2113 HT HB 277 - HB 288 2113

PRELIMINARY COST ESTIMATES

a. Alternative 1, Gabions with sand bags (Inclosure 6)

First Costs		
Earthwork		$ 51,000
Cryo-anchors, in place		593,000
Gabions, in place		857,000
Miscellaneous(Freight, equipment, insurance, travel)		511,000
Contingency 25%		499,000
Plans & Specs, Supervision & Inspection		241,000
	Total	$2,751,000
Equivalent Annual Cost		
First Cost (0-25 years)		$2,743,000
Replacement Present Worth (25-50 years)		494,000
Present Worth Cost, Total		$3,237,000
Annual Cost		$238,200
Maintenance (4%)		9,500
	Total	$247,700

b. Alternative 2, Mixed sand-cement in place (Inclosure 7)

First Costs		
Earthwork		$ 33,000
Sand-cement, in place		429,000
Miscellaneous(Freight, equipment, insurance, travel)		721,000
Contingency 25%		296,000
Plans & Specs, Supervision & Inspection		148,000
	Total	$1,627,000
Equivalent Annual Cost		
First Cost (0-25 years)		$1,627,000
Replacement Present Worth (25-50 years)		293,000
Present Worth Cost, Total		$1,920,000
Annual Cost		$141,300
Maintenance (4%)		5,700
	Total	$147,000

c. Alternative 3, Sand filled gabions with filter fabric (Inclosure 8)

First Costs		
Earthwork		$ 33,000
Gabions, in place		271,000
Miscellaneous(Freight, equipment, insurance, travel)		104,000
Contingency 25%		103,000
Plans & Specs, Supervision & Inspection		75,000
	Total	$ 591,000

PRELIMINARY COST ESTIMATES

a. Alternative 1, Gabions with sand bags (Inclosure 6)

First Costs		
Earthwork		$ 51,000
Cryo-anchors, in place		593,000
Gabions, in place		837,000
Miscellaneous(Freight, equipment, insurance, travel)		514,000
Contingency 25%		499,000
Plans & Specs, Supervision & Inspection		249,000
	Total	$2,743,000

Equivalent Annual Cost	
First Cost (0-25 years)	$2,743,000
Replacement Present Worth (25-50 years)	494,000
Present Worth Cost, Total	$3,237,000
Annual Cost	$238,200
Maintenance (4%)	9,500
Total	$247,700

b. Alternative 2, Mixed sand-cement in place (Inclosure 7)

First Costs		
Earthwork		$ 33,000
Sand-cement, in place		429,000
Miscellaneous(Freight, equipment, insurance, travel)		721,000
Contingency 25%		296,000
Plans & Specs, Supervision & Inspection		148,000
	Total	$1,627,000

Equivalent Annual Cost	
First Cost (0-25 years)	$1,627,000
Replacement Present Worth (25-50 years)	293,000
Present Worth Cost, Total	$1,920,000
Annual Cost	$141,300
Maintenance (4%)	5,700
Total	$147,000

c. Alternative 3, Sand filled gabions with filter fabric (Inclosure 8)

First Costs		
Earthwork		$ 38,000
Gabions, in place		271,000
Miscellaneous(Freight, equipment, insurance, travel)		104,000
Contingency 25%		103,000
Plans & Specs, Supervision & Inspection		75,000
	Total	$ 591,000

valent Annual Cost

First Cost (0-25 years	$59 ,000
Replacement Present Worth (25-50 years)	10 ,000
Present Worth Cost, Total	$69 ,000
Annual Cost	$ 5 ,300
Maintenance (4%)	,100
Total	$ 5 ,400

ECONOMIC JUSTIFICATION

Benefit cost ratios are calculated for each alternative in order to determine economic justification.

Alternative 1 $\frac{37,000}{247,700} = 0.15$

Alternative 2 $\frac{37,000}{147,000} = 0.25$

Alternative 3 $\frac{37,000}{53,400} = 0.69$

ENVIRONMENTAL CONSIDERATIONS

Adverse impacts are not expected at the actual structure site but may result at the borrow sites and along their access routes. Those impacts would depend on site selected, method of removing material, haul route, and method of transportation.

Further environmental studies need to be conducted so that potential impacts can be adequately assessed and so that these impacts can be eliminated, minimized, or mitigated. Specific studies which would be needed include: a study of littoral drift patterns (accretion and deposition areas); a baseline biological survey (fish, shellfish, wildlife, and vegetation) of areas of potential project impact; and an archaeological reconnaissance in areas of potential project impact.

CONCLUSIONS AND RECOMMENDATIONS

The village is culturally and socially linked to its current location. There is no acceptable site near their current village and there is little room for safe relocation on the island. A structure to prevent further loss of land appears to be the only viable solution. Protection of the village with a structure would fulfill the requirements of the Social Well Being account. However, the benefit/cost ratio does not fulfill the requirements of National Economic Development.

The District Engineer, therefore, concludes that further study is not warranted at this time under Section 103 because it appears that insufficient economic benefits would occur to justify Corps of Engineers participation in a project.

Shishmaref City Council
Shishmaref, Alaska 99772
July 17, 1979

Colonel George R. Robertson
District Engineer
Alaskan District, Corps of Engineers
P.O. Box 7082
Anchorage, AK 99510

Dear Colonel Robertson:

The City Council of the City of Shishmaref at its meeting of July 16, 1979, has directed me to write advising you of the following:

The City of Shishmaref hereby requests preparation of a Reconaissance Report covering small beach erosion control under authority of Section 103 of the 1962 River and Harbor Act, for the area of Shishmaref outlined in the 1975 report titled Shishmaref Erosion, Aftermatives, Feasibility and Cost Study, which your office has a copy of (Mr. Ken Hitch).

We would recommend Ted Forsi and Associates, Inc., a consulting firm based in Anchorage, Alaska to do the study. They have been involved in this project and are helping us on others. They are familiar with our requirements and we feel could do the report in a timely, cost efficient manner. They may also be helping prepare a study for our airport relocat and could combine the work efforts while they're on the island.

We will cooperate with the Corps of Engineers fully and provide all assurances that are necessary and that we are capable of giving.

Sincerely,

Walter Nayokpuk

Walter Nayokpuk
Mayor, Shishmaref

WN/jo

INCL 1

STATE OF ALASKA

JAY S. HAMMOND, Governor

OFFICE OF THE GOVERNOR

DIVISION OF POLICY DEVELOPMENT AND PLANNING

POUCH AD
JUNEAU ALASKA 99811
PHONE 465-3572

September 14, 1979

Mr. Lee R. Nunn, Colonel
Corps of Engineers
District Engineer
Department of the Army
Alaska Corps of Engineers
P.O. Box 7002
Anchorage, Alaska 99510

Subject: Shismaref Small Beach Erosion Control Reconnaissance
State I.D. No. 79081005

Dear Colonel Nunn:

The State Clearinghouse has completed review of the subject proposal. The following comments were received from the Alaska Department of Community and Regional Affairs (CRA):

> "The subject proposal involves a request from the City of Shismaref for the Corps of Engineers to provide funding for a reconnaissance study regarding beach erosion control. In addition to the 1975 report referenced in the letter received from the City of Shishmaref, we refer the Corps to a related report prepared in 1978 for the City by Dickinson, Oswald, Walch & Lee, Engineers, entitled, Shishmaref Expansion and Relocation Study. (The Corps was provided a copy of this report.)
>
> "We would also urge coordination with the State Department of Transportation and Public Facilities, which is evaluating airstrip realignment alternatives. Without reflecting upon the proposed consultant's qualifications, we would encourage the qualifications of several firms be considered if the proposed project is undertaken. We also note a proposed start date of August 30, 1979 in the Standard Form 424; obviously, a revised estimate is necessary. Finally, we would like to direct attention to the cost figures developed in the studies referenced above for erosion control work.

INCL 2

"We would appreciate being kept informed of any decision on the Corps' part, and offer our assistance if it is desired."

We would support CRA's request to be kept informed of the decision made regarding the project. The contact person is

Larry Kimball, Jr., Director
Department of Community
and Regional Affairs
225 Cordova St., Bldg. B
Anchorage, Alaska 99501

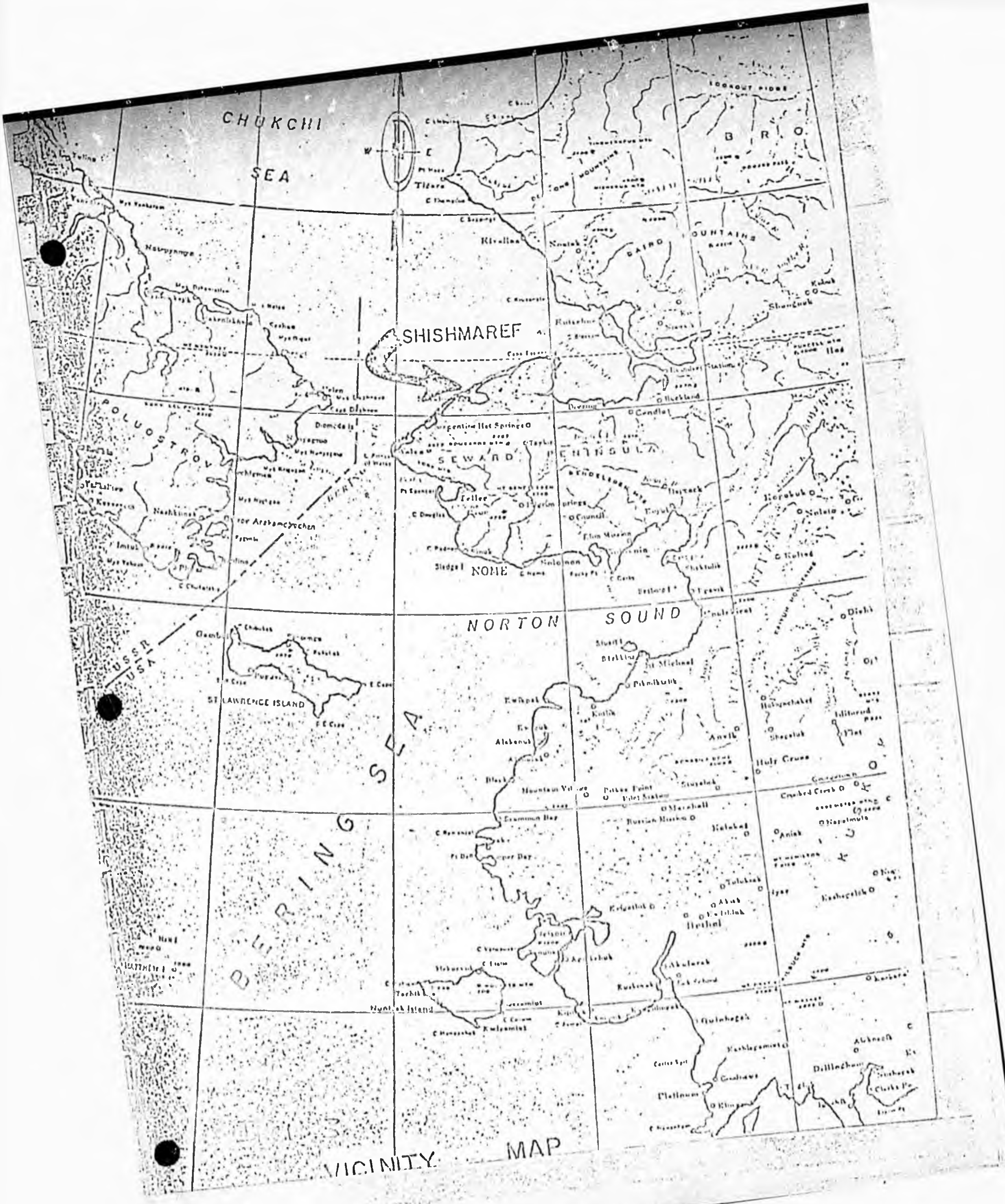
Provided that this occurs, we have no objection to the proposal. This letter satisfies the review requirements of the OMB Circular A-95.

