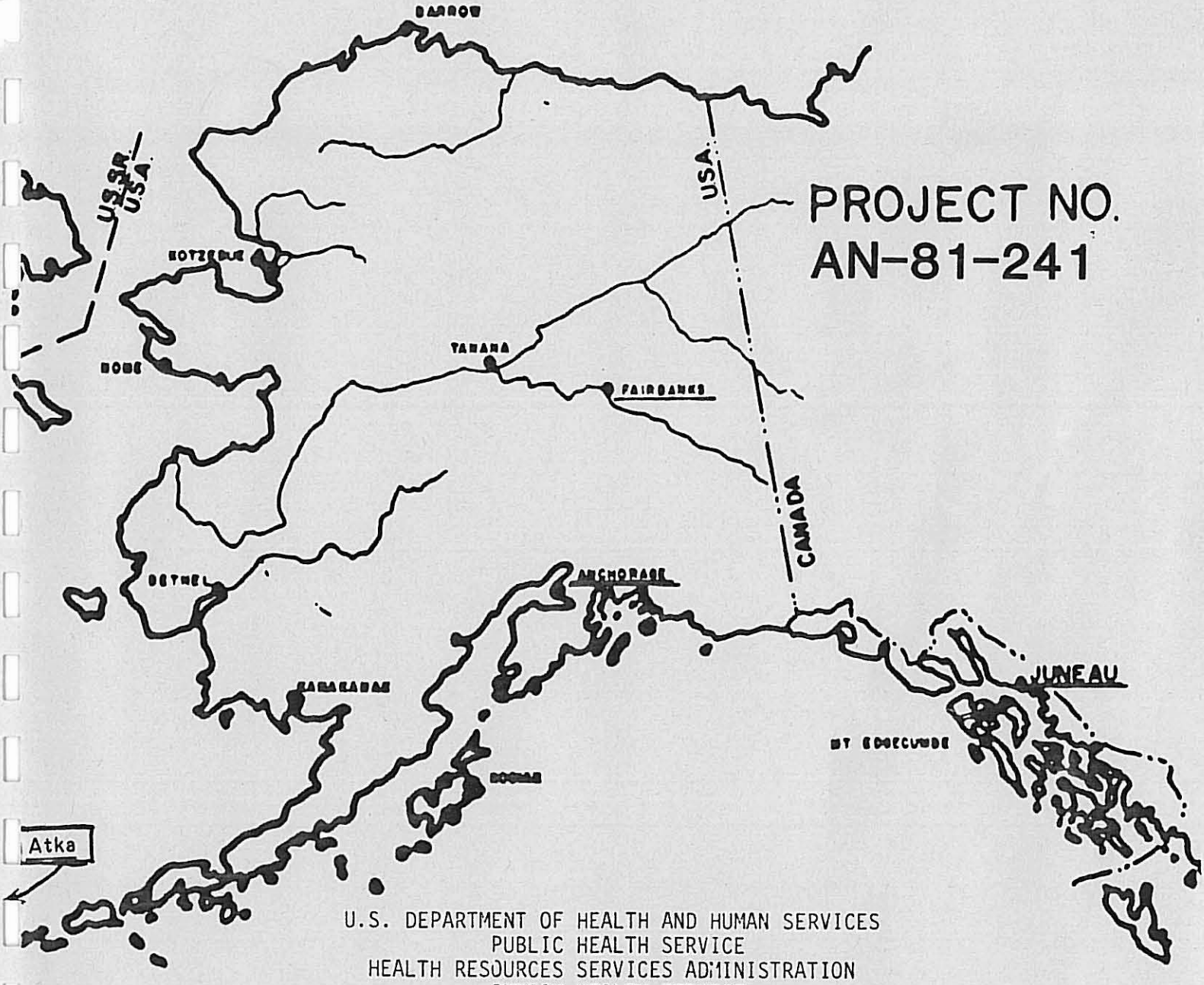
FINAL REPORT

SANITATION FACILITIES CONSTRUCTION

FOR

Atka, Alaska



PROJECT NO.
AN-81-241

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
HEALTH RESOURCES SERVICES ADMINISTRATION
INDIAN HEALTH SERVICE
ALASKA AREA NATIVE HEALTH SERVICE
ENVIRONMENTAL HEALTH AND ENGINEERING BRANCH
ANCHORAGE, ALASKA

FINAL REPORT
SANITATION FACILITIES CONSTRUCTION
VILLAGE OF ATKA, ALASKA

ID: 2079k/185H
LR: 090387

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

FINAL REPORT
SANITATION FACILITIES CONSTRUCTION
VILLAGE OF ATKA, ALASKA

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

DATE OF REPORT:
September 1987

INTRODUCTION:

The Indian Health Service (IHS), in response to a federally funded housing project in Atka, Alaska, constructed water, wastewater, and solid waste disposal facilities for 17 of the existing 25 houses in the older part of the village and a new 18 unit Department of Housing and Urban Development (HUD) housing project in the community. Funds for the sanitation project were allocated in November, 1981 under Public Law 86-121 (OMB 13.229). Engineering and technical supervision were provided by the IHS and construction was performed by force account using local labor and by the housing authority contractor.

IHS Project AN-81-241 provided the City of Atka with a 30,000 gallon water storage tank, 5,500 feet of 4-inch water main, upgrading of the chlorination and fluoridation systems, 2 septic tanks, 400 feet of 6-inch sewer main, 2 ocean outfalls with a total length of 2,090 feet of 6-inch pipe, 1,000 feet of solid waste fencing, a sludge disposal lagoon, a sludge pumper, a refuse excavation tractor, and a solid waste haul vehicle. The total IHS cost of the project was $526,968, or $15,056 per house for the 35 houses served.

The sanitation facilities and responsibility for their operation and maintenance (O&M) were transferred to the Village in August 1984. Operator training was provided during construction, through training programs, and during periodic visits by IHS technical personnel.

GENERAL:

The Village of Atka is located on Nazan Bay, on the east coast of Atka Island on the Aleutian Island chain, approximately 1,100 miles southwest of Anchorage. There are 90 residents (1980 Census figures), nearly all of whom are Aleut. The village is unincorporated and is a member of the Aleut Corporation.

A detailed description of Atka's location, climate, transportation, population, government, housing, public facilities, and economy is available in the General Information section of Project Summary AN-81-241, appended in the Engineering Report section.

PROJECT HISTORY:

There has been one previous IHS project in Atka. Project AN-77-160 provided the village with a gravity-flow water system consisting of a collection dam, transmission lines, a water treatment building with sand filters, chlorination and fluoridation equipment, a water tank, and a distribution system serving 25 homes. A gravity collection type sewer system was also constructed with two ocean outfalls.

In December 1980, the Aleutin Housing Authority (AHA) informed the IHS that they were planning to construct 18 HUD houses in Atka in the 1981 fiscal year. The IHS approved a Project Summary for Atka Project AN-81-241 in August 1981 to provide sanitation facilities for the AHA constructed houses and the existing community. A Memorandum of Agreement (MOA) between the IHS, the Village, and the AHA was approved in November 1981 delineating the contributions and obligations of each party to the project.

Force account construction began on Atka in May 1982 with the arrival of the IHS foreman on the island. The water transmission line construction went exceedingly well due to the diligent crew's efforts and the easy digging sandy soils encountered in the route from the old village site to the new housing subdivision. The construction of the wood stave water storage tank to be located on a steep hill overlooking the subdivision presented challenging problems of access and foundation stability. Since an all-weather access road to the site was not in the budget, the foreman used an innovative approach to bring the foundation stabilization material to the site. A sled was built which was pulled up the hill by a stationary excavator at the top. It was a slow process but was effective and got the job done. The ocean outfall was installed in August 1982, using a gold dredge suction nozzle to help bury the line in the surf zone. The force account construction was completed in late August 1982 and a punch list was developed. This punch list was completed in October 1982.

The original plan had called for the force account crew to construct all of the off-site and on-site sanitation facilities to within five feet of the new HUD houses. However, a delay in the award of the housing construction contract required a change of plans. It was agreed the housing contractor would construct all of the on-site water and sewer and the remaining portion of the off-site sewer to be located in the new subdivision access road. Amendment No. 1 to the MOA was signed in April 1983 to delineate the new plan of work. It was agreed to transfer all of the previously purchased sanitation materials to the contractor in trade for his installation of the two septic tanks, a dosing siphon, and 400 feet of sewer main. Plans and sample specifications were also provided to the AHA for use in this work. In April 1983, a partial Transfer Agreement was approved which transferred all of the sanitation facilities to the village which the force account crew had installed during the previous summer.

The housing contractor started construction in March 1983. Rock was encountered during the excavation for the off-site and on-site sewer mains. In July 1983, Amendment No. 1 to the Transfer Agreement provided for IHS to share in the increased costs due to this unforeseen condition, extra inspection costs, and an addition of 50 extra feet of sewer main. The houses were completed in July 1983.

During the winter of 1983, it was discovered the ocean outfall had been torn out by a series of unusual storms in the normally tranquil bay. Additionally, a request was received from the village for assistance in the replacement of one of the existing outfalls for the old village. Due to the problems of infrequent barge delivery, the repairs were not made until September 1984. Amendment No. 2 to the Transfer Agreement covered these remaining items and was signed in October 1984.

TABLE I - CHRONOLOGY OF EVENTS

Activity:	Date:
Housing Project Proposed	December 1980
Project Summary Approved	August 1981
MOA Signed	November 1981
Project Funds Allocated	November 1981
Construction Started	May 1982
Amendment No. 1 to the MOA Approved	April 1983
Construction Completed	September 1982
Final Inspection Conducted	September 1982
Punch list Complete	October 1982
Partial Transfer Agreement Approved	April 1983
Amendment No. 1 to the Tranfer Agreement Approved	July 1983
Amendment No. 2 to the Transfer Agreement Approved	October 1984

SUMMARY OF FACILITIES INSTALLED:

Water: Approximately 5,650 feet of 4-inch polyethylene (PE) water transmission lines were installed under this project. All flow is by gravity. The new water line begins at the tee near the water treatment plant and run parallel to the road to the new subdivision. The line then runs up to the new 30,000 gallon wood stave tank. The tank level is controlled by a float valve. The water then flows back down to the new subdivision. Three (3) air relief valves and one fire hydrant flush valve were installed on the transmission line. Improvements to the chemical treatment system were made by the installation of a ratio chemical feeder.

Wastewater: At the lower edge of the subdivision, two community septic tanks were installed; one 4,000 gallon steel tank and one 2,000 gallon steel tank. From there, the sewage goes through a 6-inch dosing siphon and 400 feet of 6-inch PE line to the 1,200 foot long 6-inch PE outfall into Nazan Bay. Also provided under this project was the replacement of the existing village outfall line with 246 feet of 6-inch DI pipe and 640 feet of PE pipe with concrete anchors. A sludge disposal site was developed and a 750 gallon septic tank sludge pumper was provided for septic tank maintenance.

Solid Waste: A solid waste site was created and fenced as a part of this project. A used M-37 4WD pickup was transferred to the village as a solid waste haul vehicle and for general O&M purposes. Also, a JD-350 dozer with backhoe was transferred as a solid waste site maintenance tractor.

Miscellaneous: In addition to the above-mentioned equipment, other items transferred to the village included two three-wheel Honda ATVs, a three-inch trash pump, a compactor, and a generator.

TABLE II - PROJECT COST SUMMARY

FUNDS ALLOCATED		EXPENDITURES		
Description	Amount	Description	Amount	% of Total
IHS	$571,000	Transmission Line	$170,000*	32.3
Expenditures	-526,968	Water Treatment Plant	18,968	3.6
Remaining Funds	$ 44,032	Water Mains	22,000	4.2
Ret. to 099 Acct.	- 44,032	Water Storage Tank	89,900	17.1
Balance	-0-	Ocean Outfall	96,200	18.2
		Septic Tanks & Dosing Siphon	40,500	7.7
		Solid Waste Disposal	37,100	7.0
		Sludge Disposal	21,400	4.1
		Equipment	26,500	5.0
		Miscellaneous	4,400	0.8
		Total	$526,968	100.0

*Labor costs are included in each line item.

IHS Cost Per Dwelling: = $\frac{\$526,968}{35 \text{ houses}}$ = $15,056 per house served

PROJECT DATA SYSTEM
INFORMATION SHEET

Project Name: Atka Project No.: AN-81-241

1) Type of project - Housing, Regular, or Special (circle one)

2) Indian, Aleut, or Eskimo (circle one)

3) Election District _____

4) Type of Homes served, Number of Each, and Services Provided (HUD, BIA, ASHA, Tribal, Other, Existing, Non-residential, Non-Native)

TYPE OF HOUSING								SERVICE PROVIDED									
H1	H2	H3	H4	H5	H7	E1		ACEH	ACEH	BDFI	BDFI	ACEH BDFI				(e.g.,: watering point, washeteria, circ. water system, conventional sys., etc. And/or, other types of housing; non-Natives, non-residential, const. inspection, etc.
						E X I S T	N U M B E R	I N D E V	W A T E R	I N D E V	S E W E R	C O M M U N I T Y	C O S T	S O L I D	W A S T E	F I R E	R I V E R	P R O J E C T	S E R V I C E	SYSTEM/COMMENTS
		T R I B A L	S T A T E	O T H E R	B U R E A U	G E N E R A L														
H U D	H I P	A L E	T E	H E R	L A S K A	N A T I V E	G													
H1							018			B		B		B		018				
						E1	017			F		F		B				017		

