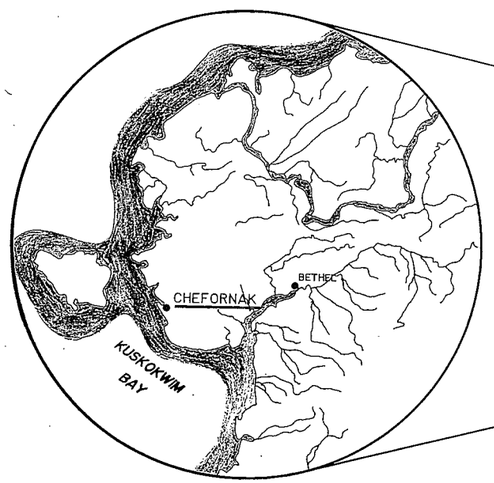
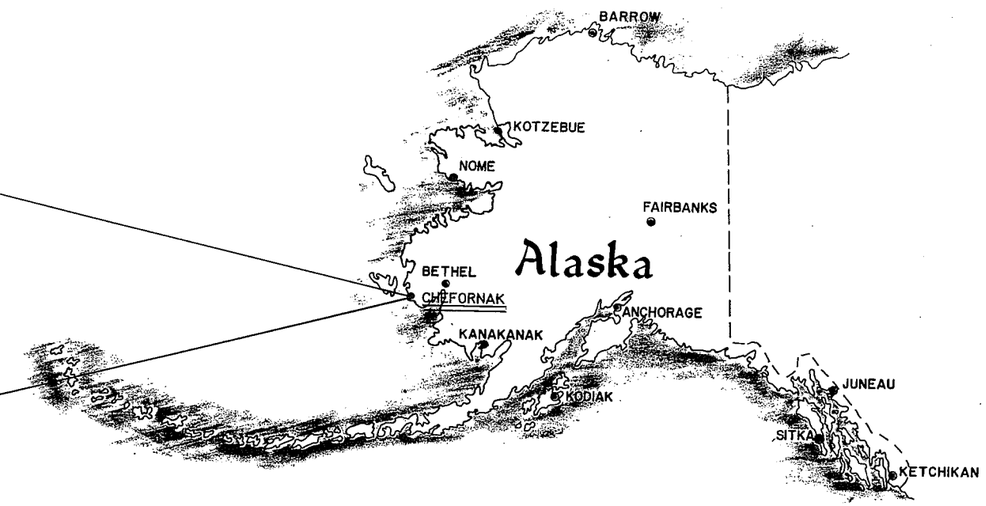
CONSTRUCTION PLANS

SANITATION FACILITIES
CHEFORNAK, ALASKA





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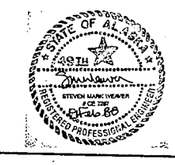
ALASKA AREA NATIVE HEALTH SERVICE
ENVIRONMENTAL HEALTH BRANCH
701 C STREET BOX 65
ANCHORAGE, ALASKA 99513

PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-86-339
(IMPROVEMENTS TO PROJECT AN-82-339)

U. S. DEPT. OF HEALTH & HUMAN SERVICES
PUBLIC HEALTH SERVICE
INDIAN HEALTH SERVICE



☆ U.S. GOVERNMENT PRINTING OFFICE: 1977—757-767

LEGEND AND GENERAL NOTES

SITE PLAN

EXISTING		PROPOSED THIS PROJECT
	STRUCTURES	
	ROADS (PAVED)	
	ROADS (UNPAVED)	
—P—	POWER LINE	—P—
	R.O.W. & PROPERTY LINE	
—C—	COMMUNICATIONS LINE	—C—
CO S	CLEANOUT	CO S
—S—	SEWER LINE	—S—
—W—	WATER LINE	—W—
—FM—	FORCE MAIN	—FM—
FH	FIRE HYDRANT, IN-LINE	FH
FH	FIRE HYDRANT, OFFSET	FH
MH	MANHOLE	MH
	VALVE	
—POL—	POL LINE (FUEL OIL)	—POL—
	LIFT STATION W/BUILDING	
	WELL	
—x—x—	FENCE	—x—x—
—U—	UTILIDOR	—U—
—R—	RACEWAY	—R—
	RAILROAD	
	BENCHMARK	
	TEST HOLE	
EL.	ELEVATION	
ST	SEPTIC TANK	ST
LF	LEACHFIELD	LF
—W—	CORPORATION STOP	—W—
BC	BRASS CAP	
—W—	WATERING POINT	—W—
PP	POWER POLE	PP
CS —W—	CURB STOP	CS —W—

MECHANICAL

	PRIMARY SYSTEM
—HW—	HOT WATER LINES
—HWR—	HOT WATER RETURN LINES
—D—	DRAIN & OVERFLOW LINE
—CWM—	COLD WATER MAKE-UP LINE
—BP—	BY-PASS LINE
—BW—	BACK WASH LINE
—CW—	COLD WATER LINES
LWC	LOW WATER CUT-OFF
CP	CHEMICAL PUMP
C	CIRCULATING PUMP
M	WATER METER
	GATE VALVE
	CHECK VALVE
	UNION
DE	DIELECTRIC UNION
	AUTOMATIC AIR RELIEF
	PRESSURE RELIEF VALVE
	ADAPTOR
	FLEX PIPE
	FLEX COUPLING
A	AQUASTAT
FS	FLOW SWITCH
PS	PRESSURE SWITCH
T	THERMOMETER
	PRESSURE REDUCING VALVE
P	PRESSURE GAUGE
	FLOW INDICATOR
	THERMOFLO INDICATOR
?	CIRCUIT SETTER
	DIRECTION OF FLOW
V	VACUUM BREAKER
LI	TANK LEVEL INDICATOR

