

ALASKA LEGISLATURE COMPILED FILES 1901-1902

1240

HCRA

HB 840

1290

SELDOVIA EAST ADDITION WATER AND SEWER SYSTEM EXTENSIONS  
PRELIMINARY ENGINEERING REPORT

Prepared For:

City of Seldovia  
Drawer B  
Seldovia, AK 99663

Prepared By:

Tryck, Nyman & Hayes  
740 "I" Street  
Anchorage, AK 99501

January, 1982

VI. COST ESTIMATE

The following page sets forth anticipated construction costs, an amount for contingency, and anticipated surveying, test hold probes and engineering. Cost estimates are based upon anticipated 1982 construction.

V. ENVIRONMENTAL IMPACT

All of the proposed construction will take place in developed areas. The environmental impact to wildlife should be negligible since no potential wildlife habitats will be disturbed.

All reasonable efforts will be made to limit the impact upon the scenic beauty of the townsite.

The only construction with potential significant environmental impact is the "additional additive" waterline and the sewer line construction that follows the shoreline for a short distance and the two sewer lines that cross Seldovia Slough. A Corps of Engineers permit will be required for this construction.

Seldovia Slough is a small estuary that is significantly affected by the rise and fall of the daily tides. Construction must be accomplished at the low tide periods of the cycle and sediments disturbed by construction should be cleared by tidal flushing action.

Construction will be scheduled so as to occur at times when salmon are not moving up the Slough.

It is expected that the waterline will be assembled on shore and dragged into a submarine trench crossing the slough. The sewer lines will be constructed by diking off 1/2 of the slough at a time and constructing the shallow sewer lines utilizing conventional trench construction methods. Trenches in the slough area should not exceed 4' depth.

to the slough discharge directly into the tidal waters. The irregular topography of the East Addition and the existing subdivision that was staked without regard for the topography makes it extremely difficult to serve all of the residences on a gravity service basis even with the sewer extensions proposed.

The design population of this area cannot in the foreseeable future be expected to grow beyond 200 persons which can be served by the minimum code requirement of 8" sewer lines.

The water system extension proposed will continue the 10" line along Augustine Avenue and down "C" Street as shown with an additive alternate continuation across the slough for a length of 400 ft. to tie into the main city system. In addition to providing service to the East Addition, this line would serve as a third supply line crossing the slough from the supply sources to the Seldovia main townsite.

Insofar as alternatives are concerned, due to the irregular topography, and limited right-of-ways, few alternatives exist. An alternative is possible to construct a line along high tide on the east side of the slough. This would provide gravity service to the residents along the slough as opposed to the installation of the sump pumps that will be required by approximately 4 houses with the proposed design. However, shoreline slough construction will raise costs substantially and also impose additional environmental problems. The proposed sewer system extensions have been designed as a gravity system flowing into the existing Seldovia system. This criteria is necessary because Seldovia has very limited cash resources to finance operations and maintenance.

### III. HISTORY OF THE SELDOVIA SEWER SYSTEM

The existing sewer system had its beginning with the construction of the Urban Renewal Improvements in 1966. That project resulted from the need to rebuild Seldovia following the devastating 1964 Earthquake. A subsequent major project provided sewer extensions to areas outside of the Urban Renewal area. In 1981 two other sewer lines were extended to provide approximately 900 l.f. of extensions bringing the total footage of Seldovia sewers to approximately 10,000 l.f.

Because of the essentially tidewater frontage served, 2 sewage lift stations were installed to lift sewage sufficiently to provide gravity flow into Seldovia Bay. The present outfall line dumps into the bay at the outer beach via an 800 l.f. cast iron outfall line. Sewage treatment is contemplated in the future but currently holds a low State and EPA priority. Except for a few isolated residences in the main townsite of Seldovia, present sewers service the entire community. The East Addition (across the slough) is essentially the only unsewered area.

### IV. PROPOSED IMPROVEMENTS

The East Addition of Seldovia (across the bridge and slough from the main community of Seldovia) includes approximately 20 residences presently served on a minimum standard basis via a combination of a 10" and 2" line water supply system. No sewerage system exists on that side of the slough and the shallow bedrock that prevails generally throughout the Seldovia area prohibits the development of adequate on-site sewage disposal systems. Residences adjacent

The upper reservoir consists of a concrete arch dam constructed in 19<sup>54</sup> by the Alaska Public Works Program. The elevation of the reservoir spillway is 610 feet. That reservoir is constructed at an elevation such that some of the water from the drainage basin enters the stream below the reservoir. The current reservoir capacity is approximately 2 million gallons.

Water from the upper reservoir flows through approximately 1800 l.f. of newly installed (the upper reservoir water line project) ductile iron pipe, thence into approximately 800 l.f. of dipped and wrapped steel pipe (installed in 1963) and thence through the EDA Project 07-01-02156 chlorinator/valve control station into a 500,000 gallon steel water storage tank installed in 1981. From the water tank, the water continues to flow into Seldovia through 900 l.f. of the 10", 1963 installed, steel pipe thence through the 1981 installed pressure filter system. From this point an additional emergency loop was added in 1981 that provides for 2 possible flow line routes into Seldovia.

Because of the limited collection and storage capacity of the upper reservoir, resulting in its inability to store sufficient water for winter low flow periods in 1979, a lower reservoir and a new pumphouse was constructed on Fish Creek approximately one-quarter mile east of Seldovia. The new pumphouse houses 2 each 800 gpm well turbine type pumps driven by 471 diesel units via right angle gear drives. Fish Creek drains a large portion of the land area east and south of the town and because of its proximity to developed areas there is danger that it is the recipient of human and animal wastes. Currently the water from the Fish Creek Reservoir (used only in times of extreme emergencies) is pumped to the new storage tank where it is chlorinated prior to flowing into Sledovia.

## I. INTRODUCTION

This report deals with proposed extensions to the City of Seldovia Water Distribution System and Sewer Collection Systems. These modifications are a continuation of modernization efforts partially constructed in the years 1978 through 1981 funded under EDA Projects 07-01-01939.40, 07-01-02156 and the DEC projects "Water and Sewer Improvements, Kodiak and Cedar Streets" and "Upper Reservoir Water Line".

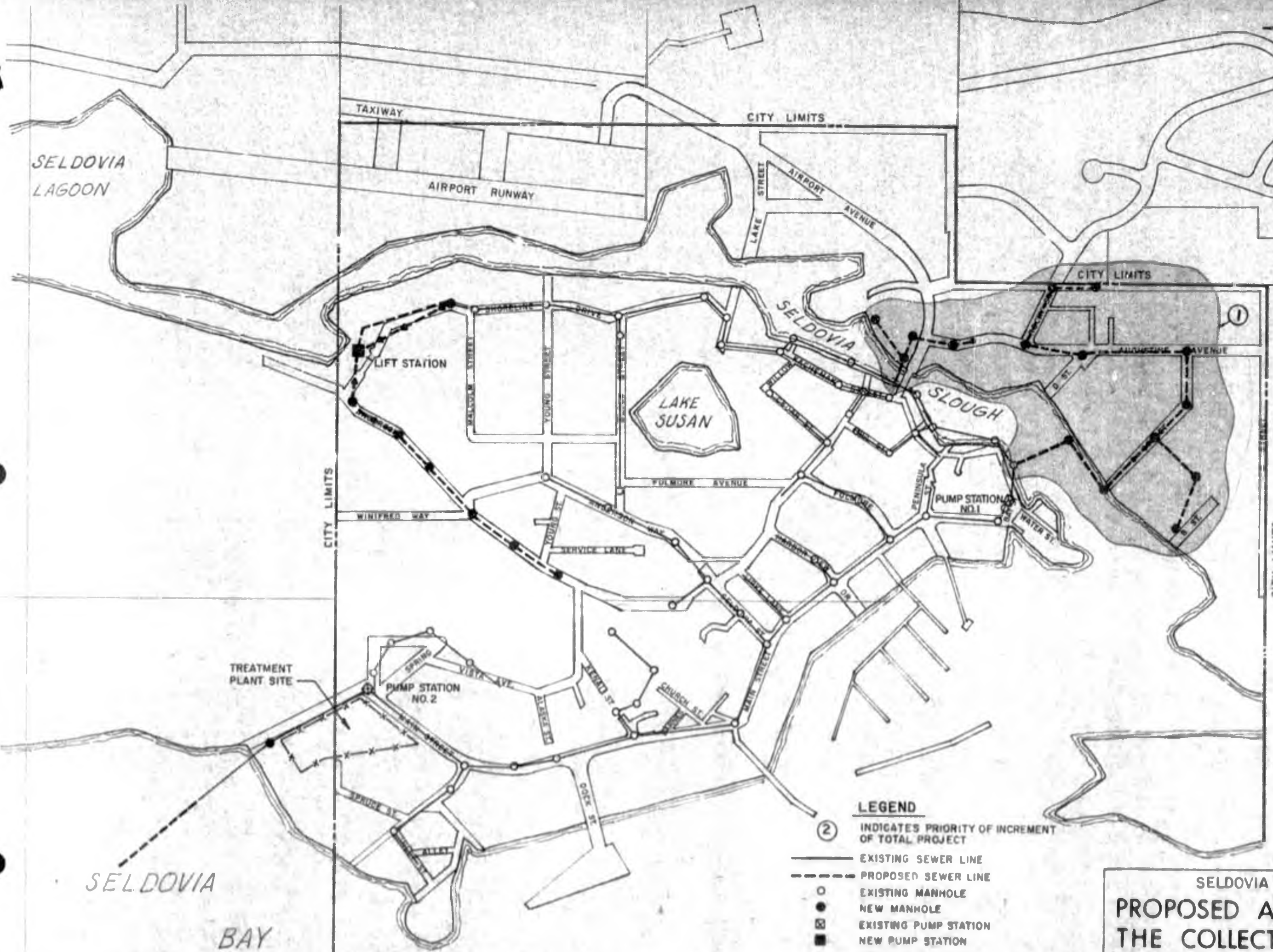
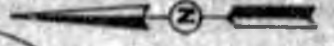
Seldovia (59°27'North, 151°44'West) is a small town (population about 500) located on Seldovia Bay, an ice-free body of water which opens to the north to Kachemak Bay on the southerly end of Cook Inlet, Alaska.

The economic base of the community is primarily fishing and seafood processing. Some logging activity (for export to Japan) also contributes to Seldovia's economy although that activity has been intermittent. Tourism in the summer is just beginning to impact Seldovia's economy. The cannery, owned by Sutterland & Wendt, Inc. is the largest single water user and requires a stable source of high quality water. Another fish processing plant, owned by the local native association is making a contribution to the local economy.

## II. HISTORY OF THE WATER SYSTEM

The existing water supply system consists of two small reservoirs, a 500,000 gallon water storage tank, a pressure reducing valve, a pumphouse, and approximately 17,000 l.f. of relatively recent (constructed 1963) steel dipped and wrapped supply line pipe and cast and ductile iron water distribution lines, predominantly 10-inch diameter.

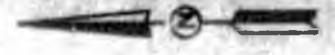
SCALE: 1" = 400'



**LEGEND**

- ② INDICATES PRIORITY OF INCREMENT OF TOTAL PROJECT
- EXISTING SEWER LINE
- - - PROPOSED SEWER LINE
- EXISTING MANHOLE
- NEW MANHOLE
- EXISTING PUMP STATION
- NEW PUMP STATION
- NEW CLEAN OUT