Douglas C. Ott 9/03/87
District Construction Engineer Date

5) Total IHS Funds $526,968

6) Total Cash Contributions _____

7) Estimated Cash Value of In-Kind Contributions _____

8) Project Engineer Douglas C. Ott Date Assigned September 1981

A-434-9
8/75

PREPARED BY: 9/03/87 Date

Douglas C. Ott, P.E.
Engineer Officer
District Construction Engineer

REVIEWED BY: 3Sep87 Date

Ralph L. Hogge, P.E.
Sr. Engineer Officer
Chief, Construction Unit

CONCURRED BY: 9/4/87 Date

James A. Crum, P.E.
Engineer Director
Chief, Sanitation Facilities Section

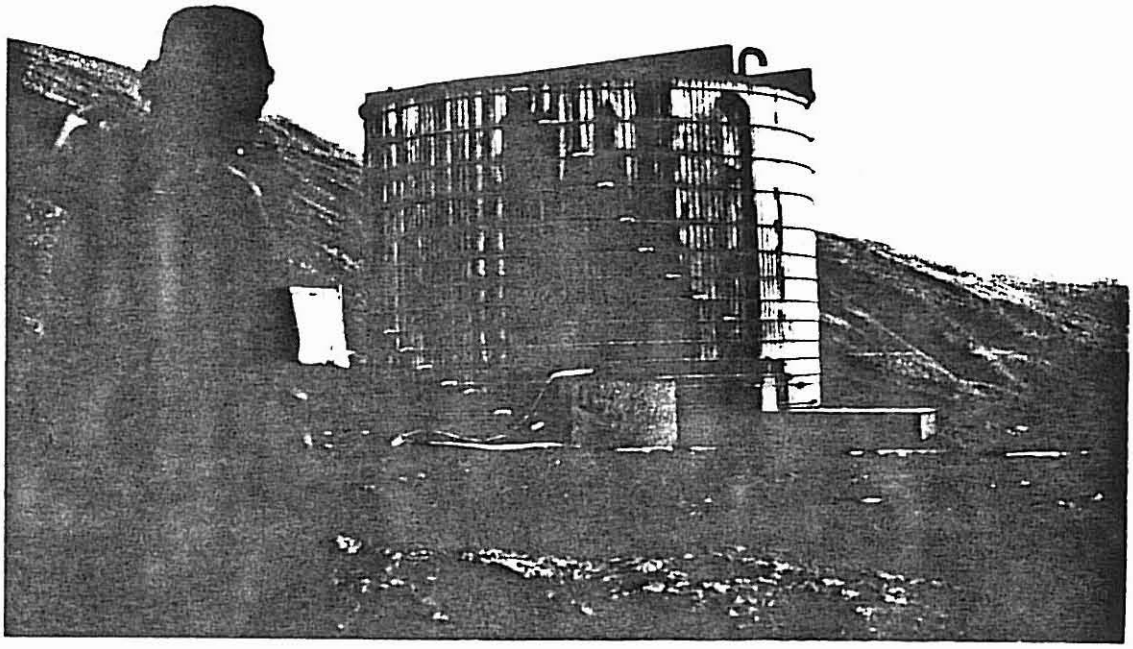
RECOMMENDED BY: 9-10-87 Date

Daniel R. Rogness, P.E.
Director
Environmental Health and Engineering Branch

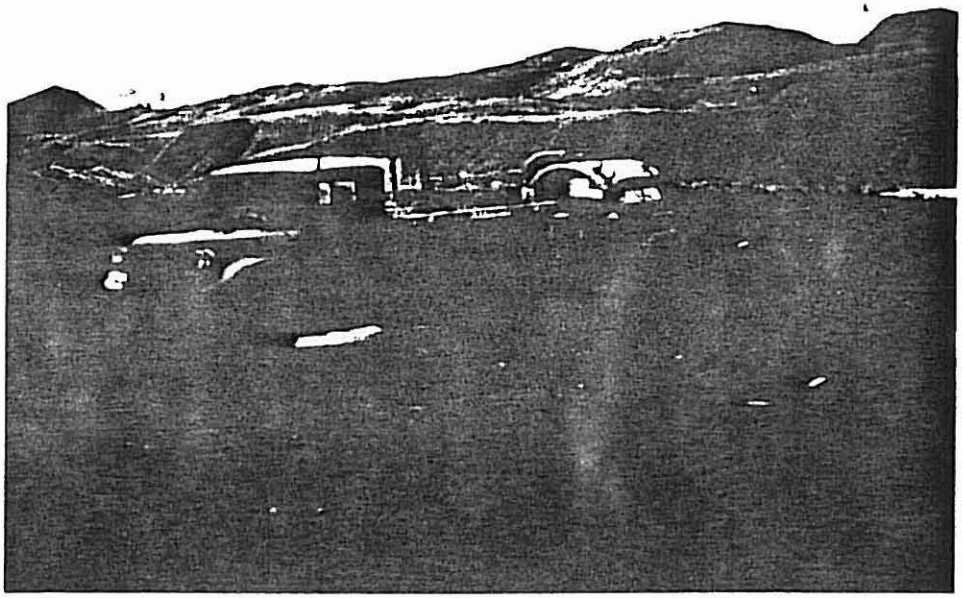
APPROVED BY: 9-10-87 Date

for G. H. Ivey
Director
Alaska Area Native Health Service

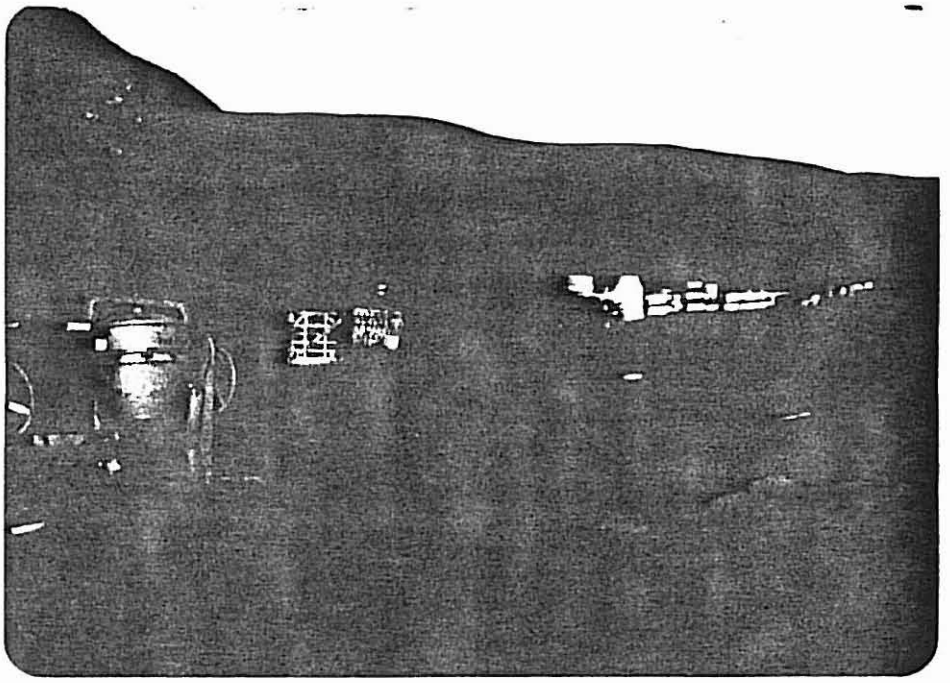
PICTORIAL MATERIAL



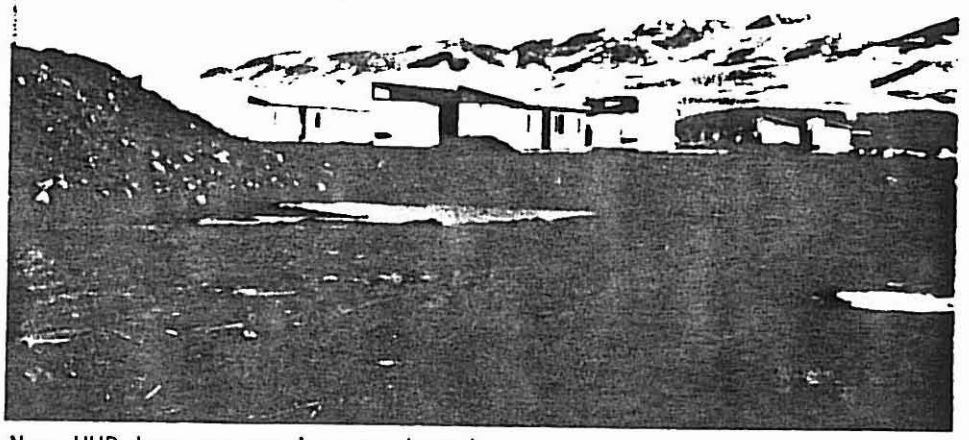
New 30,000 gallon wood stave water storage tank.



Septic tank pumper being pulled by utility vehicle.



Mobilization effort after the Cool Barge has left (pipe line is routed along the edge of this road.



New HUD houses arrive on beach.

ROWs and EASEMENTS

STATE OF ALASKA

JAY S. HAMMOND, GOVERNOR ATKA

(907)264-2265 AK16-07 Sht 1 of 6

DEPT. OF COMMUNITY & REGIONAL AFFAIRS

DIVISION OF COMMUNITY PLANNING

225 CORDOVA, BUILDING B
ANCHORAGE, ALASKA 99501

September 16, 1981

Mr. Greg Brellsford
Executive Director
Aleutian Housing Authority
2689 C Street
Anchorage, Alaska 99501

Dear Mr. Brellsford:

This is a letter of intent to convey with respect to certain lands at Atka upon which the Aleutian Housing Authority has indicated its intent to construct residential housing facilities. This office understands that 20 housing units are to be constructed within Lots 1 through 16 of Block 1, Lots 1 through 3 of Block 2 and Lot 1 of Block 3, as shown on the preliminary plat of the Atka subdivison located in T. 92S., R. 176W, S.M., Alaska.

Title to the surface estate of the subject lands presently is vested in the Atxam Corporation as evidenced by Interim Conveyance No. 159 dated February 27, 1979. On September 8, 1981, Atxam Corporation executed a Modified Quit Claim Deed conveying lands, including the subject lands, to the State in trust for any municipal corporation which may be established in Atka in the future.

The Municipal Land Trust Officer must first publish and post a decision to accept the Modified Quit Claim Deed before the decision becomes final. The decision to accept the Modified Quit Claim Deed is being prepared and will be issued soon. When the decision to accept the conveyance becomes final and the State in trust is vested with title, the Commissioner is then willing to execute an appropriate document of conveyance to the Aleutian Housing Authority or to the individual recipients. Additional prior public notice is required before such a document of conveyance can be executed by the Commissioner. Such public notice is also being prepared and will be issued in accordance with 19 AAC 90.410.

The requirements of public notice prevent the State in trust from granting an appropriate property interest at this time. Therefore, in order to allow the housing project to proceed in a timely manner, the State in trust hereby gives notice of its intent to convey the subject lands to the Aleutian Housing Authority or to the individual recipients as set forth above.

Sincerely,

Lawrence H. Kimball Jr.

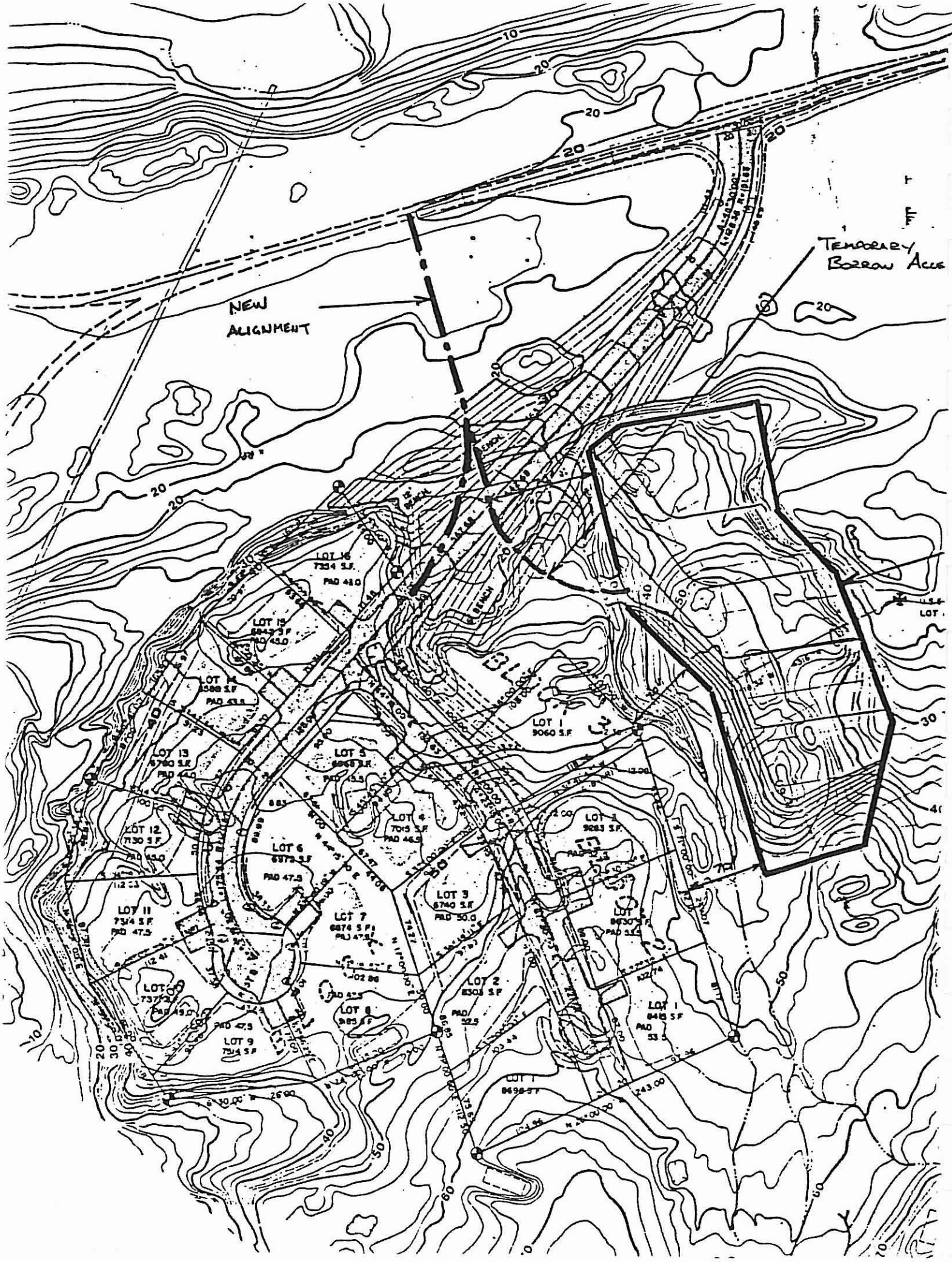
Lawrence H. Kimball, Jr.
Municipal Land Trust Officer

cc: Mr. Millar Lutton
U. S. Department of Housing and Urban Development ✓

Atxam Corporation

Atka Village Council

21-P16LH


NEW
ALIGNMENT
TEMPORARY
BORROW ACCE
LOT 16
7334 S.F.
PAD 48.0
LOT 15
8043 S.F.
PAD 45.0
LOT 14
8508 S.F.
PAD 43.5
LOT 13
8780 S.F.
PAD 46.0
LOT 12
7130 S.F.
PAD 45.0
LOT 11
7314 S.F.
PAD 47.5
LOT 10
7371 S.F.
PAD 49.0
LOT 9
7514 S.F.
LOT 5
8048 S.F.
LOT 6
6978 S.F.
PAD 47.5
LOT 7
6874 S.F.
PAD 47.5
LOT 8
9185 S.F.
PAD 47.5
LOT 4
7015 S.F.
PAD 46.5
LOT 3
6740 S.F.
PAD 50.0
LOT 2
8308 S.F.
PAD 52.5
LOT 1
9060 S.F.
LOT 1
9283 S.F.
LOT
8630 S.F.
PAD 53.5
LOT 1
8415 S.F.
PAD 53.5
LOT 1
8698 S.F.

TRANSFER AGREEMENT

ID: 2532C/XXX
LR: 083082

TRANSFER AGREEMENT
AMONG
THE INDIAN HEALTH SERVICE
AND
THE VILLAGE OF ATKA, ALASKA
AND
THE ALEUTIAN HOUSING AUTHORITY

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

TRANSFER AGREEMENT
AMONG
THE INDIAN HEALTH SERVICE
AND
THE VILLAGE OF ATKA, ALASKA
AND
THE ALEUTIAN HOUSING AUTHORITY

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

DATE OF AGREEMENT
August 1982

WHEREAS, the United States of America, acting through the Indian Health Service, Department of Health and Human Services, hereinafter referred to as the IHS, under and pursuant to the provisions of Public Law 86-121 (OMB 13.229); the Village of Atka, Alaska, hereinafter referred to as the Village, acting through the authority of the Village Council; and the Aleutian Housing Authority, hereinafter referred to as the AHA, entered into an agreement executed for the IHS on November 3, 1981, signed for the Village on May 5, 1981, and signed by the AHA on October 19, 1981, regarding the provision of sanitation facilities for the Native residents of Atka, Alaska, and

WHEREAS, the project provided for under this agreement has been completed, except for certain on-site and off-site facilities associated with the new housing subdivision, and:

WHEREAS, construction of the housing subdivision will not get underway until March 1983 when the housing units are to be barged to the site, and

WHEREAS, IHS and the AHA anticipate entering into negotiations shortly to determine whether it is feasible and cost-effective to obtain the services of the AHA's contractor to install the remaining on-site and off-site sanitation facilities through a contract amendment with IHS reimbursing AHA for the remaining work to be done, and

WHEREAS, the following items remain to be done but are contingent upon the housing project construction schedule:

ON-SITE:

A. Wastewater:

-8-inch cleanouts, 2 ea.
-Manholes, 5 ea.
-8-inch PVC sewer main, 205 lf
-8-inch DI sewer main, 615 lf
-Sewer service lines, 18 ea.

OFF-SITE:

A. Wastewater:

-4,000 gal. steel septic tank
-2,000 gal. steel septic tank
-6-inch dosing siphon
-6-inch PE line, 400 lf

ON-SITE:

B. Water:

-4-inch PE water main, 750 lf
-4-inch fire hydrants, 3 ea.
-Water service lines, 18 ea.
-4-inch gate valves, 3 ea.

OFF-SITE:

B. Equipment:

-750 gal. septic tank pumper, 1 ea.

WHEREAS, the transfer of these facilities and equipment will be affected by an amendment to this agreement after completion of these facilities, and

WHEREAS, the domestic water service and waste disposal facilities and their appurtenances, materials, supplies, and equipment provided for and incorporated therein pursuant to the aforesaid agreement are the property of the IHS, and

WHEREAS, the parties desire to provide for and assure the proper and efficient maintenance and continued operation of the sanitation facilities, and

WHEREAS, under Section 7(a)(4) of Public Law 86-121, the IHS is authorized to transfer the completed facilities with or without a monetary consideration, and under such terms and conditions as in its judgement are appropriate, considering the contributions made and the maintenance responsibility undertaken, and the special needs of the Native people.

NOW THEREFORE, in accordance with the terms of the aforesaid agreement, and pursuant to Section 7(a)(4) of Public Law 86-121:

1. The IHS hereby transfers, assigns, and conveys to the Village, without a monetary consideration and under the terms and conditions set forth in the agreement, all of the right, title, and interest of the IHS in all community facilities constructed. Community facilities include, but are not limited to, the following:

a. 1,200 lf of 6-inch PE sewer outfall,

b. 5,650 lf of 4-inch PE water main,

c. One each, 30,000 gallon wood-stave water storage tank,

d. Three each, Air relief valve assemblies,

e. One each, 4-inch fire hydrant,

f. 17 each, 4-inch gate valves,

g. One each, Ratio chemical feeder assembly for chlorination/fluoridation of water supply, and

h. 1,000 lf solid waste site fencing.

2. The following items of equipment are transferred to the Village in order to operate and maintain said sanitation facilities:

One each, used M37 4WD pickup, 1952 Dodge, s/n 80024167, voucher no. 80-10-0051

3. The Village hereby accepts such transfer of facilities listed in Paragraphs 1, and 2 under the terms and conditions set forth in the aforesaid agreement and agrees to operate, maintain, and repair such community facilities as the property of the Village to keep the facilities in an effective operating condition.

4. The Village agrees to enact and enforce appropriate ordinances and regulations to protect the community water and waste disposal facilities and agrees to collect appropriate service charges from users of said facilities. The Village further agrees to use revenues received from service charges for electricity, operator wages, equipment repair, chemicals, fuel, and those items necessary to operate and maintain said facilities properly.

5. The Village agrees to enact and enforce appropriate regulations concerning the use of individual sanitation facilities to protect the community's systems.

6. The IHS warrants the design and construction of all sanitation facilities and equipment from defects and workmanship for a period of one year after the date of transfer, or for a period of one year of system service to the village, whichever occurs first. The warranty clause does not cover normal wear and tear of equipment, repair parts, operational costs, or abuse or vandalism to equipment or structural facilities

IN WITNESS WHEREOF, the parties have subscribed their names.