Sincerely,

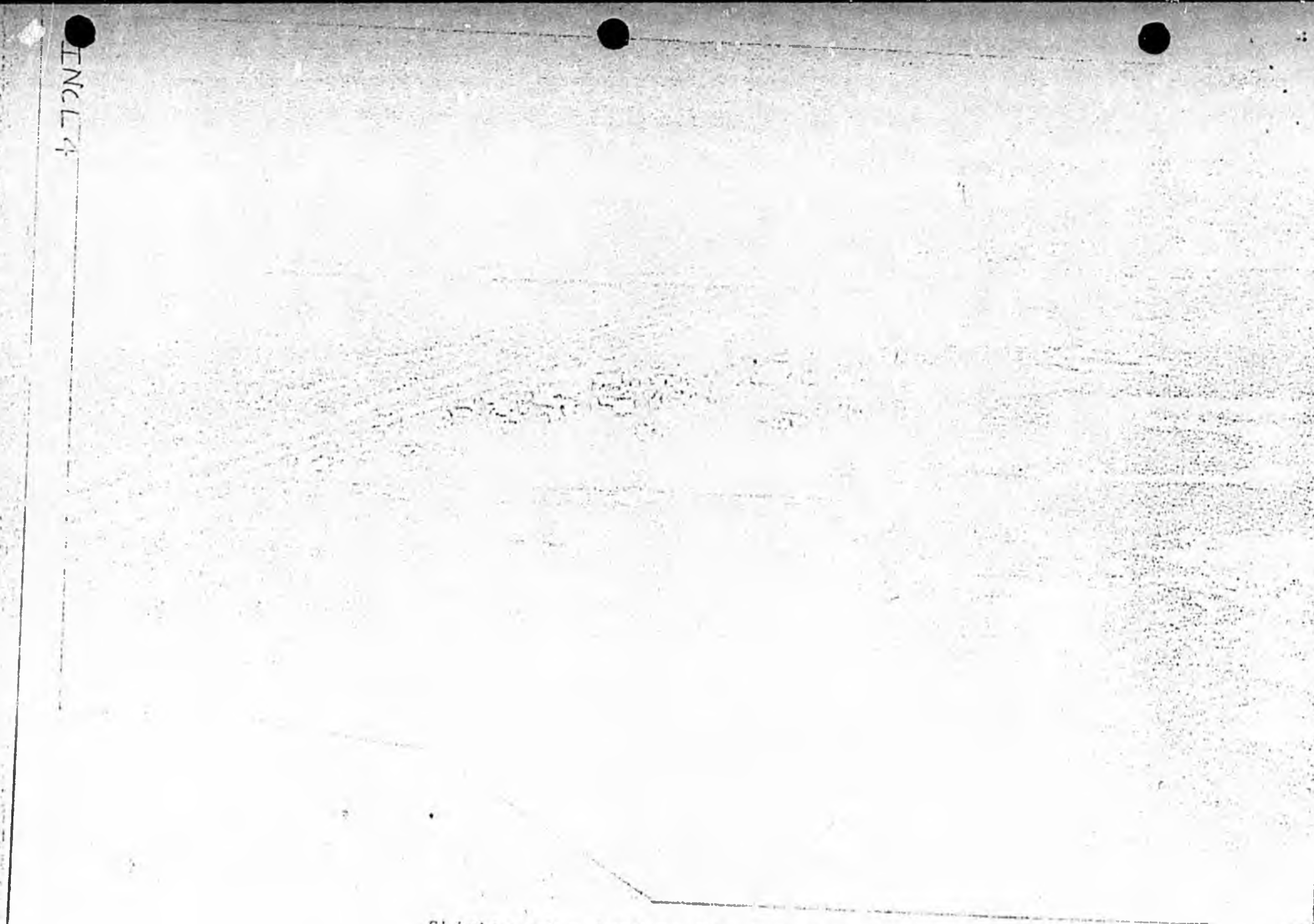
Jerry L. Madden
State-Federal Coordinator

cc: Commissioner McAnerney, Community
and Regional Affairs

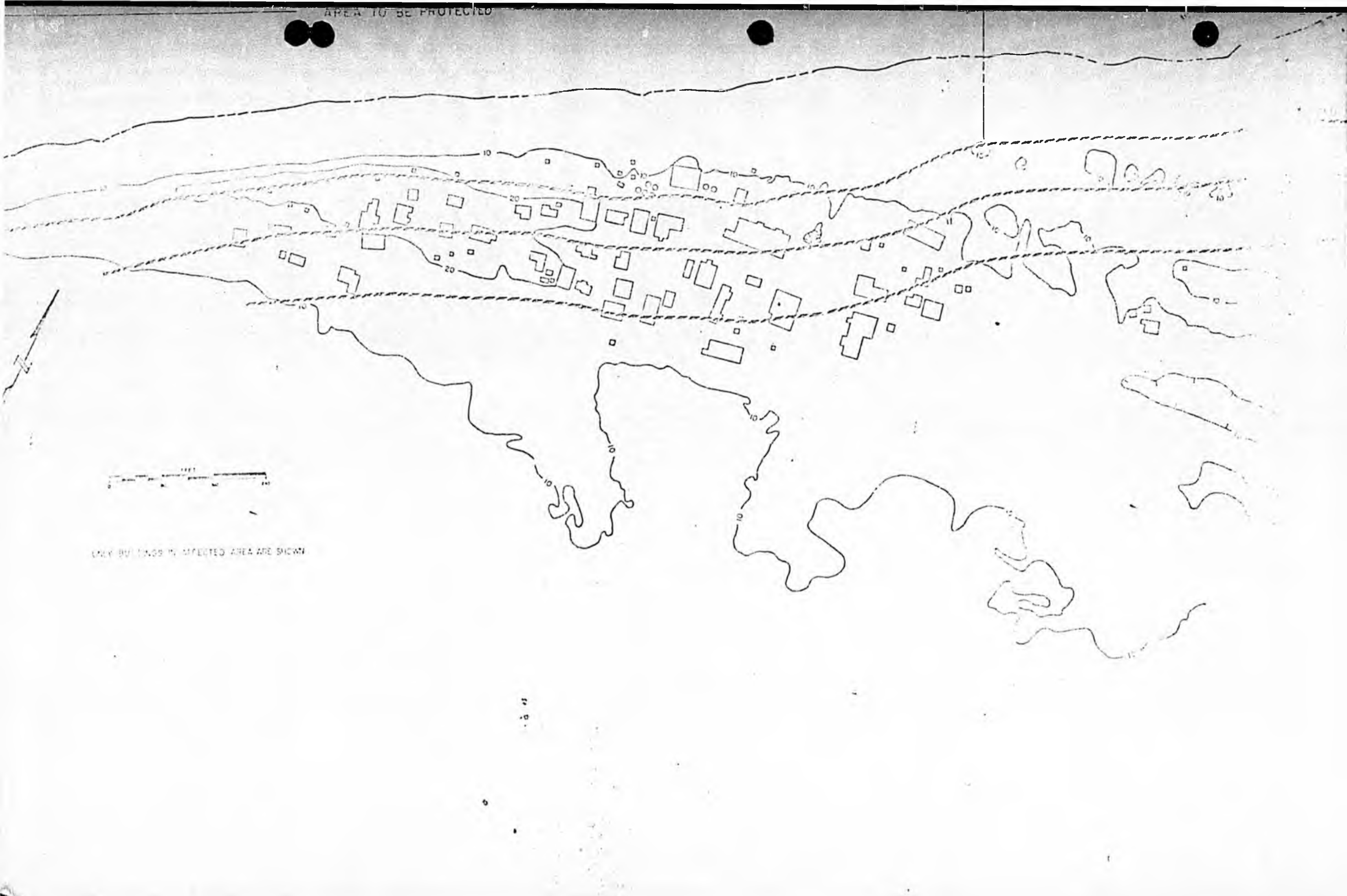
JLM/gm


CHUKCHI SEA
SHISHMAREF
POLUOSTROV
SEWARD PENINSULA
NOME
NORTON SOUND
ST LAWRENCE ISLAND
USSR
USA
BERING SEA
Kivalina
Candle
Teller
Council
Solomon
St Michael
Holy Cross
Marshall
Russian Mission
Bethel
Nunivak Island
Platinum
Dillingham
VICINITY MAP

INCL 4

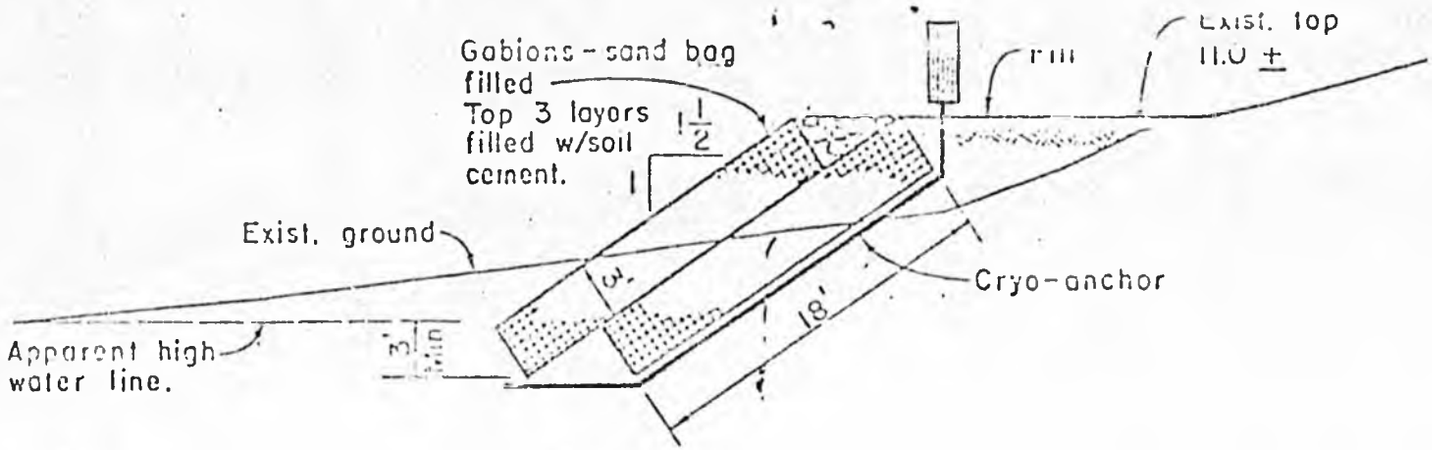


Shishmaref - looking NE, September 1974


AREA TO BE PROTECTED
10
20
ONLY BUILDINGS IN AFFECTED AREA ARE SHOWN

INCL 6

SYSTEM No. 1



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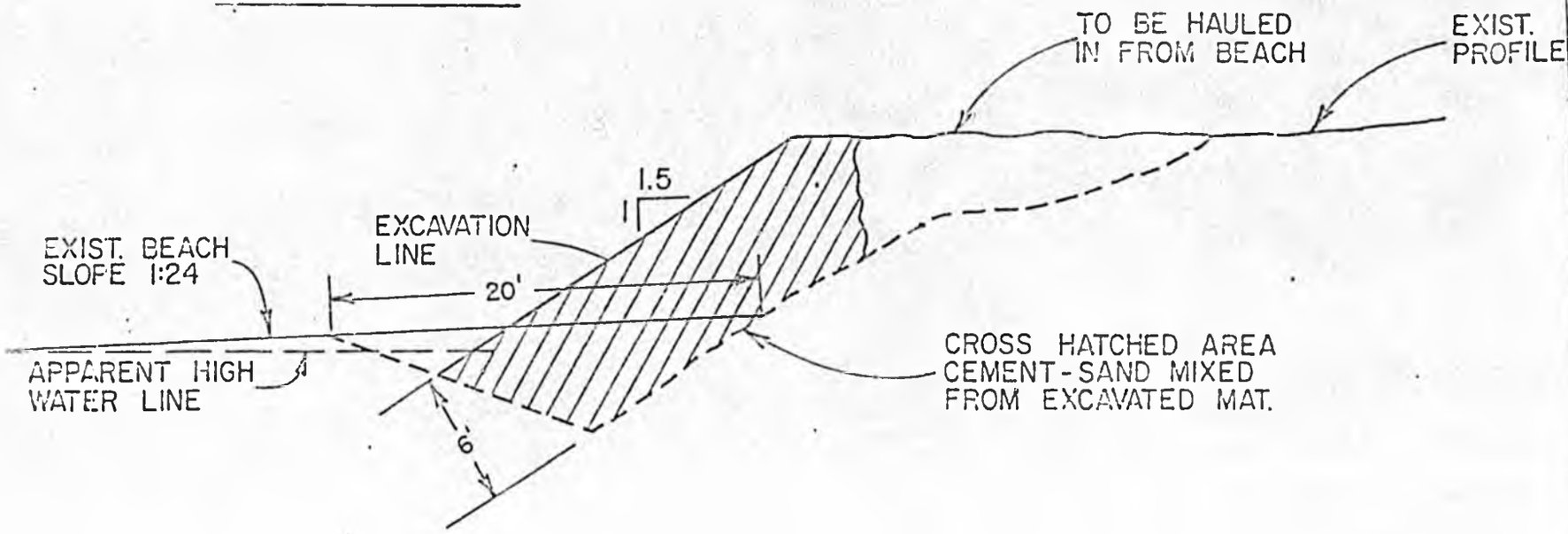
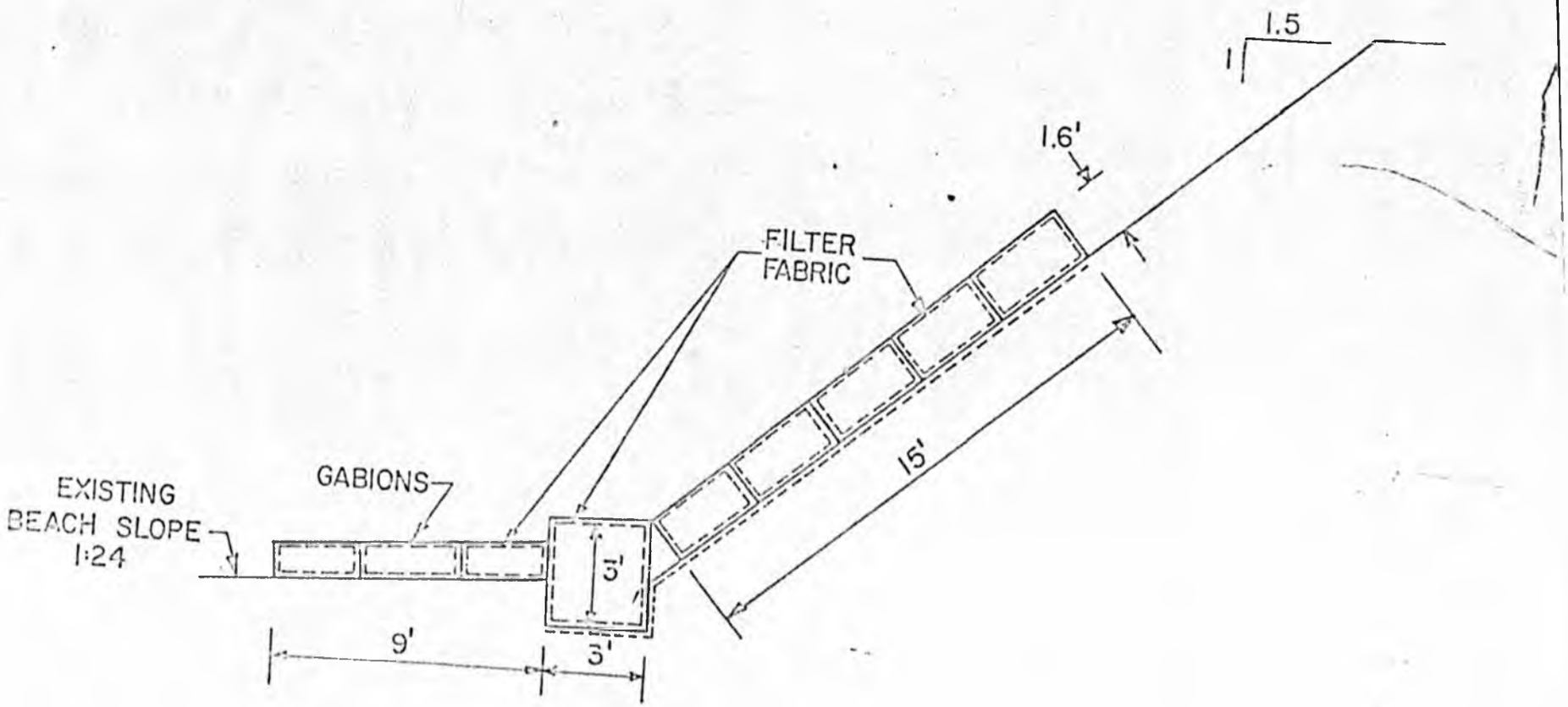