SELDOVIA, ALASKA  
**PROPOSED ADDITIONS TO  
 THE COLLECTION SYSTEM**



TO CHLORINE STA, STORAGE TANK AND UPPER RESERVOIR

RESERVOIR AND PUMP STATION

FILTER STATION

TAXIWAY

AIRPORT RUNWAY

CITY LIMITS

SELDOVIA LAGOON

3 CITY LIMITS

LAKE SUSAN

SLOUGH

CITY LIMITS

CITY LIMITS

WINIFRED WAY

ANDERSON WAY

FULMORE AVENUE

PENNELLA ST

WATER ST

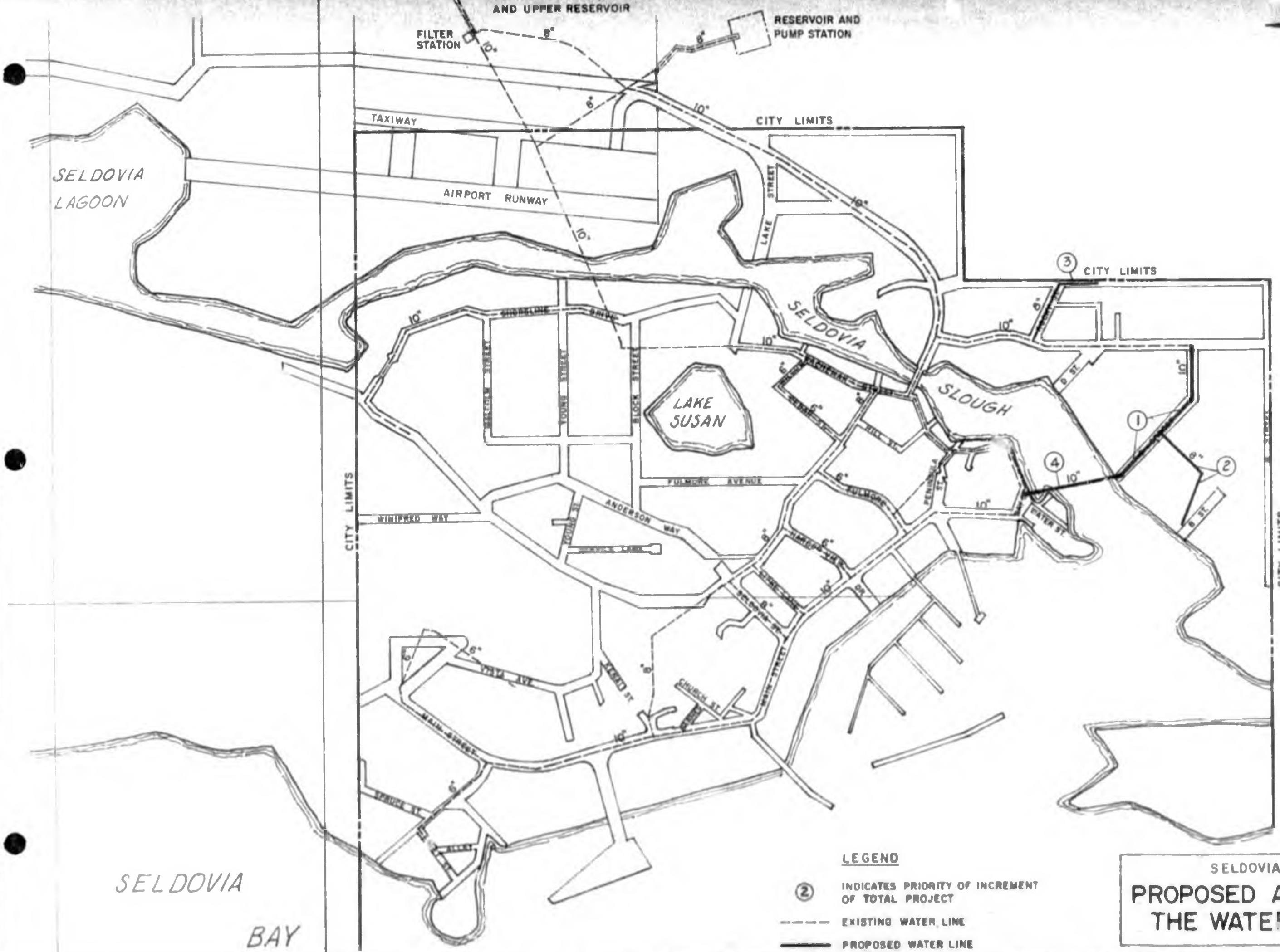
SELDOVIA

BAY

LEGEND

- ② INDICATES PRIORITY OF INCREMENT OF TOTAL PROJECT
- EXISTING WATER LINE
- PROPOSED WATER LINE

SELDOVIA, ALASKA  
**PROPOSED ADDITIONS TO THE WATER SYSTEM**



CITY OF SELDOVIA

SANITARY SEWER AND WATERLINE EXTENSIONS

EAST ADDITION

ITEM NO.	ESTIMATED QUANTITY	WORK DESCRIPTION (Write the Unit Price in Words)	UNIT BID PRICE	TOTAL BID PRICE
001	I I 8 hours I	I Allowance for exploration of I underground utilities of I dimensions and locations thereof.	I I I \$ 250.00	I I I \$ 2,000.00
100	I I 1180 l.f. I I	I Provide and install 10" Class 52 I ductile iron water main, and I fittings, including excavation I and backfill.	I I I I \$ 60.00	I I I I \$ 70,800.00
101	I I 560 l.f. I I	I Provide and install 8" Class 52 I ductile iron water main, and I fittings, including excavation I and backfill.	I I I I \$ 55.00	I I I I \$ 30,800.00
102	I I 3 each	I Provide and install 10" gate I and valve box.	I I \$ 1,000.00	I I \$ 3,000.00
103	I I 400 l.f. I I	I Provide and install 10" Class 52 I ductile iron water main, I including excavation and backfill I for slough crossing.	I I I I \$ 120.00	I I I I \$ 48,000.00
104	I I 4 each I I	I Provide and install fire hydrant I assembly including 10 l.f. of 6" I Class 52 ductile iron pipe and I fittings.	I I I I \$ 2,500.00	I I I I \$ 10,000.00
200	I I 3000 l.f. I I I	I Provide and install 8" Class I 2400 A.C. sanitary sewer main I and 8" D.I.P. at water line I crossing including excavation I and backfill.	I I I I I \$ 50.00	I I I I I \$150,000.00
201	I I 670 l.f. I I	I Provide and Install 8" Class 52 I ductile iron sanitary sewer main I for slough crossing including I excavation and backfill.	I I I I \$ 100.00	I I I I \$ 67,000.00
202	I I 15 each	I Provide and install sanitary I sewer manhole.	I I \$ 2,800.00	I I \$ 42,000.00
203	I I 2 each	I Provide and install sanitary I sewer cleanout.	I I \$ 800.00	I I \$ 1,600.00
300	I I 3 each I	I Provide and install concrete I sewer encasement around exist- I ing pipe.	I I I \$ 800.00	I I I \$ 2,400.00
Sub-Total:				\$427,600.00
Contingencies (15%):				64,140.00
Engineering:				65,300.00
TOTAL ESTIMATED COST: (Approx.)				\$557,040.00

THE PRECEDING PAGES WERE TREATED AS  
A UNIT IN THE ORIGINAL FILE.

THE FOLLOWING PAGES WERE TREATED AS  
A UNIT IN THE ORIGINAL FILE.

(907) 465-2600

January 20, 1982

The Honorable John G. Fuller  
Alaska House of Representatives  
Pouch V  
Juneau, Alaska 99811

Dear Representative Fuller:

For several months, our Village Safe Water (VSW) program staff has been working with the regional health corporations to develop a priority list of villages for future capital projects, funded under AS 46.07. Our purpose is to provide you and others in the Alaska Legislature with a list of communities which we and the regional health corporations feel are most in need of sanitation improvements.

The process began last August when letters were sent to each health corporation, asking three communities in their area to be considered along with candidate villages from the other 11 regions. To guide their deliberations, the health directors were asked to consider a number of factors, the most important being the availability of safe drinking water. For instance, melting ice or collecting river water for drinking is less safe and convenient than having a protected community well. In addition, we asked the health corporations to consider those communities with existing or potential public health problems. This includes instances of contaminated drinking water or pollution resulting from inadequately treated sewage.

To avoid duplication of effort, we requested the health corporations avoid communities where sanitation improvements are planned by the Public Health Service (PHS) or other units of government.

Eight of the 12 health corporations responded with candidate villages and supporting background information. Those that chose not to participate indicated that the Public Health Service had already provided sanitation services for villages in their regions. VSW program staff then reviewed and checked the information submitted and used it to develop a statewide priority list.

Because of the large number of communities under consideration (18), three categories were established to expedite the evaluation process. Communities in Category A, the highest priority, are characterized by one or more of the following conditions: basic sanitation services are lacking; chronic water supply or water quality problems exist; instances of waterborne disease have been reported; prospects for financial assistance are limited.

Category A Communities

<u>Village</u>	<u>Population</u>	<u>Region</u>	<u>Comments</u>
1) Rampart	210	Doyon	Relatively large population with unprotected, undeveloped water supply
2) Teller	300	Bering Straits	Existing water supply inadequate in terms of quality and quantity
3) Pt. Baker	60	Southeast	Rain, unprotected creeks and springs are only source of drinking water
4) Shishmaref	393	Bering Straits	Existing water supply inadequate, chronic quality and quantity problems
5) Ekwok	113	Bristol Bay	Instances of contamination from 6 private wells
6) Chistochina	33	AHTIA	Drinking water collected from river littered with dead salmon
7) Evansville	57	Doyon	Most residents haul untreated drinking water from Koyukuk River
8) Ivanoff Bay	---	Bristol Bay	No developed water supply in village

Communities in Category B already have basic sanitation facilities including developed water supplies. However, these facilities may not be functioning properly or do not meet the full needs of the community.

Category B Communities

<u>Village</u>	<u>Population</u>	<u>Region</u>	<u>Comments</u>
9) Napakiak	351	Yukon-Kusko.	Community has outgrown existing water point
10) St. George	184	Pribilofs	Supply of potable water limited, demand exceeds supply
11) Anvik	82	Yukon-Kusko.	Existing system does not produce enough water to meet demand
12) Akiak	192	Yukon-Kusko.	Water untreated and limited supply available

Category B Communities

<u>Village</u>	<u>Population</u>	<u>Region</u>	<u>Comments</u>
13) Manley	74	Doyon	Individual wells produce water of varying quality

Category C, the lowest priority, includes communities with problems which are not as severe from a public health standpoint as those in Categories A and B.

Category C Communities

<u>Village</u>	<u>Population</u>	<u>Region</u>	<u>Comments</u>
14) Noorvik	526	NANA	New landfill needed
15) Nnatak	271	NANA	Existing landfill needs improvement
16) New Chenega	---	N. Pacific Rim	Village not yet under construction
17) Ekuk	500 summer 3 winter	Bristol Bay	Large summer transient population served by cannery well.

In addition, Chalkyitsik, was considered but not put on the list because of planned improvements by state and federal agencies in 1982.

More detailed background information on each community can be found in the enclosed village data summary.

Estimating the cost of Village Safe Water projects in specific villages is nearly impossible at this time, since the services provided by VSW is largely a matter of choice by the village receiving it. Costs can vary from \$100,000 to more than \$1 million depending on what services are to be included, and local factors such as availability of water, type of treatment required, waste disposal options, power availability, and soil conditions.

After project scope is established, the cost of providing the selected services can be estimated based on discussions with local officials and preliminary engineering investigations.

To address the problem of having to identify funds for future VSW projects before their actual costs are known, the Department included \$10.0 million for new projects in its proposed FY 83 capital budget. From past construction experience, it is estimated that 8 or 9 new facilities can be built. Therefore, sanitation improvements can be made in all of the "top priority" communities identified in Category A. Any remaining funds will be used in the Category B communities. No additional staff will be required to undertake

Representative John G. Fuller

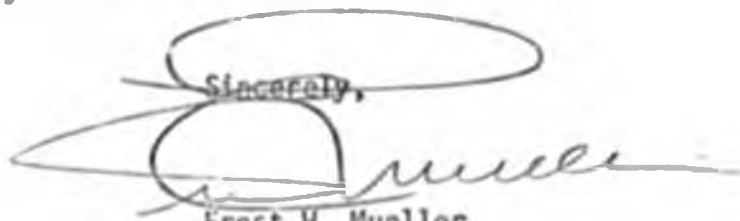
Page 4

January 20, 1982

this level of construction activity. Preliminary engineering work can begin as soon as this funding request is approved by the Legislature and the Governor. Money is available on a reimbursable basis through the Public Facilities Planning Fund as described in AS 35.10.135. Once the facility planning is completed, construction could be initiated, probably in the summer of 1983.

If you have any questions on the VSW priority list or desire additional background information on any of the communities involved, please contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ernst W. Mueller". The signature is written in dark ink and is positioned above the typed name.

Ernst W. Mueller  
Commissioner

Enclosure

EW:GC:jh

Fill out and return to  
 Greg Capito  
 VSW Pouch 0  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSW

DATA COLLECTION SHEET

January 1, 1982

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	RECOMMENDED IMPROVEMENTS
New Chenege Chugach Region	New village site 23 proposed HUD homes in 1982.	well drained gravel base soils	2 small wood dams, old wood stave lines	Cannery dams may need to be replaced. Lines in disrepair  Adequacy of existing dams needs to be ascertained	HUD Program reservations expected in winter 1982 for new houses  DOTPF has earmarked \$232,000 to put in new roads in 1982.  REAA new school plans for 17 students in fall 1983	None.	Chenege IRA Council  Charles Karella  DOTPF-Juneau  Miller Lutton.  HUD/ 271-4633  John Harris Sup, Chugach School district 472-2343	Piped water & sewer system for new site homes plus community land fill. \$ 1.1 million

Fill out and return to  
 Greg Capito  
 VSM Pouch 0  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSM

DATA COLLECTION SHEET

January 1, 1982

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	RECOMMENDED IMPROVEMENTS
CHALKYIT- SIK  Doyon Region  Unincor- porated	Population 99 Homes 33  Trend - upward	Elevation 500' with hill to south of village. Wooded bot- tom land with willow & small spruce. Clay & silt to 100'. Perma- frost with 4' active layer. Perma- frost 70' to 300'. Drain- age poor.	Haul from Black River in winter & Oxbow Slough in summer. River is un- safe bact- eriologi- cally	Inadequate	AK HB 334 feasib- ility study cur- rently being conducted. Pot- ential watering point/school supply being considered by VSM & PHS.  15 HUD units in 1982/PMS to serve these & build watering point in old village.	Indiscrimi- nate dumping of sewage. Solid waste dumped into river & put on ice in winter.	Village Sani- tation in Alaska	Washeteria Watering Point with solid & liquid waste disposal \$1.8 million
Rampart Doyon Unincor- porated	220/74 up	Hilly Terr- ain but poorly drained in spots	Nearby creek provides water for most resi- dents	Water tastes fine is untreat- ed/unpro- tected/ water tur- bid for 2 week period during breakup/ haul dis- tance 2 1/2 miles on good road	None	Outhouses	Village San- itation in Alaska	Water source development/ watering point laundro- -mat/landfill \$1.3 million
*Submitted in 1980 by VSM but not funded.								

Fill out and return to  
 Greg Capito  
 VSW Pouch 0  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSW

DATA COLLECTION SHEET

January 1, 1982

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	RECOMMENDED IMPROVEMENTS
EVANSVILLE Doyon Region  Unincorporated with traditional council	Population 57 Homes 20 Trend-upward	Elevation 649' Located on Koyukuk River between Wild and John Rivers. Scrub timber Silt over gravel, continuous permafrost with active zone to 14'.	Haul from Koyukuk River, 5 FAA wells also used 35'-40' deep	Koyukuk River is untreated  Hauling distance is a problem for some residents.	None	Privies for sewage.  Open dump for solid waste.	OEM Sanitarian and Engineer files, VSW Rural Sanitation in Alaska and Tanana Chiefs Conference Inc. Village Strategy plans.	Watering Point Community Wells with solid and liquid waste collection and disposal system \$275,000
MANLEY HOT SPRINGS Unincorporated  Doyon Region	74/45 upward	Elevation 255' at Tenana River to 2,000' at MMS Dome. Located on Tenana river. Wooded river bottom with large spruce and birch. Silt over gravel. Discontinuous permafrost with adequate drainage in non-permafrost areas.	Haul from hot springs.      12 private wells at various residences	Inadequate. Hot springs water high in fluoride (12 ppm) and dissolved solids. (448 ppm)  Water only used for washing clothes fe 5.0 ppm For drinking creek-water from hotsprings and hauled to houses.	None	Privies and septic tanks for sewage. Uncontrolled open dump for solid waste.	As above.	Watering Point Wells with solid & liquid waste collection and disposal system \$750,000

Fill out and return to  
 Greg Capito  
 VSM Pouch D  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSM

DATA COLLECTION SHEET

January 1, 1982

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	RECOMMENDED IMPROVEMENTS
Anvik Yukon-Kus- kokwim 2nd Class	82/18 stable	Severe flood- ing problems noted in 1975. Scat- tered frost.	School well  4 private wells 40-90' deep  PMS watering point, 90' well village built pump- house with own funds.  Most resi- dents use ice & rain.	14 ppm Fe/ hydrogen sulfide smell  Fe ranges from 2 - 10 ppm  CL/FL only 2.9 ppm Fe  Supply of potable water insuf- ficient to meet village needs.	None known	Bunkers/pri- vies	PMS files in Bethel YKHC - Bethel	Washeteria, lagoon & fenced landfill \$ 1.2 million
Napaklak Yukon-Kus- kokwim 2nd Class	351/50 up	Scattered frost. Some river bank erosion, poorly drain- ed tundra.	PMS watering point built in 1965/1000 gal. storage batch lime treatment	Fe .8 ppm quality OK System well maintained but insuf- ficient stor- age capacity community has out grown system	None known	Honey buckets Community has ordinance des- ignat dump sites.	PMS files - Bethel YKHC-Bethel	Washeteria, Greywater dis- posal, land- fill \$1.1 million
Aklak Yukon-Kus- kokwim 2nd Class	192/39 up	Tundra, poor drainage	5 individual wells, rest haul ice or rain	Water un- treated & limited quantity available	PMS improvements to follow 15 HUD houses in 1982. Individual wells but no funds to serve existing houses.	Honey buckets	PMS files in Anchorage YKHC-Bethel	Community well, summer water line. Fenced land fill. \$425,000

Fill out and return to  
 Greg Capito  
 VSM Pouch O  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSM

DATA COLLECTION SHEET

January 1, 1982

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	RECOMMENDED IMPROVEMENTS
Noorvik Nana Incorporated 2nd Class	526/113 up	Muskeg/ tundra	N/A	N/A	PHS plans to serve HUD units in 1982 with water and sewer service but no funds available for solid waste.	Undeveloped dump site adjacent to Kobuk River subject to flooding.	Kim Yales PHS Engineer 271-4753	New landfill \$500 - 600,000 lack of roads and access to new site makes this potential- ly a very ex- pensive pro- ject.
Noatak Nana Incorporated 2nd Class	271/74 up	Muskeg/ tundra	N/A	N/A	PHS plans to serve new HUD houses with water and sewer in 1982 but no funds available for solid waste.	Accessible & developed dumpsite	Kim Yales and Mauneluk Association 442-3311 Paul Hansen Mauneluk/ Sanitarian	Fence existing dump site \$30,000