PIPE FITTING & VALVE SYMBOLS

	ANGLE VALVE
	CAP
	CROSS
	ELBOW (ELL), 45°
	ELBOW, 90°
	LATERAL
	TEE
	STRAINER
DE	DIELECTRIC FLANGE PKG.
	FLANGE JOINT
	SCREWED JOINT
	WELDED JOINT
	SOLDERED JOINT
	SLEEVE
	DRESSER COUPLING
	EXPANSION JOINT
	REDUCER, CONCENTRIC
	REDUCER, ECCENTRIC
HB	HOSE BIBB W/ BACKFLOW PREVENTER.
	MINITROL
	90° LONG RADIUS ELBOW
	VICTAULIC COUPLING
V	VACUUM BREAKER
	FLOOR DRAIN
	BALL VALVE
	CHECK BALL VALVE
S	SOLENOID VALVE
M	MOTORIZED VALVE
M	MOTORIZED 3-WAY VALVE
	GLOBE VALVE
	BALANCING VALVE
2-WAY	AUTO. TEMP. CONTROL VALVE
3-WAY	AUTO. TEMP. CONTROL VALVE
	QUICK OPENING VALVE
	FUSIBLE VALVE
	BUTTERFLY VALVE
FC 3gpm	FLOW CONTROL VALVE
3gpm	PLUG VALVE
ELL.	ELBOW

ELECTRICAL

	CONDUIT, SURFACE MOUNTED
	CONDUIT, BURIED OR IN-SLAB
	HOMERUN TO CIRCUIT BREAKER PANEL
	CONDUIT W/No. OF WIRES INDICATED, ONE NEUTRAL, TWO HOT, AWG 12, CU
	INCANDESCENT FIXTURE
	INCANDESCENT FIXTURE, WALL MOUNTED
	FLUORESCENT FIXTURE
V	VAPOR TIGHT LIGHT FIXTURE
	HIGH PRESSURE SODIUM LIGHT FIXTURE
	INCANDESCENT FIXTURE, RECESSED
	FLUORESCENT FIXTURE, RECESSED
	DUPLEX RECEPTACLES
	QUADRAPLEX RECEPTACLES
	SPECIAL PURPOSE RECEPTACLES
S	SINGLE POLE SWITCH
S_3	3-WAY SWITCH
J	JUNCTION BOX
T	THERMOSTAT
T	TRANSFORMER
A	AQUASTAT
PC	PHOTO CELL
R	RELAY
M	MOTOR OPERATED VALVE (ZONE VALVE)
S	SOLENOID VALVE
	CONTROLLER
	MOTOR STARTER, MANUAL
	MOTOR STARTER, MAGNETIC
	SWITCHING PANEL
	CIRCUIT BREAKER PANEL
	ALARM PANEL
H	HEAT DETECTOR
S	SMOKE DETECTOR
B	BELL
	ALARM HORN
M	METER BASE
2	MOTOR W/HORSEPOWER INDICATED
FLS	FLOAT SWITCH
PS	PRESSURE SWITCH
FS	FLOW SWITCH
UH	UNIT HEATER
	EMERGENCY LIGHT
	EXIT LIGHT
T	SYSTEM GROUND
	THERMOSTAT
S_{PB}	SWITCHED RECEPTACLE
	PUSH-BUTTON SWITCH
F	FAN
P.C.	FIXTURE W/PULL CHAIN
S_T	SWITCH W/TIMER
	TELEPHONE OUTLET
CU	COPPER

NOTES

CIVIL

1. MINIMUM VERTICAL SEPARATION BETWEEN WATER LINE & SEWER LINE AT THE CROSSING POINT SHALL BE 18".
2. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER LINE & SEWER LINE SHALL BE 10.0'.
3. MINIMUM BURY ON WATER LINE SHALL BE
4. LOCATION OF ALL WELLS, SEPTIC TANKS, MANHOLES, CLEANOUTS, VALVES, ETC. SHALL BE REFERENCED TO THREE PERMANENT ABOVE GROUND STRUCTURES.
5. CLEANOUTS, LEACHFIELDS AND SEPTIC TANKS ARE NUMBERED ACCORDING TO CORRESPONDING MANHOLE, i.e., MH-1, ST-1A, LF-1A AND CO-1A.

MECHANICAL

1. ALL EXPOSED PIPING SHALL BE PAINTED USING THE FOLLOWING COLOR CODE:
   - GREEN - RAW WATER
   - BLUE - POTABLE WATER
   - BLACK - HEATING
   - RED - FIRE
   - BROWN - SEWAGE
   - GRAY - COMPRESSED AIR
   - ORANGE - FUEL
   - YELLOW - WASTE HEAT RECOVERY
2. TYPE OF PAINT TO BE USED SHALL BE GARLOCK OR APPROVED EQUAL.
3. DIRECTION OF FLOW SHALL BE INDICATED BY ARROWS AND A NAME PLATE SHALL BE ATTACHED DESCRIBING MATERIAL BEING CARRIED.
4. ALL PIPING SHALL BE COPPER UNLESS OTHERWISE INDICATED.
5. ALL SOLDER CONNECTIONS SHALL BE MADE W/TIN-ANTIMONY 95-5 SOLDER.
6. ALL HOT WATER LINES SHALL BE INSULATED.
7. ALL PIPE SUPPORTS AND HANGERS SHALL HAVE 1/2" INSULATION BETWEEN COPPER PIPE AND SUPPORTS OR HANGERS.

ELECTRICAL

1. CLEAR AREA REQUIRED FOR ELECTRICAL PANELS:
   - 36" FROM FACE OF PANEL
   - 75" FROM FLOOR UP TO FIRST OBSTRUCTION
   - 15" CLEAR EACH SIDE FROM CENTER LINE OF PANEL
2. GROUND SYSTEM NEUTRAL AND ALL METALLIC SURFACES PER 1984 NATIONAL ELECTRICAL CODE (N.E.C.).
3. ALL WIRING SHALL BE IN CONDUIT.