INCL 8

SYSTEM NO. 3



Alaska State Legislature

House

JUNEAU ALASKA

TO: Rep. Jack Fuller
FROM: Rep. Bette Cat
RE: District 5 priorities

February 23, 1981

As per your request in the memorandum dated January 13, 1981, enclosed are the priorities for my district. These are the items that are related to the areas outlined in your memo.

Cordova

The city of Cordova has requested funds for the Phase II Water Development program. This phase will consist of constructing the Eyak Lake Water Treatment Plant, 0.5 million gallon north storage tank near the ocean dock to stabilize pressure, Power Creek Distribution System, storage tank and reservoir, Whiskey Ridge Loop, MorPac parallel line (to north storage tank), Orca transmission line and chlorinization facilities to put the Chugach Cannery on line and utilize excess water from Crater Lake in the city system as suggested by the Department of Environmental Conservation. (see additional information)

Let me also emphasize the impact to the Bristol Bay Fishery. This facility means the difference between the canneries operating at full capicity or on a swing operation as has been required during past seasons.

Tatitlek

The village of Tatitlek has requested a breakwater since the earthquake in 1964. It has been discussed at the state and at the national level for years. However, there has been nothing done to date. The breakwater need has grown and the problem has gotten worse. Erosion has settled in and the harbor is silting badly. A cost estimate has not been available but I have requested one and will forward this to you as soon as possible.

These are the highest priorities for our district. If there is additional information that I can provide, I would gladly do so.

Village of Tatitlek

Breakwater

1) Document the hazards and difficulties to vessels:

A) First, it should be pointed out that it is virtually impossible to document any of the following mishaps, because of the fact that no records have ever been kept in the past.

I) Accidents:

The fact that there is no breakwater at Tatitlek has been the primary reason for several accidents. The most common being the swamping of skiffs and gillnetters caused by sea conditions that would be eliminated, had there been a breakwater.

Also, there has been several occasions when boats have been forced to run aground, to hit underwater obstacles that wouldn't have been hit, had the harbor been sufficiently sheltered.

II) Groundings:

The wind, and sea conditions caused by wind, has caused grounding in the past, these accidents will continue to occur if no breakwater is built. Only quick action by alert citizens has saved most of the vessels from extensive damage. We've been lucky, so far, in that the grounded boats have suffered only limited damage, and were repaired at minimal costs.

a) Replacement Valve:

The cost of the vessels moored at Tatitlek ranges from the $300,000 seiners to the $200 skiffs. In the past, the more expensive boats have been forced to anchor in more safer mooring locations across from the village, where they must run small

skiffs back and forth in dangerous sea conditions. Loss of lives in these conditions would not be surprizing. I would hate to see this happen - but, right now, it is possible.

The possibility of extensive damage to the dock at Tatitlek is great. The high winds cause very large swells, which along with a high tide could cause...

III). Loss or Damage to Vessels and Facilities

The most important loss that should be mentioned is the constant eroding of the waterfront caused by the swells generated by the wind. It has come to a point where boatowners will soon be forced to store their boats and equipment in places such as Cordova and Valdez, where storage costs are very high, and loss of equipment due to vandalism and theft are not uncommon.

Another important loss is the water depth. The harbor is losing its depth, due to the constant buildup of silt and gravel caused, again, by the swells generated by the wind. It has become so shallow that the larger vessels have to wait until the tide rises before they can enter the harbor. The harbor has been dredged in the past, in 1964 and 1965, and the depth to which it was dredged could be checked. I'm sure the difference between the depths, then and now, will be substantial evidence to show the need of a breakwater at Tatitlek.

The lack of water and sea conditions in the harbor has caused the village to wait for fuel to be delivered for the village generators on several occasions. The potential for disaster surfaced recently, when the barge carrying village fuel, ran aground entering

the harbor. The groundings had been caused by wind and sea currents, which forced the barge to miss the entrance and hit an underwater obstacle. We were very fortunate, in that the barge wasn't moving very fast and no fuel was spilled or any damage done. We may not be as fortunate in the future - the potential for accidents such as this still exists, but could be cut drastically with the construction of a breakwater.

2) Document Vessels:

I) Number of vessels using area:

A) Permanent:

8	(28' to 42' seiners)
14	(18' to 28' gillnetters)
16	(10' to 18' skiffs and gitneys)
38	

B) Seasonal*:

12	(Seiners)
10	(Gillnetters)
12	(Gitneys)
24	

* The amount of vessels that currently use the area seasonally would undoubtedly increase if a breakwater were to be constructed. The harbor, as it is now, it not considered to be a safe moorage unless a permanent mooring is set. The reason being that most vessels do not carry a heavy enough anchor to insure against the sudden and high winds that are common in Tatitlek area. If a breakwater was construct - Tatitlek would be an ideal place to anchor at anytime, regardless of wind or sea conditions.
The Village of Tatitlek, as a whole, depends very much on its harbor for just about every bit of merchandise that enters the community - whether it be fuel, oil, or winter supplies, etc.

The people of Tatitlek will continue to use the harbor for these purposes, regardless of a breakwater, though it would be much easier and safer to load and unload if a breakwater were constructed.

As the amount of correspondence between the IRA council at Tatitlek and its legislators indicates, the problems - posed by the lack of a breakwater have been known for quite some time. In these times, when the state seems to have more money than it knows what to do with - I would hope that a breakwater for Tatitlek will be seriously considered.

A geological survey by the Department of Interior has shown that rock materials is available in the areas surrounding Tatitlek should a breakwater be constructed.

Tatitlek - Breakwater
Estimated Cost for Feasibility Study - $250,000 Quoted by Corps of Engineers

The area surrounding Tatitlek is known for its high, gusting winds, and, when out of the southeast, produces swells of such magnitude that boats anchored at the village are beached and/or damaged. A breakwater is desparately needed to protect the fishing boats people rely on for their livelihood and to protect the beach from being eroded away.

While no formal records are kept recording accidents, everyone can tell stories of skiffs and gill netters being swamped or running aground by sea conditions caused by high winds. The water front area where people currently dock their boats is being eroded and if conditions are not reversed people will be forced to store there boats in Valdez incurring a great expense and inconvenience. A potential for disaster is that people are forced to wait for bad weather to subside before oil can be delivered to the village. As of yet they have not run out of oil before it has been delivered but the threat remains. Currently 38 boats dock in Tatitlek (8 seiners, 14 gillnetters, 16 skiffs). During the summer that number increases to 70 and will increase further when the 18 new housing units are constructed this summer. If conditions were safer more boats would dock there now.

There are several needs, both long and short range, that would be addressed by the construction of a breakwater:

1. Reduce transportation costs
   a. with boats kept in the water, people could haul freight from Valdez and/or Cordova at less than what it costs to charter air service
   b. costs to passengers would be decreased without having to rely on air charters.
2. Support growing fisheries industry
   a. year round use of boats for fishing within protected area
   b. increased bottom fishing activity
3. Stimulate development of economic resources and/or subsistence activities which would serve to reduce dependency on governmental services such as food stamps,

4. Preserve the beach area from further erosion.

This request for a breakwater has been ongoing since the 1964 earthquake. Tatitlek has been in correspondence with the Federal government, Army Corps of Engineers and State legislature. In 1965, the U.S. Senate Public Works Committee passed a resolution authorizing a feasibility study for navigation improvements. The funds were never appropriated. Most recently the U.S. Congress failed to include this feasibility study in the President's FY 81 budget. With the growing conservative mood the funding opportunities appear bleak. The village is also in the process of pursuing an Army Corps of Engineers Section 107 reconnaissance study.

5. importance of dock

REPRESENTATIVE TONY VASKA
Alaska State Legislature
House of Representatives

HOME
P.O. BOX 802
BETHEL, ALASKA 99559
(907) 543-2334

WHILE IN JUNEAU
POUCH V
JUNEAU, ALASKA 99811

(907) 465-4931
(907) 465-4932

DISTRICT 17
AKIACHAK
AKIAK
ANIAK
ATMAUTHLUAK
BETHEL
CHEFORNAK
EEK
KALSKAG
KASIGLUK
KWETHLUK
LOWER KALSKAG
MEKORYUK
NAPAKIAK
NAPASKIAK
NEWTOK
NIGHTMUTE
NUNAPITCHUK
NYAC
OSCARVILLE
TOKSOOK BAY
TULUKSAK
TUNTUTULIAK
TUNUNAK

MEMORANDUM

DATE: March 23, 1981

TO: REP. JACK FULLER

FROM: REP. TONY VASKA

SUBJECT: HB 277/ inclusion of Kwethluck, Napakiak, and Nunapitchuk in feasibility studies on erosion

---

The City of Kwethluck is in need of a feasibility study on erosion as there is presently an erosion problem on the south bank of the Kwethluk River on the village location. This problem must be remedied, so that families living near the river bank will not face danger and loss of property.

(See attached copy of Resolution No. 81-03)

The City of Napakiak is in need of a feasibility study on erosion as the current level of erosion along the Napakiak Slough and the Kuskokwim River is a threat to the welfare of families living in the area.

The City of Nunapitchuk is in need of a feasibility study on erosion as the current erosion problem is quite serious; the erosion of the banks of the Johnson River on which Nunapitchuk is situated is a threat to the families living in that area.

MAR 23 1981

Native Village of Kwethluk
Kwethluk IRA Council
Kwethluk, Alaska
99621

Gen. Johnson

Resolution No. 81-03

Entitled: "A RESOLUTION SUPPORTING PASSAGE OF HOUSE BILL 277"

Wheras , the Kwethluk IRA Council is the recognized governing body of an Alaska Native Village recognized by the United States,

Wheras , the Kwethluk IRA Council was the governing body before the incorporation of the City of Kwethluk and addressed the needs of its members or residents,

Wheras , this resolution is forwarded in the support of House Bill No. 277, in the Legislature of the State of Alaska Twelfth Legislature First Session, entitled " An Act making special appropriations to the Department of Transportation and Public Facilities and the Department of Community and Regional Affairs for erosion control and assessment projects; and providing for an effective date, and in support of the other sections included in the House Bill 277,"

Wheras , there is presently an erosion problem on the south bank of the Kwethluk River on the village location, it needs to be remedied so families living near the riverbank will not face danger and loss of property,

NOW, THEREFORE BE IT RESOLVED, THAT, THE KWETHLUK IRA COUNCIL makes a recommendation to the House and Senate of the State Legislatureto support the passage of the House Bill 277, thus appropriating $750,000 for erosion control assessment in villages listed in Section 1. of the bill and that it supports other sections of the bill for erosion control and seawall construction projects.

CERTIFICATION

Passed this 21 day of March, 1981 at which time a quorum of council members were present. The council vote taken was 5 for and 0 against.

ATTEST:

Helen Nicori
Secretary

[signature]
President, IRA Council

A SIMALAR RESOLUTION WAS PASSED BY THE CITY OF KWETHLUK 3-22-81, WHICH WILL BE FORTH COMING.