FOR THE VILLAGE OF ATKA, ALASKA

9/2/82
Date

Gregory Golodoff
President, Village Council of Atka, Alaska, having been duly authorized by the Village Council to enter into this agreement on behalf of the Village of Atka as evidenced by the attached resolution made by the Village Council of Atka, Alaska

FOR THE ALEUTIAN HOUSING AUTHORITY

Date

NOT REQUIRED
Executive Director
Aleutian Housing Authority

RECOMMENDED APPROVAL

4/1/85
Date

Richard D. Frost, Chief
Area General Services Branch

FOR THE INDIAN HEALTH SERVICE

4/7/83
Date

G. H. Ivey, Director
Alaska Area Native Health Service
Public Health Service, Department of Health and Human Services

UNITED STATES GOVERNMENT

memorandum

DATE: March 29, 1983

REPLY TO ATTN OF: Chief, Planning and Training Unit
Alaska Area Native Health Service

Refer to: A-EHB

SUBJECT: Transfer Agreement for Project AN-81-241 - Atka

TO: FOR THE RECORD

The subject Transfer Agreement was returned by the Aleutian Housing Authority (AHA) unsigned. The AHA correctly noted that their signature was not required based on the provisions of Amendment No. 1 to the Memorandum of Agreement for Project AN-81-241 dated October 1982. Therefore, the AHA signature block has been annotated with the phrase "not required".

As soon as the remaining signatures have been obtained, the executed Transfer Agreement should be processed in the normal manner.

Joseph G. Hugo, P.E.

OPTIONAL FORM NO. 10
(REV. 1-80)
GSA FPMR (41 CFR) 101-11.6
5010-114

☆ GPO : 1981 O - 341-526 (73

AMENDMENT NO. 1
TO THE
TRANSFER AGREEMENT
BETWEEN
THE INDIAN HEALTH SERVICE
AND
THE ALEUTIAN HOUSING AUTHORITY

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

ID: 5530C/81D
LR: 071283

AMENDMENT NO. 1
TO THE
TRANSFER AGREEMENT
BETWEEN
THE INDIAN HEALTH SERVICE
AND
THE ALEUTIAN HOUSING AUTHORITY

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

DATE OF AMENDMENT:
July 1983

WHEREAS, the United States of America, acting through the Indian Health Service, Department of Health and Human Services, hereinafter referred to as the IHS, under and pursuant to the provisions of Public Law 86-121 (OMB 13.229); the Village of Atka, Alaska, hereinafter referred to as the Village, acting through the authority of th Village Council; and the Aleutian Housing Authority, hereinafter referred to as the AHA, entered into an agreement executed for the IHS on November 3, 1981, signed for the Village on May 5, 1981, and signed by the AHA on October 19, 1981, regarding the provision of sanitation facilities for the Native residents of Atka, Alaska, and

WHEREAS, Project AN-81-241 provided improvements to the community's water and sewer system serving 25 houses in the older part of the Village and a new 17 unit Department of Housing and Urban Development (HUD) housing project, and

WHEREAS, the off-site water and sewer facilities were originally to be constructed by the IHS under an agreement with the AHA and the Village, and

WHEREAS, part of the off-site facilities were completed by the IHS and the portion of the project serving the new housing site was postponed due to delays in awarding the housing contract, and

WHEREAS, at that time, the IHS construction project was demobilized and the agreement with the AHA was modified to transfer piping materials and funding to the AHA in order that the housing contractor could complete the project when the new houses were built. The portion of the off-site project constructed by IHS was transferred to the Village, and

WHEREAS, during construction of the remaining off- and on-site water and sewer facilities work, some additional costs were incurred by the AHA and a portion of these costs are the responsibility of the IHS, and

WHEREAS, AHA desires to obtain satisfactory water supply and waste disposal facilities for its new houses in Atka.

NOW THEREFORE, the aforesaid agreement is hereby amended to allow transfer of $22,000 of IHS funds to the AHA to cover the additional costs of constructing water and sewer facilities.

1. That the specific items of increased costs include:

Item:	Increased IHS Costs
A. The terminal manhole (MH4) was redesigned and moved approximately 50 feet upstream when Lot 16 was abandoned due to shallow rock. This relocation resulted in the IHS being responsible for the 50 feet of sewer line which was not considered in the original definition of off-site/on-site utilities.	$ 6,000
B. In Amendment No. 1 to the project Memorandum of Agreement dated October 1982, the IHS agreed to provide $3,351 to the AHA to provide inspection costs for water and sewer facilities installation. The actual cost for water and sewer facilities inspection due to the delay in construction of utilities (related to weather and rock excavation) have exceeded $10,000. The IHS will provide an additional $7,000 for the AHA inspection efforts.	7,000
C. There were several yards of rock excavation encountered around MH4 and the septic tank excavation. The cost of this excavation along with other rock excavation on the project has resulted in a $56,341 claim by the contractor against the AHA. Even though the contract has disclaimers against unforseen conditions, it is anticipated that the AHA and HUD will negotiate a settlement of this claim out of court. It is agreeable that IHS provide $5,000 toward this off-site cost negotiation. This contribution does not contribute to the validity of the contractor's claim but only allows the AHA to resolve the problem and close the project.	5,000
Subtotal	$18,000
The increased costs discussed in Items A, B, and C above add administration costs for the AHA which is currently 20% of the total construction dollar volume.	3,600
Total	$21,600
Rounded to nearest thousand	$22,000

2. That the source of funds will be from the HUD FY-83 reserved funds for construction of off-site water and sewer systems. The funds will be transferred to the AHA upon execution of this document and processing by HUD.

3. That the Interdepartmental Agreement on Indian Housing executed by and among the Department of Health and Human Services, the Department of the Interior, and HUD setting forth the responsibilities of the various government agencies in the provision of sanitation facilities has been supplemented by letters of understanding between HUD and HHS to allow AHA to assume certain responsibilities for the provision of off-site water and sewer facilities for HUD-assisted Indian housing units.

4. That AHA will receive $22,000 less the interest payable to HUD on the "drawn funds" as its share for the construction of off-site water and sewer facilities. The interest levels payable on the "drawn" funds is designated by the HUD central office. The homes are presently over 70% complete so there is no interest on the "drawn" funds.

5. That in the case of off-site water and sewer facilities which serve both HUD-assisted units and non-HUD-assisted units, AHA funding shall only be used for the share attributable to the HUD-assisted units as provided in this amendment. AHA funds shall not be used to provide water supply and sewer facilities to non-HUD-assisted portion of the sewer and water facilities.

6. That if the actual costs of providing the share of the off-site sewer and water facilities for the HUD-assisted units are less than the amount of the funding provided under this agreement, then the difference will be refunded to HUD. If, on the other hand, the revised projection of actual cost of providing the share of the off-site water and sewer facilities for the HUD-assisted units exceeds the funding provided under this agreement, then the IHS will so notify AHA and HUD. AHA will then seek additional funds. Any additional funding by AHA shall be subject to the availability of funds and prior approval by the HUD field office.

7. That due to the relationship between HUD and the AHA, under an Annual Contributions Contract (ACC) executed between them, this agreement for sanitation facilities to be funded under said ACC, shall be subject to the prior approval of the HUD field office.

8. That all other sections of the original agreement, as amended, shall remain in effect as agreed upon and executed.

IN WITNESS WHEREOF, the parties have subscribed their names.

FOR THE ALEUTIAN HOUSING AUTHORITY

2/18/83
Date

Executive Director
Aleutian Housing Authority

RECOMMENDED APPROVAL

10-19-83
Date

Director
Department of Housing and Urban Development

2/22/83
Date

Richard B. Frost, Chief
Area General Services Branch

FOR THE INDIAN HEALTH SERVICE

7-27-83
Date

for G. H. Ivey, Director
Alaska Area Native Health Service
Public Health Service, Department of
Health and Human Services

INDIAN HEALTH SERVICE
ALASKA AREA OFFICE
SANITATION FACILITIES PROJECT

PROJECT APPROVAL DATE July 1983

Assigned Project Number	Project Title and Date	Estimated cost
AN-81-241	Sanitation Facilities Construction, Village of Atka, Alaska	IHS . . . . . $ 571,000 AHA . . . . . $ 145,000 HUD . . . . . $ 22,000 Total . . . . $ 738,000

Under and pursuant to Public Law 86-121 and the authority delegated to me, I hereby approve for initiation the sanitation facilities project outlined in the attached project summary described above. Negotiation of agreements related to project execution, contribution, and responsibilities for operation and maintenance of the planned facilities may now be initiated. Negotiations shall be based upon the project summary as approved. Indian Health Service commitments shall not exceed the estimate set forth above except as increases in such estimate may be subsequently authorized by the Area Director or others designated by him for such purposes.

The assigned project number shall be utilized on all correspondence and documents related to this project.

Michael Dworsky is hereby designated as project engineer and shall be responsible for the coordination of all activities related to the execution of the project.

Refer to fund transfer document No. N/A (Amend funds from FY-83 HUD Allocation)

Fund Certification

OAIE

Funds in the amount of the IHS estimated cost are available in the Area, but have not been specifically reserved for this project.

_____ Area FMO

Approval Recommended

_____
Chief, Sanitation Facilities Section

Concurrence

_____
Director, Environmental Health Branch

Approved

_____
Area Director

cc: Admin. Off., EHB, AANHS
Project File, EHB
Chief, SFCB, OEH
Service Unit Director
Director, IHS for Director, OEH
Area Financial Management Officer AANHS

A-434-1 (ANC)
8/75

Indian Health Service
Sanitation Facilities Construction
Under P.L. 86-121

PROJECT SCHEDULE DATE: July 1983

Alaska Area

PROJECT TITLE Sanitation Facilities
AND Construction
LOCATION Atka, Alaska
ESTIMATED COST $ 738,000
IHS $ 571,000
AHA $ 145,000
HUD $ 22,000
TOTAL $ 738,000

PROJECT NUMBER AN-81-241

PROJECT DESCRIPTION Improve water treatment, extend water system, and construct sewer system for new housing.

NO. HOMES TO BE SERVED 18

DATE PROJECT APPROVED

ACTION ITEM	TARGET DATES	REMARKS
MEMORANDUM OF AGREEMENT SIGNED	9/81	
ENGINEERING DESIGN INITIATED	3/81	
ENGINEERING DESIGN COMPLETED	5/81	
STATE HEALTH DEPARTMENT REVIEW	5/81	
RIGHTS-OF-WAY REQUESTED	6/81	
PROCUREMENT INITIATED	2/81	
CONSTRUCTION INITIATED	9/81	
RECRUITMENT	9/81	
TRAINING	throughout construction	
CONSTRUCTION COMPLETED	4/83	
FACILITIES TRANSFERRED	4/83	

Michael Dwarsky
Project Engineer

DATE 7/20/83
Chief, Sanitation Facilities Section

A-434-2 (ANC)
8/75

PROJECT DATA SYSTEM
INFORMATION SHEET

Project Name: Atka Project No.: AN-81-211

1) Type of project - Housing, Regular, or Special (circle one)

2) Indian, Aleut, or Eskimo (circle one)

3) Election District _____

4. Type of Homes served, Number of Each, and Services Provided (HUD, BIA, ASHA, Tribal, Other, Existing, Non-residential, Non-Native)

Types of Homes Served:	No. of Homes Served:	Services Provided:
H1 (HUD Housing)	018	BBB

5) Total IHS Funds $571,000

6) Total Cash Contributions $167,000

7) Estimated Cash Value of In-Kind Contributions _____

8) Project Engineer Michael Dwarsky Date Assigned January 1981

A-434-9
8/75

AMENDMENT NO. 2
TO THE
TRANSFER AGREEMENT
BETWEEN
THE INDIAN HEALTH SERVICE
AND
THE VILLAGE OF ATKA, ALASKA

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

ID: 0327F/219E
LR: 081384

AMENDMENT NO. 2
TO THE
TRANSFER AGREEMENT
BETWEEN
THE INDIAN HEALTH SERVICE
AND
THE VILLAGE OF ATKA, ALASKA

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

DATE OF AGREEMENT
August 1984

WHEREAS, the United States of America, acting through the Indian Health Service, Department of Health and Human Services, hereinafter referred to as the IHS, under and pursuant to the provisions of Public Law 86-121 (OMB 13.229) and the Village of Atka, Alaska, hereinafter referred to as the Village, acting through the authority of the Village Council, entered into an agreement executed for the IHS on November 3, 1981 and signed for the Village on May 5, 1981, regarding the provision of sanitation facilities for the Native residents of Atka, Alaska, and

WHEREAS, the Aleutian Housing Authority (AHA) was also a signator to the Memorandum of Agreement but is not required to be a party to this agreement as provided under Amendment No. 1 to the Transfer Agreement whereby the AHA assumed full responsibility for the work originally to be performed by the IHS for the AHA, and

WHEREAS, the project provided for under this agreement has been completed, and

WHEREAS, the domestic water service and waste disposal facilities and their appurtenances, materials, supplies, and equipment provided for and incorporated therein pursuant to the aforesaid agreement are the property of the IHS, and

WHEREAS, the parties desire to provide for and assure the proper and efficient maintenance and continued operation of the sanitation facilities, and

WHEREAS, under Section 7(a)(4) of Public Law 86-121, the IHS is authorized to transfer the completed facilities with or without a monetary consideration, and under such terms and conditions as in its judgement are appropriate, considering the contributions made and the maintenance responsibility undertaken, and the special needs of the Native people.

NOW THEREFORE, in accordance with the terms of the aforesaid agreement, and pursuant to Section 7(a)(4) of Public Law 86-121:

1. The IHS hereby transfers, assigns, and conveys to the Village, without a monetary consideration and under the terms and conditions set forth in the agreement, all of the right, title, and interest of the IHS in all community facilities constructed. Community facilities include, but are not limited to, the following:

Replacement of the existing Village sewer outfall line with 246 linear feet (lf) of 6-inch ductile iron pipe and 640 lf of 6-inch PE line with concrete anchor blocks, in place.

2. The following items of equipment are transferred to the Village in order to operate and maintain said sanitation facilities:

a. One each - Three-wheel Honda 110 ATC, Voucher 80-03-0034, CN. 64;

b. One each - Three-wheel Honda 185 ATC, Voucher 80-03-0034, CN. 65;

c. One each - Pump, trash and dewatering, Homelite Model 120TP3-1A, S/N 11960051, Voucher No. 82-02-0016, CN. 111;

d. One each - Compactor, Koehring Model 0E0098, S/N H2540, Voucher 80-05-0041, CN. 52; and

e. One each - Generator, Homelite Model 176A35, S/N 13245253, Voucher 82-04-0014, CN. 155.

3. The Village hereby accepts such transfer of facilities listed in Paragraphs 1 and 2 under the terms and conditions set forth in the aforesaid agreement and agrees to operate, maintain, and repair such community facilities as the property of the Village to keep the facilities in an effective operating condition.

4. It is understood that a JD-350 dozer w/backhoe will be transferred to the Village and will be shipped during the Summer of 1985.

5. The Village agrees to continue to enact and enforce appropriate ordinances and regulations to protect the community water and waste disposal facilities and agrees to collect appropriate service charges from users of said facilities. The Village further agrees to use revenues received from service charges for electricity, operator wages, equipment repair, chemicals, fuel, and those items necessary to operate and maintain said facilities properly.

6. The Village agrees to enact and enforce appropriate regulations concerning the use of individual sanitation facilities to protect the community's systems.

7. The IHS warrants the design and construction of all sanitation facilities and equipment from defects and workmanship for a period of one year after the date of transfer, or for a period of one year of system service to the Village, whichever occurs first. This warranty is limited to the extensions and improvements made on the water and sewer system under this project. The warranty clause does not cover normal wear and tear of equipment, repair parts, operational costs, or abuse or vandalism to equipment or structural facilities

IN WITNESS WHEREOF, the parties have subscribed their names.

FOR THE VILLAGE OF ATKA, ALASKA

9-25-84
Date

George Dirks
President, Village Council of Atka, Alaska, having been duly authorized by the Village Council to enter into this agreement on behalf of the Village of Atka, Alaska

RECOMMENDED APPROVAL

10/19/84 (RF)
Date

Kelly Simeonoff Jr. (acting)
Richard B. Frost, Chief
Area General Services Branch

FOR THE INDIAN HEALTH SERVICE

10-23-84
Date

G. H. Ivey, Director
Alaska Area Native Health Service
Public Health Service, Department of Health and Human Services

ENGINEERING REPORTS

PROJECT SUMMARY
SANITATION FACILITIES CONSTRUCTION
FOR THE
VILLAGE OF ATKA, ALASKA

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

PROJECT SUMMARY
SANITATION FACILITIES CONSTRUCTION
FOR THE
VILLAGE OF ATKA, ALASKA

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

DATE OF SUMMARY:
January 1981

INTRODUCTION:

In response to a project proposal submitted by the Village of Atka on October 16, 1971, the Indian Health Service (IHS) of the U.S. Public Health Service (PHS) proposes the construction of water, wastewater and solid waste facilities for residents of Atka. Because unsafe water supplies and inadequate waste disposal facilities contribute to the incidence rates of infectious diseases, the IHS has been authorized by Public Law 86-121 (OMB 13.229) to plan and construct sanitation facilities for Native communities.