Fill out and return to  
 Greg Capito  
 VSM Pouch 0  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSM

DATA COLLECTION SHEET

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	COMMEDED IMPROVEMENTS
EKWOK Bristol Bay 2nd Class	113/25 Stable	hilly, gravel & clay soils	6 individual wells  Two PMS community wells 15-50' deep	frequent un- satisfactory bacti sam- ples  Silted up	None	privies, hon- ey buckets, a few septic tanks	Ron Perkins PHS Sanitarian in Dillingham 842-5201	Community wells, septic tanks & fenced landfill  \$450,000
Ivanof Bay Bristol Bay Unincorpor- ated	16/10 Stable	Mountaineous	Individuals haul from springs & creeks	Unprotected undeveloped sources freeze up in winter	None		John Hamilton PHS engineer 271-4725	Scattered, low density housing tends itself to individual wells
Ekut Bristol Bay Unincorpor- ated	Summer-500 Winter-3 Fish Camp	Soil con- sists of gravel and sand depos- its	Individual wells 96' & 180' deep	20 gpm, good quality but no water for non- cannery workers in summer  20 gpm good quality but no water for non cannery workers in summer	New cannery well to be drilled in 1982  New cannery well to be drilled in 1982	privies  privies	Ron Perkins  Ron Perkins	Community well watering point \$50,000  Community well watering point \$50,000

Fill out and return to  
 Greg Capito  
 VSW Pouch 0  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSW

January 1, 1981

DATA COLLECTION SHEET

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	RECOMMENDED IMPROVEMENTS
TELLER Two sites: old town site and  -new site  Incorpor- ated 2nd class City	Approx. 300 total popula- tion (stable)  59 homes 30 HUD Homes 2 miles away constructed in 1975. (Coyote Creek subdivi- sion)	-Rolling hills;tundra -Old -townsite in -flood plain -Poor drain- -Age.	Summer: City , hauls water from Blue- stone River. A distance of 18 miles. -Rain water collection  WINTER: (Snow & Ice) -Residents haul water from Coyote Creek and a lake near Brevig Mission.  PHS constructed a watering point on Coyote Creek near newsite in 1978. -1,000 gal. wood-stave tank lined with P.E. -Outside fill for water truck in winter. 1976- PHS drilled 3 wells. Two were dry; the other well was high in iron and TDS (ex- tensive treatment)  School well	Quality & quantity are inade- quate, to meet City's needs          Marginal in winter due to Creek going dry. Jan.-March -Chlorina- tion equip- ment only at watering pt.          Contaminated by oil spill so ice used for drinking water.	HUD Program res- ervation for 30 units in 1982. PHS will serve these houses in 1983 if funds are available.	-Indiscrimi- nate dumping into Bay and on shore during both winter and summer. -REAA school sewage lagoon	Geoff Langer NSHC, Sanitar- ian -RDA Comm. Profile. -PHS files -NSHC files	WASTES: Need both im- proved sewer & solid waste disposal sys- tems. i.e., bunkers, haul- ing tanks, a trunk. \$190,000.  WATER: -Develop water source for old Townsite, water stor- age, and -Improvements to existing watering pt. at new site -Rain water collection on homes. \$650,000.

Fill out and return to  
 Greg Capito  
 V.W Pouch 0  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSM

DATA COLLECTION SHEET

January 1, 1982

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	RECOMMENDED IMPROVEMENTS
SHISHMAREF Incorporated 2nd class City  Norton Sound	Pop. 393 89 homes:	Located on sand spit. Saturated soil condi- tions. Flood hazard area.	-PHS water- ing pt. Residents do not use, due to its close prox- imity to cem- etary. -Residents haul from mainland a distance of 15-20 miles. -Rain water collection. -Ice & Snow -REAA school utilizes PHS source.	Poor: Quality & quantity are inadequate  School utilizes half of the 300,000 gallon stored water supply/H <sub>2</sub> O rationed toward end of school year.	-20 new homes to be constructed summer 1982. -REAA to con- struct new elem- entary school, 1982. -New runway to be constructed, '82.  Efforts by PHS to upgrade existing system in 1982 depends upon fund- ing availability (doubtful)	-REAA school sewage lagoon -Community dump at far west end of village. City truck utilized for garbage haul in the summer. Individual dumping in winter time. honeybucket waste disposed of in ocean, overfilled outhouses, or at the Cit, dump.	Geoff Langer NSHC, sanitari- an -PHS files -NSHC files -RDA Comm. Profiles.	-Upgrade existing system, i.e., -Washeteria facility. -Develop new water source. -Summer dis- tribution water line to homes. -Rain water collection homes. -Improved solid waste and sewage disposal systems. Containers, hauling equipment, garage, etc. \$1.2-1,300,000

Fill out and return to  
 Greg Capito  
 VSW Pouch 0  
 Juneau, Alaska

VILLAGE CANDIDATE SELECTION - VSW

DATA COLLECTION SHEET

January 1, 1982

SUMMARY

VILLAGE	POP/HOMES TREND	TERRAIN	WATER SUPPLIES	ADEQUACY	PLANNED IMPROVEMENTS	WASTE DISPOSAL	SOURCE OF INFORMATION	RECOMMENDED IMPROVEMENTS
St. George unincorporated Pribilofs	184/39 stable	Lava base, volcanic sediment, extensive peat bogs & tundra	2 community wells piped to homes & businesses	Sodium con- tent (400 - 800 Mg/L), used for toilet flushing only	None	Two community septic tanks with ocean outfalls apparently no pollution problem but septic tanks need replace- ment	Bill Wilson- PHS/U.S.G.S. water recon- naissance report	-Develop a source which produces water of adequate quantity to meet the com- munity's needs. Est: \$955,000
			R/O unit at hospital also provides potable drinking water for village.	Cannot meet demand of resident & hospital. Amount of water resi- dents haul is restrict- ed. Hospital needs come first.	None NMF may pull out in 4-5 years			
Pt. Bar Southeast Unincorporated	60/18 up	Shallow soils poorly drained	Individual rain catch- ment systems a few homes pipe water from near- by streams or springs	Untreated and unpro- tected sources of supply	None	Outdoor priv- ies	C & R A Regional Pro- file	Develop a community water supply that produces pot- able water the year around. No estimate
Chisto- china*	33/14 down	Soil compos- ed of sand and gravel/ flat terrain adjacent to flood plain	PHS piped water system built in 1970 well was source of supply  Sinon River	Quality and quantity of water good system fail- ed in 1974 due to O & M problems  Undeveloped unprotected source littered with dead fish in summer	None	Sewer system failed/privies used	Bill Giles PHS sani- tarian 279-6661	Design and build water- ing point and additional services pending nego- tiation with village \$150,000
*Submitted	In 1980 by VSW but not funded.							

THE PRECEDING PAGES WERE TREATED AS  
A UNIT IN THE ORIGINAL FILE.

CITY OF SELDOVIA

SANITARY SEWER AND WATERLINE EXTENSIONS

EAST ADDITION

ITEM NO.	ESTIMATED QUANTITY	WORK DESCRIPTION (Write the Unit Price in Words)	UNIT BID PRICE	TOTAL BID PRICE
001	I I 8 hours I	I Allowance for exploration of I underground utilities of I dimensions and locations thereof.	I I I \$ 250.00	I I I \$ 2,000.00
100	I I 1180 l.f. I I	I Provide and install 10" Class 52 I ductile iron water main, and I fittings, including excavation I and backfill.	I I I I \$ 60.00	I I I I \$ 70,800.00
101	I I 560 l.f. I I	I Provide and install 8" Class 52 I ductile iron water main, and I fittings, including excavation I and backfill.	I I I I \$ 55.00	I I I I \$ 30,800.00
102	I I 3 each	I Provide and install 10" gate I and valve box.	I I \$ 1,000.00	I I \$ 3,000.00
103	I I 400 l.f. I I	I Provide and install 10" Class 52 I ductile iron water main, I including excavation and backfill I for slough crossing.	I I I I \$ 120.00	I I I I \$ 48,000.00
104	I I 4 each I I	I Provide and install fire hydrant I assembly including 10 l.f. of 6" I Class 52 ductile iron pipe and I fittings.	I I I I \$ 2,500.00	I I I I \$ 10,000.00
200	I I 3000 l.f. I I I	I Provide and install 8" Class I 2400 A.C. sanitary sewer main I and 8" D.I.P. at water line I crossing including excavation I and backfill.	I I I I I \$ 50.00	I I I I I \$ 150,000.00
201	I I 670 l.f. I I	I Provide and Install 8" Class 52 I ductile iron sanitary sewer main I for slough crossing including I excavation and backfill.	I I I I \$ 100.00	I I I I \$ 67,000.00
202	I I 15 each	I Provide and install sanitary I sewer manhole.	I I \$ 2,800.00	I I \$ 42,000.00
203	I I 2 each	I Provide and install sanitary I sewer cleanout.	I I \$ 800.00	I I \$ 1,600.00
300	I I 3 each I	I Provide and install concrete I sewer encasement around exist- I ing pipe.	I I I \$ 800.00	I I I \$ 2,400.00

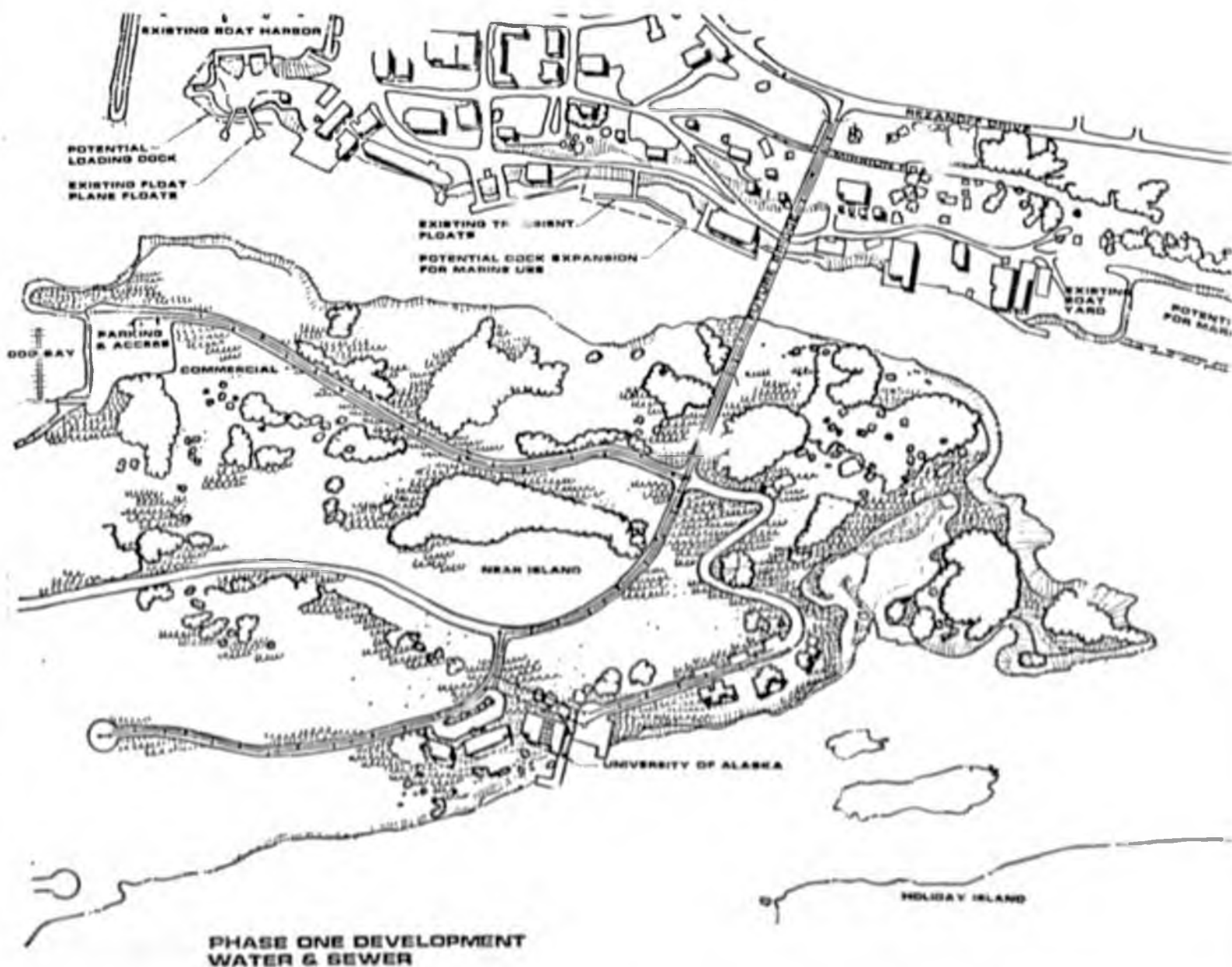
Sub-Total: \$427,600.00  
 Contingencies (15%): 64,140.00  
 Engineering: 65,000.00  
 TOTAL ESTIMATED COST: \$556,740.00

# near island utility development planning & engineering funding request city of kodiak, alaska

## introduction

Kodiak depends upon marine-related commerce for economic stability and future growth. To accommodate expansion of both marine commerce and other industry, the adjacent Near Island is being developed. Currently, a new bridge to the island and Dog Bay Boat Harbor have been designed, and the University of Alaska has proposed a significant addition to their program on Near Island.

Expansion of these facilities calls for supporting utilities, including water, sewer, and power. Planning, design, and construction of critical portions of the development must be a coordinated, homogeneous effort, so that the result is a functional and useful supplement to the economy. Improper planning and construction of any key element would have a negative impact on the entire Near Island plan and also impact future development.