REPRESENTATIVE ALBERT F. ADAMS

Alaska House of Representatives

HOME
P.O. BOX 271
KOTZEBUE, ALASKA
99752
(907) 442-3320

WHILE IN JUNEAU
POUCH V
JUNEAU, ALASKA
99811

(907) 465-3724
(907) 465-3877

MEMBER
FINANCE COMMITTEE
BUDGET AND
AUDIT COMMITTEE
BUSH CAUCUS

DISTRICT 21
AMBLER
ANAKTUVUK PASS
ATQASUK
BARROW
KAKTOVIK
KIANA
KIVALINA
KOBUK
KOTZEBUE
NOATAK
NOORVIK
NUIQSUT
POINT HOPE
POINT LAY
SHUNGNAK
WAINWRIGHT

March 23, 1981

TO: REP. JACK FULLER

FROM: REP. AL ADAMS

RE: WAINWRIGHT EROSION PROBLEM

Wainwright is an arctic coastal village which lies on a flat sand and gravel spit. Severe storms and wind driven waves cause flooding which affects most of the village. The removal of sand and gravel has also contributed to the erosion problems in Wainwright today.

From: Kotlik City Council
c/o Kotlik City Office
Kotlik, Alaska 99620

JAN 30 1981

To: John G. Fuller
Alaska State Representative
Pouch V
Juneau, Alaska

Date: January. 26, 1981

Dear Alaska State Representative,

We are sending a list of the Priorities, which are listed below. We would appreciate it if you took them into consideration. The priorities that the Village of Kotlik have Dire needs of. They are as follows:

1. Television is one of our priority for the reason.
   a. There are some Educational Series that will be helpful to the Children, and also to the Adults.
   b. For entertainment
   c. Also it gives out information on news that are not broadcasted over Radio Station.
   d. Some Video Programs are also beneficial for the young students that are still in school.
2. Village Gymnasium with Bleachers
   a. The Villagers need more entertainment centers. Their main sport is Basketball and it is not big enough to hold up a tournament because of not enough space.
   b. The people need a place of their own Gym where it is big enough to hold up to 350 people. Besides playing basketball they also can have different sports going on.
   c. The High School Gym is much to small, and it has signs of weak spots after four to five weeks of occasional use by the High School Students and the Village Leagues.
   d. The High School Gym is not well constructed and does not have good equipment or bleachers.
3. Roads for the Village
   a. It is swampy behind the village, so we need it to be drained. And put a gravel to have a road to walk on.

4. Lights for Airport

a. Since we do have an emergency yearly here at the Village of Kotlik. We would like to have some lights for the safe landing of the Pilots. It is needed badly for the safety of the People and the Pilots.

b. Planes will be able to land if there should be lights.

c. Also a beacon can be installed at the airport for the benefit of the airplanes.

5. Extra Generator

a. We have only one Generator to light up the whole Village of Kotlik. So in any case the Generator should happen to break we or the Village of Kotlik would need badly a Standby Generator to take the place of the broken Generator.

6. River Bank Erosion

a. The Village of Kotlik river banks are eroding year by year and the bank is getting very close to some houses.

b. We need a seawall to prevent the Erosion of the bank of something, that can cut the River Bank from further carving in of the Banks of the Kotlik River.

I do hope that you will stress all, or some of the priorities that are needed badly here at the Village of Kotlik.

Enclosed you will find a letter to Lower Yukon School District concerning the High School Gymnasium.

Sincerely,

Joseph P. Mike (mayor)

Joseph P. Mike, Mayor
Kotlik City Council

REPRESENTATIVE ALBERT P. ADAMS

Alaska House of Representatives

HOME
P.O. BOX 271
KOTZEBUE, ALASKA
99752
(907) 442-3320

WHILE IN JUNEAU
POUCH V
JUNEAU, ALASKA
99811

(907) 465-3724
(907) 465-3877

MEMBER
FINANCE COMMITTEE
BUDGET AND
AUDIT COMMITTEE
BUSH CAUCUS

DISTRICT 21
AMBLER
ANAKTUVUK PASS
ATQASUK
BARROW
KAKTOVIK
KIANA
KIVALINA
KOBUK
KOTZEBUE
NOATAK
NOORVIK
NUIQSUT
POINT HOPE
POINT LAY
SHUNGNAK
WAINWRIGHT

March 23, 1981

TO: REP. JACK FULLER

FROM: REP. AL ADAMS

RE: WAINWRIGHT EROSION PROBLEM

Wainwright is an arctic coastal village which lies on a flat sand and gravel spit. Severe storms and wind driven waves cause flooding which affects most of the village. The removal of sand and gravel has also contributed to the erosion problems in Wainwright today.

Proposed Amendment Changes to House Bill 277

Section 1. The sum of ~~$850,000~~ 900,000 ($750,000) is appropriated to the Department of Transportation and Public Facilities for erosion assessment. This figure is based on a cost of $50,000 per community assessment in the 17 communities listed on the following page.

Delete the communities of Naknek and Chevak.

Add the communities of Kipnuk, Kongiganak, Kwigillingak and Tuntatuliak. Quinhagak

This brings the total communities to 17 (15).

Quinhagak

Transfer of responsibility agreement

KODIAK AREA NATIVE ASSOCIATION

Post Office Box 172 - Kodiak, Alaska 99615 - Phone (907) 486 - 5725

KARLUK EROSION

March 18, 1981

MEMORANDUM

To: Members of the Legislature

From: Thomas Peterson, Economic Development Planner for the Kodiak Area Native Association

Subject: Supplemental support for HB 277 concerning the Karluk Erosion Problem

The continuous disintegration of the Karluk Spit that was initially caused by the storm of "78" has increased the size of the break in the spit 350 feet, and has allowed a sufficient current of water to significantly increase the erosion rate to monumental proportions. The erosion of the Karluk lagoon is becoming a tremendous problem to the community and is inhibiting the economic development and potential development existing in Karluk.

Specifically, the erosion is prohibiting the development of a bulk fuel storage facility, expansion of the children's playground, and skiff moorage. Karluk needs to have the erosion problem dealt with immediately.

Sincerely,

Thomas Peterson

Thomas Peterson
Economic Development Planner

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPT. OF COMMUNITY & REGIONAL AFFAIRS

DIVISION OF COMMUNITY PLANNING

225 CORDOVA, BUILDING B
ANCHORAGE, ALASKA 99501

February 27, 1981

Mr. Thomas Peterson
Economic Development Planner
Kodiak Area Native Association
P.O. Box 172
Kodiak, Alaska 99615

Dear Mr. Peterson:

In response to your telephone call, and subsequent February 6 letter to Christy Miller of our Anchorage office, concerning erosion at Karluk I would like to suggest steps the Karluk IRA Council or Kodiak Area Native Association may want to pursue in requesting an engineering assessment.

First, it's important to note that community planning authority for the entire Kodiak Island, including Karluk, lies with the Kodiak Island Borough. This authority is provided in Title 29 of Alaska Statutes. The Department of Community and Regional Affairs is prohibited by Alaska Statute from providing planning assistance within a borough's jurisdiction unless specifically requested to do so by the borough. Therefore, this Department is not in a position to provide the assisted requested unless such a written request is made by the Kodiak Island Borough.

Secondly, this Department does not contain the engineering capabilities that you indicate are needed to assess shoreline erosion at Karluk. A comprehensive composite assessment of the problems associated with bulk fuel storage and fuel distribution, barge docking, and future community facilities siting may be needed, as well as shoreline erosion that plagues the village.

As you may be aware, the Division of Local Government Assistance (LGAD) within this Department coordinates the Bulk Fuel Storage Program (for which applications for assistance this year are due to LGAD by the end of this week); also revenue sharing funds have recently been sent to the Village of Karluk. I suggest you contact Mr. Mike Cutter of the Local Government Assistance Division (264-2201) for additional information regarding the bulk fuel storage grant program.

If the Kodiak Island Borough requires engineering assistance beyond their capabilities, the Corps of Engineers or perhaps the Department of Transportation and Public Facilities may be able to assist. Requests for assistance should go directly to these agencies.

Again, a direct request from the Kodiak Island Borough is required in order for us to respond. This is a requirement of the Department's enabling legislation. Information from our files on your inquiry is being provided to legislators from your region and to the Borough. I trust this information will be of assistance.

Sincerely,

Lawrence H. Kimball, Jr.

Lawrence H. Kimball, Jr.
Director

cc: Senator Robert Mulcahy
Representative ERic Sutcliff
Representative Fred Zharoff
Mr. Murray Snyder, Manager
Kodiak Island Borough
Mike Cutter, Local Government
Assistance Division

DEPARTMENT OF COMMUNITY AND REGIONAL AFFAIRS

Files

February 9, 1981

Christy L. Miller
Senior Planner
Division of Community Planning

Karluk Erosion Problem

On February 5, I received a call from Tom Peterson, (486-5721) economic planner for the Kodiak Area Native Association (KANA) who explained a road erosion problem in the community of Karluk was aggravating local fuel distribution and requested assistance in obtaining an engineer's assessment of the method and cost of repairing the eroding road. Peterson explained such an assessment would be needed to provide to area Legislators, Rep. Eric Sutcliff and Sen. Bob Mulcahy, so that special appropriations could be sought to correct the problem. From an on-site visit by Peterson and Monty Sowers, area Soil Conservation Service agent, the problem was explained as apparent erosion (and ill repair in low swampy areas) of a road leading from the south opening of the Karluk spit, along the coastline and up the hill to the airstrip. Necessity of the road was explained as the only means community residents had of transporting fuel oil drums from the barge site to the new village. (After further investigation it appears this road is presently the most convenient method of transporting the oil barrels from barge to village, and a pipeline would be more satisfactory.)

Contacted John Horn, DOT/PF maintenance and operations chief for Southcentral region, and Mike Gavin, M & O engineer. The road was apparently built by the DOT contractor expanding the Karluk airstrip last summer for use in hauling fill from the spit to the airstrip. The haul road was tough to maintain even during the airstrip expansion and DOT plans on abandoning or removing the road this summer. Another permanent road on high ground is under construction from the airstrip to the new village site (not from the spit).

In a follow up call to KANA, Peterson said he would send DCP a written report of the problem and may suggest the Karluk Village Council formally request DOT not to tear the haul road out. Other problems such as fuel distribution and access to the new village would be explained in Peterson's letter.

CLM:rw

GF - Karluk

KODIAK AREA NATIVE ASSOCIATION
Post Office Box 172 - Kodiak, Alaska 99615 - Phone (907) 486 - 5725

February 6, 1981

Ms. Christie Miller
Dept of Community and Regional
Affairs
Division of Community Planning
225 Cordova Building B
Anchorage, Alaska 99501

Dear Christie:

Pursuant to our telephone conversation yesterday regarding Karluk's errosion problem. I am enclosing my memo concerning Karluk with this letter. The memo explains the degree of errosion and the area affected. It also suggests solutions to rectify the errosion problems.

The community's major concern is the rate of errosion to the adjacent banks near the relocation site. The errosion is creating an extreme safety hazard to the villagers who conduct their activities near the shore. The access road mentioned in my memo is in jeapordy of completely sliding into the lagoon by errosion. Even though the road was built as a temporary approach to the airstrip for the contractor's equipment, the Karluk's IRA Council has identified the road as a possible access for a fuel oil transportation line connecting the bulk fuel storage tanks with barge service suppliers. This concept has been applied for in an application to your department under the bulk fuel storage facility grants. The road is also essential to the community to transport goods and materials from the shoreline of Shelikof Strait to "new" Karluk.

It may be too costly to maintain this road and a new road may have to be planned for at another location. The errosion problem, however, effects the total shoreline of the lagoon and future planning for socio-economic development for Karluk will be greatly hindered because of this problem.

Your efforts in identifying engineering design and cost to develop a solution to this problem is greatly urged. I will keep you

informed of any developments from my end as they occur and, hopefully, you will provide the same to me.

Sincerely,

KODIAK AREA NATIVE ASSOCIATION
IONE M. NORTON, PRESIDENT

Thomas Peterson
Economic Development Planner

TP:dz

ENCLOSURE

Monte and I returned to Kodiak that afternoon. We went over various ways to slow the errosion rate in Karluk. Nonetheless, all approaches to the problem are of a temporary nature. The mouth to the lagoon is very deep and, unless the mouth can be restricted to allow marginal water flow, any type of reinforcement to the banks would be inaffective.

Monte and I agreed upon the following measures to slow down the rate of errosion:

1) construct a barrier of some sort to restrict the progression and growth of the mouth and to decellerate the speed of incoming current.
2) transplant grass and alders into the bank that support the road to protect the soil against runoff and tides-and
3) roundoff and grass seed the banks nearest the relocated village site.

It is necessary to get a harbor engineer to accurately assess the proper design and materials to construct a barrier. The engineer would also assess the total cost of teh measures suggested here. I would suggest that the water resource council and the University of Alaska be contacted to provide this service.

It may also be possible to establish an agreement with the contractor involved in the airstrip development to work on the bank errosion rectifications.

I am hopeful that whatever type of solution is agreed upon the State will take charge of the financial portion, at least. The measures discussed in this memo are not extremely costly to do. I do think that some action on this problem is of an immediate nature and suggest that we get the ball rolling.