The water, wastewater and solid waste facilities proposed for Atka will serve 17 new houses to be built during FY 1981 by the Aleutian Housing Authority (AHA) through the U.S. Department of Housing and Urban Development (DHUD). This project summary contains a preliminary engineering evaluation, cost estimates and recommendations for construction of the proposed sanitation facilities.

PROJECT HISTORY:

The community of Atka was completely destroyed by fire during World War II. The U.S. Navy rebuilt the community and developed a gravity flow water distribution system which included an impoundment on one of the nearby creeks, a wood stave pipe transmission line, and service connections for

each of the 22 houses. Wastewater disposal facilities consisted of wood stave drain pipe running from each house directly into one of two streams flowing through the village. Both streams empty into Nazan Bay on which the village is located (see Fig. 1).

In 1976, the Bureau of Indian Affairs (BIA) constructed six new houses and renovated seven existing houses through the BIA Housing Improvement Program. In response to the new housing and a project proposal submitted by the village, IHS initiated Project AN-77-160 which provided the community with a new intake structure above the old dam; a 30,000-gallon water storage tank; water treatment building with chlorination and fluoridation equipment, and a gravity sewer system with an ocean outfall.

There are currently 25 houses in Atka connected to the community water and sewer system. With the addition of 18 new houses, the existing system will require some renovation as well as being extended to serve the new dwellings.

GENERAL INFORMATION:

A. Description:

1. Location - Atka is located on Nazan Bay, on the east coast of Atka Island, in the Andreanof Islands of the Aleutian Island chain. The village is approximately 1,100 air miles southwest of Anchorage and 140 miles east of Adak, a U.S. Naval military base. It is the farthest west of the Alaska Native communities.

FIG. 1


Korovin Volcano
Kliuchevskoi
Avacha Bay
Petrof II
Cape Ulka

The University of Alaska, Arctic Environmental Information and Data Center (AEIDC) places Atka in the southwest region, Aleutian subregion, for purposes of regional distinctions. The Aleutian Islands border the Aleutian Trench, a south-bending arc of more than 50 islands separating the north Pacific Ocean from the Bering Sea. It is one of the world's most active seismic zones.

Coordinates are 52°12'N, 174°12'W (See Fig. 2).

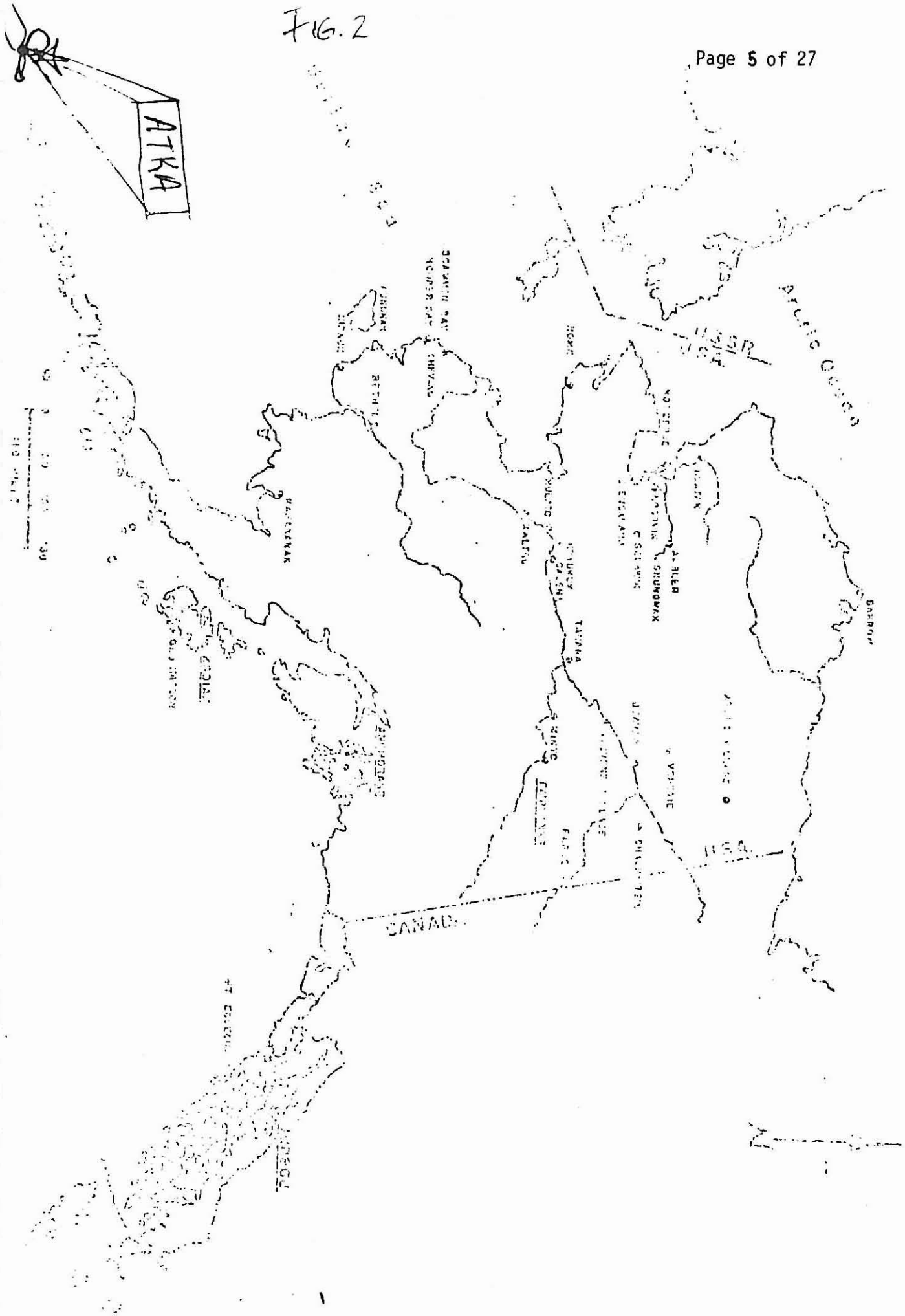
2. Climate - The climate of Atka is characteristic of the maritime climate zone in which it lies, with small seasonal and daily temperature variations, high humidity and fog frequency, and moderate precipitation. Surface winds are frequently strong and persistent, making for blizzard or near blizzard conditions in winter. Unlike most of its adjacent neighbors, Atka does not have heavy precipitation. The following data, while approximate, are generally applicable.

Mean maximum temperature, °F.	56
Mean minimum temperature, °F.	28
Heating index, degree days.	9,000
Mean annual precipitation, inches	68.08

No thawing or freezing indexes are given because temperatures rarely go below 28°F.

On the longest day of the year (June 21), Atka receives about 18 hours of sunlight plus twilight.

FIG. 2



3. Geology and Topography - The Aleutian Islands constitute a 1,500 mile long chain of Eocene volcanoes jutting sharply up from ocean depths of more than 2,000 fathoms. There are three or four active volcano vents on Atka Island, many more along the chain. The whole island is very mountainous and was heavily glaciated during the Pleistocene period, leaving deep fjords and valleys.

Topographically, the area around Nazan Bay is formed of rolling hills with steep slopes; within the first 500 feet inland the ground rises from sea level to 200 feet. The terrain in town varies from 10° to 80° slopes. Atka Island is entirely treeless. Vegetation on lower ground within the town is moist tundra dominated by sedges. Higher ground behind the community is alpine tundra.

4. Wetlands - There are no areas the U.S. Army Corps of Engineers would consider wetlands in Atka.

5. Soil Conditions - The only soil on the island is volcanic ash. At the townsite, bedrock lies below two to twelve feet of ash. There is no permafrost in the area, nor on any of the Aleutian Islands.

6. Flora and Fauna - Because of the nonarable properties of the soil on Atka Island, there is little flora and grazing land is at a minimum.

Vegetation is either grasses, alder, and associated shrubs or dominantly low growing shrubs. The soil is stratified, silty and cindery ash.

Tundra anemone are found in the alpine tundra. The relatively cool summers combine with terrain and climate to prevent the establishment of forests on the Aleutians. The vegetation of the lowland meadows is the most varied and includes crowberry, sedges, hair moss, reindeer lichens, Arctic willow, blueberries, cranberries and dwarf birch. Herbs, grasses and sedges appear spottily. Characteristic species of the alpine tundra are similar to the moist tundra vegetation.

Vegetation growing in salt, brackish and freshwater marshes along the shores of estuaries, coastal lagoons, tundra ponds and large lakes provide important habitat and food for various animals. Diatoms account for most marine phytoplankton. Grasses and sedges are the most noticeable brackish water plants and provide excellent habitat for waterfowl and shorebirds.

Fauna: Few terrestrial mammals appear in the Aleutian subregion, particularly on the farther west islands. Most mammals have been transplanted from other regions and are only on those islands where they were placed.

The islands do serve as a major breeding ground for such species of birds as the black-legged kittiwakes; several species of auklets; pelagic and red-faced cormorants; petrels, gulls and horned and tufted puffins. The islands are also an important area for migrant birds. Albatross and shearwaters are regular summer migrants.

Most of the streams in the area are quite short and few have headwater lakes, thus, there are no significant salmon spawning areas; Arctic char and Dolly Varden trout are found throughout the area.

7. Archaeological Significance - The IHS contracted Douglas W. Veltre, Archaeologist, to survey the Atka area for possible archaeological significance in conjunction with the proposed IHS project, AN-77-160. His report, "A Report on the Potential Archaeological Impact of a Proposed U.S. Public Health Service Water and Sewer Project in the Village of Atka, Alaska," dated July 8, 1977, recommended that archaeological clearance be granted for the entire area investigated for the project, with the exception of four areas described in the report. It was noted in the report that the four areas had archaeological significance and were to be avoided during all project work. For the proposed project, the IHS archaeologist recommends that a survey be conducted prior to any construction.

8. Flood and Seismic Hazard Evaluation - The U.S. Army Corps of Engineers Flood Plain Management Service has no information on flood hazards in Atka, although it notes the possibility of a teleseismic tsunami. Residents of the island reported a tsunami in 1955, but no damage was recorded. Erosion is not considered a problem; however, the beach area is eroding near the water storage tanks. No flood insurance study has been made and the village does not have a land use control program; therefore, it is not eligible for flood insurance.

Atka is located in seismic zone No. 4 on the border of the Aleutian Trench, a fault line running the length of the Aleutian Islands chain. The No. 4 designation indicates that an earthquake in the area could register greater than 6.0 on the Richter Scale and cause major damage to structures. The Aleutian Trench is the source of the majority of earthquakes occurring in Alaska.

B. Access: Access to Atka is very limited. An airstrip built by the U.S Army during World War II has deteriorated and is no longer usable. The primary supply source is the BIA North Star barge which stops at the island once a year. There is a dock located about four miles from the townsite but it has deteriorated, and supplies must be lightered ashore while the barge anchors in Nazan Bay.

A gravel road built during World War II extends from one end of town to the other and continues about five miles north; however, it has washed out in many places. The only wheeled vehicle in town is the school's pickup truck. There are a few motorcycles but most land transportation is on foot. Most residents own skiffs for ocean travel.

C. Population: The 1970 U.S. Census recorded 88 residents. The 1980 State of Alaska revenue sharing figures list a population of 90 persons. All except the school teacher are Native Aleuts. Population figures of 1960 showed 119 villagers; evidence indicates a slightly declining to fairly stable population. Most commonly, 60 to 65 persons are in the village at any one time, with the men gone during the fishing season and high school students away during the school year.

D. Public Administration: Atka is an unincorporated village organized under the Indian Reorganization Act of 1936. A five-member village council governs with the council president serving a two-year term. Atka is part of the Aleut League Regional Corporation; the local Native corporation is the Atxam Corporation with a Native enrollment of 145 persons. The village is eligible for land partitioning under the Alaska Native Claims Settlement Act (ANCSA). The village's health needs are provided by the Anchorage PHS Service Unit. The Aleutian Regional School District administers affairs for the elementary school.

E. Economy: Atka's economy is divided between a cash and a subsistence economy. The workforce is estimated at about 30 persons. Commercial fishing, generally in Kodiak Island waters, is supplemented by subsistence fishing, hunting and sealing near Atka. Villagers occasionally leave town to work in other towns temporarily. Atka's remoteness and economy severely limits local employment.

F. Housing and Public Facilities: During World War II the military built 22 houses, all of woodframe construction set on pilings. In 1976, the BIA constructed six new houses and repaired seven existing dwellings. There are currently 25 inhabitable houses in the village. DHUD plans construction of an additional 17 houses in FY 81.

Commercial and public facilities include the elementary school, two general stores, a Russian Orthodox Church, the PHS clinic and community building. The community hall (the old school building) houses the post office.

There is no community-wide power source. The school operates two 40 kw generators alternately, providing power to the school, the teachers quarters and the community building. There is one privately-owned Pelton wheel generator. Fuel storage facilities are owned by the school and the village corporation. The only telephone in the community is in the village council office in the old school. There are a few CB radios within the community and good reception in the evenings from mainland radio stations.

G. Social and Political Profile: The Aleutian Islands' early history is one of subjection to Russian authority after the first contact. The Aleuts were considered "dependent" or manageable. Long before Russian infiltration, however, the Aleuts were a thriving, prospering culture. The Aleut word "Alaxaxaq" is the origin of the word "Alaska." Its meaning was, the mainland -- "the object toward which the action of the sea is directed."

Historical accounts place the first outside contact at about 1742. The Aleuts suffered terrible cruelties and mass killings at the hands of the Russian hunters. Because the Aleuts were skilled hunters of the highly valued sea otter, the Russians wanted their services, and when they resisted becoming slaves, the Russians killed them in order that those remaining could be forced to submit.

Although the lives of thousands of Natives were affected by the Russians, their lands were not taken. Today, the Aleut Corporation embraces an area of about 11,000 square miles and has more than 3,300 stockholders. The corporation office is in Anchorage.

Fishing and seafood processing, harvest of the Pribilof Island fur seals, government, and some cattle grazing are the principal economic activities. In addition to the economic factors, the corporation hosts two military establishments, Adak and Shemya, which together account for about half of the region's population of 7,700 persons.

Apart from the lower Alaska Peninsula, all of the corporation's lands are islands, including Atka Island.

EXISTING SANITATION FACILITIES:

A. Water: The water distribution system in Atka was originally built by the U.S. Military during World War II. In 1977, IHS Project AN-77-160 was initiated in response to a project proposal from the village requesting assistance in improving the water distribution and sewage collection systems, and in providing chemical treatment for the water. The water source had been an untreated surface source, impounded by an old plank dam across the northern stream flowing through the community.

In August 1978, construction began on a new dam approximately 200 feet upstream from the existing structure. A 6-inch PVC transmission line carries water from the impounded area to a water treatment building where chlorine and fluoride are added. The water then flows via gravity through a 4-inch PVC water main to the 25 service connections in the village.

In addition to the chemical treatment equipment, the pumphouse contains a shop area, pressure filters, a storage area, heating stove, water heater,

and a bathroom with a flush toilet, lavatory and shower. A 30,000-gallon wood stave tank provides water storage.

B. Wastewater: Wastewater is disposed of by a gravity collection system from each of the 25 houses. Sewage is carried to an ocean outfall through a 6-inch PVC sewer main. The ocean outfall line consists of high molecular weight polyethylene pipe. The direct outfall was installed on the theory that the very small population and small amount of sewage generated by residents would be sufficiently diluted and dispersal would be more than adequate with about 120 miles of open ocean between Atka and its nearest neighbor.

Eleven (11) households were provided with domestic plumbing, which included a kitchen sink, lavatory and flush toilet. BIA provided domestic plumbing for the houses built or renovated in 1976.

C. Solid Waste Disposal: Although no solid waste disposal facilities were installed under the 1977 project, each household was supplied with a garbage can and holding rack and the village was provided with a John Deere 350C tractor with backhoe/loader for maintenance of an existing dumpsite.

D. Unmet Needs:

1. Water: The existing water supply system for 25 houses has been adequate with regard to supply, pressure and treatment. With construction of the additional houses, facilities to provide equal service will be required.

2. Wastewater: As with the water supply, sewage treatment and collection is adequate within the town; however, the new houses will need a treatment and collection system. These needs will be addressed under Recommended Sanitation Facilities.

3. Solid Waste Disposal: With completion of Project AN-77-160, a small crawler/tractor with a backhoe/loader was transferred to the village for maintenance of an existing dumpsite. The dump area is inadequate for the new housing, because of distance and size. A larger landfill area will be required to provide service to the new houses. These needs also will be addressed under Recommended Sanitation Facilities.

RECOMMENDED SANITATION FACILITIES:

A. Alternatives Considered: Since the existing water and sewer system are adequately serving the community, it will merely require an extension of these facilities to serve the new housing; therefore, there is no need to consider alternatives. The proposed renovations will conform to the design and operation of the existing system.

B. Recommended Facilities:

1. Water System - The water source presently used is sufficient to serve the new housing, however, a new water storage tank will be needed to maintain adequate pressure in the mains extending from the existing system into the new housing area. The new housing will be connected to the water main through service saddles and 3/4-inch copper service lines with curb and corporation stops. Each service line will be equipped with a thaw wire.

2. Wastewater Disposal Facilities - The new housing area will have its own gravity flow sewer system, separate from that of the existing community sewer system. Four-inch PVC service lines will connect each house to the 8-inch sewer main which will carry the sewage to a community septic tank for primary treatment. A 6-inch PE outfall line will carry the effluent out to the ocean.