DATE	REVISIONS	INITIALS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

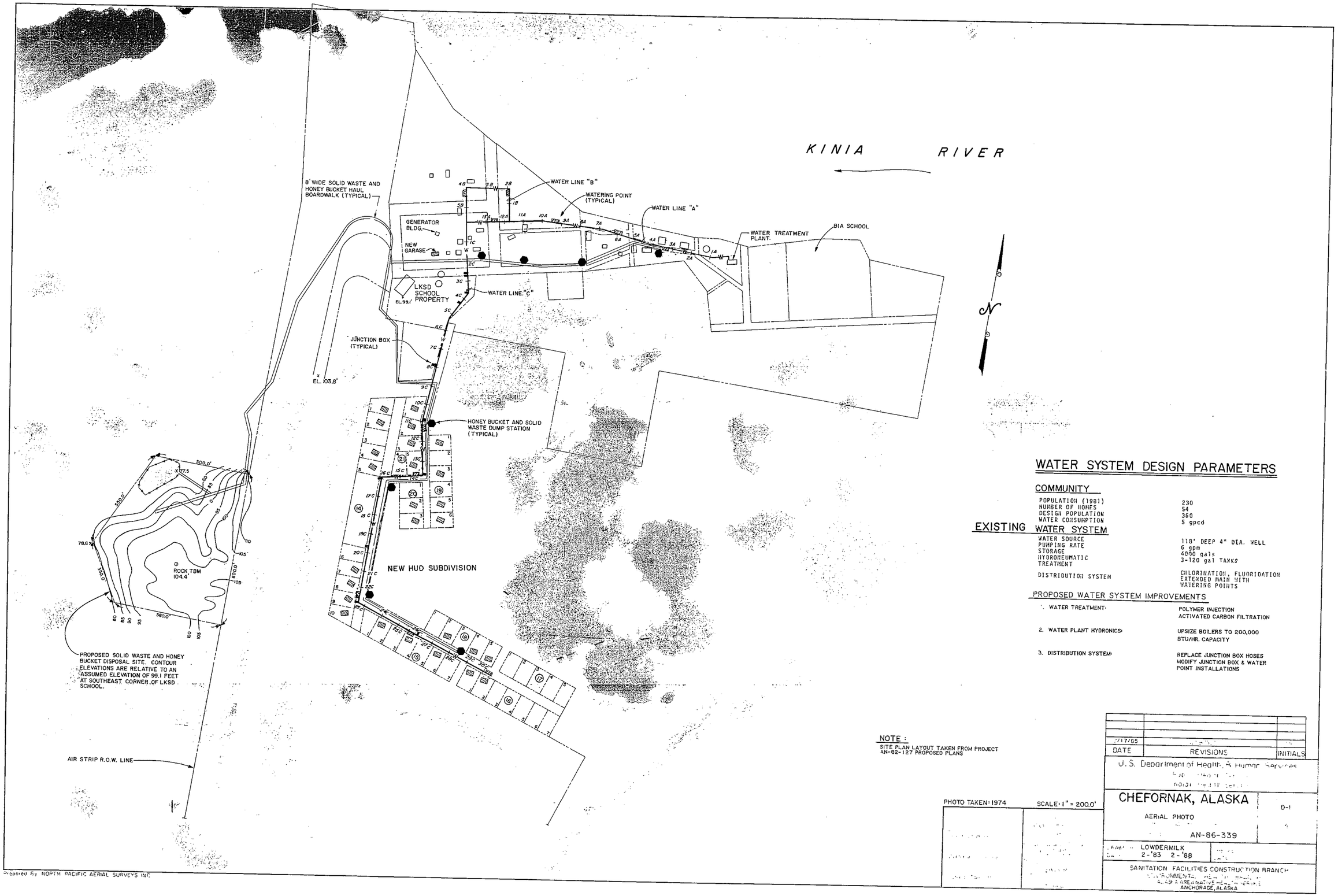
LEGEND & NOTES
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-86-339

SHEET NO. L-1 OF 1 TOTAL SHEETS

DRAWN BY: LOWDERMILK
DATE: 9/82 2/88
CHECKED BY:
DATE:

Design Engineer
Maintenance Review
Material Take-off

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA



WATER SYSTEM DESIGN PARAMETERS

COMMUNITY

POPULATION (1981)	230
NUMBER OF HOMES	54
DESIGN POPULATION	350
WATER CONSUMPTION	5 gpcd

EXISTING WATER SYSTEM

WATER SOURCE	118' DEEP 4" DIA. WELL
PUMPING RATE	6 gpm
STORAGE	4000 gals
HYDRONEUMATIC	3-120 gal TANKS
TREATMENT	CHLORINATION, FLUORIDATION
DISTRIBUTION SYSTEM	EXTENDED MAIN WITH WATERING POINTS

PROPOSED WATER SYSTEM IMPROVEMENTS

1. WATER TREATMENT:	POLYMER INJECTION ACTIVATED CARBON FILTRATION
2. WATER PLANT HYDRONICS:	UPSIZE BOILERS TO 200,000 BTU/HR. CAPACITY
3. DISTRIBUTION SYSTEM:	REPLACE JUNCTION BOX HOSES MODIFY JUNCTION BOX & WATER POINT INSTALLATIONS

NOTE:
SITE PLAN LAYOUT TAKEN FROM PROJECT AN-82-127 PROPOSED PLANS

PHOTO TAKEN: 1974 SCALE: 1" = 200.0'

DATE	REVISIONS	INITIALS
2/17/05	[illegible]	[illegible]

U.S. Department of Health & Human Services
[illegible]