TP:dx

KODIAK AREA NATIVE ASSOCIATION

BOX 172
KODIAK, ALASKA 99615
PHONE: (907) 486-5725

MEMORANDUM

To: The Record

From: Thomas Peterson, Economic Development Planner

Date: January 20, 1981

Subject: Trip Report, Karluk's errosion problem

I was requested by Karluk's IRA Council to arrange for either a Federal or State official assigned to errosion contol to make an on-site assessment of the errosion problems in Karluk Lagoon. In my efforts to do so I was able to make arrangements for Mr. Monte Sowers, District Conservationist, of the Department of Agriculture to accompany me on a trip to Karluk.

On January 19, 1981 Mr. Sowers and I traveled to Karluk via Flyrite, Inc. at 9:00 a.m. Upon arriving, we were met by Mary Reft. Mary directed us to Allen Panamaroff to receive more information concerning the errosion problems.

After a conversation with Allen, Monte and I did a complete survey of the banks along the south portion of the Lagoon's mouth and the relocated village. We were able to ascertain that errosion rates varied along the whole souch shore of the lagoon. Moderate errosion to the banks nearest the relocated village gave evidence that there has been a substantial increase in the current and tidal action in the lagoon.. An extremely fast current running through the mouth is erroding the south portion of the mouth and the banks nearest to the old water channel and south village site. Monte estimated that by spring break-up the bank supporting the road will collapes due primarily to current and tidal action assisted by wind storms.

The north shore is receiving a good portion of errosion due to the counter-clockwise motion propelled by the current. However, lagoon sediment is being stockpiled by the current to fortify the north protion of the spit. It is apparent, by this acion, that the mouth is widening and moving southward at an impressive rate. The rate of total errosion is also being accelerated by winter storms.

KODIAK AREA NATIVE ASSOCIATION

BOX 172
KODIAK, ALASKA 99615
PHONE: (907) 486-5725

File Karluk
Permanent
File

MEMORANDUM

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TP:dz

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. House Bill No. 277

Title Special Appropriation for Erosion Control and Assessment

Requested by Fuller, Hurlburt, Vaska, Adams, Cato, Chuckwuk Date 3/5/81

II. FISCAL DETAIL

Agency Affected DOT/PF

Program Category Affected General D & C

BRU, Program, or Subprogram(s) Affected

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

EXPENDITURES (Thousands of Dollars)

		FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100	PERSONAL SERVICES						
200	TRAVEL						
300	CONTRACTUAL						
400	COMMODITIES						
500	EQUIPMENT						
600	LAND & STRUCTURES						
700	GRANTS, CLAIMS, ETC.						
	TOTAL		$6,030,000				

FUNDING (Thousands of Dollars) $6,030,000

GENERAL FUND						
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

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

A. Assumptions: No maintenance on the erosion control structures would be performed.

B. Operational Summary: (1) No new positions would be needed. (2) No major expenditures are required. (3) N/A. (4) N/A.

IV. DATE 3/13/81 PREPARED BY Jonathan A. Widdis JB

AGENCY DOT/PF

PHONE 479-6138

Original: Legislative Finance

cc: Budget and Management

Prime Sponsor (First Legislator Named)

33-001 (Rev. 12/80

BR

C. Computations:

Section 1. $750,000 for erosion control assessments at the 15 communities listed is adequate to accomplish the work.

Section 2.

(1) Deering Sea All. - $1.2 million - $1.2 million will build a seawall of class III riprap, 10' wide, 3,500' long.

(2) Shishmaref Erosion Control - $1.2 million - The U.S. Army Corps. of Engineers prepared a reconnaissance report in December of 1979 for erosion control at Shishmaref. This report gave 3 possible alternatives:
   (a) Gabions with sandbags - cost of $2.8 million.
   (b) Mixed sand and cement in place - cost of $1.6 million.
   (c) Sand filled gabions with filter fabric - cost of $600,000.

   $1.2 million would build some combination of (b) and (c).

(3) Southwest Alaska region dredging - $2.0 million - This item is intended to fund a series of dredging projects on the Kuskokwim and Johnson Rivers using the dredge purchased for the City of Bethel in 1980. Recommend appropriation to Municipal Grant account.

(4) Unalakleet Seawall Construction - $800,000 - A seawall long enough to cover $800,000 should be sufficient to protect the community by itself. Recommend $1.8.

Section 3. $80,000 to Community and Regional Affairs to complete the Port Heiden erosion project is adequate for what the community intends to do (relocate another 20 buildings).

D. Economic Impact: The capital projects in sections 2 and 3 should provide short-term construction employment on the local level.

E. Attachments: None.

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. HB NO. 277

Title A special appropriation to DOT/PF and DC & RA for erosion control projects.

Requested by House Transportation Committee Date March 23, 1981

II. FISCAL DETAIL

Agency Affected Department of Community and Regional Affairs

Program Category Affected Development

BRU, Program, or Subprogram(s) Affected Local Government Assistance

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

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES		-0-				
200 TRAVEL		-0-				
300 CONTRACTUAL		-0-				
400 COMMODITIES		-0-				
500 EQUIPMENT		-0-				
600 LAND & STRUCTURES		-0-				
700 GRANTS, CLAIMS, ETC.		-0-				
		-0-				
TOTAL		-0-				

FUNDING (Thousands of Dollars)

GENERAL FUND		-0-				
FEDERAL FUNDS		-0-				
OTHER (Specify Fund Source)		-0-				

POSITIONS

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

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

Section 3 only

Erosion has forced the relocation of the city of Port Heiden. Legislative Grants totalling $75,000 for FY 79 and FY 80 were used to provide electricity to a new town site and move five homes. Approximately 20 buildings would be moved with this $80,000 appropriation, which would complete the project. This appropriation is in response to a formal request from city council.

No additional costs providing Department of Community & Regional Affairs Legislative Grants administrative positions remain in Governor's FY 82 budget.

IV. DATE March 23, 1981 PREPARED BY McKie Campbell

AGENCY Department of Community & Regional Affairs

Original: Legislative Finance PHONE 465-4735

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

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300 CONTRACTUAL		-0-				
400 COMMODITIES		-0-				
500 EQUIPMENT		-0-				
600 LAND & STRUCTURES		-0-				
700 GRANTS, CLAIMS, ETC.		-0-				
		-0-				
TOTAL		-0-				

FUNDING (Thousands of Dollars)

GENERAL FUND		-0-				
FEDERAL FUNDS		-0-				
OTHER (Specify Fund Source)		-0-				

POSITIONS

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

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STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

DEPUTY COMMISSIONER – PLANNING AND RESEARCH

POUCH Z
JUNEAU, ALASKA 99811

March 25, 1981

Representative Jack Fuller
Alaska House of Representatives
Pouch V
Juneau, Alaska 99811

Dear Jack:

This is reply to your questions about the extent of erosion problems in the communities listed in H.B. 277. The following information was obtained from community profiles and supplemented with what we are aware of first hand.

Ambler
Spring flooding from the Kobuk River is an annual occurence. Erosion occurs along the shoreside bluff areas. Additionally there are upland erosion problems from spring run-off on creeks which flow through that community. This has caused washouts on the road to the airport. A lack of vegetation in many areas of the community as a result of previous ground disturbances causes a significant dust problem.

Kivalina
Storm surges and wind-driven waves have caused coastal flooding at Kivalina. According to the U.S. Army Corps of Engineers, 20 to 30 percent of the village was flooded in 1970. Beach erosion has occured and continues. The airfield is being undermined on one end.

Kotlik
Kotlik lies within the 100-year floodplain; the flood hazard for the area has been rated high by the Corps of Engineers. The last recorded flood was in November 1970. Given a combination of storm conditions, high tides and ice jams, the city may be inundated with water and ice floes during spring break-up.

The annual scouring of the riverbank during break-up of river ice has created a significant erosion problem on the east edge of the city.

Teller
Major flooding has occured as the result of storm driven waves. The most significant recent example of this problem was the November, 1974 storm/disaster. New areas for housing in Teller's original townsite are limited because of Federal recognition of the flood hazard.

25A-T&LH

Wainwright
The village, situated on a coastal bluff, is high enough to avoid serious flooding from coastal storm surges. Spring snow melt water which cannot properly drain away until snow melt is complete causes minor flooding problems in lower areas. The Chukchi Sea shoreline is receding by thermal erosion processes at the rate of 1 to 2 feet per year, presenting a threat to near shore structures and facilities.

Itemized below is a detailed cost estimate for an on-site erosion assessment. This cost is appropriate to each of the communities discussed.

Field Survey	-	$ 30,000
Hydrologic Study	-	4,000
Materials Investigation	-	1,500
Preliminary Design Survey	-	3,000
Report Preparation	-	4,500
Total	-	$ 43,000

If we can be of further assistance on this please let us know.

Sincerely,

John C. Bates
Deputy Commissioner

HB

286

EXECUTIVE SUMMARY

1.0 Introduction

The primary purposes of the study were to update the study of the Yukon River Ferry System carried out in 1973 and to determine the economic and financial feasibility of operating a ferry service on the Yukon River.

The Yukon River is divided into two sections for the purposes of this study: the upper Yukon, extending from Dawson City, Yukon Territory to Circle, Alaska, and the lower Yukon, extending from Fort Yukon to Holy Cross. Nenana and Manley Hot Springs on the Tanana River are also included in the study of the lower Yukon.

The characteristics of the service on the two sections of the river would differ. The service on the upper Yukon would be primarily directed toward the promotion of tourism as the communities along this section of the river are already provided with road access. The service on the lower Yukon would be directed primarily toward freight transportation, although passenger transportation, primarily for residents of the area, could be an important aspect of this project.

2.0 Alternatives Considered

Ten basic types of vessels were considered, ranging from conventional displacement hulls with either propellers or paddlewheels, through higher-speed semi-planing and planing hulls, to the more sophisticated technologies such

as air-cushion vehicles (hovercraft) and hydrofoils. Consideration of technical and economic factors resulted in the following conclusions.

2.1 Upper Yukon

The most effective configuration would be a high-speed (about 35 miles per hours) propeller-driven planing hull capable of carrying 75 passengers. This would provide a one-day trip between Dawson and Circle, with overnight accommodations at Circle, and a bus connection between Circle and Fairbanks.

A more attractive alternative from the tourism point of view would be a slower paddlewheel-driven vessel similar in appearance to the old-time riverboats, capable of carrying 150 passengers and 25 vehicles, with overnight accommodations on board for a two-day trip. However, the cost per passenger of this alternative would be about three times the cost of the one-day service with the planing hull, and the tariff would then be so high as to significantly discourage the use of the service. In addition, if the service were later found to be less viable than anticipated, there would be little scope for the use of the paddlewheel vessel elsewhere in Alaska, whereas the high-speed planing hull could be used in other services in such a case if desired.

2.2 Lower Yukon

The most effective configuration on this section of the river would be a ferry-and-barge combination with accommoda-

tions for 20 overnight and 50 day passengers on the ferry, and barge capacity of 200 tons plus one 35-foot refrigerated container for the transportation of fish. It would act primarily as a supplement to Yutana Barge Lines in serving the villages along the lower Yukon and would also provide passenger transportation among the villages.

Estimates of capital, operating and maintenance costs, and of revenue, were made for the various alternatives. Benefits in the form of factors such as employment and increased economic development, which are not reflected directly in the revenues of the ferry services, were also considered. The comparisons of costs and benefits, made to determine the viability of the proposed ferry projects, were based primarily on the two basic configurations described above, as they were found to be the most cost-effective alternatives and would then have the greatest chance of becoming financially and economically viable.

3.0 Costs

3.1 Upper Yukon

1. Capital Costs	($million)
Ferry, 1982/83	1.86 ✔
Road to dock at Circle	0.96 ✔
Support facilities	1.10
Total initial capital costs[1]	3.92

[1] A hotel or motel would also be required at Circle, but this would be a self-supporting facility which could be operated either separately or in combination with the ferry service.

Assuming traffic growth is as forecasted in the study, a second ferry could be added in 1989 and a third in 1996.

2. Annual Operating and Maintenance Costs ($million)

Ferry	0.49
Support facilities and roads	0.39
Total Annual Operating and Maintenance Costs	0.88

With the addition of a second and third ferry, the ferry operating and maintenance costs would increase in proportion to the number of vessels, but the costs of road and shore facilities would increase only marginally.

3.2 Lower Yukon

1. Capital Costs ($million)

Ferry	1.59
Support facilities	0.40
Total initial capital costs	1.99

This ferry is expected to be able to carry the forecasted traffic over the life of the project.

2. Annual Operating and Maintenance Costs ($million)

Ferry	0.62
Support facilities	0.02
Total Annual Operating and Maintenance Costs	0.64

4.0 Economic Evaluation

4.1 Upper Yukon

The ferry on the upper Yukon is economically feasible only if the assumptions used to compute the costs and benefits are modified. However, for the base case, which is considered to represent the most realistic assessment, it would not be economically feasible as the following table indicates.

Indices of Economic Viability for the Upper Yukon River Ferry System

	Internal Rate of Return (%)	Benefit Cost Ratio[1]	Net Present Value[1] ($1 millio
1. Base Case	0.25	0.73	-4.04
2. Reduced Capital and Operating Costs[2]	5.40	0.87	-1.59
3. Increased Benefits (+27%)[3]	7.45	0.89	-1.35
4. Combination of 2 and 3	13.70	1.06	1.07

[1] Discounted at 10.5 percent.