The community will be provided with a sludge haul trailer and sludge pump to maintain the community septic tank. A fenced lagoon will be developed in the vicinity of the proposed landfill site for septic tank sludge disposal.

3. Solid Waste Disposal - A new sanitary landfill, beyond the village limits, will be developed and fenced. The landfill will be designed to utilize the trench method, i.e., trenches will be dug with the backhoe for refuse disposal land, once filled, the excavated material will be used to cover the refuse.

The proposed project will include a 4X4 pickup to be transferred to the community for refuse collection and to pull the sludge haul trailer. The project also will provide each of the 17 new houses with two 32-gallon garbage cans and holding racks.

4. Energy Conservation Measures Adopted - The energy used in the existing system is minimal, i.e., lights and heat in the water treatment building. Heat in the treatment building is only required during a few

days of the year when it gets below freezing. The proposed facilities will not add any additional energy requirements to the system.

C. Unmet Needs: Once the new housing is provided with water and sewer facilities, and the entire community is provided with a sanitary landfill, there will be no unmet needs in relation to community sanitation facilities in Atka.

COST ESTIMATE OF RECOMMENDED FACILITIES:

Item	Quantity	Cost IHS	Cost AHA
Water Storage Tank			
A. Foundation, including excavation, gravel haul, and mudsill placement.	L.S.	$12,000	
B. Wood stave material, including purchase and installation.	L.S.	55,000	
C. Piping, including valves, drains, overflow and vent.	L.S.	6,000	
SUBTOTAL - Water Storage Tank		$73,000	
Water Transmission Line			
A. Water Main; 4-inch PE from existing treatment building to subdivision. unit cost: $35/LF	5,500 LF	$192,500	
B. Valves in water main, including valve and boxes. unit cost: $450 ea.	5	2,250	
C. Air relief valve, including manhole and valve. unit cost: $2,000 ea.	1	2,000	

Item	Quantity	Cost IHS	Cost AHA
D. 2-inch blowoff valve, including tee valve and riser piping. unit cost: $500 ea.	1	500	
SUBTOTAL - Water Transmission Line		$197,250	
Water Treatment System			
A. Upgrading of chlorination and fluoridation system.	L.S.	$ 4,500	
B. Piping; building piping to accommodate extension to system; including private and underground piping.	L.S.	5,000	
C. Renovation of existing water valves at treatment building. unit cost: $450 ea.	12 ea.	5,400	
SUBTOTAL - Water Treatment System		$14,900	
Subdivision Water System			
A. Water service line, including 3/4-inch copper with curb and corp. stops, thaw wire, and tap to main. unit cost: $950 ea.	17		$16,150
B. Water main, 4-inch PVC unit cost: $30/LF	500		15,000
C. Fire hydrant, including hydrant, valve, and tee in water main. unit cost: $1,500 ea.	3		4,500
D. Water valves, including valve and box. unit cost: $450 ea.	4		1,800
SUBTOTAL - Subdivision Water System			$37,450
Subdivision Wastewater System			
A. Sewer service line, 4-inch PVC. unit cost: $20/LF	1,360		$27,200

Item	Quantity	Cost IHS	Cost AHA
B. Sewer service connection to house and main. unit cost: $175 ea.	17		2,975
C. Sewer main; 8-inch PVC.	200	$12,000	
unit cost: $60/LF	745		44,700
D. Manholes, including solid base, concentric cones, and sections.	2	5,000	
unit cost: $2,500 ea.	5		12,500
E. Septic tanks, including 4,000 and 2,000-gallon tank.	L.S.	25,000	
F. Polyethylene outfall line, including 6-inch line and anchor blocks. unit cost: $25/LF	1,750	43,750	
SUBTOTAL - Subdivision Wastewater System		$85,750	$87,375
Solid Waste System			
A. Refuse containers, two 32-gallon cans/house	17		$1,190
B. Refuse haul vehicle, 4X4 pickup truck	L.S.	$15,000	
C. Refuse excavation vehicle	L.S.	45,000	
D. Landfill fencing, including 6-foot high mesh. unit cost: $20/LF	1,000	20,000	
SUBTOTAL - Solid Waste System		$80,000	$1,190
Sludge System			
A. Lagoon excavation, including dike development and grading.	L.S.	$12,000	
B. Lagoon fencing, 6-feet high. unit cost: $20/LF	400	8,000	
C. Sludge haul trailer, 500-gallon.	L.S.	9,500	

Item	Quantity	Cost IHS	Cost AHA
D. Sludge pump; gasoline powered unit for pumping sludge from septic tank.	L.S.	1,800	
SUBTOTAL - Sludge System		$31,300	
O&M Manual			
Manual Preparation	L.S.	$4,000	
O&M Training			
Operator Training	L.S.	$10,000	

Totals	IHS	AHA
Water Storage tank	$ 73,000	
Water Transmission Line	197,250	
Water Treatment System	14,900	
Subdivision Water System		$37,450
Subdivision Sewer System	85,750	87,375
Solid Waste System	80,000	1,190
Sludge System	31,300	
O&M Manual	4,000	
O&M Training	10,000	
Subtotal	$496,200	$126,015
+15% Contingencies	74,430	18,902
Total	$570,630	$144,917
Rounded to nearest thousand $	$571,000	$145,000

Combined Total $716,000

Unit Cost $\frac{\$716,00}{35 \text{ units}} = \$20,457$

NOTE: IHS money allocated for this project can be divided into two categories:

1. Money benefiting all residents of Atka; and
2. Money benefiting only the recipient of the new DHUD housing.

Village-wide Unit Cost

Those items benefiting all Atka residents include: water treatment renovation, solid waste system, sludge disposal system, O&M Manual and O&M Training.

Upon completion of the new DHUD housing units, some of the existing 25 housing units will be abandoned. It is assumed with the addition of the 17 housing units, that approximately 35 housing units will benefit from the facilities provided by this project.

Therefore, the village-wide unit cost is determined as follows:

Total Village-Wide Cost	
Water Treatment System	$ 14,900
Solid Waste system	81,190
Sludge Disposal System	31,300
O&M Manual	4,000
O&M Training	10,000
Subtotal	$141,390
+15% Contingencies	21,208
Total	$162,598

$$\text{Village-Wide Unit Cost} = \frac{\$162,598}{35 \text{ units}} = \$4,646$$

New Housing Unit Cost

The unit cost for the new DHUD housing is determined by adding the village-wide unit cost to the unit cost for items benefiting only the new housing.

The items benefiting only the new housing include: subdivision water and sewer system; water storage tank, and water transmission line.

Therefore, the new housing unit cost is determined as follows:

Total New Housing Unit Cost

Water Storage Tank	$ 73,000
Water Transmission Line	197,250
Subdivision Water System	37,450
Subdivision Sewer System	173,125
Subtotal	$480,825
+15% Contingencies	72,123
Subtotal	$552,948

$$\text{New Housing Unit Cost} = \frac{\$552,948}{17 \text{ units}} = \$32,526$$

Plus Prorated share of village-wide unit cost	4,646
Total New Housing Unit Cost	$37,172

SYSTEM OPERATION AND MAINTENANCE:

The water distribution and sewage disposal system are to be operated and maintained by the Village of Atka. To encourage effective operation and maintenance procedures, the IHS will assist the village in:

1. Drafting appropriate village ordinances for regulation and operation of additional water and sewerage facilities;
2. Determining utility use charges for each household.
3. Training personnel in the proper operation and maintenance procedures for improvements to the water treatment plant and facilities at the new housing site;
4. Developing a realistic utilities operation and maintenance budget, including capital fund appropriations for system component repair and replacement.

In addition, the IHS will provide an Operation and Maintenance (O&M) Manual, and will be available as a utilities consultant. However, the operation and maintenance responsibility for the transferred sanitation facilities will be entirely that of the village.

ESTIMATED OPERATION AND MAINTENANCE COSTS:

A. Water System: The village of Atka does not currently charge each house a monthly user fee for community water. The apparent low cost of operating the existing system does necessitate an assessment of users' fees. At this time, the village of Atka assumes all costs of operation of the systems.

The monthly operation and maintenance costs of the proposed water system was estimated based on annual chemical costs, labor costs for the operator, and annual cost of repair parts. An economic evaluation of the water system is presented in the following pair parts. The monthly user fee was determined on the basis of 35 households using an interest rate of 5 percent, and an inflation rate of 12 percent.

PROJECTED MONTHLY USER FEE
ATKA WATER SYSTEM

Inflation = 12%
Interest - 5%

Item	Annual Cost (1981)
A. Annual Chemical Cost	
1. Chlorine, HTH Crystals, shipped (200#/yr) ($100/100#)	$ 200
2. Fluoride, NaF Crystals, shipped (100#/yr) ($175/100#)	175

Item	Annual Cost (1981)
B. Labor	
(4 hr./wk.) (52 wks./yr.) ($10/hr.)	2,080
C. Repair Parts	
Gasket, pump parts, lube, etc.	300
D. Chemical Pump Replacement	
Life = 10 yrs. 1980 Cost = $2,000 1985 Cost = ($2000) $(1.12)^5$ = $3,525 Annual Cost = $3,500 (SFF, 5%, 10 yrs.) = ($3,525) (0.07950) =	280
Annual Cost (1981)	$3,035
User's Fee = $\frac{\$3,035}{35 \text{ Households}}$	$86.71/yr./household
User's Fee = $\frac{\$86.71/yr.}{(12 \text{ mon./yr.}}$	$7.22/mo./household

From the above table, it is estimated that the users of the water system will have to be charged $7.22 (say $7.25) per month in order for the system to pay for itself and to pay an operator.

B. Septic Tank Sludge Haul Trailer: The operation and maintenance costs of the septic tank sludge haul trailer should be paid for by the users of the unit. Costs include labor for operating the unit, labor and parts for maintaining the unit and an amortized amount for replacement of the sludge pump. It is estimated that the sludge pump will have a life of 10 years and, once again, a 12 percent inflation rate and a 5 percent interest rate were used to determine annual costs. The table below indicates how the costs were evaluated to determine a fee to be charged users of the system,

based on a total of two trips per year. The community septic tanks will serve 18 new DHUD housing units.

PROJECTED USERS FEE FOR SEPTIC TANK SLUDGE HAUL TRAILER

Inflation Rate = 12%
Interest Rate = 5%
Pump Life = 10 yrs.

Item	Cost (1981)
A. Fuel	
(10 gallons/trip) ($2.25/gallon)	$22.50/trip
B. Labor	
(3 hrs./trip) ($10/hr.)	30.00/trip
C. Repair Parts - pump seals, etc.	
($100/yr.)/(2 trips/yr.)	50.00/trip
D. Pump Replacement	
Pump Cost 1981 = $900 Pump Cost 1990 = ($900) $(1.12)^{10}$ = $2,800	
Annual Cost = ($2,800) (SFF, 10 yrs., 5%) Annual Cost = ($2,823) (.0795) = $223.60 A = $223,60/yr. (2 trips/yr.) A = $112/trip	112.00/trip
Total cost/trip	$214.50
Total cost/year	$429.00
Cost/Unit/Year $\frac{\$429/year}{18\ units}$	$23.83

Thus, each time a homeowner has his septic tank pumped, the cost per job should be about $24.00.

C. Solid Waste System: Collection and hauling of solid waste is currently the responsibility of individual homeowners in Atka. This project will provide a community collection vehicle for use in collecting and hauling refuse. The project will also provide an excavation vehicle for use in burying refuse in the landfill. Based on weekly collection of refuse and monthly burying at the landfill, the following is an economic evaluation of the user's fee for the solid waste system:

PROJECTED MONTHLY USERS FEE
ATKA SOLID WASTE SYSTEM

Item	Cost (1981)
A. Fuel	
(2 gallons/trip) (1 trip/wk.) ($2.25/gal.)	$ 234
B. Labor	
(3 hrs./wk) (52 wks./yr.) ($10/hr.)	1,560
C. Parts	
Oil, tune-ups, etc.	100
Annual Cost (1981)	$1,894
Users Fee = $\frac{\$1,894/yr}{12 \text{ mo./yr} \times 35 \text{ units}}$ =	$4.51/mo./user

The preceding evaluation provides for paying an individual to collect, haul and bury refuse at the new landfill site. If volunteer labor is utilized to collect and haul refuse to the landfill, the user's fee could be substantially reduced.

PARTICIPATION:

The principal participants in this project are the Indian Health Service (IHS); the Aleutian Housing Authority (AHA); and the Village of Atka, Alaska.

The IHS will provide the engineering to design and construct the proposed sanitation facilities. In addition, the IHS will provide the capital funds to construct the following:

1. New water supply facilities to include water transmission line, water storage tank, and water treatment building modifications;
2. Off-site water and wastewater facilities to serve the 18 new DHUD/AHA housing units;
3. Solid waste collection and disposal facilities to serve the Native residents of Atka.

The AHA will provide funds for all on-site water, wastewater and solid waste facilities required to provide sanitation facilities to the 18 new housing units.

The Village of Atka will pass and enforce the necessary ordinances to regulate the proposed utility systems; operate and maintain the systems; collect sufficient fees from users to make the system self-supporting; provide manpower for project construction (to be paid at rates agreed upon by the village and the IHS); and select individuals to be trained to operate and maintain the systems.

PREPARED BY: 4/13/81 Date

Joan Harrell
Writer-Editor

5/8/81 Date

Richard McManus
Sr. Asst. Engineer Officer
Design Engineer

REVIEWED BY: 5/8/81 Date

Michael Dworsky
Engineer Officer
Sr. Field Engineer

CONCURRED BY: 7-30-81 Date

Daniel R. Rogness, P.E.
Chief, Sanitation Facilities
Section

RECOMMENDED BY: 7-30-81 Date

for William L. Ryan, Ph.D., P.E
Engineer Director
Environmental Health Branch

APPROVED BY: 8-3-81 Date

G. H. Ivey
Director
Alaska Area Native Health Service

INDIAN HEALTH SERVICE
ALASKA AREA OFFICE
SANITATION FACILITIES PROJECT

PROJECT APPROVAL DATE January 1981

Assigned Project Number	Project Title and Date	Estimated Cost	
AN-81-241	Sanitation Facilities Construction, Village of Atka, Alaska	IHS	$571,000
		Tribal. . . .	$
		Others AHA	$145,000
		Total	$716,000

Under and pursuant to Public Law 86-121 and the authority delegated to me, I hereby approve for initiation the sanitation facilities project outlined in the attached project summary described above. Negotiation of agreements related to project execution, contribution and responsibilities for operation and maintenance of the planned facilities may now be initiated. Negotiations shall be based upon the project summary as approved. Indian Health Service commitments shall not exceed the estimate set forth above except as increases in such estimate may be subsequently authorized by the Area Director or others designated by him for such purpose.

The assigned project number shall be utilized on all correspondence and documents related to this project.

Mike Dworsky is hereby designated as Project Engineer and shall be responsible for the coordination of all activities related to the execution of the project.

Refer to fund transfer document No. 1-29

Fund Certification

DATE

Funds in the amount of the IHS estimated cost are available in the Area, but nave not been specifically reserved for this project.

_____ Area FMO

Approval Recommended

Chief, Sanitation Facilities Section

Concurrence

for Environmental Health Branch

Approved

Area Director

cc: Admin. Off., EHB, AANHS
Project File, EHB
Chief, SFS, EHB
Service Unit Director
Director, IHS, Attn: Director, EHB
Area Financial Management Officer, AANHS

A-434-1 (ANC)
8/75

Indian Health Service
Sanitation Facilities Construction
Under P.L. 86-121

PROJECT SCHEDULE

DATE: January 1981

Alaska Area

PROJECT TITLE Sanitation Facilities PROJECT NUMBER AN-81-241

AND Construction

LOCATION Atka

ESTIMATED COST $ 716,000 PROJECT DESCRIPTION Improve water

IHS $ 571,000 treatment, extend water system and

TRIBAL $ construct sewer system for new housing.

OTHER AHA $ 145,000 NO. HOMES TO BE SERVED 18

TOTAL $ 716,000 DATE PROJECT APPROVED

ACTION ITEM	TARGET DATES	REMARKS
MEMORANDUM OF AGREEMENT SIGNED	4-30-81	
ENGINEERING DESIGN INITIATED	3-1-81	
ENGINEERING DESIGN COMPLETED	5-1-81	
STATE HEALTH DEPARTMENT REVIEW	5-30-81	
RIGHTS-OF-WAY REQUESTED	6-30-81	
PROCUREMENT INITIATED	2-1-81	
CONSTRUCTION INITIATED	9-1-81	
RECRUITMENT	9-1-81	
TRAINING	11-1-81	
CONSTRUCTION COMPLETED	10-30-81	
FACILITIES TRANSFERRED	11-15-81	

Mike Dworsky
Project Engineer

DATE 7-30-81
Chief, Sanitation Facilities Section

A-434-2 (ANC)
8/75

ALASKA REVIEW
GENERAL PROJECT SUMMARY OUTLINE AND REVIEW FORMAT

Service Unit Anchorage City or Village Atka
Title
Prepared By Date
Reviewed By Date

1. INTRODUCTION

Purpose, type of project, number and type of housing units and authority. X

2. PROJECT HISTORY

Events, approvals and dates. Project proposal date, assigned Project numbers. X

3. GENERAL INFORMATION

Location: Geography, Service Unit, U.S. Survey Nos. Proximity to major cities, description of town layout. X
Climate: Temo., precip., wind, seismicity, permafrost. X
Population: Census date, forecasts, seasonal and long term trends, % Native and tribe. X
Government: Municipal class & form, Native political, legal assistance retained by community. X
Facilities: Industrial, commercial, educational, government Transport, recreational. X
Non-Sanitation Utilities: Power, fuel, communications, X
(phone, radio, TV, paper, teletype), organization of them. X
Local Resources: Village and area income base, revenue X
sharing, taxes, natural materials, equipment. X
Construction geology and groundwater (brief).
Construction considerations.
Condition of Homes: 2500 card info., observations and IHS or BIA surveys.
Community Planning: Comprehensive, OEDP, 701, etc. X
Transportation: Land, air, water modes for mail, people and X
freight, schedules, local vehicles.
Previous IHS Projects: Project No. & brief description. X
Future Projects Affecting IHS: EDA, RDA, AVEC, Corps, BIA. X

4. DISEASES OF ENVIRONMENTAL SANITATION SIGNIFICANCE X

5. EXISTING SANITATION FACILITIES

Water:
Sewerage:
Solid Waste:
Sanitation Organization: Operators, equipment, ordinances, service charges, effectiveness

6. NEW AND/OR EXISTING HOUSING LOCATIONS X

7. STUDIES X

Other which have been done.