CHEFORNAK, ALASKA

AERIAL PHOTO

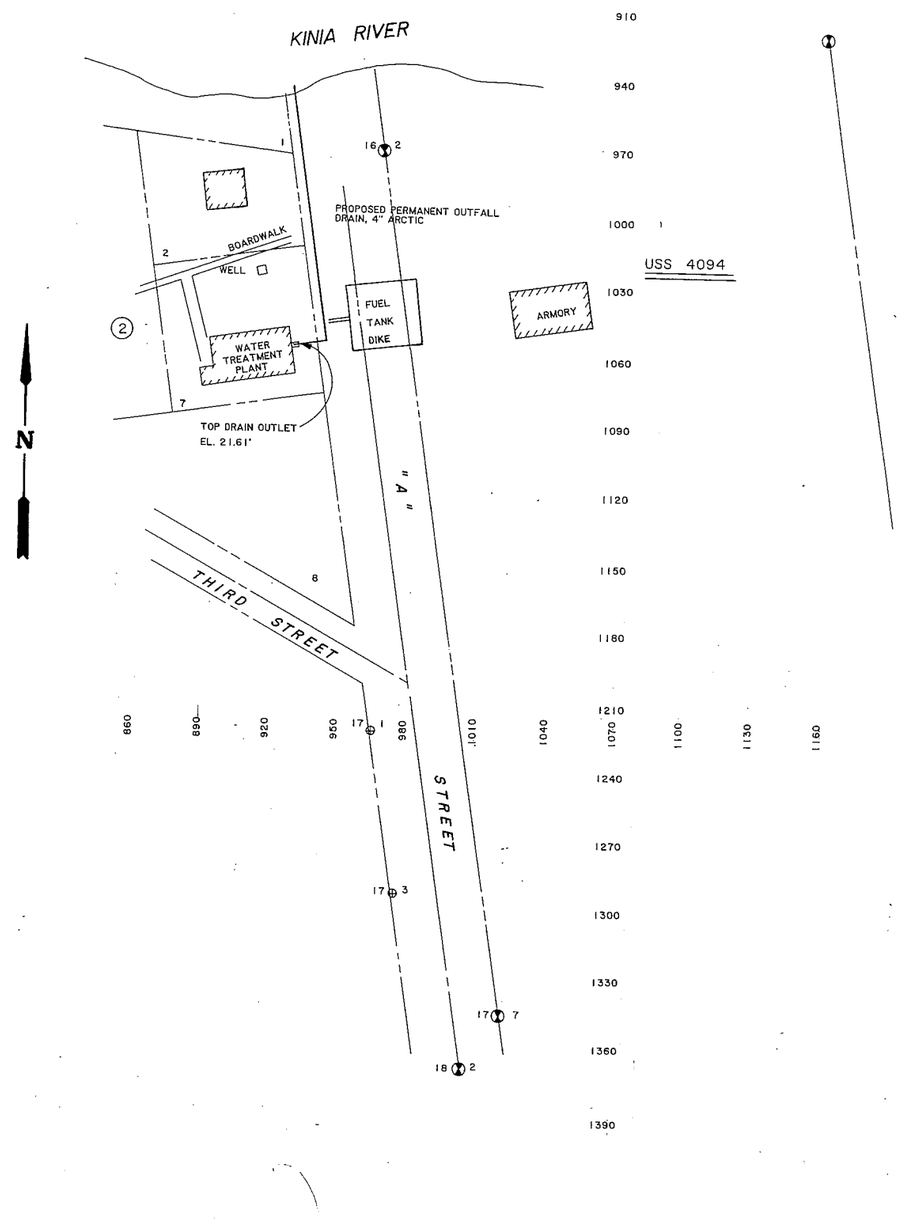
D-1

AN-86-339

DRAWN: LOWDERMILK
DATE: 2-'83 2-'88

SANITATION FACILITIES CONSTRUCTION BRANCH
[illegible]
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

Prepared By NORTH PACIFIC AERIAL SURVEYS INC.



NOTES:

1. DETERMINE OUTFALL LOCATION IN THE FIELD ENSURING ALL FACILITIES ARE WITHIN EXISTING PUBLIC EASEMENTS.
2. INSTALL ARCTIC 90° ON END OF OUTFALL LINE.
3. PROVIDE 2.5 WATT/foot a 120 VOLT TEFZEL (BLUE) HEAT TRACE. INSTALL ON TIMER RELAY TO REQUIRE HAND RESET OF HEAT TAPE AFTER TWO HOURS OF OPERATION.
4. WATER TREATMENT PLANT & FUEL DIKE LOCATION FROM SURVEY 7-18-1986 BY STAN BROWN.

SCALE: 1" = 30.0'

DATE	REVISIONS	INITIALS

U. S. Department of Health & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

WTP AND FUEL DIKE LOCATION
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-86-339

SHEET NO. D-4 OF 4 TOTAL SHEETS

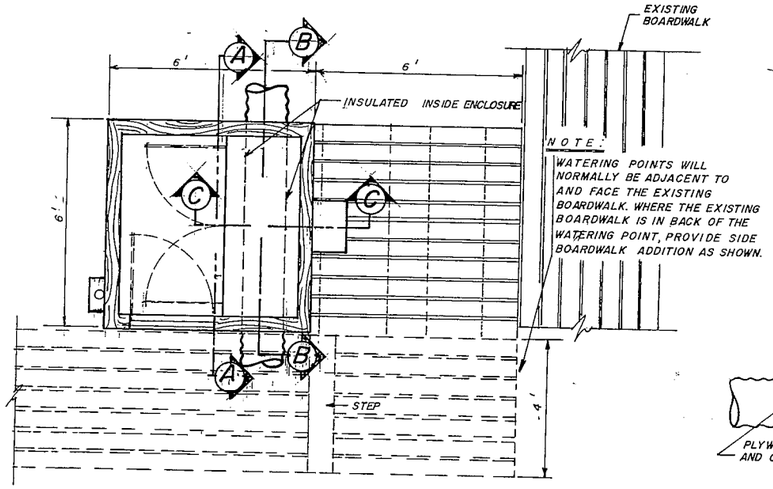
DRAWN BY: JSP LOWDERMILK
DATE: JULY, '86 2-'88
CHECKED BY:
DATE:

Design Engineer
Maintenance Review
Material Take-off

STATE OF ALASKA 49TH STEVEN MARK WEBER JOE FOR 4 FEB 88 REGISTERED PROFESSIONAL ENGINEER

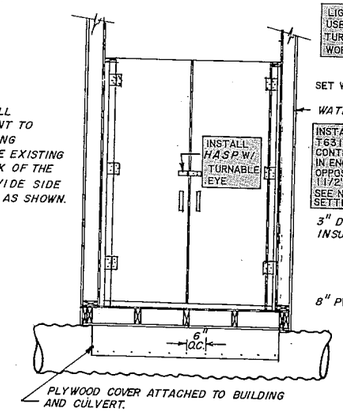
SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978 746-116

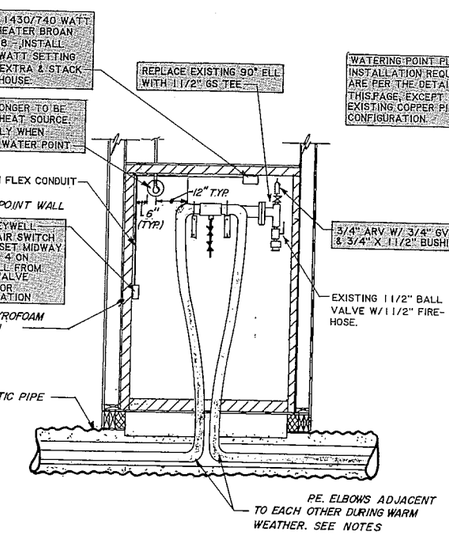


NOTE:
WATERING POINTS WILL NORMALLY BE ADJACENT TO AND FACE THE EXISTING BOARDWALK. WHERE THE EXISTING BOARDWALK IS IN BACK OF THE WATERING POINT, PROVIDE SIDE BOARDWALK ADDITION AS SHOWN.