[2] Excluding the cost of the road and sharing the cost of some of the support facilities with the hotel.

[3] Based on the maximum fare presently charged on cruiseships.

4.2 Lower Yukon

Even considering the benefits of the ferry to fisheries, agriculture and recreational activities, the existing tug and barge operations and air service are the more cost-effective solutions to transportation on the lower Yukon River.

5.0 Financial Analysis

Realizing that there are many possible financial arrangements that could be developed for the ferry system, two financial programs were analyzed for the upper Yukon River. The common elements in both programs are the assumptions that the state would construct a 3.5 mile extension of the Steese Highway to the ferry landing site six miles up-river from Circle and would provide concessionary terms for the financing of the ferry and its support facilities. In the first case tested, if the state were to finance 90 percent of the project cost with a loan at an eight percent interest rate, a private operator would not find the arrangement particularly attractive, so the conditions of the loan would have to be even more favorable. In a second case, if the state were to subsidize 80 percent of the capital cost of the project (for example, in the form of an interest-free loan to be repaid at some distant future date), the financial rate of return on the operator's 20 percent equity would be about 12 percent, possibly enough to interest the private sector. Alternatively, the state could elect to operate the ferry itself. With one

ferry, the revenue would cover the capital, operating and maintenance costs over the life of the project. However, the ferry would show almost no return on capital, i.e. it would provide a close-to-zero interest rate on the initial investment.

6.0 Conclusions

6.1 Economic and Financial Analysis

1. Upper Yukon

   A. The proposed service would not be economically viable under the basic assumptions, which are considered to represent the most realistic assessment of the project.

   B. From the point of view of a private operator, revenue from the proposed service would not cover the fully-allocated cost (capital, operating and maintenance costs) unless subsidized by the State. The proposed service is therefore not financially viable.

   C. If the State of Alaska were to operate the ferry, the estimated revenues over the life of the project would cover the estimated capital, operating and maintenance costs. However, this does not include any interest charges or return on investment and working capital.

2. Lower Yukon

   Under present conditions, the Lower Yukon Ferry is not economically or financially feasible at this time. Much

of the traffic would be diverted from existing services, primarily Yutana Barge Lines, and it is unlikely that the costs of a new service could be made sufficiently low that the tariffs could be less than those now charged by Yutana Barge ferries.

6.2 Social and Economic Impact

1. Upper Yukon (Circle, Eagle and Dawson City)

The main impact of the upper Yukon ferry service will be on the tourist industry. Besides the ferry, hotel facilities would be needed near the ferry site at Circle. 50 to 60 seasonal jobs would be directly involved in the operation of the ferry and hotel and about 100 persons would be indirectly employed in the other service industries supporting the ferry and hotel. Any adverse social impact of the ferry would be minimized, given the location of the support facilities and hotel at some distance from Circle (7 miles by road). Based on a survey of the tour operators and other tourist-related businesses, there is enthusiastic support of the ferry. The public involvement program indicated that individuals in the towns of Circle and Eagle perceive that they would benefit from having the ferry.

2. Lower Yukon (Tanana, Ruby, Galena, Kaltag, Nulato, Koyukuk, Manley Hot Springs and Nenana)

The main impact of the lower Yukon ferry would be the improvement of the freight service in the region. The poten-

tial impact on the processing of fish in the region would be positive, but investments in cold storage facilities as well as the ferry would be needed. The ferry would provide public inter-village transportation. The public involvement program survey indicated that the villagers are in favor of improved transportation on the Yukon and would be willing to pay a higher price for this service than what they are paying for the present tug and barge service. Some villages would not like to see an influx of tourists which might result from the ferry. Direct additional employment is estimated to be less than ten persons.

but also makes them more exposed to damage, especially in narrow and restricted passages likely to be encountered on the Yukon River. Therefore, the sidewheeler will not be investigated further.

Of the ten types of vessels analyzed, three high speed vessels - the captive air bubble (CAB), the air cushion vehicle (ACV), and the planing hull (PH) - and two slow speed vessels, the propeller-driven displacement hull (PDDH) and a sternwheel driven displacement hull (SDDH), are technically feasible alternatives for the upper Yukon River.

5.1.3 Evaluation of Alternative Trip Schedules and Vessel Types

High speed vessels can operate on two-day round trip schedules, but require that a hotel be constructed at or near Circle to accommodate the passengers. The vessel's arrival and departure would not easily facilitate the transportation of passengers between Circle and Fairbanks, a five- to six-hour bus trip. It was determined that a minumum design speed of about 35 miles per hour is required to achieve a two-day round trip, one leg each day, even on a schedule relaxed by the availability of lodging at Circle. Without lodging, a vessel must be designed for about 58 miles per hour. All of the following vessels will be compared under this category:

1. Air Cushion Vehicle (58 miles per hour);
2. Captured Air Bubble Boat (46 miles per hour); and the
3. Conventional Planing Hull (35 miles per hour).

The slower speed vessels can accommodate the arrival and departure of buses to and from Fairbanks so passengers would be able to take the bus trip during daylight hours. Con-

sequently, the four-day round trip does not require that a hotel be located near Circle to provide lodging for the passengers. Because the slower speed vessels are displacement hulls, they can accommodate motor vehicles.

According to the schedule analysis, vessel speeds of approximately 13 miles per hour were necessary. To safeguard against unpredictable river conditions, a value of 14 miles per hour was chosen for this category. This margin was not considered necessary for the two-day boats, because of their much higher relative speeds. The vessels that fall into the slower category are:

1. Standard Displacement Hull, and
2. Sternwheeler.

A detailed discussion of the scheduling of the two types of trips is made in Appendix I.

The schedule analysis was inconclusive as to the required speed for a three-day round trip. It can be assumed that this trip would fall between the two-day and the four-day speeds, but closer to the four-day speed. The only vessel that has a natural speed in this range is the semi-planing hull, whose normal speed is around 21 to 23 miles per hour. This vessel at the capacity required was found to require too deep a draft to be considered for this service, however. Therefore, further consideration of a three-day round trip was dropped.

5.1.3 Selection of the Alternative Vessel Types

Based on the analysis of traffic, a 150-passenger vessel for a four-day round trip and a 75-passenger vessel for a two-

Table 5.1-1

Vessel Characteristics, Upper Yukon, Four-Day Round Trip

VESSEL	150/25 PDDH	150/25-SDDH	200/33-SDDH	150-S	25-B	150-S/25-B
Length Over All (LOA)	210'-0"	255'-0"	280'-0"	233'-0"	131'-0"	369'-0"
Length on Waterline	230'-0"	230'-0"	252-'0"	214'-0"	125'-0"	
Beam, Overall	48'-0"	48'-0"	53'-0"	45'-0"	37'-0"	45'-0"
Beam, Hull	46'-0"	46'-0"	51'-0"	43-'0"	36'-0"	
Depth, Mean, Deck @ Side	7'-5"	7'-5"	3'-2"	6'-4"	7'-0"	7'-0"
Draft, Full Load	5'-8"	5'-8"	6'-0"	5'-1"	4'-6"	5'-1"
Displacement, Full Load (long tons)	1,265	1,265	1,680	1,000	395	1,415
Passengers: Total) doesn't have to =	150	150	200	150	0	150
Stateroom Capacity	150	150	200	150	0	150
Cars	25	25	33	0	25	25
Crew	38	38 !	50	38	0	38
Speed - Kts/MPH	12/13.8	12/13.8	12/13.8	12/13.8	12/13.8	12/13.8
Rated Horsepower (SHP)	1,665	1,665	2,440	3,490		3,490
Fuel Rate (gallons per hour)	80	80	119	170		170

Source: Consultants' estimates.

TABLE 5.1-2

Capital Costs for Alternative Vessel Types

($ million in 1980 Prices)

	Cost	Contingencies	Transportation	Total Cost
150/25 PDDH	4.750	0.475	0.262	5.487
150/25 SDDH	5.220	0.522	0.287	6.029
200/33 SDDH	6.930	0.693	0.381	8.004
150 SDDH	4.210	0.421	0.232	4.863
25 Barge	0.875	0.088	0.048	1.011
75/PH	1.600	0.160	0.088	1.848
75/CAB	3.600	0.360	0.198	4.158
75/ACV	2.500	0.250	0.138	2.887

Source: Consultants' estimates.

Table 5.1-3

Ferry Operating Cost, Upper Yukon River Ferry Overnight Trip

	150/25 PDDH	150/25 SDDH	Combined 150 SDDH	Combined 25 Barge
1. Capital Costs (million $)	5.49	6.03	4.86	1.01
2. Wages and Benefits/year	615,276	615,276	615,276	--
3. Annual Victualling for crew	102,600	102,600	102,600	--
4. Maintenance and Repairs	138,348	151,956	122,472	6,060
5. Supplies and Equipment	32,940	35,180	29,160	--
6. Hull Insurance	192,150	211,050	170,100	35,350
7. Protection and Indemnity Ins.	137,250	150,750	121,500	25,250
8. Fuel	96,422	131,375	204,897	--
9. Subtotal Without Capital Costs	1,314,986	1,399,187	1,366,005	66,660
			1,432,665	
10. Capital Costs @ 10.5% 25 years	623,040	684,701	551,544	114,621
11. Total Annual Cost	1,938,026	2,083,888	2,098,830	

150K

Source: Consultants' estimates.

Table 5.1-5

Cost Per Passenger on the Upper Yukon River Overnight Trip

	150/25 PDDII	150/25 SDDII	150/ 25 SDDII/B
1. Cost per passenger unit 100% utilization of capacity	205	221	222
1 car equivalent to 1 passenger	205	206	207
1 car equivalent to 1.5 passengers	191	206	207
1 car equivalent to 2 passengers	179	193	194
1 car equivalent to 3 passengers	159	172	173
2. 80% Utilization			
Ratio of 1:1	256	276	277
Ratio of 1:1.5	239	257	258
Ratio of 1:2	224	241	242
Ratio of 1:3	199	215	216
3. 50% Utilization			
Ratio of 1:1	410	442	444
Ratio of 1:1.5	382	412	414
Ratio of 1:2	358	386	388
Ratio of 1:3	318	344	346
4. Cost per passenger without Capital Costs (assuming a ratio of 1:2)			
100% Utilization of Capacity	122	130	133
80% Utilization of Capacity	152	162	166
50% Utilization of Capacity	244	259	265
5. Percent reduction between 1, 2 and 3 and 4.	32	33	31

Source: Consultants' estimates.

Alaska State Legislature

House of Representatives

Committee on Transportation

Rep. Bette Cato, Chairman

Pouch V
State Capitol
Juneau, Alaska 99811
(907) 465-4858

March 27, 1982

HOUSE TRANSPORTATION COMMITTEE
LETTER OF INTENT

TO ACCOMPANY HB 286

"An Act making a special appropriation for payment as a grant to the City of Nenana for ferry construction; and providing for an effective date."

The House Transportation Committee has had HB 286 under consideration.

Section 1 of HB 286 appropriates from the general fund $8,600,000 as a grant to the City of Nenana for construction of an Upper Yukon River stern-wheeler ferry.

It is the intent of the House Transportation Committee that a condition be included in the terms of agreement for Nenana to receive the grant. The condition is that if the Alaska Marine Highway Authority is created, (presently HB 651) then the City of Nenana must transfer this project to the Marine Highway Authority once that Authority is established.

Bette Cato
Ch. Transportation Committee

COMMITTEE REPORT

HOUSE

(7)

3/3/82

FURTHER: FINANCE

Date: March 25, 1982

Mr. Speaker: (Taken from Finance 3/8/82)

The Committee on TRANSPORTATION has had SSHB 286

"An Act making a special appropriation for payment as a grant to the City of Nenana for ferry construction; and providing for an effective date."

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

[ ] do pass [ ] do not pass

[ ] do pass with attached amendments(s)

[ ] replace with CS for ____________ [ ] same title [ ] new title

and recommends ____________

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

[X] reports it back ~~without~~ individual recommendation

[X] referred to the Finance Committee

MEMBERS SIGNING DO PASS

(signatures)

MEMBERS HAVING OTHER RECOMMENDATIONS:

(signatures)

CHAIRMAN

H 60 (Rev. 12/78)

Alaska State Legislature

TRANSPORTATION COMMITTEE HEARINGS

DATE: 3/25/82
LOCATION: 112 Capitol
SUBJECT: HB ~~268~~ 286

NAME	REPRESENTING	ADDRESS	PHONE	HERE TO TESTIFY	HERE TO OBSERVE
Brian Rogers	District 20	Dorch V	4925	✓	

COMMITTEE REPORT

HOUSE

FURTHER: FINANCE

3/9/81

(7)

Date: April 3, 1981

Mr. Speaker:

The Committee on TRANSPORTATION has had HB 288

"An Act making a special appropriation to the Municipality of Anchorage to study modes of mess transportation in Anchorage; and providing for an effective date."

under consideration and reports it back as follows:

[X] do pass [ ] do not pass

[ ] do pass with attached amendments(s)

[ ] replace with CS for ______ [ ] same title [ ] new title

and recommends ______

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

[ ] reports it back without recommendation

[x] referred to the Finance Committee

MEMBERS SIGNING DO PASS	MEMBERS HAVING OTHER RECOMMENDATIONS:
[signature], Do PASS	[signature] No Rec
[signature] " "	
[signature]	
[signature]	
[signature] Buchholdt	

[signature]
CHAIRMAN

H 60 (Rev. 3/81)

MUNICIPALITY OF ANCHORAGE

REQUEST FOR PROPOSAL

For an analysis of Mass Transportation
Modes Suitable for Primary
Transit Corridors

Introduction

In order to provide personal mobility with minimal disruption to the urban environment, the Municipality of Anchorage is seeking qualified consultants to submit proposals for an analysis of the suitability of a range of modes for Primary Transit Corridors.