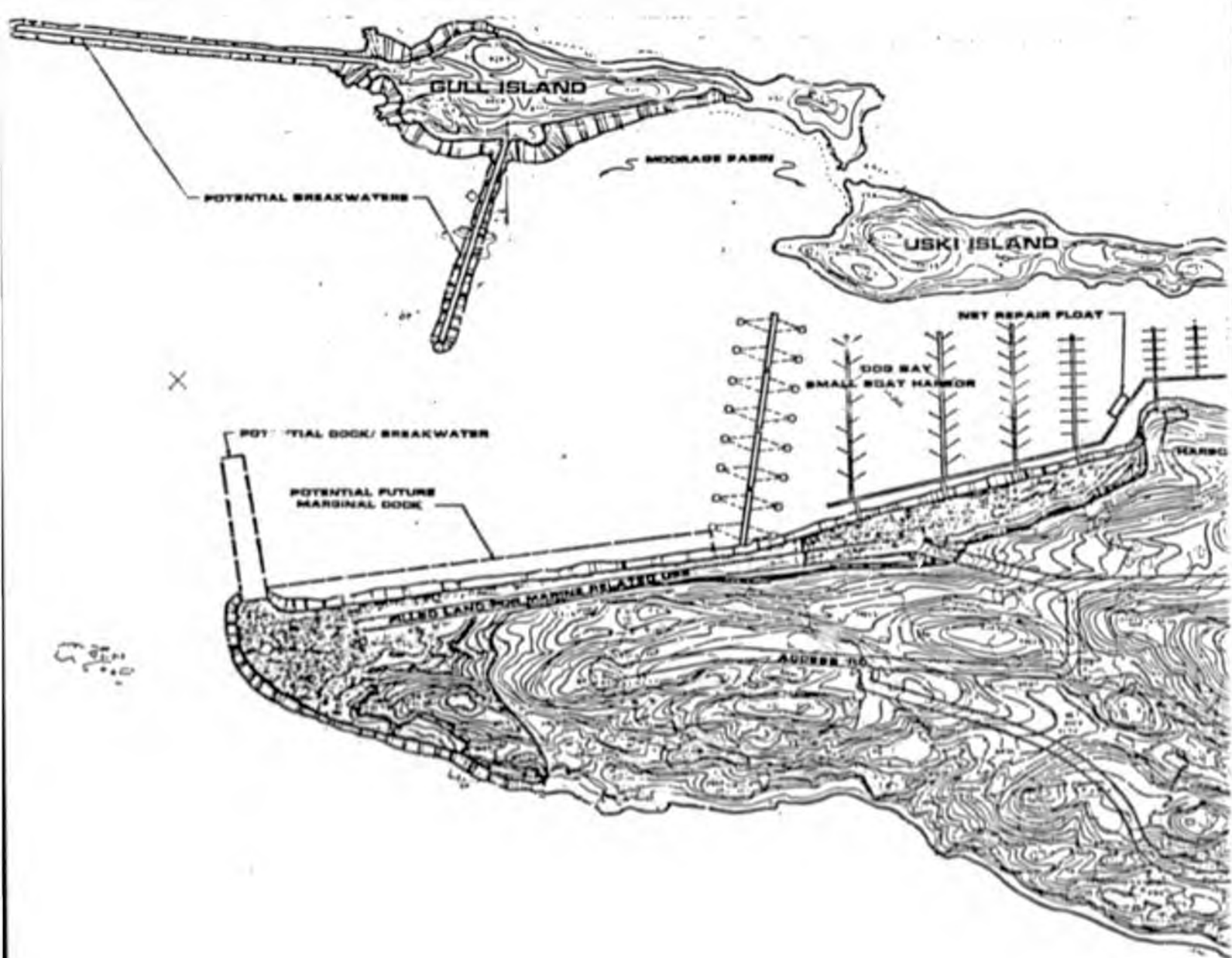
# water and sewer

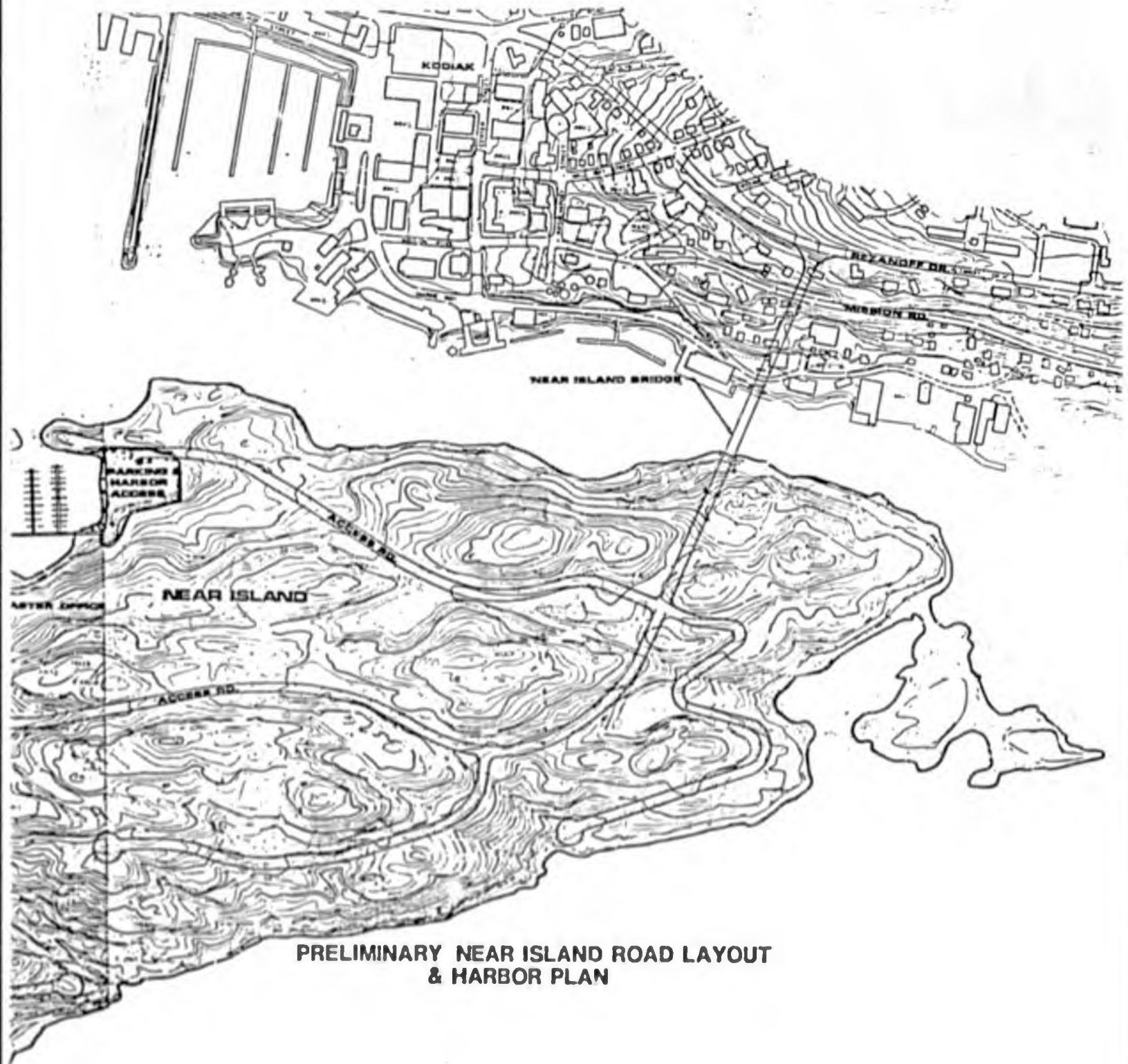
The bridge currently being designed is the key to water and sewer supply to Near Island. With a sewer connection to Rezanoff Drive and a water connection to Mission Road, trunk pipelines can be carried by the bridge and extended to key locations on Near Island.

It is imperative that planning and design of proposed pipeline connections, sizes, and supports be incorporated into the forthcoming bridge construction contract. For efficient coordinated development, the planning and preliminary design for all Near Island utilities is an important factor.

Near Island has many harsh features, including bedrock near the surface and steep slopes that can limit development. Costs of utility extensions and connections on this type of land are high, but they can be minimized with proper long-range coordinated planning.

Very preliminary drawings are included to help illustrate the nature and extent of expected development for this project.



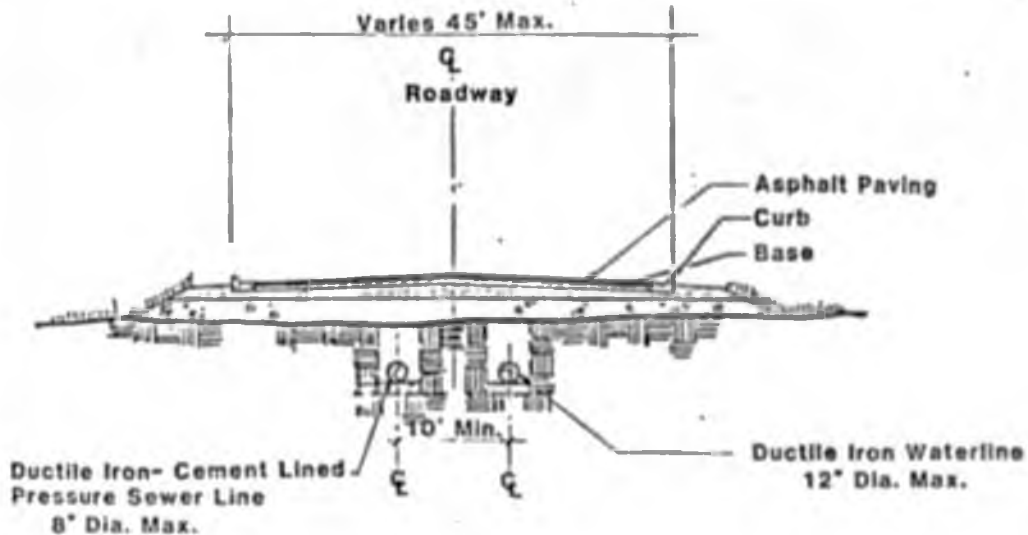


**PRELIMINARY NEAR ISLAND ROAD LAYOUT  
& HARBOR PLAN**

# project budget & timing

Time is of the essence for funding utility planning and engineering improvements on Near Island. At present, ongoing bridge engineering must incorporate pipelines and supports into the plans.

Costs for planning, preliminary engineering, and contract development are estimated at approximately \$700,000.



Typical Improvement Section



For additional information, contact:

William C. Bivin, City Manager

Laurence Monroe, P.E., City Engineer

P.O. Box 1397, Kodiak, Alaska, 99615 (486-3224)



Peratrovich & Nottingham, Inc.

# STATE OF ALASKA

**DEPT. OF COMMUNITY & REGIONAL AFFAIRS**

OFFICE OF THE COMMISSIONER

JAY S. HAMMOND, Governor

POUCH B  
JUNEAU, ALASKA 99811  
PHONE: (907) 465-4700

February 22, 1982

The Honorable Patrick O'Connell  
Chairman, House Community & Regional  
Affairs Committee  
Alaska State Legislature  
Pouch V  
Juneau, Alaska 99801

Dear Representative O'Connell:

As requested during the hearing on HB 723 and HB 724 last Friday the Department is providing you with information on applicants for Chapter 60 funding who have actually received funds.

Please feel free to contact me if you have further questions.

Sincerely,



Richard Aks  
Deputy Commissioner

cc: Keith Specking  
Senator Frank Ferguson  
Senator John Sackett  
McKie Campbell, Senator Gillman's Office  
Ralph Bennett, Representative Montgomery's Office  
Wendy Rader, Representative Adams' Office

Unincorporated Community Aid Applicants

<u>Community</u>	<u>Status</u>	<u>Organization Type</u>	<u>Amount</u>	<u>Projects</u>
Arctic Village	Pending	IRA(16 & 17)	\$ 111,000	Fuel for generator
Birch Creek	Approved	Non-profit (formed for SB 168)*	\$ 32,000	Purchase generator, operating electric company
Cantwell	Pending	Non-profit (formed for SB 168)*	\$ 89,000	Building community hall, improve solid waste system, fire hall improvement
Cold Bay	Approved	Non-profit (existing)	\$ 228,000	Operating an emergency medical care clinic
Elfin Cove	Approved	Non-profit (formed for SB 168)	\$ 28,000	Maintaining community equipment & buildings, developing an alternate energy
Gustavus	Pending	Non-profit (existing)	\$ 98,000	Building a community center
Healy Lake	Approved	IRA (16 & 17)	\$ 33,000	Completing community hall and community freezer
Igiugig	Pending	Non-profit (formed for SB 168)*	\$ 33,000	Salary for recreation supervisor, purchasing a truck, salary for community building maintenance person
Klukwan	Pending	IRA (16 & 17)	\$ 135,000	Rewiring in community, buy fire equipment, repairing community hall, buy pump truck, Adult basic ed., emergency medical service, purchase a village
Kongiganak	Pending	Non-profit (formed for SB 168)*	\$ 239,000	Building: Multi-purpose, VFD, and equipment trash collection
Kwigilingok	Pending	IRA (16 & 17)	\$ 354,000	Renovate community building, install fence, purchase truck
Levelock	Approved	Non-profit (formed for SB 168)*	\$ 79,000	Salary for building maintenance person, buy satellite transmitter, community hall renovation, complete bulk fuel storage and dock
Metlakatla	Pending	IRA (16 & 17)	\$1,195,000	Build recreation building, Port improvements
McKinley Park	Pending	Non-profit (existing)	\$ 32,000	Operating community center
Minto	Approved	IRA (16 & 17)	\$ 153,000	Utility improvements, operating lodge
Nikolski	Approved	IRA (16 & 17)	\$ 50,000	Windmills
Noatak	Pending	IRA (16 & 17)	\$ 273,000	Building a Post Office, buying various pieces of equipment, operating water sewer and community buildings, medical and old age care
Pedro Bay	Approved	Non-profit (formed for SB 168)*	\$ 33,000	Constructing a dock & trails and bridges
Rampart	Pending	Non-profit (formed for SB 168)*	\$ 50,000	Build generator building, operating expenses, custodian salary, buy recreation equipment
Stevens Village	Pending	IRA (16 & 17)	\$ 96,000	Salary for water treatment plant operator, buy truck, buy washers and dry recreation director salary
Tatitlek	Approved	IRA (16 & 17)	\$ 68,000	Renovate community building and school, buy generator, install fuel lines
Venetie	Pending	IRA (16 & 17)	\$ 132,000	Buy generator, fuel for generator

\* has existing traditional Native government or IRA Council.

Unincorporated Community Aid Applicants

	<u>Status</u>	<u>Organization Type</u>	<u>Amount</u>	<u>Projects</u>
illage	Pending	IRA(16 & 17)	\$ 111,000	Fuel for generator
ark	Approved	Non-profit (formed for SB 168)*	\$ 32,000	Purchase generator, operating electric company
	Pending	Non-profit (formed for SB 168)*	\$ 89,000	Building community hall, improve solid waste system, fire hall improvements
	Approved	Non-profit (existing)	\$ 228,000	Operating an emergency medical care clinic
	Approved	Non-profit (formed for SB 168)	\$ 28,000	Maintaining community equipment & buildings, developing an alternate energy source
	Pending	Non-profit (existing)	\$ 98,000	Building a community center
	Approved	IRA (16 & 17)	\$ 33,000	Completing community hall and community freezer
	Pending	Non-profit (formed for SB 168)*	\$ 33,000	Salary for recreation supervisor, purchasing a truck, salary for community building maintenance person
	Pending	IRA (16 & 17)	\$ 135,000	Rewiring in community, buy fire equipment, repairing community hall, buy sewer pump truck, Adult basic ed., emergency medical service, purchase a village bus
	Pending	Non-profit (formed for SB 168)*	\$ 239,000	Building: Multi-purpose, VFD, and equipment trash collection
ark	Pending	IRA (16 & 17)	\$ 354,000	Renovate community building, install fence, purchase truck
	Approved	Non-profit (formed for SB 168)*	\$ 79,000	Salary for building maintenance person, buy satellite transmitter, community hall renovation, complete bulk fuel storage and dock
ark	Pending	IRA (16 & 17)	\$1,195,000	Build recreation building, Port improvements
	Pending	Non-profit (existing)	\$ 32,000	Operating community center
	Approved	IRA (16 & 17)	\$ 153,000	Utility improvements, operating lodge
	Approved	IRA (16 & 17)	\$ 50,000	Windmills
	Pending	IRA (16 & 17)	\$ 273,000	Building a Post Office, buying various pieces of equipment, operating water & sewer and community buildings, medical and old age care
	Approved	Non-profit (formed for SB 168)*	\$ 33,000	Constructing a dock & trails and bridges
	Pending	Non-profit (formed for SB 168)*	\$ 50,000	Build generator building, operating expenses, custodian salary, buy recreational equipment
illage	Pending	IRA (16 & 17)	\$ 96,000	Salary for water treatment plant operator, buy truck, buy washers and dryers, recreation director salary
	Approved	IRA (16 & 17)	\$ 68,000	Renovate community building and school, buy generator, install fuel lines
	Pending	IRA (16 & 17)	\$ 132,000	Buy generator, fuel for generator

\* has existing traditional Native government or IRA Council.