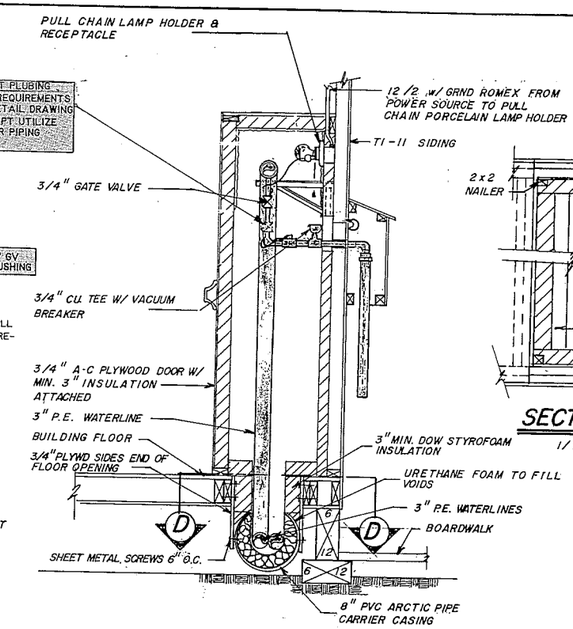
PLAN VIEW
1/2" = 1'-0"



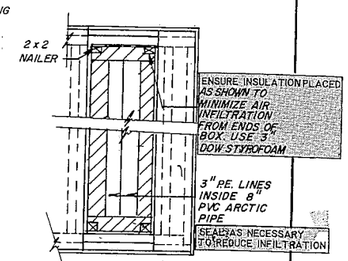
SECTION A-A
1/2" = 1'-0"



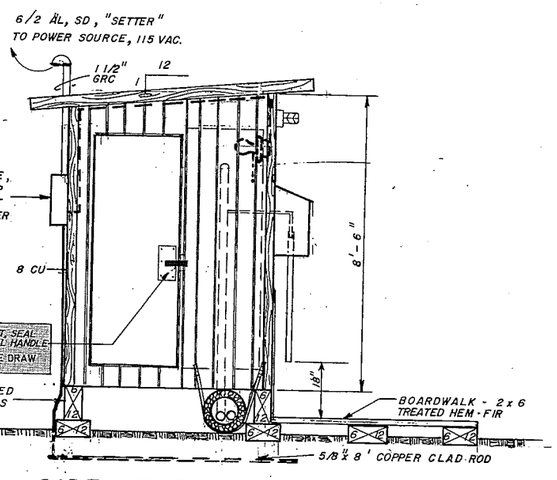
SECTION B-B
1/2" = 1'-0"



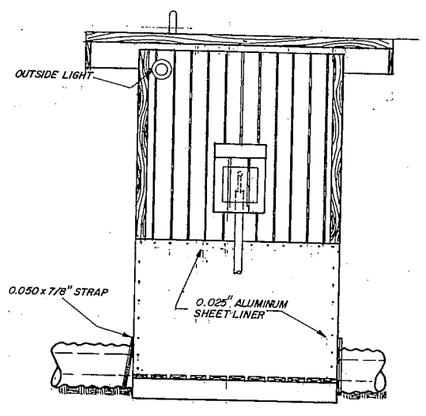
SECTION C-C



SECTION D-D
1/2" = 1'-0"



SIDE ELEVATION
1/2" = 1'-0"



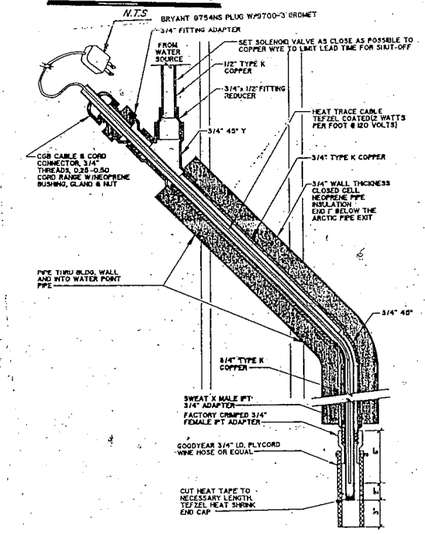
FRONT ELEVATION
1/2" = 1'-0"

FINISH BUILDING WITH APPURTENANCES

JUNCTION BOX HOSES

HOSE LENGTHS

BOX	ORIGINAL DESIGN	INSTALLED	CONNECTION
A	7'	22'	FLANGED
	12'	22'	FLANGED
B	6'	10'	VICTAULIC
	10'	10'	VICTAULIC
C	7'	8'	
	SPOOL	11'	
D	10'	9'-6"	
E	5'	4'-10"	
F	7'	6'-6"	
	SPOOL	6'-6"	
G,H	14'-5"	14'-5"	
	14'-5"	14'-5"	
I	7'	11'-6"	
	12'-6"	11'-6"	
J	11'	11'	
	12'	12'	
K	13'	13'	
	13'	13'	
L	12'	12'	
	12'-6"	12'-6"	
M	13'	13'	
	13'	13'	



WATERING POINT HEAT TAPE INSTALLATION DETAIL
SCALE: 1/2" = 1'

NOTES:

1. ALL WALL & CEILING FRAMING TO BE 2" X 4" CONSTRUCTION.
2. P.E. LINES WILL EXPAND & CONTRACT WITH TEMPERATURE CHANGE. IF LINE IS INSTALLED DURING WARM WEATHER LOWER ELLS. IN SECTION B-B SHOULD BE PLACED TOGETHER. CONSULT DESIGN ENGINEER FOR ELL PLACEMENT IF WORK IS DONE DURING COLD WEATHER.
3. 1 EXISTING WATERING POINTS ARE LOCATED AS SHOWN ON SHEETS D-2 & 3.
4. SET ELECTRIC HEATER THERMOSTAT AT 35°F. PRIMARY HEAT SOURCE FOR PUMPHOUSE IS RADIANT HEAT FROM CIRCULATING WATER LOOP PE PIPING. ELECTRIC HEAT IS ONLY A BACK UP HEAT SOURCE.
5. PROVIDE A SIGN IN EACH WATER POINT HOUSE UNDER ENCLOSURE ADJACENT TO THERMOSTAT (AIR SWITCH CONTROLLER) BACK UP HEAT SOURCE ONLY-SET THERMOSTAT AT 35°F FOR NORMAL OPERATION.