6. RECOMMENDED SANITATION FACILITIES

Water: Source, transmission, treatment, storage, distribution, water use, quality, quantity, water supply law. X

Sewer: Collection, treatment, water pollution law, flow rate and strength. X

Solid Waste: Collection, disposal, law requirements. X

9. FLOOD HAZARD EVALUATION

Corps, NWS, NOAA, local info X

10. EHB Environmental Assessment (Include copy) X

11. CONTRIBUTIONS

City: Cash, material, labor, storage, equip., etc.
Housing authority, BIA, HUD, State W&S Grants
AFN, Regional Native Corp., etc. X

12. COST ESTIMATE OF RECOMMENDED FACILITIES

Water*
Sewer*
Solid Waste*
Cost per design unit
*Cost breakdown by agency responsibility

13. OPERATION & MAINTENANCE

Organization and estimated Cost X

14. MAPS X

15. PRELIMINARY DESIGN ANALYSIS SHEETS X

16. SIGNATURE SHEET

I. Type	No.	IHS Cost	IHS Cost/Home	Total Cost	Total Cost/Home
Initial					
Exist.	18	$224,450	$12,469	$224,450	$12,469
HUD	17	346,550	20,385	491,550	28,914
HIP					
Other					
Initial					
Total	35	$571,000	$16,314	$716,000	$20,457
Design					
Total					

II. Type Facility (No. of homes in each)
CW 17 CS 17 CR 35
IW IS IR
Other

A-434-4 (ANC)
8/75

PRELIMINARY DESIGN ANALYSIS
SEWAGE COLLECTION AND TREATMENT SYSTEMS

COMMUNITY Atka Subdivision RESERVATION _____

POPULATION SERVED

PRESENT: NO. HOMES 0 NO. PERSONS 0

DESIGN: NO. HOMES 18 NO. PERSONS 70 GROWTH FACTOR -

SEWAGE FLOW EXPECTED
PRESENT POPULATION: _____ GPCD AVERAGE DAILY TOTAL - GPD

SUBDIVISION

DESIGN POPULATION: 70 GPCD AVERAGE DAILY TOTAL 75 GPD

SEWAGE COLLECTION SYSTEM

MIN. VELOCITY: LATERIAL _____ FPS INTERCEPTOR _____ FPS OUTFALL _____ FPS
_____ FT. 8" MATERIAL _____ _____ FT. 10" MATERIAL _____
945 FT. 6" MATERIAL PVC 1,360 FT. 4" MATERIAL PVC

MAXIMUM DISTANCE BETWEEN MANHOLES 250 FT. NUMBER OF LIFT STATIONS 0

SEWAGE TREATMENT FACILITY

SEWAGE STABILIZATION LAGOON
MIN. FLOW IN RECEIVING STREAM _____ CFS NO STREAMFLOW _____ DAYS/YR.
DOWNSTREAM USE OF RECEIVING STREAM WATER _____

EVAPORATION RATE _____ IN./YR. PRECIPITATION _____ IN./YR.
CAPACITY: DESIGN _____ AC. NO. CELLS _____ INITIAL _____ AC. NO. CELLS _____
RETENTION TIME: DESIGN _____ DAYS INITIAL _____ DAYS
BOD LOADING: DESIGN _____ POUNDS/ACRES INITIAL _____ POUNDS/ACRE
OPERATING DEPTH: MAX. _____ FT. MINIMUM _____ FT. FENCING REQD. _____ LIN. FT.
PREVAILING WIND DIRECTION _____ NEAREST DWELLING _____ FT.

SEPTIC TANK SYSTEMS

SEPTIC TANK VOLUME (TOTAL) 6,000 GALLON NUMBER OF TANKS 2

DISPOSAL METHOD FOR SEPTIC TANK EFFLUENT outfall to bay

SOIL PERCOLATION RATE _____ MIN./IN.

REQD. AREA: SOIL ABSORP. FIELD _____ SQ.FT. SUB-SURF. SAND FILTER ___ SQ. FT.

OTHER TREATMENT FACILITY (SPECIFY)

PREPARED BY: Richard McManus APPROVED BY: [signature]

DATE: March 20, 1981 DATE: 7-30-81

A-434-5 (ANC)
8/75

PRELIMINARY DESIGN ANALYSIS
WATER SUPPLY AND DISTRIBUTION SYSTEMS

COMMUNITY Atka Subdivision RESERVATION _____

POPULATION SERVED

PRESENT: NO. HOMES - NO. PERSONS -

DESIGN: NO. HOMES 18 NO. PERSONS 70 GROWTH FACTOR -

WATER CONSUMPTION (FOR SYSTEM DESIGN):

PRESENT POPULATION _____ GPCD AVERAGE DAILY TOTAL _____ GPD

DESIGN POPULATION 80 GPCD AVERAGE DAILY TOTAL 6,000 GPD

DESIGN MAXIMUM FLOW _____ GPD

EXISTING WATER SOURCE:

TYPE OF SUPPLY Surface stream REQUIRED YIELD -

NUMBER OF WELLS - DIAMETER - IN. AVERAGE DEPTH - FT.

PUMP CAPACITY REQUIRED - GPM T.D.H. - FT. PUMP CYCLE - HR.

PUMP TYPE - PUMPHOUSE SIZE _____ SQ. FT.
PUMPHOUSE MATERIAL: _____

RECOMMENDED TREATMENT (SPECIFY) Sandfiltration Chlorination
Fluoridation _____

WATER STORAGE:
TYPE AND MATERIAL: GROUND Wood stave ELEVATED _____

CAPACITY: REQUIRED 30,000 GAL. ACTUAL 30,500 GAL.

DIMENSIONS 20' Dia. X 13' ELEVATED HEIGHT _____ FT.

SYSTEM PRESSURE
STATIC: MAXIMUM 45 PSI MINIMUM 40 PSI

WORKING: MAXIMUM 45 PSI MINIMUM 35 PSI

DISTRIBUTION SYSTEM (PIPELINE LENGTH)

_____ FT.	1" MATERIAL	_____ FT.	6" MATERIAL
_____ FT.	1-1/2" MAT.	_____ FT.	8" MATERIAL
_____ FT.	2" MATERIAL	_____ FT.	" MATERIAL
500 FT.	4" MATERIAL PVC	_____ FT.	" MATERIAL

PREPARED BY: Richard McManus APPROVED BY: [signature]

DATE: March 20, 1981 DATE: 7-30-81

A-434-6 (ANC)
8/75

PROJECT DATA SYSTEM
INFORMATION SHEET

PROJECT NAME ATKA PROJECT NO. AN-81-241

1) Type of project - Housing, Regular, or Special (circle one)

2) Indian, Aleut, or Eskimo (circle one)

3) Election District _____

4. Type of Homes served, Number of Each, and Services Provided (HUD, BIA, ASHA, Tribal, Other, Existing, Non-residential, Non-Native)

18 DHUD

5) Total IHS Funds $571,000

6) Total Cash Contributions $145,000

7) Estimated Cash Value of In-Kind Contributions -

8) Project Engineer Mike Dworsky Date Assigned January 1981

A-434-9
8/75

UNITED STATES GOVERNMENT

memorandum

Alaska Area Native Health Service
Box 7-741, Anchorage, Alaska 99510

DATE: January 25, 1981

REPLY TO ATTN OF: A-EHB

SUBJECT: Environmental Assessment, Atka, AN-81-241

TO: FOR THE RECORD

The attached Initial Criteria Checklist and Environmental Assessment Summary have been completed with respect to proposed sanitation facilities construction at Atka, Alaska, under Project No. AN-81-241. The recommendation for a determination of inapplicability has been approved.

The proposed work includes constructing a new water storage tank; extending the water main to the new housing area; upgrading water treatment facilities; extending a water sewer main to new housing area; and developing a sludge disposal area and sanitary landfill.

The IHS will provide capital funds, engineering and technical services for the project. The project will be constructed by force account using local labor.

Although the Initial Criteria IV A2b "creates or expands water treatment and distribution systems", and IV42c "creates or expands sewage treatment and collection systems" are met, these factors can be excluded from further consideration since the housing site is smaller than 160 acres. The population served is approximately 90.

Construction should begin by June 1, 1981 and be completed by October 15, 1981.

Joseph G. Hugo, P.E.
NEPA Coordinator

jh

ENVIRONMENTAL ASSESSMENT SUMMARY SHEET

I. For Program Officer

Project or Application No.: AN-81-241
Name and Addrees of Applicant:
Environmental Health Branch
3350 Commercial Drive
Anchorage, Alaska 99501

Type of Application: Construction (X) Service ( ) Entitlement ( )

Loan ( ) Permit ( ) Leasing ( ) Other ( ) (Specify)_____

Date of Application_____
Date Environmental Analysis received_____
Date Environmental Assessment completed_____

Analysis is complete	Yes	No
is accurate	Yes	No
include safeguards	Yes	No
meets initial criteria	Yes	No

Recommendation Determination of Inapplicability

Assessment - A 2-3 page narrative giving your rationale for reaching the decision above should be attached. This narrative should be based upon the Initial Criteria listed in Appendix F or the Region X Environmental Handbook.

Signature [signature] Title Field Engineer

Date 5/8/81

II. For Regional Agency Environmental Officer:
Agree Disagree; remanded to program officer for revision.

III. For Regional NEPA Coordinator:
Agree Disagree; remanded to program officer for revision.

[signature]
NEPA Coordinator

5-8-81
Date

REGION X HHS

INITIAL CRITERIA CHECKLIST

APPLICANT (name & address) Environmental Health Branch
3350 Commercial Drive
Anchorage, Alaska 99501

DATE January 1981

BRIEF PROJECT DESCRIPTION Improve existing water treatment facilities; extend water system to serve new houses; construct sewer system for new houses; and develop sanitary landfill

PROJECT OFFICER (& Title) Mike Dworsky
Engineer Officer
Field Engineer

SIGNATURE Michael Dworsky

9/22/76

	Yes	No	Info Needed
I. Human Values			
A. Historic Properties			
1. destroys property		X	
2. alter property		X	
3. relocate objects		X	
4. change access to site		X	
5. change use of property		X	
6. change general use of district		X	
7. visual change - - view from site		X	
8. visual change - - view from site		X	
9. destroy structures more than 50 years old		X	
B. Archaeological Preservation			
1. alter or destroy archaeological sites		X	
C. Natural Preserves			
1. use of Natural Landmarks sites		X	
2. use of sites under National Wilderness Preservation Act or Wild or Scenic Rivers Act		X	
3. use of natural preserve		X	
4. affects endangered or threatened species		X	
5. utilize product from endangered species		X	
D. Environmental Laws			
1. existing air and water quality		X	
2. existing land use laws		X	
3. existing odors and noise laws		X	
4. existing visual environment law		X	
II. Natural Systems			
A. Land-Related Environments			
1. Land Use (affecting less than 16 acres excluded)		X	
a) introduce technological use		X	
b) introduce more intensive technical use		X	
c) charted underground space		X	
2. Land Form			
a) affect stability (less than 16 acres excluded)		X	
b) affect earthquake fault		X	
c) undeground disposal of wastes (existing waste systems excluded)		X	
d) interfere with underground water system		X	

	Yes	No	Info Needed
e) future changes may be necessary to protect action		X	
f) use or destruction of barriers protecting coastal lands		X	
g) increase water erosion (less than 16 acres excluded)		X	
h) increase wind erosion (less than 16 acres excluded)		X	
3. Land Composition (Topsoil)			
a) Destroy or deny access of more than 100 acre-ft.		X	
b) remove and affect vegetation (less than 16 acres excluded)		X	
c) change ambient substance concentration (less than 16 acres excluded)		X	
d) introduce foreign or artificial substance (less than 16 acres and approved waste disposal sites excluded)		X	
e) increase trash and/or waste materials (less than 16 acres & approved waste disposal sites excluded)		X	
B. Water-Related Environments (water bodies of less than 1 acre and running water less than 100 yds. excluded)			
1. Aquatic Environment			
a) introduces technological use		X	
b) reduces surface area		X	
2. Aquatic Form			
a) affect rate of natural change		X	
b) increase wave action or turbulence		X	
c) causes erosion into (siltation)		X	
d) increase floods		X	
3. Aquatic Composition			
a) changes volume		X	
b) causes erosion into (particulate concentration) water body		X	
c) increase human or domesticated animal wastes	X		
d) change concentration of naturally occurring substances		X	
e) introduce artificial or foreign substance		X	

	Yes	No	Info Needed
C. Air-Related Environments (100,000 vehicle miles or less per annum in 16 acres or less excluded)			
1. Air Space Use			
a) interfere with bird migration routes		X	
b) introduces pollutant (less than 1,000 parked vehicles or traffic increase of 2,000 per hour		X	
2. Air Form			
a) change weather		X	
3. Air Composition			
a) violation of stack emission standards		X	
b) introduce gaseous substances other than ambient substance		X	
c) increase ambient subastances by more than one percent		X	
d) increase pollutant concentration by more than 5% in (1 hr.)		X	
e) increase pollutant concentration by more than 30% for (1 sec.)		X	
f) increase pollutant concentration by more than one % in any 1 hr., $mi.^3$)		X	
g) increase substances in stratosphere		X	
h) introduce artificial substances into ionosphere or exosphere		X	
D. Special Environments (fresh water wetlands less than 1/4 acre and desert, tundra, and alpine areas less than 1 acre excluded			
1. Change water level in wetland or hotspring		X	
2. Change temperature in wetland, hotspring or coral area		X	
3. Introduce artificial or foreign substance into wetland, hotspring, desert, tundra, alpine, or coral area		X	
4. Change concentration of naturally occurring substance in wetland, hotspring		X	
5. Uses, creates, or destroys wetland, hotspring, desert, tundra, alpine, or coral area		X	
E. Contaminants			
1. Temporary storage of		X	

	Yes	No	Info Needed
F. Energy (aquatic areas less than 1 acre and human population less than 50 excluded			
1. Energy Transmission			
a) introduce or increase electromagnetic activity which may alter physiology, genetic make-up or behavior pattern		X	
b) change resistance of atmosphere to extraterrestrial wave spectrum		X	
c) create sound levels affecting human communication		X	
d) generates shock waves		X	
2. Energy Concentration			
a) charges albedo (less than 16 acres excluded)		X	
b) changes air-land heat exchange (less than 16 acres excluded)		X	
c) change air or ground temp. affecting animal behavior (less than 160 acres excluded)		X	
d) change temperature of aquatic environment (less than 1 acre excluded)		X	
III. Populations			
A. Plant Populations			
1. Natural Functioning (land area less than 160 acres and water bodies less than one acre or 100 yards running water are excluded)			
a) introduces species		X	
b) increased non-indigenous species		X	
c) decrease indigenous species		X	
d) change genetic makeup		X	
2. Domestic Use			
a) destroy plant population requiring 60 years to return		X	
b) utilize comercial material from plant species		X	
c) decrease species of commercial value		X	
B. Animal Populations			
1. Animal Functioning (same exclusion as plant functioning)			
a) introduces species		X	

	Yes	No	Info Needed
b) introduce or increase pathogenic microorganism		X	
c) increases non-indigenous species		X	
d) decrease indigenous species		X	
e) increase or decrease specie population		X	
f) change behavior patterns		X	
g) change physiology		X	
h) create genetic change		X	
2. Domestic Use			
a) Utilize commercial material from animal specie		X	
b) decrease species of commercial value		X	
C. Human Populations			
1. Human Population characteristics (less than 160 acres excluded)			
a) introduce permanent or continual increase		X	
b) change population density		X	
c) change number of annual transients (commuters)		X	
d) increase population such that new service unit needed		X	
e) change physiology		X	
f) develop capability for genetic change		X	
2. Technological Resource			
a) decrease number employed		X	
b) decrease enrollment in schools		X	
c) alter number entering a profession		X	
IV. Technological Systems			
A. Extension Systems			
1. Disruption/Reduction (less than 100 population and less than 160 acres with less than 10,000 population excluded)			
a) disrupt water supply for more than 24 hours		X	
b) disrupt heat for more than 14 hours		X	
c) disrupt sewage system for more than 24 hours		X	
d) desrupt solid waste service for more than 4 service days or 2 weeks		X	
e) reduce amount of food, water, energy, or shelter for more than 2 weeks		X	
f) disrupt food supply for more than 72 hours.		X	