ESTIMONY

<u>Name</u>	<u>Affiliation</u>	<u>Address</u>	#8840
Sharon Counts	Pelican (city of)	538 Wuloughby Juncan	

Linda says - usually don't have testimony

# CITY OF KIANA

KIANA, ALASKA 99749

(907) 475-2136

February 26, 1982

Honorable Albert Adams  
Pouch V  
Juneau, Alaska 99811

Dear Representative Adams:

In the early 1970's, the Public Health Service installed a Water & Sewer system in the City of Kiana. The system that was installed included a Sewage Treatment Plant and was sufficient to accommodate the population and number of homes that existed at that time.

Since that time, the population of Kiana has almost doubled. In the past two years, 36 new homes have been built by the Department of Housing and Urban Development. They are planning to build another 20 homes in the summer of 1982. The present system cannot handle the load that is now hooked to it.

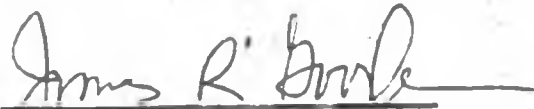
The most recent breakdown of the system put the entire west end of town out of commission. Currently, we have hired a person to monitor the system on a 24 hour basis to ensure that the entire town is not shut down.

We feel that we are faced with a serious health hazard and would like to ask your assistance in helping us to solve our problem. We have asked the PHS for assistance but we have'nt received a very prompt reply. The Sewage Treatment Plant that was originally installed has been over-capacitated for four years. A new or renovated system is long overdue. Also, with the recent expansion on the west end of town, we need a new reseroir tank and a well pump to replace the one we now have, which is not large enough to meet the demand.

For your information, the Kiana High School is on the west end, and is presently shut off due to the problems.

Is there any way that you can help us to make the Public Health Service more aware of the problems that we are facing? Your assistance in this matter will be greatly appreciated.

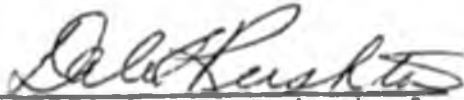
If you have any further questions about the nature of our problems, please contact: James Gooden, Mayor at 475-2136.



James R. Gooden, Mayor  
City of Kiana



Larry Westlake, Sr. President  
Kiana Traditional Council



Dale Ruston, Principal  
Kiana Schools

cc: Marvin Weber, PHS  
NANA Regional Housing Authority

Funding Information  
General Fund \$25,000,000  
Other Funds -0-  
\$25,000,000

Introduced: 2/16/82  
Referred: Community & Regional  
Affairs and Finance

1 IN THE HOUSE BY ADAMS

2 HOUSE BILL NO. 840

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TWELFTH LEGISLATURE - SECOND SESSION

5 A BILL

6 For an Act entitled: "An Act making special appropriations for water and  
7 sewer systems, waste disposal facilities, and related  
8 facilities, projects and project maintenance; and  
9 providing for an effective date."

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

11 \* Section 1. (a) The sum of \$3,355,000 is appropriated from the general  
12 fund to the Department of Environmental Conservation as follows:

13 (1) \$150,000 for water and sewer feasibility studies in the follow-  
14 ing communities:

- 15 (A) Chignik Bay \$ 50,000
- 16 (B) Chignik Lagoon 50,000
- 17 (C) Manley Hot Springs 50,000
- 18 ~~(D) Hoonah 80,000~~
- 19 (2) \$2,925,000 for water and sewer projects as follows:
  - 20 (A) St. George - water project \$ 955,000
  - 21 (B) Kongiganak - water and sewer project 75,000
  - 22 (C) Iguigig - well 50,000
  - 23 (D) Togiak - well 100,000
  - 24 (E) Platinum - well 50,000
  - 25 (F) Koliganek - water and sewer project 75,000
  - 26 ~~(G) Neatak water project 400,000~~
  - 27 (H) Hooper Bay - water and sewer upgrade 200,000
  - 28 (I) Chevak - water system upgrade 370,000
  - 29 (J) Pilot Point - water and sewer project 200,000
  - (K) Ekvok - water and sewer project 450,000

*Sussex Add*

*Adams delete*



50,000  
50,000

(3) \$280,000 for landfills in the following communities:

- (A) Manokotak \$ 200,000
- (B) Togiak 20,000
- (C) Twin Hills 20,000
- (D) Clark's Point *revise* [40,000]  
10,000

20,000

~~Chickadee~~  
~~Adams~~

\* Sec. 2. The sum of \$100,000 is appropriated from the general fund [For payment as a grant to the Bristol Bay Borough] for the regional water and sewer maintenance center, *for the Bristol Bay region.*

MOTION PENDING

\* Sec. 3. The sum of \$215,000 is appropriated from the general fund for payment as grants for water and sewer feasibility studies to the following cities:

- (1) Shageluk \$ 25,000
- (2) Chuathbaluk 25,000
- (3) Nulato 25,000

~~Fulda~~

~~(4) *Elle - PHS project water sewer facility, 50,000*~~

- (5) Selawik 50,000
- (6) Anderson - (sewer feasibility study) 40,000

\* Sec. 4. The sum of \$18,948,900 is appropriated from the general fund for payment as grants to the following municipalities for the following water and sewer projects:

~~Adams~~

- (1) Saxman - [*water & sewer upgrade for Revilla Road & Evergreen Ave.*] sewage treatment plant, and chlorination plant] \$ 150,000
- (2) Klawock - upgrade and reroute of water system 350,000
- (3) Craig - extension and upgrade of water and sewer lines 350,000
- (4) Wrangell-Stikine-Evergreen project 1,046,000
- (5) Sitka - design of specifications for an alternate domestic water source 500,000
- (6) Haines - water project 500,000

1	(7)	Skagway - water and sewer project	1,932,000
2	(8)	Wasilla - sewer planning, design and	
3		right-of-way acquisition	1,000,000
4	(9)	Ouzinkie - water and sewer renovation	750,000
5	(10)	City of Kodiak - design of water and sewer	
6		system for Near Island	750,000
7	(11)	Sand Point - water and sewer extensions	1,300,000
8	<del>(12)</del>	<del>Port Lions - water and sewer extensions</del>	<del>400,000</del>
9	(13)	Goodnews Bay - water and sewer system	800,000
10	(14)	Aleknagik - water, sewer, landfill <del>OK w/PHS</del>	540,000
11	(15)	New Stuyahok - sewer upgrade	90,000
12	(16)	Akiak - water system	200,000
13	(17)	Akolmiut - outhouses and bunkers	31,600
14	(18)	Emmonak - water and sewer system	2,400,000
15	(19)	Shageluk - individual wells	100,000
16	(20)	Huslia - water and sewer upgrade	185,000
17	(21)	Galena - water and sewer extension	500,000
18	(22)	Holy Cross - water and sewer improvements	20,000
19	(23)	Kotzebue - fire protection water line	400,000
20	(24)	Kotzebue - water and sewer service line repair	450,000
21	<del>(25)</del>	<del>Kiana - sewage treatment plant</del>	<del>750,000</del>
22	<del>(26)</del>	<del>Shungnak - sewer line</del>	<del>300,000</del>
23	PHS-OK-(27)	Noorvik - water and sewer repairs	150,000
24	(28)	Buckland - water system upgrade	100,000
25	(29)	Buckland - water and sewage trucks	197,400
26	(30)	Deering - road to dumpsite	100,000
27	(31)	Diomede - water tanks	363,700
28	(32)	Koyuk - washeteria toilets	3,100
29	(33)	Savoonga - water system upgrade	431,400

no conflict w/ PHS →

Adams

Adams

COLE  
BKR  
↓  
To James  
Adams  
PHS?

(43) Pelican

250,000

- 1 (34) Shaktoolik - garbage truck 50,000
- 2 (35) Shaktoolik - water line to clinic 100,000
- 3 (36) Shishmaref - water system project 750,000
- 4 (37) Shishmaref - water truck 93,700
- 5 (38) Teller - garbage truck 90,000
- 6 (39) Wales - water and sewage trucks 150,000

Incl. in DEC Budget Request '83

Adams add

OConnell add

- 7 (40) North Slope Borough - for Kaktovik for 75,000
- 8 (41) Wainwright emergency repairs - water treatment water storage tanks facility 1,200,000
- 9 (42) Seldovia water sewer line extensions 657,000

\* Sec. 5.

The sum of \$1,847,100 is appropriated from the general fund to

the Department of Community and Regional Affairs for payment as grants to the following communities for the following water, sewer, and solid waste facility projects:

- 13 (1) Metlakatla - water line drainage, sewer lines, sewer treatment plant, chlorination plant \$650,000
- 15 (2) Copper Center for Silver Springs - (Cabo) community well 32,100
- 17 (3) Takotna - individual wells 100,000
- 18 (4) Takotna - sewer feasibility study 25,000
- 19 (5) Dot Lake - water system repair 150,000
- 20 (6) Chalkyitsik - water and sewer system 250,000
- 21 (7) Evansville - well repair 100,000
- 22 (8) Rampart - safe water development 230,000
- 23 (9) Stevens Village - safe water development 250,000
- 24 (10) Beaver - solid waste facility 40,000
- 25 (11) Alatna - solid waste facility 10,000
- 26 (12) Northway - solid waste facility 10,000

\* Sec. 6. The sum of \$534,000 is appropriated from the general fund for payment as grants to the following municipalities for solid waste facilities:

- 29 (1) Akutan \$ 60,000

Grand total \$1,847,100

Final budget

DEC 1983

1	(2) Platinum	40,000
2	(3) Koyukuk	22,000
3	(4) Huslia	22,000
4	(5) Kiama - dump fencing	30,000
5	<del>(6) [Shungnak]</del> <sup>Humble</sup> - dump fencing - PHS provided fencing for Shungnak	30,000
6	(7) Kotlik	50,000
7	(8) Teller - landfill relocation	100,000
8	(9) Kodiak Island Borough - for Karluk facility	120,000
9	(10) Kodiak Island Borough - for Old Harbor facility	60,000

10 \* Sec. 7. The appropriations made by secs. 2 - 6 of this Act shall be  
 11 disbursed in accordance with AS 37.05.315 - 37.05.319.

12 \* Sec. 8. The appropriation made by sec. 1 of this Act is for capital  
 13 projects and is subject to AS 37.25.020.

14 \* Sec. 9. This Act takes effect immediately in accordance with AS 01.10.-  
 15 070(c).

16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29



# Alaska State Legislature

## House of Representatives

Committee on

Community & Regional Affairs

Pouch V  
State Capitol  
Juneau, Alaska 99811

Official Business

### MEMORANDUM

To: Committee Members  
House C&RA

Date: 3/11/82

From: Linda Otey

Re: HB 840 Proposed Amendments

In comparing projects and figures with the Dept. of Environmental Conservation, the Public Health Service and in some instances, the individual communities, the following list of amendments have been compiled and offered by legislators as well as committee staff:

Page 1:

- (1) -Line 18, by Grussendorf: *Adams moved amend. unan.*  
Insert new subsection"(D) Hoonah .....\$ 80,000 *ok ✓*
- (2) -Line 25, by Adams: *Clarkin moved amend unan.*  
Delete Noatak water project ..... 400,000 *ok ✓*

Page 2:

- (3) -Line 5, by Chuckwuk: *Spurs moved amend unan.*  
Delete \$40,000 and insert.....10,000 *ok ✓*
- (4) -Line 6,7,8, by Adams: *Clarkin moved amend unan.*  
Delete Sec. 2 and reword accordingly, " The sum of \$100,000 is appropriated from the general fund to the Dept. of Environmental Conservation for the regional water and sewer maintenance center for the Bristol Bay region." *ok ✓*
- (5) -Line 15, by Fuller: *Clarkin move - adopted unan. ok ✓*  
Delete (4) Elim .....50,000

(6) -Line 21 and 22, by Adams: *clock move - no obj. adopted unan.* ✓

Delete "water line drainage, sewer lines, sewage treatment plant, and chlorination plant" and insert;

water and sewer upgrade for Revilla Road and Evergreen Avenue.

Page 3

*open*

(7) -Line 21, by Adams: *- not accepted - motion not made 3/15/82*

Delete.....\$125,000  
Insert..... 750,000

(8) -Line 22 by Adams: *clock move - no obj. unan.*

Delete:(26) Shungnak - sewer lines. ✓ ..... 300,000

Page 4

(9) -After Line 8, end of Section 4, by Adams: *clock move unan. adopted.*

(41) Insert the following "(41) Wainwright emergency repairs - water treatment facility. - to North Slope Borough.... 75,000"

(10) -After Line 8, end of Section 4, by O'Connell: *General move - adopted*

(42) Insert the following "(42) Seldovia water and sewer line extensions..... 557,000"

*250,000*

Page 5

(11) -Line 5 by Adams: *clock amend adopted. Pelican* ✓

Delete "Shungnak" and Insert Ambler

Amendment to HB 840

by Grussendorf

*A Council -  
now -  
adopted*

Amend Section 4 by adding:

(43) Pelican - seawater pumping facility 250,000  
and dry fireline for fire  
protection



The City of Pelican has a fire protection system that is outmoded and unable to handle present emergencies. Immediate fire fighting improvements need to be made. A study of the specific needs and costs has been done by a consulting firm. Over half of the City of Pelican is built over water. Under prevailing circumstances the recommendation is for two submersible pumps, a diesel generator set and a dry fireline with standpipes. This would help provide the necessary emergency capacity.

AMENDMENTS

AMENDMENT NUMBER 1:

*DEC - fund for 2 years.*

Page 2, Sec. 2. Delete. Add new Sec. 2. The sum of 100,000 is appropriated from the general fund to the Department of Environmental Conservation for a regional water and sewer maintenance center for the Bristol Bay region.

AMENDMENT NUMBER 2:

PAGE 2, Sec. 4 (a): Saxman--water and sewer upgrade for Revilla Road and Evergreen Avenue. (water line drainage, sewer lines, sewage treatment plant, and chlorination plant).

## AMENDMENTS

### AMENDMENT NUMBER 1:

Page 2, Sec. 2. Delete. Add new Sec. 2. The sum of 100,000 is appropriated from the general fund to the Department of Environmental Conservation for a regional water and sewer maintenance center for the Bristol Bay region.