NOTE:
BASIC SHEET TAKEN FROM PROJECT AN-82-127 PROPOSED PLANS. ADDITIONS THIS PROJECT ARE HIGH LIGHTED.

DATE	REVISIONS	INITIALS

Design Engineer
Maintenance Review
Material Take-off

STATE OF ALASKA — 49TH — STEVEN MARK WEAVER — REGISTERED PROFESSIONAL ENGINEER

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA
MODIFICATIONS TO WATERING POINT DETAILS
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-86-339

SHEET NO. C-3 OF 3 TOTAL SHEETS

DRAWN BY: D.F./WKT/LOWDERMILK
DATE: 7-'82, 10-'87, 2-'88
CHECKED BY: JRD
DATE: 9/82

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

☆U.S. GOVERNMENT PRINTING OFFICE: 1978—796-319

SCOPE OF WORK

THE SCOPE OF WORK WILL INVOLVE INSTALLING WATER TREATMENT EQUIPMENT TO REMOVE COLOR, TASTE, AND ODOR FROM THE COMMUNITY WELL WATER. BECAUSE THE FILTERS WILL REQUIRE BACKWASHING, INSTALLATION OF A PORTABLE HOSE AND REEL WILL BE INSTALLED IN THE BUILDING. WHEN BACKWASHING THE FILTERS, THE HOSE WILL BE PULLED TO THE KINIA RIVER TO DISPOSE OF WASTEWATER.

PLUMBING CHANGES WILL INVOLVE:

1. ENLARGING THE EXISTING 1/2" Cu MAKE-UP WATER LINE FROM A TWO INCH TEE (WEST OF THE PRESSURE TANKS) TO A 1 1/2" Cu. LINE.
2. RELOCATING THE EXISTING 9-INCH FILTER CLOSER TO THE WELL PUMP.
3. INSTALLING TWO 16" DIAMETER X 65" HIGH CARBON FILTERS, PLUMBED AS SHOWN IN THE PIPING SCHEMATIC.
4. INSTALLING A POLY-BLEND FEED UNIT. WITH FLOW SWITCH CONTROL, WIRED THROUGH WELL PUMP MOTOR CONTROL.
5. RELOCATING THE EXISTING WATER METER.
6. REPLACING CHLORINATOR AND FLUORIDATOR AND THEIR FLOW SWITCHES. WIRING FLOW SWITCHES THROUGH WELL PUMP MOTOR CONTROL.
7. INSTALLING A HOSE REEL WITH APPROXIMATELY 150 FEET OF 1 INCH HOSE.
8. INSTALLING DIFFERENTIAL PRESSURE SWITCH ON CARBON FILTERS AND WIRE THROUGH WELL PUMP MOTOR CONTROL.
9. INSTALLING THE INTERIOR PIPING FOR A BACKWASH WATER OUTFALL DRAIN.

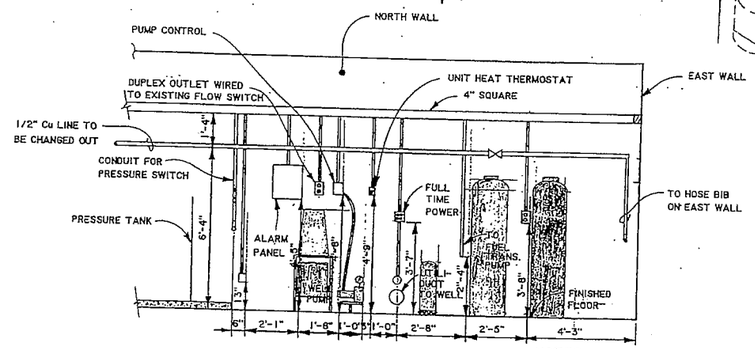
TO ENSURE ADEQUATE BACKWASH FLOWS, OPERATE BOTH SYSTEM PRESSURE PUMPS ON "HAND" MODE WHEN BACKWASHING CARBON FILTERS.

POLYMER MATERIAL: NALCO 8105 (NO SUBSTITUTE)
NALCO CHEMICAL CO., P.O. BOX 1915, KENAI, ALASKA 99611
PH. 283-3581

CARBON MATERIAL: CAMERON YAKIMA 12X40 MESH GAC
CAMERON YAKIMA INC., P.O. BOX 1554, 1414 1st. ST., YAKIMA, WA. 98907
PH. (509)-452-6605

Treats to primary standard, but no resident drinks treated water. Salt and taste problems.