	Yes	No	Info Needed
2. Creation (excluded if action uses at least 80% of system capacity or is designed for less than 100 population)			
a) creates or expands electrical power plant		X	
b) creates or expands water treatment and distribution system		X	
c) creates or expands sewerage treatment and collection system		X	
3. As a Resource			
a) uses more than 5% of remaining electric power or natural gas in system (less than 1,000 kwh and 3,500 CFH gas excluded)		X	
b) uses more than 5% of water kept in reserve (less than 5,000 GPD excluded)		X	
c) uses more than 5% of remaining capacity of sewage system (less than 500 excluded)		X	
d) uses more than 5% of remaining capacity of solid waste disposal system (less than one ton per day excluded)		X	
B. Maintenance Systems			
1. Protective Services			
a) increase utilization of fire and police services		X	
b) decreases personnel or equipment of fire or police services		X	
c) delay utilization of police services by more than 15 min.		X	
d) render emergency health unavailable for more than one hour		X	
e) reduce stock of biologicals to prevent or inhibit human epidemics		X	
2. Recovery Services			
a) decrease ratio of medical personnel or hospital beds to population		X	
b) decrease hospital use		X	
3. Care Systems			
a) decrease care service use		X	

	Yes	No	Info Needed
C. Intermediary Systems			
1. Transportation			
a) established transportation service or extends existing service by more than one mile		X	
b) changes entry or exit point		X	
c) increases cost		X	
d) increases transportation time		X	
e) closes transportation service for more than one week		X	
f) reduces remaining roadway system capacity		X	
2. Communication			
a) denies access to service for more than two weeks		X	
b) extends telephone or telegraph service more than one mile		X	
c) interfere with two way communication		X	
d) increases messages transmitted by a system		X	
3. Economic Exchange			
a) causes decrease of income of human population		X	
b) decrease revenues or increase costs of human settlement		X	
D. Resource Allocation			
1. Land			
a) addition of technological use (less than 10 acres excluded)		X	
b) addition of technological use to open underground space (less than 1,000 cu. yds. excluded)		X	
c) adjacent land use pre-empted		X	
2. Mineral and Fossil Fuel Use			
a) affects accessibility of mineral deposits		X	
b) inhibits use of recycled materials		X	
c) increases amount of mineral or fossil fuel being mined		X	
d) increases consumption of mineral or fossil fuel		X	
e) required use of protected natural resource		X	

	Yes	No	Info Needed
3. Waste Production			
a) increases use of nonrecyclable materials		X	
b) recyclable materials not recycled		X	
4. Water Use (water body less than 1 acre and running water less than 100 yd. excluded)			
a) requires reallocation of use		X	
b) required reallocation of water rights		X	
c) decrease existing technological water use		X	
d) recludes technological use		X	
5. Air Space Use			
a) interference with other uses		X	

A REPORT ON THE POTENTIAL ARCHAEOLOGICAL IMPACT OF A PROPOSED U.S. PUBLIC HEALTH SERVICE WATER AND SEWER PROJECT IN THE VILLAGE OF ATKA, ALASKA

Douglas W. Veltre
4 May 1982

Introduction

Prior to the 1970s, no archaeological work had been conducted in or near the proposed water and sewer project area delineated on the project map. In 1909, Waldemar Jochelson excavated at two sites south of the present village of Atka (Jochelson 1925). In the late 1930s, Ales Hrdlicka conducted limited probing in two areas: one of Jochelson's sites and some caves on the western side of the island (Hrdlicka 1945:219, 320-322). Since that time, and until the mid-1970s, only sporadic, inconclusive, and largely unpublished work by Ted P. Bank has taken place on Atka, although not within or near the project area.

In 1974, Douglas and Mary Veltre began five seasons of ethnohistorical and archaeological research on the island. Two weeks during the summer of 1976 were spent by them surveying various portions of the coast of the island, including the entire area included in the current P.H.S. water and sewer project (Veltre 1977a). In addition, a detailed field survey was conducted of the immediate Atka Village area for P.H.S. in 1977 for archaeological clearance for a water and sewer project (Veltre 1977b). The limits of the 1977 P.H.S. survey area are indicated on the map accompanying this report.

Results

The southern end of the proposed water main easement (near the existing water treatment plant) lies within the area surveyed and cleared in 1977 (Veltre 1977b). The remainder of the route has been flown over and walked by Douglas and Mary Veltre many times and is very familiar territory. Most of it, especially at the southern and northern ends, lies somewhat inland and at relatively high elevation and shows no evidence of cultural remains. Archaeological sites in the Aleutians are virtually non-existent in such locations, with immediately coastal locales having been preferred. The middle portion of the route, which is closer to the coast, also shows no evidence of cultural remains (except for twentieth century debris), with the exception discussed below.

Only a single site is known within the project area. The site's location is indicated on the accompanying map, and is entered as site ATK-016 in the Alaska Heritage Resource Survey. The site was referred to as the "Dump" site by Veltre (1979:356) and further described by him as follows:

> Less than 1 km north of the village of Atka is a sand dune area between the present roadway and the coast. This area was utilized as a dump by the military during World War II and is greatly disturbed. On the unvegetated surface of the ground several stone artifacts and flakes were recovered during 1974. During 1976 an attempt was made to delineate more precisely the original size of the occupational area at this location. However, although more surface artifacts were located, no surface features are present and the entire area seems to have been substantially disturbed. Limited testing revealed no cultural deposits. The surface artifacts were concentrated in an area approximately 10 x 25 m; hence, the original occupation was possibly limited. The site area suffers from slow, but continuous, wind and sand dune changes.

Since this site is small in area and apparently greatly disturbed, and since it is at least 200' from the proposed easement for the water main, the proposed project should have no impact on the site. Nevertheless, the site area as mapped should be avoided as a materials source or as an equipment storage area, etc.

Recommendations

Archaeological clearance is recommended for the entire route of the proposed water main, water storage tank, and sewer facilities, as detailed on the accompanying project map. Project personnel should avoid disturbance of site ATK-016, as noted earlier. Finally, in the unlikely event that cultural remains are discovered during the course of construction, it is recommended that the State Historic Preservation Officer be contacted immediately regarding mitigating measures.

Resources

In addition to the works listed below, resources utilized for this report included aerial photographs, area maps, personal field notes made from 1974-1979, and ground photographs. The records of the Office of History and Archaeology of the State Division of Parks, including the Alaska Heritage Resource Survey, were consulted. This project was also discussed with Mr. Ty Dilliplane, State Historic Preservation Officer.

Hrdlicka, Ales
1945 The Aleutian and Commander Islands and Their Inhabitants. Wistar Institute of Anatomy and Biology, Philadelphia.

Jochelson, Waldemar
1925 Archaeological Inventigations in the Aleutian Islands. Carnegie Institution of Washington, 367.

Veltre, Douglas W.
1977a An Archaeological Reconnaissance of Portions of Atka Island, Alaska. Report submitted to State Archaeologist, Alaska Division of Parks.
1977b A Report on the Potential Archaeological Impact of a Proposed U.S. Public Health Service Water and Sewer Project in the Village of Atka, Alaska. Submitted to U.S. Public Health Service, Anchorage.
1979 Korovinski: The Ethnohistorical Archaeology of an Aleut and Russian Settlement on Atka Island, Alaska. Ph.D. Dissertation, University of Connecticut.

UNITED STATES GOVERNMENT

memorandum

DATE: December 2, 1982

REPLY TO ATTN OF: District Construction Engineer
Alaska Area Native Health Service

Refer to: A-EHB

SUBJECT: Pre-final Inspection - Atka - Project AN-81-241

TO: FOR THE RECORD

A pre-final inspection of the subject project was made on August 31, 1982. In attendance were:

Mr. Jim Simmons, PHS Foreman
Mr. Michael Bergin, NOAA
Mr. Larry Lockyer, Field Engineer
Mr. Mike Dworsky, District Construction Engineer

While visiting Atka to install a sewer outfall line, a pre-final inspection was made. The following punch list is cited as the major items to complete:

Storage Tank: The wood stave storage tank was in excellent condition with no visible leaks evident.

The ground immediately surrounding the tank is extremely wet, although much gravel was hauled up to the site. A trench was placed very close to the tank foundation to drain and stabilize the area. However, the trench has vertical walls and may be susceptible to soil erosion undermining the tank. Re-seeding the area and placing a jute mat will be necessary to help prevent erosion. An inspection should be made next summer (1983) to check on the status of the jute mat and re-seeding.

Water Transmission Line: Markers should be placed along the route of the transmission line to facilitate locating the line in the future.

Sewerage Outfall Line: The outfall line was buried in the beach sand and then buried in the ocean to a water depth of 10 feet. However, since installation, a stream nearby has changed its course and now crosses our line, exposing it. The sewerage outfall should be buried deeper in the beach sand to allow any stream meanders to cross over the line without exposing it.

Treatment Plant: Mr. Ray Hough and Mr. Rick Robinson installed the new H. E. Anderson chemical treatment system on October 15. The systems both appear to be working as designed.

OPTIONAL FORM NO. 10
(REV. 1-80)
GSA FPMR (41 CFR) 101-11.6
5010-114

* GPO : 1981 O - 341-526 (7008)

Since the pre-final inspection was made, the foreman has left the job, and additional work has been identified. A crew will return to Atka in the fall of 1983 when materials arrive to complete punch list items, and newly identified work items. Mr. Doug Ott, Project Engineer, will coordiate and document the completion of this punch list and a final inspection will be made when the project is complete.

Michael Dworsky
Sr. Engineer Officer

jh

cc: Frank Williams, ANC-CES, Anchorage
John Hamilton
Doug Ott
Ray Hough
Bill Fort
Jay Farmwald

MEMORANDUM OF AGREEMENT

MEMORANDUM OF AGREEMENT
AMONG
THE INDIAN HEALTH SERVICE
AND
THE VILLAGE OF ATKA, ALASKA
AND
THE ALEUTIAN HOUSING AUTHORITY

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

MEMORANDUM OF AGREEMENT
AMONG
THE INDIAN HEALTH SERVICE
AND
THE VILLAGE OF ATKA, ALASKA
AND
THE ALEUTIAN HOUSING AUTHORITY

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

Date of Agreement:
January 1981

PURPOSE

THIS AGREEMENT is made among the U.S. Government acting through the Indian Health Service (IHS), part of the U.S. Public Health Service, under and pursuant to the provisions of Public Law 86-121 (OMB 13.229); the Village of Atka, Alaska, hereinafter referred to as the Village, as authorized by the Village Council; and the Aleutian Housing Authority, hereinafter referred to as the AHA.

WHEREAS, the Village submitted a project proposal dated October 16, 1971 to the IHS requesting help in developing community sanitation facilities, and

WHEREAS, the IHS desires to help Alaska Native communities construct and improve their sanitation facilities, and

WHEREAS, the AHA desires to obtain satisfactory water supply and waste disposal facilities for its new houses in Atka.

NOW THEREFORE, the IHS; the Village; and the AHA agree to carry out the project described in the project summary titled "Sanitation Facilities Construction, Village of Atka, Alaska, Project No. AN-81-241". The parties agree to the following division of responsibilities and accept the following obligations to carry out the project:

VILLAGE CONTRIBUTIONS AND OBLIGATIONS

VILLAGE CONTRIBUTIONS AND OBLIGATIONS

1. The Village will provide, without cost to the IHS, a representative to coordinate Native participation under this agreement. The Village representative will: (a) encourage residents to attend meetings with IHS concerning the project; (b) obtain the consent of every participating Native family on forms furnished by the IHS; and (c) actively promote attendance of Native members in the fulfillment of labor responsibilities assumed by the Village under this agreement.

ENTRY UPON VILLAGE LAND

2. The Village will allow the IHS to enter upon and cross over Village land whenever necessary to carry out the project. The Village agrees to waive any claims for damages that may result from this entry, except those recognized under the Federal Tort Claims Act. (The Federal Tort Claims Act allows damage claims to be submitted against the Federal Government under certain circumstances.)

ARCHAEOLOGICAL SURVEY

3. The Village will assist and allow the IHS archaeologist to survey the project site for important historical, cultural, or archaeological materials, as required by the Historic Preservation Act of 1966 and Presidential Executive Order No. 11593. Any artifacts recovered will be stored and protected by the United States Government until proper storage facilities are available in the Village and its land allotment has been conveyed. Upon the Village's request, the State Director's Office, Bureau of Land Management, will return such artifacts to the Village after the land has been transferred and proper storage facilities are available within the Village.

R.O.W.'s

4. The Village will secure in its name and at no cost to IHS all rights-of-way (R.O.W.'s) and easements over all public and private lands that the project engineer determines are necessary to build and maintain the project facilities. The Village will file copies of the easements and R.O.W's with the appropriate District Court Recorder and send one copy of each to the IHS.

USE OF VILLAGE OWNED EQUIPMENT

5. The Village will allow the IHS to use, without charge, any Village owned construction equipment requested by the project engineer. The IHS will operate and maintain the equipment and will return it to the

Village in as good condition as it was before IHS use, less normal wear and tear. The Village representative and IHS project engineer will jointly inspect the equipment before and after its use. The condition of equipment before and after use will be noted in writing.

OFFICE AND STORAGE SPACE

6. The Village will provide, without charge, a heated office/inside storage area (minimum size 12 by 16 feet), and an outside storage area (minimum size 150 by 150 feet) for IHS use during construction of the project. The office and storage spaces must be acceptable to the IHS project engineer.

AGGREGATE

7. The Village will provide without charge any sand, gravel, or rock which is needed for construction of project facilities and that it has available.

O&M PLAN

8. The Village, with technical assistance provided by IHS, will write and legally adopt a plan for the operation and maintenance of the sanitation facilities before the facilities are transferred to the Village. The plan will include:

O&M Policy

a. Operation and maintenance policy;

Health Ordinances

b. Rules and regulations to provide for the use and protection of the sanitation facilities and to protect the public health;

O&M Budget	c. A budget giving costs for fuel, chemicals, electricity, supplies, parts, repairs, and salary and training for operators.
User Charge System	d. A user charge system (rate schedule) that will provide enough money from user fees to pay the estimated costs;
Collection System	e. A collection system with penalties for non-payment; and
Compliance with State Laws and Regulations	f. A system for compliance with the Alaska Department of Environmental Conservation water supply and and waste disposal regulations.

O&M COST ESTIMATE

9. The following is a summary of estimated operation and maintenance costs for the project facilities. This estimate is based on 1981 costs. A detailed cost estimate is attached. The Village must recognize that these costs represent IHS's best estimate based upon current costs of fuel, electricity, repair parts, etc. The Village must keep a record of actual costs incurred and revise its user rate fees accordingly. The user rate fees should be revised annually.

SUMMARY OF
ESTIMATED ANNUAL OPERATION AND MAINTENANCE COSTS
FOR 1981

Estimated Annual Cost (for water and solid waste)* $4,929

Estimated User Fee = $\frac{\$4,929/yr}{12\ mo./yr. \times 35\ Homes}$ = $11.73/mo/user

*Pumping of septic tanks will be paid for separately.

Such estimated costs and estimated revenues will have to be adjusted according to actual costs experienced and actual revenues realized. For example, the cost of electricity, fuel, operator wages, repair and

replacement parts and equipment will undoubtedly increase with time. The user charges (rate schedule) will have to be revised accordingly so that sufficient revenues will be available to pay for the continued operation and maintenance of the sanitation facilities. Making these revisions and collecting user fees is the Village's responsibility.

OPERATORS

10. The Village will, before the start of construction, identify one or more individuals who will become the future operator(s) of the sanitation facilities. This person will be hired as part of the construction crew and will receive on-the-job training from the project superintendent. After construction is completed the Village will hire this person and will pay him at a rate to be established by the Village Council from user fees for his work as the operator. IHS will provide further training to the operator(s) to operate and maintain the facilities for the benefit of the Village.

LABOR

11. The Village will hire the labor force to construct the project facilities. Workers will be assigned to work under the supervision of the IHS project superintendent. For pay purposes, time sheets will be submitted to the Village biweekly by the project superintendent.

LABOR ACCOUNT

12. The Village will pay the workers from the Village "Labor Account." The Labor Account will be a separate checking account in the Village's name. The account must be established at a bank which is insured by the Federal Deposit Insurance Corporation.

a. The IHS will contribute up to $150,000 to this account by the following formula:

Contribution = 0.75 X person hours X Davis-Bacon wage rate. Davis-Bacon wage rates are established for each of the separate trades involved on the project.

b. The Village will pay workers' wages; make necessary payroll deductions for Federal and State income taxes, and Social Security taxes (if applicable); pay Liability Insurance, Unemployment Insurance and Workmen's Compensation premiums; and submit employer and employee taxes and records to the appropriate agencies, as required.

c. The Village must recognize that IHS's contribution to the Labor Account will not cover the cost of Davis-Bacon wage rates plus taxes and insurance premiums. The Village has two options:

Option 1: The Village can provide additional funds from its own sources or sources other than IHS and pay its workers the full Davis-Bacon wage rates plus pay the necessary taxes and insurance premiums, or

Option 2: The Village may pay its workers less than the full Davis-Bacon wage rates (usually in the range of 50-60 percent of the Davis-Bacon wage rates) plus pay the necessary taxes and insurance premiums from the total contribution made by IHS.