### AMENDMENT NUMBER 2:

PAGE 2, Sec. 4 (a): Saxman--water and sewer upgrade for Revilla Road and Evergreen Avenue. ( water line drainage, sewer lines, sewage treatment plant, and chlcrination plant)



# Alaska State Legislature

REPRESENTATIVE  
ERIC SUTCLIFFE

REPRESENTING  
THE SOUTHERN ALASKA PENINSULA  
THE ALEUTIAN CHAIN  
KODIAK ISLAND  
AND THE PRIBILOF ISLANDS

HOME  
P.O. BOX 3  
UNALASKA, ALASKA 99588  
(907) 981-1499

WHILE IN JUNEAU  
POUCH V  
JUNEAU, ALASKA 99811  
(907) 485-4940

## MEMORANDUM

TO: Community and Regional Affairs Committee Members

FROM: Eric Sutcliffe<sup>EGS</sup>

SUBJECT: HB 840

DATE: March 3, 1982

The question was raised during the March 3 testimony on HB840 whether or not the Port Lions water and sewer extensions (pg. 3, item 12) were already funded by the Public Health Service. At the time, the PHS representative did not have the back-up material describing the projects proposed in HB 840 and could not say for sure whether or not there was a duplication of effort. Conversations with him and the city have clarified beyond a doubt that the project outlined in HB 840 and the work planned by PHS are different projects. PHS plans to construct water and sewer extensions into the new HUD subdivisions. The city is seeking funding for service into already developed areas of town. In fact, the city applied for PHS funds for the project listed in HB 840 but was told PHS could only construct lines into the new housing projects.

Please see the attached descriptions if you have any further questions.

CITY OF PORT LIONS  
CAPITAL PROJECTS NARRATIVE

1. PORT LIONS WATER & SEWER EXTENSIONS

A. Water Main - Kizhuyak Drive

2,700 feet of 6" water main to the City Dock and through the City's only industrial area. Repair or replace septic tank at City Dock. The City of Port Lions had an application into EDA to fund this project when Federal monies were cut. The U.S. Public Health Service has already done the industrial sizing of key water mains within the village. Also, three (3) industrial water filters were installed in our new water treatment building in the summer of 1981. Therefore, the 2,700 foot water extension and workable septic tank is all that is needed to put our industrial area and City Dock back in working order.

City Project #11 (FY '82) on the Municipal Aid financial report shows the City's intention to prepare Kizhuyak Drive water for the industrial extension.

B. Water Main & Sewer Main - Bayview Drive

1,200 feet of four (4) inch water main and 1,200 feet of four (4) inch sewer main along Bayview Drive where existing homes are located. Although all residential units in Port Lions are connected to the City's water and sewer systems, Bayview Drive extensions have never been funded. This represents a health hazard for our community.

City Project #10 on the Municipal Aid Financial Report represents \$6,000.00 for the engineering and design of a comprehensive water, sewer and road study for Bayview Drive. This study is expected to be completed the winter of 1982. The City is requesting construction funds only.

It should be noted that the City of Port Lions charges all users a service fee each month for water and for sewer. The existing system operates all year around and has a full time operator. The City of Port Lions is wholly responsible for operation and maintenance.

TESTIMONY ON HB 840

By  
Ernst W. Mueller  
Commissioner of Environmental Conservation

Before  
House Community & Regional Affairs Committee

February 26, 1982

HB 840 is a bill to improve sanitation facilities in Alaskan communities. Several sections affect the ADEC. We are pleased to have the opportunity to provide the following comments.

Section 1(1) \$150,000 for water/sewer feasibility studies in three communities.

(2) Specifies a certain amount to be spent in 11 designated villages for water/sewer improvements, totaling \$2,925,000.

(3) Specifies a certain amount for landfills in four places, totaling \$280,000.

Section 2 - Authorizes \$100,000 for a regional water/sewer maintenance center in the Bristol Bay Borough.

The remainder of HB 840 (section 4) contains direct grants to municipalities for water and sewer improvements.

Our comments on these sections follow.

Section 1(1) Good approach. Feasibility studies are an excellent way to identify problems and accurately document capital improvement costs.

Section 1(2) It is extremely difficult to accurately estimate the amount needed to construct sanitation improvements, unless engineering studies are initiated to define the exact scope of each project. To the best of our knowledge, this has not been done for all the communities identified in Section 2, and many of the estimates used not be accurate.

To remedy this problem, We would suggest feasibility studies, at \$50,000 each, for Iguigig, Togiak, Platinum, Koliganek, Noatak, Pilot Point, and Ekwook. This will enable the Department to deliver more accurate cost estimates to the Legislature next session and ensure that the proposed capital projects reflect local desires. This approach is supported in HB 790 recently introduced by Representatives Buchholdt and Zharoff.

After feasibility studies are complete, we recommend that a group funding approach be used for a number of projects, rather than specifying a certain amount of money for each community. This reduces the likelihood of there not being enough money to satisfy community needs, and permits more flexibility in designing and constructing needed improvements.

Project estimates for St. George, Kungiganak, Hooper Bay, and Chevak appear to be accurate.

Section 1(3) Again, it is impossible to accurately estimate the true cost of these landfills unless engineering studies are done first. Soil and ground water conditions, road access, land status, and availability of gravel must be determined before estimates are made.

The Department will be unable to effectively perform the work identified in Section 1 of HB 840 unless more personnel are made available to do the studies, build the facilities, and manage the grants. Currently, our four-man engineering staff is spread thin administering 47 existing projects. The attached fiscal note would remedy this situation by providing an additional two technical and two administrative staff.

Section 2 of HB 840 is of interest even though ADEC is not charged with its administration. Our experience is that \$100,000 will support a remote maintenance worker for about one year. This is not really enough time to evaluate a pilot program of this sort. We feel \$200,000 would be a more realistic figure. In addition, the Bristol Bay Borough, which is the targeted study area, contains only three villages. We recommend all 29 villages in the Bristol Bay geographic area be included.

Section 4 contains \$18,948,900 in direct grants to 40 communities for water and sewer projects. Based upon past experience, it is likely that most of these communities will use their appropriation as a match for the ADEC Municipal Construction Grant Program. As you may know, Construction Grants is presently out of funds. Unless the Department receives additional appropriations, there will be no money available to match the potential grant application identified in HB 840.

Some background information is available on the other communities identified in the bill, and we would be happy to share it with members of your staff.

Attachment: Fiscal Note

THE LEGISLATURE OF THE STATE OF ALASKA  
ELEVENTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. HB-840

Title An Act making funds available for sanitation improvements

Requested by Adams

Date 2/16/82

II. FISCAL DETAIL

Agency Affected Department of Environmental Conservation

Program Category Affected Division of Facilities Construction & Operation

BRU, Program, or Subprogram(s) Affected NRMEC

(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 80	FY 81	FY 82	FY 83	FY 84	FY 85
100 PERSONAL SERVICES				123.1	131.7	140.9
200 TRAVEL				24.0	27.4	31.2
300 CONTRACTUAL				12.9	13.8	14.7
400 COMMODITIES				1.5	1.5	1.5
500 EQUIPMENT				2.1	--	
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
<b>TOTAL</b>				<b>163.6</b>	<b>174.4</b>	<b>188.3</b>

FUNDING (Thousands of Dollars)

	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85
GENERAL FUND				163.3	174.4	188.3
FEDERAL FUNDS						
OTHER (Specify Fund Source)						

POSITIONS

	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85
FULL TIME				3	3	3
PART TIME				1	1	1
TEMPORARY						

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

This fiscal note reflects DEC responsibilities in their Village Safe Water Program and their construction.

IV. DATE

2/25/82

PREPARED BY

Keith Kellon

AGENCY

ADEC

PHONE

425-2610

Original: Legislative Finance

cc: Budget and Management

Prime Sponsor (First Legislator Named)

Jan 20 from  
letter to  
DEC Jackson

HCRA Mtg. - O'Connell Feb 26 8:30 am  
Bylsma  
Anderson  
Clocksin

On the Agenda this am is HB 840 Intro  
by Rep Adams

Adams Bill covers from Ketchikan to Barrow -  
Dept may ~~not~~ <sup>debate</sup> some of these estimates.  
Urged passage this session.

Clocksin Dept. ~~January~~. Have you compared  
DEC's figures w/ any of these?

Adams If there are any differences they  
are discrepancies between legislators and  
the <sup>Public</sup> Health Corporation re a January letter of

DEC -

Adams - 2 Amendments offered -

Last year passed 14 mil to DCRA which has not yet <sup>been</sup> distributed.

No intent here to pick up any projects already funded thru that program of last year to DCRA

Kelton - DEC - support concept of HB840 -

not proposal to go thru this on project by project basis due to lack of time to this point.

Format of the bill. Agree w/ Adams Amend #1. \$100,000 is adequate for 1 year service. Would propose that this be funded for a 2 year prog. Cost est. in

Sec 4 of bill - comm will use \$ to come to us to apply for the 50% grant programs that we will have. Will need \$ to handle this load.

Sec 1 - 3 proj. More, H.S., St. Geo's

Ekwok - 200 projects line up here w/HB840  
The bill includes areas that aren't even considered by health service programs.

Clark - Dupl. Fed Pub Health Serv. proj. duplicated by HB840.

K - There are no duplicate projects or here. Some \$ avail to exist, projects.

We coord w/ PHS a number of times a day - they have manpower - we have \$.

We support HB790 - it requires us to do a feasibility study before projects can begin.

Clark pg 2 & 24 - need feas. studies in Sect 4

K - Most cases. more accurate and better cost est. are usually already done on these projects.

K - None of these projects has received grants from us a yet.

C - See this proj. twice -  
one as bill - HB 840  
" " budget & to DEC.

K <sup>yes</sup> Request making funds in <sup>dept.</sup> budget request - before the Finance Comm now.

C Sect 5 - approx to DCRA - what diff prog. is this?

K Can't answer that  
Dks We have <sup>direct</sup> grant authority for Unincorp. Communities. DEC always does inc. commitments.

Clark - If a local health issue. This is nec. i. the legis. doesn't - rel proj. are not in on are but the health services this they are

D - Proj. or harder out will appear on our Cap. budget request. Only 3 may be duplicated

Greg Capita - diff between <sup>dept's.</sup> priority list i HB 840-

Top 8 or 9 com reflect places that ~~are~~ have less possibility of help assistance.

Var may diff w: many have basic level of service that needs maintenance - Our top

8 or 9 - have nothing at all. HB 840 is much more comprehensive

~~Clark~~ ~~Uninc. HB 840~~ ~~Health~~

Clark - Oper Costs - none of this funding goes for this proj - how do they get this \$?

K Comm. has discretion for direct maintenance financing - 15 to 20,000 - per proj. 25% are

Self sustaining. One 50% are run by user fees.  
523,000 budgeted in gen fund for existing  
facilities. It is possible, going to get cut.

Q'C How by <sup>village</sup> a fac. worth \$1 mill.

R Many cases we contract w/ REAMS or RDA's etc.  
- Mostly

AKA <sup>how</sup> When is it deter what villages must pay  
for sew? what v. don't?

R - We go to area and assess needs.

Q'C Ques - Putting in facilities on private property -  
DEC can do it with direct approp but  
not grant money?

AKA - Spoke to prob of rural areas.

AD has ruled that these villages must  
set up non-profits. Have asked AD to  
draft lang to tie in sov run lang.  
to Env. Conserv. Statutes.

The inc. from 25 - to \$100,000

AKA <sup>advised</sup> the Supp Hous. Devel Grant Program -

legis decid last year to provide 20%  
of amenities for rural <sup>housing</sup> develop. Proj. can't  
begin without fuel amt being pledged.

38 applica. sub. to HUD - Verify cost & certify  
and ready to go to bid - 8 proj. - grant  
awards has been made. By May to have entire  
12mil approp for this year. Being prudent and  
waiting for Fed commitments. Not seeking add'l  
funds for 1982.

DCEA - writes check and monitor -  
DEC - uses \$ to do project themselves } unincorp  
comm.

Clark Sect 5 ques - Reg. DCEA Review this sect.

Copy letter - re \$ spent from AAs re/on  
projects. -

Adj.

★ HB 334 - Chp. 88 - Manually compare  
w/ this bill -

# STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR

## DEPT. OF COMMUNITY & REGIONAL AFFAIRS

DIVISION OF ADMINISTRATIVE SERVICES

POUCH B  
JUNEAU, ALASKA 99811

March 1, 1982


The Honorable Patrick M. O'Connell  
Chairman  
House Community & Regional Affairs Committee  
Alaska State Legislature  
Pouch V  
Juneau, AK 99811

Dear Representative O'Connell:

As requested by the House Community & Regional Affairs Committee, enclosed is a fiscal note for HB 840 "An Act making special appropriations for water and sewer systems..."

Should you have any questions concerning this note please contact me at 465-4709.

Sincerely,



Rod Mourant, Director  
Division of Administrative Services

cc: Representative Albert P. Adams  
Alaska State Legislature

Keith Specking, Legislative Assistant  
Office of the Governor

Ron Lehr, Director  
Division of Budget & Management  
Office of the Governor

Elmer Lindstrom, Fiscal Analyst  
Legislative Finance Division  
Legislative Affairs Agency

THE LEGISLATURE OF THE STATE OF ALASKA  
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. House Bill No. 840  
 Title "An Act making special appropriations for water and sewer systems..."  
 Requested by Community & Regional Affairs and Finance Committees Date 2/16/82

II. FISCAL DETAIL

Agency Affected Dept. of Community & Regional Affairs  
 Program Category Affected Community Development  
 BRU, Program, Or Subprogram(s) Affected Local Government Assistance Div.  
 (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 82	FY 83	FY 84	FY 85	FY 86	FY 87
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

FUNDING (Thousands of Dollars)

	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
GENERAL FUND						
FEDERAL FUNDS						
OTHER (Specify Source)						
<b>POSITIONS</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

FULL TIME						
PART TIME						
TEMPORARY						

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

Section 5 appropriates \$1,047,100 to the Department of Community & Regional Affairs for administration of grants to twelve (12) unincorporated communities for water, sewer, and solid waste facility projects.

No additional administrative costs are expected for these particular grants unless, however, additional grants are made to the Department thereby increasing staff workloads.

IV. DATE February 25, 1982

PREPARED BY Terrence A. May *TAM*

AGENCY DC&RA/Local Government Assistance Div.  
 PHONE 465-4714

Original: Legislative Finance  
 cc: Budget and Management

Prime Sponsor (First Legislator Named) Adams

33-001 (Rev. 12/81)

AN ACT

Making special appropriations for village safe water facilities, solid waste facilities, and water and sewer systems; and providing for an effective date.

Section 1. (a) The sum of \$383,500 is appropriated from the general fund to the Department of Environmental Conservation as follows:

- (1) \$83,500 for a village safe water project under the Village Safe Water Act (AS 46.07) and for 2 solid waste facility projects in ~~Tanana~~
- (2) \$300,000 for village safe water studies under the Village Safe Water Act (AS 46.07) and for solid waste feasibility studies in the following communities:

- (A) Chalkyitsik + HB240
- (B) Fort Yukon ✓
- (C) Hughes ✓
- (D) Northway + HB240
- (E) Saint Mary's ✓
- (F) Minto ✓

Sec. 2. The sum of \$7,694,000 is appropriated from the general fund in payment as grants to the following municipalities for water and sewer and solid waste facility construction as the local match to be used by the Department of Environmental Conservation as follows:

- (1) Bethel sewer system ✓ \$ 330,000
- (2) Dillingham water and sewer system ✓ 265,000
- (3) Kotzebue water and sewer system ✓ 1,637,000

Chapter 88

✓(4) Home water and sewer utilidor 4,600,000

✓(5) Unalaska water supply and distribution system repair 862,000

• Sec. 3. The sum of \$1,451,500 is appropriated from the general fund for payment as grants to the following municipalities for the following purposes:

840 ✓(1) City of Shageluk for purchase of a hot water tank \$ 1,500

840 ✓(2) City of Craig for upgrade of sewer line and beach lift station 700,000

✓(3) City of Fairbanks for sewer main insulation and rehabilitation - phase II 750,000

• Sec. 4. The sum of \$236,000 is appropriated from the general fund for payment as grants for solid waste disposal site construction in the following communities:

✓(1) Saint Mary's \$ 100,000

✓(2) Eagle 22,000

✓(3) Holy Cross 50,000

✓(4) Kaltag 22,000

✓(5) Nihilal 20,000

840 ✓(6) Shageluk 22,000

• Sec. 5. The sum of \$63,000 is appropriated from the general fund to the Department of Environmental Conservation for sanitation system repairs in Arctic Village.