CHEFORNAK PLANT as of 2009

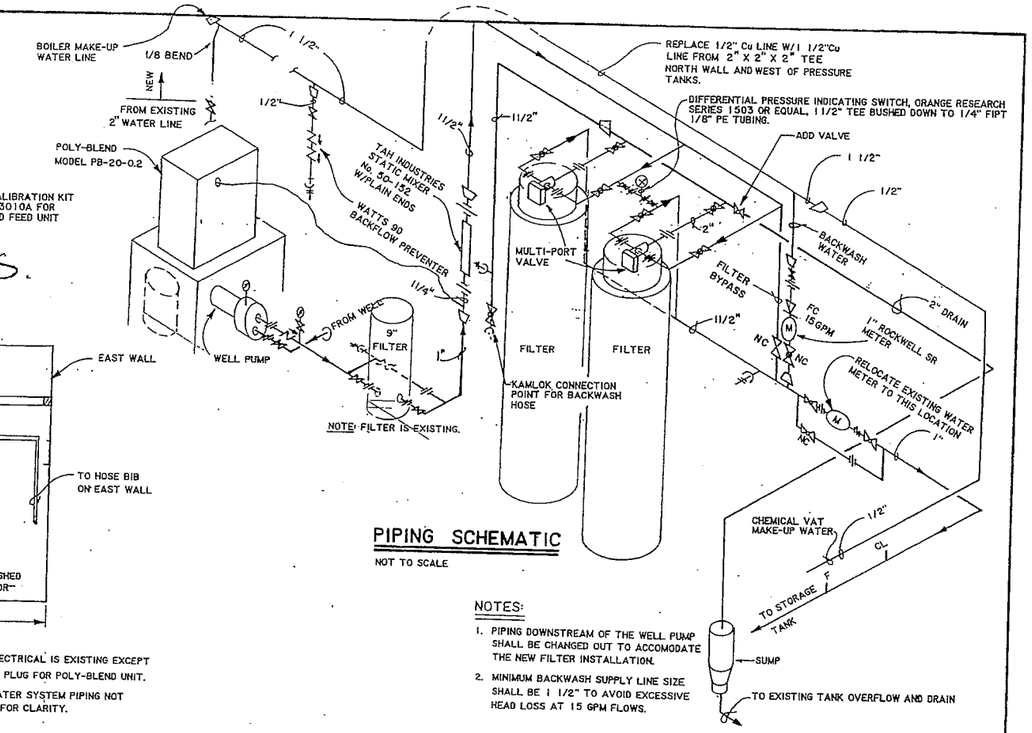


SECTION A - A

SCALE: 3/8" = 1'-0"

NOTES:

1. ALL ELECTRICAL IS EXISTING EXCEPT DUPLEX PLUG FOR POLY-BLEND UNIT.
2. NEW WATER SYSTEM PIPING NOT SHOWN FOR CLARITY.

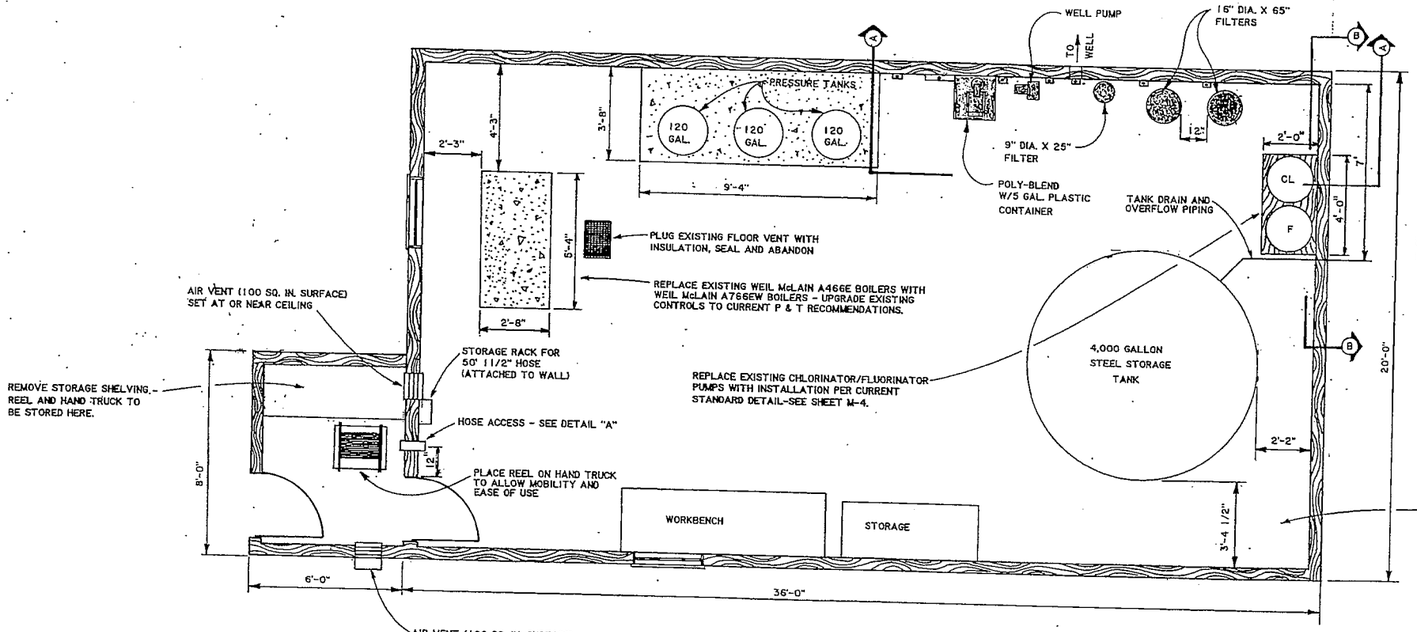


PIPING SCHEMATIC

NOT TO SCALE

NOTES:

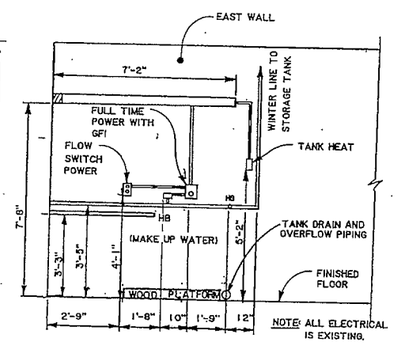
1. PIPING DOWNSTREAM OF THE WELL PUMP SHALL BE CHANGED OUT TO ACCOMODATE THE NEW FILTER INSTALLATION.
2. MINIMUM BACKWASH SUPPLY LINE SIZE SHALL BE 1 1/2" TO AVOID EXCESSIVE HEAD LOSS AT 15 GPM FLOWS.



MECHANICAL FLOOR PLAN

SCALE: 3/8" = 1'-0"

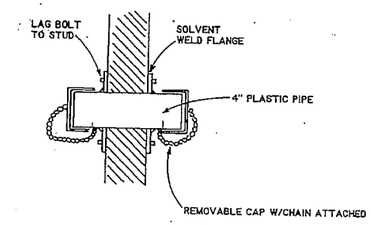
NOTE: REEL - HANNRAY MODEL No. 7534-23-24 WITH MODEL No. 4300 TRK OR EQUAL
HOSE - 50' OF 1 1/2" DIA. BOSTON CENTURION A/W (BLACK) OR EQUAL FOR USE IN BLDG.
150' OF 1" DIA. BOSTON CENTURION A/W (BLACK) OR EQUAL FOR PLACEMENT ON REEL.