Under Option 2, the difference between the Davis-Bacon wage rates and the actual wage rates paid by the Village to its workers represents part of the Village's contribution to the project.

d. The Village will provide or hire a bookkeeping service to: keep payroll records, complete tax statements quarterly and annually, make required deposits of withheld taxes, pay Liability Insurance, Unemployment Insurance, and Workmen's Compensation premiums, make payroll deductions, issue paychecks biweekly, and provide regular statements on the account to the project

engineer. Prior to establishing the Village Labor Account, IHS will review the Village's bookkeeping and accounting system and will provide technical assistance to the Village in establishing a bookkeeping and accounting system or contracting for such services.

e. The IHS may also contribute additional sums to the Labor Account to permit the Village to purchase materials, supplies, or services determined necessary for the project by the project engineer. Such purchases must be authorized in advance by the IHS project engineer.

f. The Village will return to IHS any Labor Account funds not used for project labor or previously agreed upon materials, equipment, or services upon request by the project engineer. The Labor Account will be subject at any time to an audit by the project engineer and/or a certified auditing agency.

IHS CONTRIBUTIONS AND OBLIGATIONS

IHS SUPERVISION

13. The IHS, represented by its project engineer, project superintendent, employees, and contractors, is responsible for designing, scheduling, selecting and purchasing materials and equipment, arranging for transportation, and constructing the sanitation facilities. All work will be done under the supervision of the IHS project engineer.

IHS CONTRIBUTIONS

14. The IHS will contribute up to $571,000 to build the sanitation facilities for the Village as outlined in the Project Summary.

LABOR ACCOUNT

15. From the total amount of funds contributed by IHS under paragraph 14, up to $150,000 of that amount is to fund the Labor Account as described in Paragraph 11. Funds not utilized for labor or previously agreed upon materials, equipment or services will be returned to IHS upon request by the project engineer.

O&M MANUAL

16. The IHS will provide an Operation and Maintenance manual for the completed system. This Operation and Maintenance manual will include instructions on the use, maintenance, operation, and repair of the facilities.

TRAINING

17. The IHS will provide sufficient hours of formal technical training for the individual(s) named by the Village to operate the facilities. This training shall be conducted in accordance with the current IHS training guidelines. Training will include instructions on the operation and maintenance of system components. IHS will also provide training to the Village regarding bookkeeping, recordkeeping, development and adoption of local utility ordinances and health ordinances, and assist the Village in writing an Operation and Maintenance Plan.

EQUIPMENT USE

18. The IHS will provide fuel, oil, and repair parts for the operation, maintenance, and repair of Village owned construction equipment when such equipment is used by the IHS as provided under Paragraph 5.

WARRANTY CLAUSE

19. The IHS warrants the design and construction of all sanitation facilities and equipment from defects and workmanship for a period of one year after the date of transfer or for a period of one year of water and sewer service to the Village, whichever occurs first. The warranty clause does not cover normal wear and tear of equipment, replacement parts, operational costs, or abuse or vandalism to equipment or structural facilities.

AHA CONTRIBUTIONS AND OBLIGATIONS

AHA CONTRIBUTIONS AND OBLIGATIONS

20. The AHA will contribute $145,000 to IHS as its share of the cost of the on-site project facilities serving the AHA's new houses.

Reference: The (IHS, Housing and Urban Development, Bureau of Indian Affairs) Inter-Departmental Agreement, 24 CFR 805, Vol. 41, No. 47, p. 10165ff, dated March 9, 1976.

AHA REPRESENTATIVE

21. The AHA will provide without cost to the IHS a representative to work with IHS representatives to ensure that the AHA fulfills its responsibilities to the project.

ENTRY UPON AHA LAND

22. The AHA will permit the IHS to enter upon or cross over AHA land whenever necessary to carry out the project. The AHA agrees to waive any claims for damage that may result from this entry, except those recognized under the Federal Tort Claims Act.

ARCHAEOLOGICAL SURVEY

23. The AHA will allow the IHS archaeologist to survey the project site for important historical, cultural, or archaeological materials, as required by the Historic Preservation Act of 1966 and Presidential Executive Order No. 11593. Any artifacts recovered will be stored and protected by the United States Government until proper storage facilities are available in the Village and its land allotment has been conveyed. Upon the Village's request, the State Director's Office, Bureau of Land Management, will return such artifacts to the Village after the land has been transferred and proper storage facilities are available within the Village.

R.O.W.'s

24. The AHA will convey to the Village, at no cost to IHS, all R.O.W.'s and easements over its lands that the project engineer determines are necessary to build and maintain the project facilities. The AHA will file copies of the easements and R.O.W.'s with the appropriate District Court recorder and send one copy of each to the IHS and the Village.

STAKING OF THE SITE

25. The AHA will stake all building corners, lot corners, and roadways in its subdivision(s). Where stakes have been removed from sites, the AHA will replace them at no cost to the IHS.

TRANSFER OF THE PROJECT

OPERATION OF SANITATION FACILITIES

26. The sanitation facilities will not be put into operation by IHS until after the Transfer Agreement has been signed by all of the participants to this Memorandum of Agreement.

OWNERSHIP OF FACILITIES

27. That in consideration of the contributions made and the responsibilities undertaken, the IHS will transfer all its right, title and interest of all community sanitation facilities to the Village upon completion of the project. The Village will accept ownership of the facilities and immediately assume its responsibilities for operation and maintenance of the facilities according to the Village Operation and Maintenance Plan outlined in Paragraph 8.

OWNERSHIP OF INDIVIDUAL FACILITIES

28. That in consideration of the contributions made and the responsibilities undertaken, the IHS will transfer all its right, title, and interest of all individual facilities including those portions of service lines on

private property to the individual homeowners. Where the AHA is the lienholder of the property, the IHS will transfer all its right, title, and interest of the sanitation facilities to the AHA pending transfer of those facilities along with the house by the AHA to the individual homeowner when the house loan is repaid. Individual homeowners will be responsible for operating and maintaining individual facilities as soon as they have moved into the house.

PROJECT SCHEDULE AND SUPERVISION

SCHEDULE AND SUPERVISION

29. The IHS is responsible for the successful completion of this sanitation facilities project. This includes design, scheduling, material take-offs, purchasing, transportation, and construction. All work will be done under the supervision of the IHS project engineer.

30. It is important that the installation of the water supply and waste disposal facilities as outlined in the Project Summary be completed as soon as is practicable in accordance with the schedule of the IHS project engineer.

PROJECT TERMINATION

PROJECT TERMINATION

31. In the event that actual construction of this project cannot be initiated, for any reason, by September 1981, the IHS reserves the right to cancel the

project and use the funds earmarked therefor for other projects which lack impediments to prompt construction. If the condition which impeded construction is resolved following such cancellation, the IHS Anchorage Area will give high priority to funding the project from appropriated sanitation facilities' funds available at that time or from future appropriations for sanitation facilities.

ATTACHMENT

DETAILED ESTIMATE OF PROJECTED ANNUAL OPERATION AND MAINTENANCE COSTS:

For Water and Solid Waste Systems*

A.	Fuel	$234
B.	Chemicals and supplies	$375
C.	Labor - operator and bookkeeper wages	$3,640
D.	Repair and Replacement	$680
	Parts and Equipment	
	Estimated Annual Cost	$4,929

*Note: The cost for pumping septic tanks will be charged to individuals separately.

DETERMINATION OF ESTIMATED USERS FEE:

Estimated Cost Minus Revenue

Annual Cost: $4,929

Net Estimated Annual Cost: $4,929

Estimated Monthly Users Fee:

$4,929

35 X 12 months/year = $11.73

Estimated User's Fee per home: $12.00/month/user

IN WITNESS WHEREOF, the parties have subscribed their names.

FOR THE VILLAGE OF ATKA, ALASKA

5/5/81
Date

Gregory Golodoff
President, Village Council of Atka, Alaska, having been duly authorized by the Village Council to enter into this agreement on behalf of the Village of Atka as evidenced by the attached Resolution made by the Village Council of Atka, Alaska

FOR THE ALEUTIAN HOUSING AUTHORITY

10/19/81
Date

Executive Director
Aleutian Housing Authority

RECOMMENDED APPROVAL

11/3/81
Date

Richard D. Frost, Chief
Area General Services Branch

FOR THE INDIAN HEALTH SERVICE

11/3/81
Date

G. H. Ivey, Director
Alaska Area Native Health Service
Public Health Service, Department of Health and Human Services

RESOLUTION

OF Atka Village Council

WHEREAS, the Atka Village Council, hereinafter called the Council, is the governing body of Atka, Alaska, and

WHEREAS, said Council is desirous of aiding the Indian Health Service, hereinafter called the Service, in providing adequate sanitation facilities for the residents of Atka, and

WHEREAS, said Council has a duly authorized President to represent it in matters concerning Atka.

NOW THEREFORE, be it resolved that said Council hereby authorizes the President to enter into agreements with the Service on behalf of Atka concerning the provisions and transfer of sanitation facilities for Atka, and

BE IT FURTHER RESOLVED that said Council will cooperate with the provisions of any agreement entered into by the Council's President and the Service, and they will be duly carried out.

I, the undersigned, hereby certify that the Council is composed of seven members, of whom four constituting a quorum were present at a meeting duly and regularly called, noticed, convened, and held this 5th day of May, 1981; and that the foregoing Resolution was duly adopted at such meeting by the affirmative vote of 4 members, and that said Resolution has not been rescinded or amended in any way.

DATED this 5th day of May, 1981.

SIGNED: Julie Dirks
Secretary

Delineation of Responsibilities
Between
The U.S. Public Health Service
and
The Aleutian Housing Authority
for
On-Site Water and Sewer
at
Atka, Alaska

ID: 1810C/XXX
LR: 052582

Delineation of Responsibilities
Between
The U.S. Public Health Service
and
The Aleutian Housing Authority
for
On-Site Water and Sewer
at
Atka, Alaska

The following agreement clarifies and delineates the responsibilities of each party with regard to the water and sewer facilities to be installed within the Atka housing site and the wastewater treatment facilities to be installed between the housing site and the ocean outfall, as shown on the attached map (see Attachment A).

Public Health Service (PHS) Responsibilities:

1. A complete set of mylar drawings stamped by a professional engineer covering the sanitation facilities to be installed by the Aleutian Housing Authority (AHA) will be provided to the AHA. These drawings shall include (a) the on-site water and sewer facilities within the subdivision boundaries, and (b) the off-site wastewater treatment facilities inclusive of the PE line between the subdivision boundary and the PHS ocean outfall. It shall be the responsibility of the PHS to secure Department of Environmental Conservation approval on these drawings.

2. Detailed construction specifications covering the installation of the off-site wastewater treatment facilities will be provided to the AHA. These specifications will be complete and in the format of AHA specifications.

3. Sample construction specifications covering the on-sitewater and sewer facilities will be provided to AHA. These specifications will be typical of those used by PHS for this type of construction. However, they will not be written specifically to cover the work at Atka. They are only to be used as samples in preparing the Atka on-site water and sewer specifications.

4. PHS will have review responsibility of the final change order drawings and specifications covering the sanitation facilities construction at Atka.

5. The PHS materials, originally intended for construction of these facilities and presently stored at Atka, will be transferred to the AHA in exchange for value of the materials and transportation costs (a total of $55,649). These materials will be inventoried and crated when PHS leaves Atka upon completion of its off-site work. At that time a representative of AHA will inspect the materials and sign for their receipt in the location and condition at the time of inspection.

No attempt has been made by the PHS to cover the complete on-site material needs with the above materials. Any additional materials needed over and above those provided which are found necessary for the satisfactory completion of the on-site work shall be the responsibility of AHA to procure

6. As delineated in the Inter-Departmental Agreement on Indian Housing, the AHA is totally responsible for all on-site water and sewer work. The PHS, by providing plans and sample specifications as a courtesy to the AHA, assumes none of the AHA's responsibility or liability for this work. The AHA maintains full responsibility for the use of these plans and any claims or disputes arising from their use.

AHA Responsibilities:

7. The AHA, or its representative, shall assemble the construction specifications for the on-site water and sewer facilities. These specifications shall be presented to PHS for review.

8. The AHA shall provide PHS with inspection services for the on-site and off-site sanitation facilities constructed by AHA in exchange for the sum of $3,351.

9. The AHA shall assume full responsibility and liability for the construction of the on-site water and sewer facilities.

FOR THE ALEUTIAN HOUSING AUTHORITY:

6-3-82
Date

Gregg Brelsford
Executive Director

FOR THE U.S. PUBLIC HEALTH SERVICE

5-25-82
Date

Daniel R. Rogness, P.E.
Director
Environmental Health Branch

ID: 2865C/
LR: 100482

AMENDMENT NO. 1
TO THE
MEMORANDUM OF AGREEMENT
AMONG
THE INDIAN HEALTH SERVICE
AND
THE VILLAGE OF ATKA, ALASKA
AND
THE ALEUTIAN HOUSING AUTHORITY

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

AMENDMENT NO. 1
TO THE
MEMORANDUM OF AGREEMENT
AMONG
THE INDIAN HEALTH SERVICE
AND
THE VILLAGE OF ATKA, ALASKA
AND
THE ALEUTIAN HOUSING AUTHORITY

PROJECT NO. AN-81-241
PUBLIC LAW 86-121

DATE OF AGREEMENT:
October 1982

PURPOSE

WHEREAS, the Indian Health Service, hereinafter referred to as the IHS, acting under and pursuant to Public Law 86-121 (OMB 13.229); the Village of Atka, hereinafter referred to as the Village, acting through the Village Council; and the Aleutian Housing Authority, hereinafter referred to as AHA, entered into an agreement executed for the IHS on November 11, 1981; signed by the Village on May 5, 1981, and signed by the AHA on October 19, 1981, providing for the contruction of water supply and waste disposal facilities for the Native residents of Atka, and

WHEREAS, under Paragraph 14 of the original Memorandum of Agreement (MOA), the IHS agreed to contribute a total of $571,000 for construction of the sanitation facilities to serve the AHA's new houses, and

WHEREAS, under Paragraph 20 of the original MOA, the AHA agreed to contribute $145,000 to the IHS for construction of on-site facilities for the new houses, and

WHEREAS, in the original Project Summary, the IHS agreed to construct all the facilities to serve the new houses, and.

WHEREAS, The IHS and the AHA entered into a letter of understanding signed by the IHS on May 25, 1982, and signed by the AHA on June 3, 1982, altering the participation, obligations, and responsibilities of the parties in the project.

NOW THEREFORE, the MOA is hereby amended to reflect the changed participation, obligations, and responsibilities of the parties involved in the project. The parties mutually agree to the following changes:

IHS CONTRIBUTIONS AND OBLIGATIONS:

IHS CONTRIBUTIONS AND OBLIGATIONS

1. That the IHS will contribute materials, delivered to the job site, valued at $55,649, which were originally intended for construction of the IHS portion of the on-site facilities for the new houses, to the AHA.

2. That the IHS will contribute $3,351 to the AHA for inspection services for the on-site and off-site sanitation facilities constructed by the AHA.

AHA CONTRIBUTIONS AND OBLIGATIONS:

AHA CONTRIBUTIONS AND OBLIGATIONS

3. That the AHA shall assume full responsibility and liability for the construction of the on-site water and sewer facilities to serve its new houses. Since the AHA is assuming responsibility for the construction of these facilities, it will not be required to contribute $145,000 to the IHS.

4. That the AHA will also assume responsibility for the construction of a portion of the off-site facilities to serve the new houses. The general scope of the off-site work to be done by the AHA contractor will include installation of the primary treatment facilities and wastewater disposal line from the housing site to the existing ocean outfall line, and the tie-in of the wastewater disposal line to the ocean outfall line. The major items to be installed by the AHA contractor include, but are not limited to, the following:

A. One each, 4,000 gallon septic tank,
B. One each, 2,000 gallon septic tank,
C. One each, dosing siphon,
D. 400 linear feet of 6-inch PE gravity flow wastewater disposal line.

Normally, all off-site work is performed by the IHS, however, the AHA's contractor can more efficiently perform this work in connection with its work on the new houses.

5. That the AHA will assume the responsibility for inspection of the on-site and off-site sanitation facilities constructed by the AHA.

GENERAL PROVISIONS:

GENERAL PROVISIONS

5. All other sections of the original agreement, as amended, shall remain in effect as agreed upon and executed.

6. In the case of any conflict between the intent and meaning of similar paragraphs contained in the orginal MOA and this amendment, the intent and meaning of the amendment shall control the first.

IN WITNESS WHEREOF, the parties have subscribed their names.

FOR THE VILLAGE OF ATKA, ALASKA

October 8, 1982
Date

President, Village Council of Atka, Alaska, having been duly authorized by the City Council to enter into this agreement on behalf of the Village of Atka as evidenced by the attached resolution made by the Village Council of Atka, Alaska

FOR THE ALEUTIAN HOUSING AUTHORITY

3/18/83
Date

Executive Director
Aleutian Housing Authority

RECOMMENDED APPROVAL

4/1/83
Date

Richard D. Frost, Chief
Area General Services Branch

FOR THE INDIAN HEALTH SERVICE

4/7/83
Date

G. H. Ivey, Director
Alaska Area Native Health Service
Public Health Service, Department of Health and Human Services