• Sec. 6. The sum of \$79,000 is appropriated from the general fund to the Department of Community and Regional Affairs for payment as grants for solid waste disposal site construction in the following communities:

(1) Northway 840 \$ 32,000

(2) Takotna 840 25,000

Chapter 88  
22,000

(3) ✓(1) Toldo 840

• Sec. 7. The appropriations made by secs. 1, 2, and 3 of this Act are for capital projects and are subject to AS 37.25.020.

• Sec. 8. The appropriations made by secs. 3, 4, and 6 of this Act shall be disbursed in accordance with AS 37.05.315.

• Sec. 9. This Act takes effect immediately in accordance with AS 01.10.010.



# Alaska State Legislature

REPRESENTATIVE  
ERIC SUTCLIFFE

REPRESENTING  
THE SOUTHERN ALASKA PENINSULA  
THE ALEUTIAN CHAIN  
KODIAK ISLAND  
AND THE PEARL AND HERB ISLANDS

HOME  
P.O. BOX 3  
UNALASKA, ALASKA 99885  
(907) 581-1455

WHILE IN JUNEAU  
POUCH V  
JUNEAU, ALASKA 99811  
(907) 465-4940

## MEMORANDUM

TO: Community and Regional Affairs Committee Members

FROM: Eric Sutcliffe<sup>EGS</sup>

SUBJECT: HB 840

DATE: March 3, 1982

The question was raised during the March 3 testimony on HB840 whether or not the Port Lions water and sewer extensions (pg. 3, item 12) were already funded by the Public Health Service. At the time, the PHS representative did not have the back-up material describing the projects proposed in HB 840 and could not say for sure whether or not there was a duplication of effort. Conversations with him and the city have clarified beyond a doubt that the project outlined in HB 840 and the work planned by PHS are different projects. PHS plans to construct water and sewer extensions into the new HUD subdivisions. The city is seeking funding for service into already developed areas of town. In fact, the city applied for PHS funds for the project listed in HB 840 but was told PHS could only construct lines into the new housing projects.

Please see the attached descriptions if you have any further questions.

CITY OF PORT LIONS  
CAPITAL PROJECTS NARRATIVE

1. PORT LIONS WATER & SEWER EXTENSIONS

A. Water Main - Kizhuyak Drive

2,700 feet of 6" water main to the City Dock and through the City's only industrial area. Repair or replace septic tank at City Dock. The City of Port Lions had an application into EDA to fund this project when Federal monies were cut. The U.S. Public Health Service has already done the industrial sizing of key water mains within the village. Also, three (3) industrial water filters were installed in our new water treatment building in the summer of 1981. Therefore, the 2,700 foot water extension and workable septic tank is all that is needed to put our industrial area and City Dock back in working order.

City Project #11 (FY '82) on the Municipal Aid financial report shows the City's intention to prepare Kizhuyak Drive water for the industrial extension.

B. Water Main & Sewer Main - Bayview Drive

1,200 feet of four (4) inch water main and 1,200 feet of four(4) inch sewer main along Bayview Drive where existing homes are located. Although all residential units in Port Lions are connected to the City's water and sewer systems, Bayview Drive extensions have never been funded. This represents a health hazard for our community.

City Project #10 on the Municipal Aid Financial Report represents \$6,000.00 for the engineering and design of a comprehensive water, sewer and road study for Bayview Drive. This study is expected to be completed the winter of 1982. The City is requesting construction funds only.

It should be noted that the City of Port Lions charges all users a service fee each month for water and for sewer. The existing system operates all year around and has a full time operator. The City of Port Lions is wholly responsible for operation and maintenance.

THE FOLLOWING PAGES WERE TREATED AS  
A UNIT IN THE ORIGINAL FILE.

- (1) 150,000 for water and sewer feasibility studies in the following communities:

CHIGNIK BAY -- feasibility study \$50,000

It is a high priority of the community of Chignik Bay to have a buried water system which will provide water at sufficient pressure for domestic use and fire protection. The water and sewer system at Chignik Bay is make-shift, insufficient for the community and a health hazard. Water is supplied by a pipeline which originates at a reservoir 500 feet above and behind the village and terminates at the Alaska Packers Association Cannery. Residents have tapped into the line and supply their homes by running plastic pipes on top of the ground. The system freezes in winter, of course, creating an inconvenience and fire hazard.

Sewage is disposed of by direct discharge into the Indian River, into a stagnant pond behind the village, and into private septic tanks, most of which do not have drain fields. During the fishing season when the village population increases from 200 to close to 1000, it is common to see and smell raw sewage near the cannery.

CHIGNIK LAGOON -- feasibility study \$50,000

A centralized water and sewer system is one of the village's main priorities. Residents get their water from private shallow wells or from nearby streams by running hose or pipe on the ground. The gravity flow systems freeze in the winter, and some of the wells are contaminated by residential cess pools. Villagers also report that some of the streams are slightly contaminated. The PHS Sanitarian in Dillingham says several new homes are being built upstream, which will aggravate the contamination problem, and in his opinion, an improved water and sewer system in Chignik Lagoon is already desperately needed. In addition to health reasons, residents want centralized system for fire fighting.

MANLEY HOT SPRINGS -- feasibility study \$50,000

Obtaining a good quality source of drinking water is a high priority in Manley Hot Springs. There are twelve private wells in Manley Hot Springs. The water from these wells is used for washing clothes, due to the high mineral content of the water. For drinking water purposes, residents of the village currently use water from the hot springs which has been run through a home heating system. This water contains an extremely high content of natural fluoride, which is very detrimental to the children's teeth. These funds are going to DEC to do a feasibility study to find a good source of drinking water.

ST. GEORGE == Water Project

\$955,000

The following is from a letter written in 1980 by the Department of Environmental Conservation to a St. George resident:

"A check of our files confirms the high sodium content in the St. George water supply. I also learned that residents have been concerned about this problem since 1972 and from time to time various government agencies have attempted to resolve the matter, but to no avail."

There is a small (400 gallon/day) desalination unit in the village which is operated by the federal government, but the unit does not supply enough potable water for the community. One possible solution for correcting the situation would be to install a second desalination unit, but with the National Marine Fisheries Service's planned withdrawal from St. George in a few years, there will be no technical personnel on the Island capable of handling the complicated operations and maintenance of such a unit. Rather than put in an expensive machine which has proven to be difficult to maintain, a more sensible solution might be to pipe water from three lakes located 3.5 miles from town.

The Public Health Service estimated \$955,000 is needed to solve the St. George water problem. The appropriation includes monies for design and engineering.

Kongiganak -- Water & Sewer Project

\$75,000

The VSW facility consists of a laundromat, bathing facility toilets and a central watering point. The source of water for this is the river and is supplemented by the drainage from the school roof. The village well's water is of marginal quality and the facility is inoperable when the river water runs salty. In the winter ice is used as a domestic water source and during the summer the main source is rain water or ponds. The clinic's water supply is from rain water. Some funds were provided in HB 334 for the purpose of: increasing water storage capacity and locating a potable water source. These funds are needed to complete that project. This is not a duplication of last year's project.

Iguigig -- Well

\$50,000

Community residents obtain their water from the Kvichak River and a nearby spring. Neither of these sources are treated. The school uses an infiltration gallery on the river to obtain its water supply HUD plans to construct homes this spring which would further complicate the problem. Existing health conditions will undoubtedly be improved if a central watering point were constructed. These funds are for the purpose of construction of a central watering point to provide clean, treated water for the village.

Togiak -- Well

\$100,000

Public Health Service, a few years ago, drilled a 50' deep well which is the water source for the community. A 60,000 gallon wood stave storage tank stores the water supply. There are buried pipes for both water and sewer to serve the homes. The well water table has gone to very low levels in the past couple of winters. Both the clinic and fish processor operate their own wells. The school obtains water from its own well and from the village well. The water is of good quality. The problem is that demand exceeds supply. This necessitates the drilling of another community well.

Platinum -- Well

\$50,000

A shallow hand dug well provides a water source for the community and school. This well is your basic open hole in the ground with a wooden lid, so that it is not protected from surface contamination. These funds would improve the only main water source for Platinum.

Koliganek -- Water and Sewer Project Upgrade

\$75,000

The community has a 100' deep well for a water source. Water and sewer service lines are piped (buried) into homes. Water supply lines experiences occasional freeze-up due to poor insulation on pipes. Sewage disposal methods are by means of septic tanks, honey buckets, and flush toilets, which are discharged into a stream through the village sewer system. These funds through DEC would provide a desperately needed upgrade of the water and sewage disposal system. The installed by PHS has failed while sewage is currently draining into the Nushagak River.

Noatak -- Water Project—

\$400,000

This is the top priority for Noatak. The community has a well which is 550 ft. deep, and supplies a 50,000 gallon wood stave storage tank. Before 1980, water was piped to some of the homes. In 1980, the water line was damaged and service to most of the homes has been disrupted. These funds are to expand and upgrade the distribution system. It is also intends that the pipes will be properly insulated and the pump house be heated.

Hooper Bay -- Feasibility Study

\$200,000

PHS drilled a couple of wells to provide Hooper Bay with its water needs. Many homes collect rain water, or get water from a pond or ice. PHS had constructed a pump house and storage tanks, but they were destroyed by fire in 1971. In 1980, a state grant was used to renovate the pump house and extend a summer transmission line.

## Hooper Bay cont'd

Also in 1980, PHS repaired the frozen well. Honey buckets, and nine sewage bunkers are used for waste disposal and are located within 50 yds. of the village. Hooper Bay is located at sea level and there is a very high risk of contamination to the water wells. Hooper Bay has a population of 600 and is in desperate need of an adequate supply of safe water. These funds are to go to DEC to assess and design a feasible water system for this community.

### Chevak -- Water System Upgrade \$370,000

The village has two VSW watering points. A heavy iron taste was noted after the water was treated and this is unacceptable to the villagers. Some use ice and rainwater for drinking purposes and utilize the VSW facility for bathing only. One of the watering points is shut down because of problems such as sand infiltration, and freeze-up on several occasions due to lack of fuel oil storage capacity. The amount of 370,000 is to go to DEC for remodeling and upgrading of the existing watering point, and to build two new wells, with one located near the airport and the other at the new housing site. Also, two new sewage bunkers are to be constructed with these funds.

### Pilot Point -- Water and Sewer Project \$200,000

Water sources are provided of five private hand dug shallow wells, and a tundra pond. However, the pond does become stagnant during summer seasons. All sources of drinking water are untreated. The village school and clinic utilize the same well for a water source. A packers/cannery operation their water from the lake. Domestic sewage disposal methods are accomplished by the following means; privies, honey buckets, seepage pits, and some homes and school utilize septic tanks. Villagers would prefer a complete water and sewage system with all homes serviced. These funds to go to the DEC for water and sewer project.

### Ekwok -- Water and Sewer Project \$450,000

A water and sewer system is badly needed in Ekwok. Since the homes in the community are far distances apart, centralized wells and cesspools or septic tanks are much more economical than one main system. Water samples have been taken and are routinely contaminated from the private hand dug wells. This project is needed to improve health conditions in the community.

(3) \$280,000 for land fills in the following communities:

Manokotak

\$200,000

The dump is currently located about 1/4 of a mile south of the village. A tractor with a wagon, garbage cans, and a rack were provided by PHS for the village solid waste disposal program. The landfill site is covered very irregularly and an improved site is badly needed. This appropriation is to go to DEC and is for cleaning up the existing health hazards that now exist and for preparation of the new land fill area.

Togiak

\$20,000

The community operates an open dumpsite for its waste disposal. The village leaders feel that the current dumpsite is too small and in need of relocation. Plans must be made immediately to relocate the dumpsite or it will pose a serious threat to the community health. The dumpsite should be located further away from the village, enclosed by a fence, and have a good access road. These funds to go to DEC for Togiak land fill.

Twin Hills

\$20,000

The community utilizes an open dumpsite for solid waste disposal. The village has identified solid waste disposal improvements as a top development priority. These funds are to go to DEC for the Twin Hills land fill.

Clark's Point

\$40,000

The community utilizes a pit near the school for its solid waste disposal. Beach dumping has also been noted to occur. A developed and enclosed landfill is greatly needed to prevent serious health problems. These funds to go to DEC for development of land fill.

Section 2. Regional Maintenance Center -- Bristol Bay \$100,000

The sum of \$100,000 is appropriated from the general fund for payment as a grant to DEC for the Bristol Bay regional water and sewer center. There are twenty-seven (27) villages in the Bristol Bay Region which have water and sewer facilities which were constructed by PHS. Many of the facilities are on the verge of failure and are barely kept operating by the efforts of two (2) PHS operating and maintenance specialists who serve the entire state of Alaska, and are available strictly on an emergency basis, this allows little or no time for training village water and sewer operators in repairing and maintaining equipment.

## Section 2. cont'd

Many villages have broken down backhoes, sludge pumps, boilers, and circulating pumps, because village operators don't have the technical knowledge to repair and maintain equipment. After a village has used a water and sewer system for several years, a system failure can produce much worse sanitation problems than originally existed. A reasonable solution would be to establish a regional maintenance center. This center would provide an operation maintenance specialist to assist villages in keeping their water and sewer systems operable, as well as providing training to the village operator. It is imperative that the original water and sewer investments be protected and kept operable, as well as protecting the health of the people in the Bristol Bay region.

## Section 3.

The sum \$215,000 is appropriated from the General fund for payments as grants for water and sewer feasibility studies to the following cities:

Shageluk -- Sewer Feasibility Study                      \$25,000

These funds are to go to the city of Shageluk for a water and sewer feasibility study. PHS put in a washeteria, watering point and well in 1975 and the community has had problems ever since. A feasibility study is needed to determine the best alternative for this community.

Chuathbaluk -- Feasibility Study                      \$25,000

PHS constructed a well and watering point in the mid 1970's. Since 1977 the community has had problems with the pipes freezing and breaking for both water and sewer lines. The community's septic tank needs to be pumped to prevent surface contamination. A feasibility study needs to be undertaken to come up with specifications for a workable system.

Nulato -- Feasibility Study                      \$25,000

A top priority of the city of Nulato is a water and sewer system. Currently, there is a laundry, bathing and watering point facility. The sewage disposal system consists of honey buckets and privies. The new townsite is a couple of miles away and they would like a central watering point there. These funds are for a feasibility study to come up with the most economical way to provide these services.