Anchorage has a unified government that encompasses an area of 2,000 square miles with a population near 200,000. Most of the population is located in an area covering 180 square miles which is expected to accommodate 350,000 people by 1995. The Municipality initiated transit service in 1974 and now has a daily ridership in excess of 10,000. The Long Range Element of the Transportation Plan forecasts approximately 140,000 daily transit trips for 1995.

Parameters of Alternatives

The objective is to evaluate a broad range of modal alternatives within the following parameters:

1. A wide range of anticipated levels of demand for transit service, within the population range predicted for the study area.

2. Availability of right-of-way.

3. Capital and operating costs.

4. Accessibility to the mobility-impaired.

5. Anticipated reliability of the technology.

6. Comfort, personal safety, and security of passengers and staff.

Modal-Evaluation Criteria

The final product will be a report assessing a variety of modes with respect to:

1. Potential to attract varying levels of ridership.

2. Construction cost, in light of local-financing capability.

3. Operating costs, in light of local-financing capability.

4. Average speed, including access time.

5. Lead time for implementation.

6. Frequency of service.

7. System capacity.

8. Right-of-way requirements and associated displacement.

9. Visual and noise impacts.

10. Energy impact.

11. Accessibility to the mobility-impaired.

12. Structural stability under prevailing soil and seismic conditions and the subarctic climate.

13. Maintenance requirements.

Modal Characteristics

The proposal should list a wide variety of modes to be examined in the initial phase of the project. The initial selection should cover numerous variations within--and combinations of--the following factors:

- Vehicle size--including articulation and the potential for multiple unit (MU) operation. Passenger-carrying capacity is a primary concern.

- Guideway--surface, mixed-traffic, elevated, subway, degree of grade separation, fixed guideway.

- Control--manual, automatic with on-board attendant or completely automated.

- Personnel Requirements--vehicle operator, vehicle attendant, station attendant, traffic controllers and supervisors, peaking characteristics of daily crew size.

- Power Supply--central Station: overhead wires, current rails, recharging stations. On-board: petroleum-based fuels, alcohol, propane, batteries, flywheels.

- Propulsion--electric, internal combustion, linear induction, flywheel, cable.

- Effect on Street Traffic Control--preferential signalization, restricted-use lanes, grade-crossing signals and gates.

- Pedestrian Access--including means of handicapped access.

Attached is an example list of modes.

Selection of Modes for Detailed Analysis

The consultant will present the results of the initial analysis of each mode to the AMATS Committees, the Transit Advisory Board, the Planning and Zoning Commission (in a public hearing), and the Municipal Assembly. In this presentation the consultant will provide brief desriptions, in lay terms, of the distinguishing characteristics of each mode, providing--where possible--photographs or drawings of the modes. The presentations should include a description of the land-use and population characteristics appropriate to each mode. Order-of-magnitude relative costs should also be discussed.

The Municipality will then select four modes for detailed analysis.

Final Report

The detailed analysis of the final four modes will describe the conditions under which each mode could be successfully operated on primary transit corridors in Anchorage.

Land Use

The final report should highlight the land-use characteristics that are typically associated with successful operation of each mode.

Reference to Previous Studies

Reference should be made to the "Anchorage Light Rail Feasibility Analysis" (Alan M. Voorhees & Associates, 1979) and the "Feasibility Analysis of Upgraded Passenger Rail Service in the Anchorage, Alaska Region" (A.M.V. & Assoc. 1979). The Municipality will loan copies of these reports

to interested consultants, upon request, and will provide a copy of each report to the party to whom the contract is awarded. The report should note where conclusions are similar to, or different from, those contained in the aforementioned Voorhees reports.

Corridors

The corridors for which these modes are to be studied include:

1. Northern Lights Boulevard, from "C" Street to Muldoon Road (designated as a primary transit corridor).

2. "C" Street from Downtown Anchorage to Dimond Boulevard (also a primary transit corridor).

3. Northern Lights Boulevard from "C" Street west to Earthquake Park, thence south to Anchorage International Airport.

4. The Seward Highway from Third Avenue to Potter Marsh.

5. The Alaska Railroad from Birchwood to Potter Marsh.

6. The Glenn Highway from Downtown Anchorage to Eklutna.

PLANNING DEPARTMENT STAFF SUPPORT

The contractor may avail itself of the following pieces of information from the Planning Department:

1. Map of the Adopted Comprehensive Land Use Plan.
2. Existing population and employment, by traffic
3 analysis zone.
4. Projected populations and employments, by traffic analysis zone.
5. The adopted Long Range Transportation Plan.
6 Existing and projected average daily traffic counts.
7. The adopted Transit Development Program.
8. Limited data on current transit ridership.
9. Copies of previous relevant studies.

The Planning Department will not furnish any other staff support except to coordinate with the AMATS Policy Committee and to help further define the scope of the project.

Qualifications Sought

In reviewing the proposals, the Municipality will consider the following items:

1. Previous experience in transit-mode feasibility studies.

2. Previous experience with small to medium-sized transit systems.

3. Qualifications of individuals who will work on the project, including any subcontractors.

4. Methodology and organization of study.

5. Proposals for group presentations of preliminary and final reports.

The review team will consist of representatives from the Municipal Planning and Transportation Departments. No more than $100,000 is likely to be available for the transit data study. The terms of payment are negotiable.

Time Frame of Study

The approximate time schedule for the project is:

1. Pre-proposal session: 4 weeks from date of cover letter.

2. Proposals due: 6 weeks from date of cover letter.

3. Staff review: 2 weeks from proposals-due date.

4. Contract award: 2 weeks following staff review.

5. Status reports: Monthly during project.

6. Initial report: 4 months after contract award.

7. Selection of final modes: 2 months after initial report.

8. Project completion: 9 months after contract award.

The consultant must be prepared to make a preliminary presentation and a final presentation to the Municipal Assembly, the Planning and Zoning Commission, the Transit Advisory Board, and the AMATS Technical Advisory and Policy Committees, including production of 40 copies of the final report. A public hearing must also be conducted.

The requirements outlined in the project description are minimums and any additional information you can provide should be listed to allow a better evaluation of the proposal. Any questions before the opening date can be directed to Ken Markve or to Stanley Green at (907) 264-4251.

APPENDIX A

List of Modes

The modes to be examined initially should include, but not necessarily be limited to, the following list. For all modes, the costs and access times for primary access modes should be included in the analysis.

1. Automated rapid transit, such as the new system in Lille, France.
2. Monorail, with under-carriage structural rail, such as in the systems in Disneyland and Seattle.
3. Monorail, with catenary-suspended rail, such as proposed for New Orleans.
4. Monorail, with over-carriage rail.
5. Personal rapid transit, such as the Morgantown system.
6. Electric bus with intermediate stations for recharging.
7. Express buses on HOV lanes.
8. Express buses on exclusive bus lanes.
9. Trolley buses on exclusive bus lanes.
10. Light rail transit.
11. Aerial tramways (telepherique) such as on Roosevelt Island, New York.
12. Rail cars on the Alaska Railroad.
13. Trolley bus with off-line capabilities, either by flywheel or internal-combustion engine.
14. Flywheel-powered vehicles.
15. Articulated buses.
16. Heavy rail rapid transit.

Alaska State Legislature

TRANSPORTATION COMMITTEE HEARINGS

DATE: 3/30/81
LOCATION: CAPITOL
SUBJECT:

NAME	REPRESENTING	ADDRESS	PHONE	HERE TO TESTIFY	HERE TO OBSERVE
Glenn W. Sachs	Dept. of H. & S. S. - Div. of Adult & Aging Svcs	Pouch H-01C	465-3250	Yes	
Rep Clocksin	Bill Sponsor			X	

CRITS

POSITION PAPER
ON
HOUSE BILL NO. 288

"An Act making a special appropriation to the Municipality of Anchorage to study modes of mass transportation in Anchorage; and providing for an effective date."

This bill would appropriate the sum of $100,000 to the Municipality of Anchorage to study modes of mass transportation in Anchorage. It is generally an accepted fact that transportation is a major service needed for all age groups, including the elderly and handicapped, and present services are not meeting the demand.

The Municipality of Anchorage received a grant of $10,000 for FY'81 from the Department of Health and Social Services to contract with a transportation consulting firm to plan better coordination of transportation services with existing agencies providing services to the elderly and handicapped. However, this legislation would extend beyond the scope of the coordination study and evaluation.

The Department of Health and Social Services supports the concept and need for improved mass transportation in Anchorage.

Recommended by: Elizabeth Muktarian
Elizabeth Muktarian
Director
Div. of Adult and
Aging Services

Date: 3/19/81

Approved by: Helen D. Beirne
Helen D. Beirne
Commissioner
Dept. of Health and
Social Services

Date: 3/24/81

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. House Bill No. 288

Title "An Act making a special appropriation to the Municipality of Anchorage to study mass transportation in Anchorage; & providing for an effective date."

Requested by _____ Date March 18, 1981

II. FISCAL DETAIL

Agency Affected Department of Health and Social Services

Program Category Affected Social and Economic Assistance for the General Population

BRU, Program, or Subprogram(s) Affected Division of Adult and Aging Services-Adult Services

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

EXPENDITURES (Thousands of Dollars)

	FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		-0-				

FUNDING (Thousands of Dollars)

GENERAL FUND		-0-				
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

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

Zero Impact.

IV. DATE 3-18-81 PREPARED BY Dorothy Wall

AGENCY Division of Adult and Aging Services

PHONE 465-3250

Original: Legislative Finance

cc: Budget and Management

Prime Sponsor (First Legislator Named)

M&B Approval M Hubbard Date 3/20/81

33-001 (Rev. 12/80)

GOVERNOR

STATE OF ALASKA
OFFICE OF THE GOVERNOR
JUNEAU

January 30, 1981

Speaker of the House
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Mr. Speaker:

Once again I have been requested to recommend naming the bridge over the Yukon River in honor of E. L. Patton.

I am pleased to submit Mr. Patton's name to the Alaska State Legislature, which by law is the assembly for the unorganized borough, for its consideration. I would suggest that the Legislature pass a resolution of legislative intent on this issue, if they determine that the bridge should be named for E. L. Patton.

Thank you for your assistance and consideration on this issue.

Sincerely,

Jay S. Hammond
Governor

Alyeska pipeline SERVICE COMPANY

1835 SOUTH BRAGAW STREET (99504), P.O. BOX 4-Z (99509), ANCHORAGE, ALASKA, TELEPHONE (907) 278-1611, TELEX 090-25-127

Biographical Sketch
Edward L. Patton, Chairman
Alyeska Pipeline Service Company

Edward L. Patton was named President of Alyeska Pipeline Service Company upon its formation in August, 1970, and was named Chairman and Chief Executive officer of the company in 1976. With extensive experience in managing the construction of petroleum facilities both in the United Stated and abroad, he moved to Alyeska after managing the construction and operations of a major new refinery complex at Benicia, California.

A native of Newport News, Virginia, Patton was graduated from the Georgia Institute of Technology in 1938 with a BS degree in Chemical Engineering. He joined an Exxon affiliate in Baton Rouge, Louisiana, the same year and served in several engineering assignments for that company before being called to active duty in the Navy.

From 1941 until 1946, Patton served in the U.S. Navy, including duty as commanding officer of several antisubmarine and escort vessels serving in Caribbean, North Atlantic, and Pacific waters. In 1946, he returned to Exxon in Baton Rouge and progressed through a number of management positions before transferring to the Norwegian affiliate for the construction and early operation of a refinery. He returned to the United States in 1964 as an advisor for Exxon refining operations in the Mediterranean, Middle East and Far East.

In 1966, Patton was transferred to Exxon's chief domestic affiliate to assume responsibility for construction and operation of the refining facility at Benicia, near San Francisco.

As Alyeska's chief executive, Patton led the world's largest private construction project through its regulatory, design, construction and operation stages, overseeing a peak workforce of 22,000 men and women.

THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST
Bill/Resolution No. SB 188
Title Naming the North Slope Bridge in honor of Edward L. Patton
Requested by (State Affairs Committee) Date 2/18/81

II. FISCAL DETAIL
Agency Affected Dept. of Transportation and Public Facilities
Program Category Affected Maintenance & Operations
BRU, Program, or Subprogram(s) Affected
(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

		FY 81	FY 82	FY 83	FY 84	FY 85	FY 86
100	PERSONAL SERVICES	.45					
200	TRAVEL	.2					
300	CONTRACTUAL	.1					
400	COMMODITIES	.5					
500	EQUIPMENT						
600	LAND & STRUCTURES						
700	GRANTS, CLAIMS, ETC.						
	TOTAL	1.25					

FUNDING (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

FULL TIME						
PART TIME						
TEMPORARY						

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

Cost includes manufacture and installation of standard highway bridge signs.