Elim -- Feasibility Study

\$50,000

In 1974 PHS put in a new water and sewer system, however there has been a multitude of problems with the system. If approved this appropriation would enable the City of Elim to come up with plans and specifications for a system that is adequate.

Selawik -- Feasibility Study

\$50,000

PHS ranks Selawik highest with major sanitation problems. In the past it has been established that the cost of a water and sewer system would be prohibitive, however because of the severe sanitation problems, a feasibility study would enable the City of Selawik to come up with plans and specifications for a system that is cost effective and one which would be adequate to serve the needs of the residents.

Anderson -- Sewer Feasibility Study

\$40,000

Anderson is a community of more than 500 people and presently depends upon private disposal of sewage and provision of safe drinking water. There is no public supply. There is a considerable amount of concern in the community that the drinking water will be contaminated because of the proximity to the sewage drain fields. The City of Anderson wishes to conduct a feasibility study for a public sewer system and to explore available alternatives.

#### Section 4.

The sum of \$18,948,900 is appropriated from the General fund for payment as grants to the following municipalities for the following water and sewer projects:

- (1) Saxman - water and sewer lines for Revilla Road and Evergreen Avenue \$150,000

The water source for the City of Saxman is a high concrete dam on Saxman Creek which supplies a 35,000 gallon storage tank. Homes have buried pipe service which was constructed in 1972 by PHS. Inadequate pressure at high homes in town is experienced. Sewage is disposed through a 25,000 GPD secondary treatment extended aeration plant. There are chronic problems with the sewage treatment plant as it is undersized to serve the community. The City of Saxman is requesting \$150,000 for water and sewer lines for Revilla Road and Evergreen Avenue.

- (2) Klawock - upgrade and reroute of water system, \$350,000

The water source is a dam on Half Mile Creek. Buried 10" Techite pipe extends 2.5 miles to town, to supply a 100,000 gallon wood stave storage tank. The water supply is sufficient. The village provides good operation and maintenance, but 200 line breaks were noted in the last 8 years. During cannery season, higher sections of town do not get water due to pressure problems. This municipal grant is requested for rerouting and upgrading the water system.

- (3) Craig - extension and upgrade of water and sewer lines, \$350,000

A spring box and earthen dam supplies a 170,000 gallon storage tank, and from there, through a distribution system to 150 homes. The system is operated and owned by the City. In 1975, PHS extended the water main to serve 15 units, and installed a trunk system in 1976 to elderly housing units. The existing sewage plant is a Bio Disc treatment system which drains into Klawock Inlet. The three (3) lift stations are used for the sewage disposal treatment plant, were built or improved in 1977. The demand for water currently exceeds supply. The municipal grant requested for the City of Craig is for the extension and upgrade of water and sewer lines to occupied lots, and to replace overloaded pipes in the existing system. An FY 82 appropriation of \$700,000 began the work, but substantially more is needed to finish the project.

- (4) Wrangell - Stikine - Evergreen Project, \$1,046,000

Stikine - Evergreen Avenue in Wrangell is a densely populated

area of town. Presently there is no water and sewer service, and no fire protection facilities available in this area. Water and Sewer lines would provide hydrant facilities for fire protection. The Department of Transportation is planning to pave Stikine - Evergreen Avenue. Should this be done prior to the installation of water and sewer lines, the paved road would have to be dug up. This would create unnecessary waste and duplication. The total cost of project is \$2,092,000. One half the amount is requested here, and the other half will be sought from DEC.

(5) Sitka - design of specifications for an alternate domestic water source, \$500,000

The present domestic water supply for the City and Borough of Sitka is insufficient to meet present needs. The appropriation would fund a plan to: (1) identify a new source, (2) write specifications for construction.

(6) Haines - water project, \$500,000

By Environmental Protection Agency's mandate in 1975, the City of Haines built a new water treatment facility, as well as changing its water source from a high crystal clear mountain stream, to a lake water source. Since the completion of the project, city residents have been forced to live with a slightly reddish colored water supply. This water supply stains clothing as well as household fixtures. Consultants have advised city that the water coloration problem can be corrected. It is apparent that the plant design was not adequately funded and the filtration units which were needed to remove the coloration from the lake water have never been installed. This funding request is to complete the system and provide clear, safe, and clean water to Haines.

(7) Skagway - water and sewer project, \$1,932,000

Water consumption in Skagway is as much as eight times the normal consumption for a community its size. The main reason for this enormous amount of water wastage is the presence of more than 3 miles of ancient wood stave water main in the town distribution system. This old pipe requires constant maintenance attention, and is a financial drain on the City. The wood stave pipe, and a small amount of A-C pipe, will be replaced with cement lined ductile iron.

(8) Wasilla - sewer planning, design and right-of-way acquisition, \$1,000,000

Funds to go to Wasilla for the planning, design, right-of-way and land acquisition for sewer project. This would encompass sewer collection, treatment and disposal for the city. The sewer system is considered to be a priority fund-

ing item for Wasilla.

(9) Ouzinkie - water and sewer renovation, \$750,000

The City of Ouzinkie needs a new water and sewer system for approximately 60% of the city. Through the years, sewer lines plug up, and in some places the sewer comes up through the ground. Because of pressure problems in the water system, if there was a serious fire, it would be almost impossible to put it out.

The project would renovate about 60% of the present water and sewer system, add additional fire hydrants, add water and sewer service to 14 new homes, and change the present pump fed system to a gravity fed system.

(10) City of Kodiak - design of water and sewer system for Near Island, \$750,000

Near Island is the only direction the City of Kodiak can expand, as it grows. Presently, the city is in the process of designing a bridge from Kodiak to Near Island. The Dog Bay Boat Harbor is presently under construction, on Near Island, and several other public facilities are in planning, including the Fishery Industrial Technology Center.

The firm of Peratrovich & Nottingham has been contracted by the City of Kodiak to do an extensive Near Island Master Plan for island usage, including commercial and private buildings. Detailed plans will be available to the committee by March 3, 1982. This project will consist of design and engineering of a water and sewer system on Near Island, with the main area to receive water and sewer service being the Dog Bay Harbor area.

(11) Sand Point-water and sewer extensions, \$1,300,000

Sand Point's present water and sewer system is incapable of accommodating the requirements of a significant new development area in the community. This area consists of a 25-acre site for the new Sand Point school and a major housing subdivision, located northeast of the present town center. The city's present sewer plant is already handling double the quantity of wastewater it was designed to treat, and expansion of the present facility to accommodate the new load is impractical due to the present plant's location and site characteristics. The community's water system, while capable of providing sufficient water to handle the new area, does not contain sufficient tank storage to serve the developments, nor does the present distribution system even approach the area's boundaries. Construction of the new school is expected to begin in the spring of 1982, and water service and sewerage will need to be in place for its scheduled opening early in 1983. Onsite sewage treatment is impractical due to soils and topographical constraints. The proposed

project consists of extending new main and distributor water lines into the development area and to the new school, including the provision of a new storage tank capable of providing adequate pressure requirements. A new sewer system, complete with a treatment plant sized to treat the development area's wastewater, will also be required. This system consists of lateral and main lines, and perhaps, several lift stations. The city will manage and maintain the system.

(12) Port Lions-water and sewer extensions, \$400,000

In order to hook up the city dock and industrial areas to the water system, 2,700 feet of 6' water main is needed. Replacement of the septic tank at the city dock may be needed. The U.S. Public Health Service has already done the industrial sizing of key water mains within the village. Also, three (3) industrial water filters were installed in the new water treatment building in the summer of 1981. Therefore, the 2,700 foot water extension and working septic tank is all that is needed to put the industrial area and city dock back in working order. An extension of the water and sewer system to the homes along Bayview Drive is needed. This requires 1,200 feet of four (4) inch water main and 1,200 feet of four (4) inch sewer main. The lack of water and sewer extension to this part of town represents a health hazard. The appropriation in HB 840, in the amount of \$400,000, is requested for water and sewer extensions. Remaining funds for the project are expected to be awarded through a matching grant from DEC.

(13) Goodnews Bay - water and sewer system, \$800,000

This Public Health Service water and sewer project, constructed in 1970, includes septic tanks with drain fields and buried water and sewer lines hooked up to homes. The plastic service lines occasionally freeze. The school reverts to a septic tank operation when complications with the sewer system become a problem. Villagers utilize honey buckets when the system is not working. Water is noted to be cloudy and contains sediment. The current water source is an infiltration gallery in a shallow stream which dries up occasionally, and also runs near the dump.

(14) Aleknagik - water, sewer and landfill, \$540,000

A Public Health Service 118' well, located on the north shore of Aleknagik Lake, was built and turned over to the village in 1974. This provides a watering point for some residents. Several private wells (3 on the north shore, and 3 on the south shore) provide water to other residents. Some homes use water from a lake spring, and others use water from Aleknagik Lake. The domestic sewage disposal methods which are used are privies, cess pools and honey buckets. The school, community hall, and clinic utilize a septic tank and some privies for sewage disposal. Many of the individual sewer systems are failing and sewage is draining

into the lake. Residents dispose solid waste at an open dump site, which is accessible by boat on the north shore of the lake. Its proximity to the lake results in some trash getting into the lake. Since many households are hauling water from the lake, a central watering facility would greatly improve health conditions.

(15) New Stuyahok - sewer upgrade, \$90,000

The entire community is serviced by three (3) PHS constructed septic tanks with two (2) drainfields. One (1) septic tank has direct outfall. Equipment to pump the septic tanks was provided in 1976. Drain fields were noted to be backed up in low areas. One (1) septic tank with a drain field is connected to the community system. The clinic is also connected to the community system.

(16) Akiak - water system, \$200,000

DEC, in conjunction with the regional health corporations, developed a statewide priority listing of villages which are most in need of sanitation improvements. Akiak is listed among the village most in need of available safe drinking water and sanitation facilities.

Akiak's water is untreated from the river and the supply is variable. Currently, honeybuckets are dumped in a hole behind the houses. HUD is building 20 houses this spring interspersed among the already existing houses in the village. HUD and AVCP Housing Authority are providing funds to PHS to drill wells and construct septic tank drain fields for the HUD houses. However, they do not have the funds to do the same for the already existing houses while they are there with all of their equipment. PHS has already ordered the materials to be barged to Akiak for construction to begin in May and, therefore, cannot postpone the project. If we wait to get an appropriation through the capital budget, PHS will have to remobilize their drilling and construction equipment late this summer, or may have to wait until next year. This will push up the cost of construction of wells and septic tank drain fields for the old houses to more than 3 times what it would cost if done at the same time as the HUD housing, according to the Housing Authority and PHS.

PHS estimates that it will cost an additional \$200,000 to provide these basic sanitation improvements to the old housing if done at the same time as the HUD housing. If done separately, this summer, with remobilization of equipment, it will cost between \$407,000 - \$600,000.

(17) Akolmiut - outhouses and bunkers, \$31,600

Last year the Public Health Service funded the construction of 18 sewage bunkers for Akolmiut. The City of Akolmiut includes the villages of both Kasigluk and Nunapitchuk. Eleven of the sewage bunkers were placed at the new AVCP Housing Authority housing site in Kasigluk, and seven were

placed in Nunapitchuk. However, more bunkers are needed, as the bunkers built last year fill up rapidly, especially during cold weather. The Public Health Service, due to federal budget cuts, lack the funding to construct any more bunkers.

This appropriation would fund the construction of 18 more bunkers for Akolmiut. Nine bunkers would be placed in Kasigluk and nine would be placed in Nunapitchuk. The bunkers are 8 x 6 x 4 feet and made out of plywood, 2 x 4's, and metal.

(18) Emmonak - water and sewer system, \$2,400,000

On February 8, 1982, Emmonak experienced a fire which destroyed its pumphouse and water system. This water system included a washeteria. The Governor has declared a state of emergency in Emmonak, as the current available water source has containation potential and is totally inadequate to meet the needs of the residents of Emmonak. These funds are requested as a municipal grant to the City of Emmonak as Phase I construction of a project totalling \$4.6 million.

(19) Shageluk - individual wells, \$100,000

The amount of \$100,000 will be awarded as a municipal grant to the City of Shageluk for the upgrading of the water delivery system in Shageluk. The current water system is inadequate in meeting the needs of the residents.

(20) Huslia - water and sewer upgrade, \$185,000

The Huslia water and sewer system is presently being upgraded through VSW bond money. These additional funds are needed to complete Huslia's water systems. This is a high priority for the residents of Huslia. The existing funding through VSW is an insufficient amount to complete this system. Additional funds are required to adequately serve the needs of the community.

(21) Galena - water and sewer upgrade, \$185,000

The first priority of the City of Galena is the reworking of the existing water and sewer lines, and extending the waste heat to the vehicle storage building. With rising energy costs, utilization of waste heat is a viable energy conservation measure.

Current water and sewer lines cover only city buildings and the school. Other development will be taking place around

this complex. Extending the current system will bring more of the city on line for piped water and sewer.

The project is estimated to cost \$500,000. This will include planning, construction, materials and administrative costs.

(22) Holy Cross - water and sewer improvements, 20,000

The City of Holy Cross has been having problems maintaining its water and sewer system for several years. Due to its limited equipment, the lagoon hasn't been properly maintained and floods houses in the vicinity. It is a great concern to the residents of Holy Cross that a serious health hazard will occur because of this situation.

The Holy Cross pumphouse also is desperately in need of repair. The roof is caving in and leaks year round.

A grant to the City of Holy Cross would allow for the repair of the pumphouse roof and the purchase of some small new sewage equipment.

(23) Kotzebue - fire protection water line, \$400,000

The present PHS water system in Kotzebue was designed to provide residential water service, and not for fire fighting purposes. The system has recurring problems of low water pressure, in fact, the maximum pressure at which the system can operate, without developing serious leaks is 55 psi. This is not adequate for fighting fires. In addition, Kotzebue has had recurring problems with line freeze up.

The storage capacity is adequate for current needs, but is expected to be insufficient by 1985 or 1990 depending, in part, on the type of new fire fighting equipment the city acquires.

A tragic fire occurred last January in which the community lost their IRA Recreation Center. This was partly due to the inability of the existing water loops to provide sufficient water, although there was plenty of water in the storage tank at the time.

In an attempt to prevent fires in the future, the city has engaged an engineering firm to plan a fire protection water distribution system, which would utilize "dry lines," activated by turning on a pump, to avoid the freeze up problem.

The City of Kotzebue is a second class city with a population of 2,250, and has been growing at a moderate and steady rate. It can no longer protect its residents with its present domestic water distribution system. In 1973 the Insurance Service Office surveyed the structures in Kotzebue, and recommended a 3,500 gpm flow, order to provide adequate fire protection. However, full capacity of the current system is 2,000 gpm, which is also the full capability of the 3 pumper trucks which Kotzebue now has. The fire protection water line requested here, is therefore greatly needed to protect the lives and property of the people of Kotzebue, in the event of fire.

(24) Kotzebue - water and sewer service line repair, 450,000

The City of Kotzebue is a second class city, north of the Arctic Circle with a population of 2,250 and has been growing at a moderate and steady rate. Many of the water and sewer lines are in a state of disrepair. If repairs are done in a piecemeal fashion, it will double the cost of the project. This money is to go to the City of Kotzebue to do all the repairs that they have identified for water and sewer lines.