Alaska State Legislature

House of Representatives

Committee on

Health, Education & Social Services

Donald E. Clocksin, Chairman
465-3797
465-3777

Pouch V
State Capitol
Juneau, Alaska 99811

TO: Members of the House Transportation Committee

FROM: Rep. Don Clocksin

RE: HB 288

DATE: April 2, 1981

In response to the questions posed at your Committee meeting on Monday, March 30, 1981 I have the following information:

1) The Municipal Assembly voted on November 25, 1980 to appropriate $100,000 to study mass transit in Anchorage (not $50,000 as I told the committee).

2) The vote was 10 - 1 (Carol Maser against).

3) The Planning Department feels that an additional $100,000 will be sufficient to complete the study.

4) The RFP will be ready for release next week. It will take one month from that date to assess the project schedule, however. Estimated completion March 31, 1982.

If you have any further questions please feel free to contact me.

DC:sp

CATO

EXECUTIVE SUMMARY
ALASKA MUNICIPAL LEAGUE TRANSIT STUDY

January, 1981

Alaska MUNICIPAL League

TELEPHONES
(907) 586-1325
586-6526

204 N. FRANKLIN ST.
JUNEAU, ALASKA 99801

Executive Summary - AML Transit Study

January, 1981

In late 1979, the Alaska Department of Transportation and Public Facilities contracted with the Alaska Municipal League to conduct a statewide transit study. The purpose of the study was threefold: (1) to meet with local elected and nonelected officials in various communities throughout the state in order to assess their perceptions of the feasibility of transit systems in their communities, including the potential for growth of existing systems; (2) to assess, statewide, the requirements for a state role in transit development; and (3) to assess the feasibility and potential function for a transit operators association.

The transit project consisted of four distinct phases. The first phase was preparation for community meetings, including arranging all the scheduling with local officials and developing a draft of a transit brochure. Meetings in ten communities throughout the state, a meeting with paratransit operators, and the first meeting of transit operators made up the second phase. Summarizing the results of these meetings, developing alternative strategies for operating and capital assistance, and preparing for a three-day transit conference constituted the third phase. The final phase was the assimilation of the results of the conference and interim products into a final report.

The League developed and published an information booklet, "Guide to Community-Based Public Transportation Systems for Local Officials", which describes the options that exist for a community to improve the local mobility of its citizens, the potential benefits of improved community-based public transportation systems, the sequence of steps that a community usually takes in developing a public transit system, and available funding opportunities.

Meetings were held with local officials in ten communities throughout the state, representing a cross section of size, geographic location, and local government types. Among those visited were three municipalities that currently operate public transit systems: the Municipality of Anchorage, Fairbanks North Star Borough, and the City and Borough of Juneau; and one that has a private transit operator: Ketchikan. The remaining six local governments did not have public transit systems at the time of the meetings: Bethel, Dillingham, Kenai Peninsula Borough, Kodiak Island Borough, Matanuska-Susitna Borough and the City and Borough of Sitka. The meetings had a dual purpose of disseminating information about public transit and of acquiring information about the status of local transportation services and the interest of local governments in pursuing opportunities to improve local mobility.

Three meetings were scheduled with transit operators: one solely for paratransit operators and two mainly for public transit operators, although there was participation by paratransit operators. Technical assistance for paratransit operators was provided by inviting a speaker for a regular training program sponsored by the Office on Aging for its grant recipients. All others who had received grants through the Urban Mass Transportation Act Section 16(b)(2) program were also invited.

The first transit operators workshop was held in May. Two guest speakers from Seattle's METRO were chosen in part on the basis of operational areas which transit operators had indicated needed improvement. Preliminary discussions were held concerning the formation of an Alaskan transit operators association.

The second meeting of the transit operators was expanded to a conference format and scheduled in conjunction with AML's annual Local Government Conference, which was held the second week in November. Three types of sessions were held, with the two sessions during the first day being of general interest to both transit operators and other local officials. The second day consisted of technical workshops on a broad range of topics. The third day was devoted to establishing the Alaska Transit Operators Association.

Recommendations of the study are based on a consensus of local government officials and transit operators with whom we met during the course of the transit project. They represent a cross section of communities throughout the state, including all local governments operating public transit systems. It should be noted, however, that transit needs were not discussed in relation to other transportation needs or prioritized.

It is recommended that the State implement a comprehensive public transit assistance program, with four main components: (1) technical assistance - $150,000, (2) capital assistance - $5 million, (3) operating assistance - $5 million, and (4) demonstrations - $500,000. All figures are for FY '82.

Although DOT/PF currently provides some technical assistance, there was a need expressed for an expanded program that covers all aspects of planning, operations, and management. Staffing in Alaska's small systems is inadequate to address the full range of tasks needed for effective short and long range planning.

The State has taken a major step in initiating significant capital assistance for transit with the $8.8 million in the transportation bond issue. It is recommended that the distribution of the bond moneys be on a flexible, discretionary basis, rather than a formula basis, in order to respond to the expressed needs of the communities.

Operating assistance is the third component recommended for a comprehensive public transit assistance program. Of the various distribution strategies used throughout the country, a percentage of gross costs is recommended for Alaska. Gross cost formulas take different conditions such as land use patterns and cost-of-living into effect while performance based formulas could penalize systems in isolated areas of the state. Because there will still be a significant amount of local subsidy needed for local public transit even with the state operating assistance, the incentive to operate efficiently will not be diminished.

Finally, demonstrations are needed to enable local officials and the general public to find out first-hand whether or not the benefits of public transit are worth the costs. Funding for demonstrations should be at a much higher level than for established systems.

The general forecast of the statewide public transit requirements for the next six years is based on detailed five-year development plans of the three largest public transit systems in the state and projections derived from community interviews and mobility questionnaires. In addition to the potential for some intercity and regional public transportation, it is estimated that there will be 23 local public transit systems by 1986.

SUMMARY OF RECOMMENDATIONS.

1. Implementation of a comprehensive public transit assistance program with four main components: (1) technical assistance, (2) capital assistance, (3) operating assistance, and (4) demonstrations.

2. Detailed investigation of the potential for joint school/public use of school buses and/or public transit vehicles.

3. Up-dating the statistical information that was gathered during the early stages of the transit project. (Follow-up questionnaires have been mailed.)

4. Participating in follow-up meetings in the communities visited and scheduling sessions in several other areas that have expressed an interest.

In addition, future studies may wish to take into consideration other potential state roles in transit development. In the AML study, emphasis was placed on alternatives generally favored by the communities visited.

Page 127, Table 6-6. Effects of Change in Revenue Sharing Legislation on Support to Public Transit. The last column, Transit Related Revenue Sharing: New/Old, which depicts the new amounts divided by the old, should read, 29.3%, 20.4%, 1.8% and 46.6% instead of "0.29%, 0.20%, 1.02% and 0.47%.

MEMORANDUM State of Alaska

TO Lee McAnerney
Commissioner
Department of Community
and Regional Affairs

DATE: February 3, 1981

FILE NO. 0004

TELEPHONE NO. 465-3900

FROM Robert W. Ward
Commissioner
Department of Transportation
and Public Facilities

SUBJECT: Transmittal of the Alaska Municipal League transit study Final Report and Executive Summary

Attached please find the subject materials which are provided as a part of the DOT/PF portion of the report required by the legislature under last year's FCC HB 192 (Revenue Sharing). You will note that there are several explicit recommendations contained in the League's report, along with suggested legislation to implement these recommendations, but it is understood from this office that some of the recommendations are not in keeping with State policy and that the suggested legislation is not required at this time.

Following is a brief description of the major recommendations from the League's report, as well as the DOT/PF position with regard to these recommendations:

1) Capital assistance: The report recommends that the DOT/PF regularize transit as a modal element within the capital improvements program and that funding be discretionary, in response to locally developed transit plans and in conjunction with available Federal funds (cost for FY82: $4-$5 million).

   The DOT/PF supports this recommendation, and, in fact, this Department has undertaken to implement a transit element to our CIP. Although we are now waiting for an Attorney General's opinion regarding assistance to private-for-profit and private, nonprofit operators, it is understood that unless some legislation is required to simplify the procedures by which the Department assists these private sector interests, then no additional legislation is required to continue the provision of capital assistance. I would note however that the capital cost estimates in the report may be somewhat low.

2) Operating Assistance: The report recommends that the DOT/PF establish through legislation a categorical program for operating assistance and that the program be allocated under a formula whereby operators receive one-third of their gross operating costs (costs for FY82: $5 million).

   The DOT/PF does not support this recommendation at this time. In view of the Governor's proposal to increase the size of the Municipal Assistance program to over $90 million and to increase the Revenue Sharing program substantially as well, it is seen that enough unrestricted State funds should exist to afford local communities ample resources, in conjunction with Federal funds, fares, local funds and sound management, to either expand transit services or to maintain existing levels of service.

In addition to the Governor's proposal for increased unrestricted fiscal resources among local communities, two other related factors weigh strongly in our position against a categorical operating assistance program: a) clearly transit is undergoing a period of rapid growth in the State at this time (ridership has doubled in the State in the past two years, and, as discussed below, a number of new systems are expected to come on line in the very near future); therefore, any State commitment to a categorical operating assistance program, particularly a program which guarantees a percentage of costs, is sure to become more expensive (and more expensive at an exponential rate) in the future; b) finally, the trend toward the provision of unrestricted funding is also a trend toward the development of local government decision-making, local autonomy, but the trend toward categorical programs, on the other hand, is a trend toward more regulations, more rigid policies and procedures, a larger State bureaucracy and less local government autonomy. No legislation is required.

3) Planning and Technical: The report recommends that the DOT/PF initiate a program of planning and technical assistance to provide resources to local operators as well as to conduct studies of a Statewide nature (cost for FY82: $350,000).

The DOT/PF supports this recommendation in part. Project-specific capital plans can be supported with a portion of capital appropriations (the Department has already initiated this concept with a portion of the $8.8 million in transit bond funds approved by the voters in the November election). Federal planning dollars are available to local communities through the Department for management and technical assistance, and the Department conducts studies of a Statewide nature (such as the current study) utilizing planning funds from the general fund appropriation made annually to the DOT/PF Planning and Programming Unit. It is seen that the efforts of the Department in this area are adequate at this time. No further enabling legislation is needed, although continuing attention to the programming requirements for this task must not be relaxed.

4) Demonstrations: The report makes a recommendation on demonstrations, but that recommendation is included within the "Operations" category. The report recommends that the State provide 90% of the first year net operating costs and 80% of the second year net operating costs for new systems (in the "Sketch Transit Management Plan," at the conclusion of the report, it is shown that fifteen or more new systems may be established within the next five years). Cost for FY82: $250,000 (these are operating grants; capital grants are included in the capital assistance section).

The Department has no recommendation to offer in the area of operating assistance for demonstrations at this time.

5) Other recommendations: a) Pupil transportation: the report states that there may be significant potential for combining pupil transportation and public transportation in the State and goes on to suggest three strategies under which such coordination might be effected. The report recommends that a "review team" comprised of representatives from the DOT/PF, Department of Education and Department of Public Safety be established to examine and make recommendations on proposals from local communities.

As shown in the Executive Summary, the real potential for combining services remains unclear, and further study of this area is suggested before any action is taken. The DOT/PF agrees with the recommendation in the Executive Summary.

b) Transit Operators Association: as shown in the report, a Transit Operators Association has been formed as a direct result of the Municipal League study. The DOT/PF will work closely with the Association in the next year to both encourage the growth of the Association and to explore the potential for creation of the Association as a technical resource center in the State for public transportation. If this strategy proves successful, then pressure for an increase in DOT/PF staff may be reduced, despite a rapid growth in the size of the transit program throughout the State.

c) Followup activities: The report recommends that the DOT/PF work with communities visited during the study, as well as with other communities in the next year, in order to assure the continuation of the momentum built during the study period. The Department agrees with this recommendation, and in addition to the ongoing interaction between DOT/PF staff and local communities, the Department is now in the process of building a public transit element, based on local inputs, to ongoing Regional Transportation Plans. Finally, to build a transit element within the Statewide Transportation Plan, the Department will continue with projects such as the current study. Funds for Phase II of the present study have been budgeted within the Planning and Program Unit Annual Work Program for the present fiscal year. Phase II will concentrate on an update of Phase I (through community visits, dissemination of questionaires and a review of recommendations), on the provision of technical information (through the use of workshops and other forums in cooperation with the Transit Operators Association) and on a Final State Transit Management Plan (required under Federal regulations for the Rural Transit Assistance Program administered by the DOT/PF). The Association will be consulted during the development of the specific tasks in the scope of work for Phase II, and it is hoped that this involvement will further encourage the continued development of that organization.

In general it is seen that the Department agrees with many of the report recommendations and that the Municipal League did highly credible job on this study, accurately reporting the concerns of local elected and nonelected officials, while operating on a very tight budget and under the difficult circumstances of having to schedule more than ten meetings with local elected bodies throughout the State in a proportionately short time period.

Thanks for your assistance, and if you have any further questions, then please do not hesitate to contact this office.

cc: John Bates
Dennis Dooley
Henry Springer
Kit Duke
Ginny Chitwood
Keith Specking
Jessie Dodson