SECTION B - B

SCALE: 3/8" = 1'-0"

NOTE: ALL ELECTRICAL IS EXISTING.



HOSE ACCESS PORT CROSS SECTION

DETAIL "A"

NOT TO SCALE

DATE	REVISIONS	INITIALS

U. S. Department of Health & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

MECHANICAL FLOOR PLAN & DETAILS
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-86-339

SHEET NO. M-1 OF 4 TOTAL SHEETS

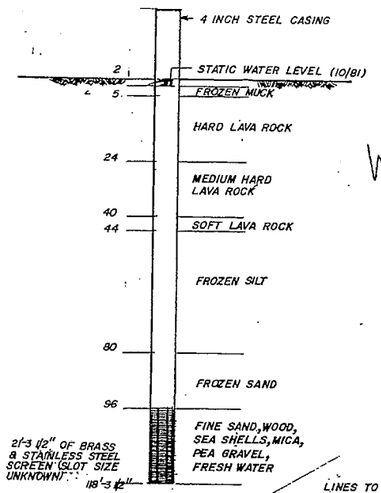
DRAWN BY: JSP WKTLOWDERMILK
DATE: NOVEMBER, 85 1-87 2-88
CHECKED BY:
DATE:

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

-Design Engineer
Maintenance Review
Material Take-off

STATE OF ALASKA 49TH STEVEN MARK WEAVER 1-5-88 REGISTERED PROFESSIONAL ENGINEER

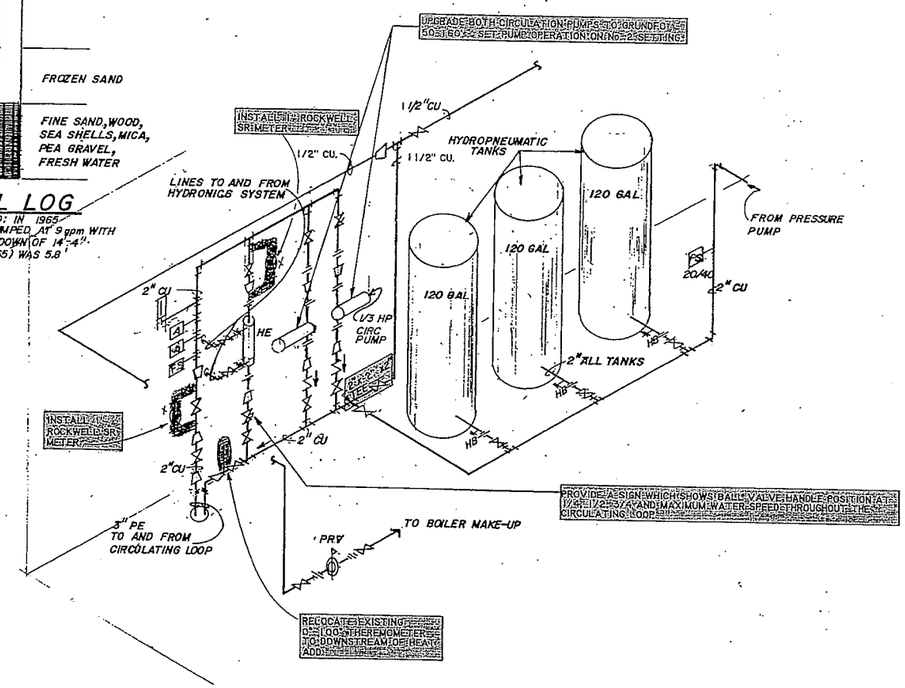
☆U.S.GOVERNMENT PRINTING OFFICE: 1978-705-219



Well now briny

WELL LOG

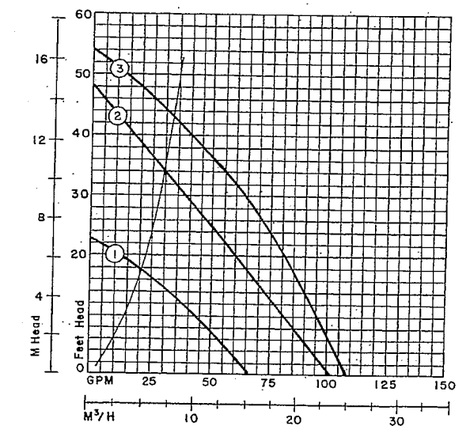
DRILLED: IN 1965
TEST PUMPED AT 9 gpm WITH A DRAWDOWN OF 14'-4".
SWL (1965) WAS 5.8'



PLUMBING ISOMETRIC

SYSTEM OPERATING INSTRUCTIONS

1. WHEN THE STORAGE TANK WATER LEVEL DROPS TO THE MIDDLE FLOAT, THE WELL PUMP STARTS, PUMPING WATER THRU THE WATER METER, CARBON FILTER, CHLORINE AND FLUORIDE INJECTORS AND INTO THE STORAGE TANK. THE WELL PUMP IS SHUT OFF WHEN THE STORAGE TANK WATER LEVEL REACHES THE UPPER FLOAT.
2. THE PRESSURE PUMPS ARE CONTROLLED BY A PRESSURE SWITCH WHICH STARTS THE PUMPS AT 20 psi AND STOPS THE PUMPS AT 40 psi.
3. THE WATER SYSTEM CIRCULATION PUMPS RUN CONTINUOUSLY AND SHOULD PROVIDE AN APPROXIMATE 25 gpm FLOW.
4. CIRCULATION FLOW IS DIVIDED BETWEEN THE HEAT EXCHANGER AND THE CIRCULATING LOOP WHICH ARE PIPED IN PARALLEL. FLOWS ARE TO BE INITIALLY SET AT 5.0 gpm & 2.5 gpm RESPECTIVELY.
5. WORST CASE LOOP HEAT REQUIREMENTS ON A 40°F DAY ARE ANTICIPATED TO BE 31,000 BTU/HR WITH A 70°F CIRCULATING LOOP OF 9.0 gpm. THE CIRCULATING AT 2.5 gpm IS 1 FT/SEC. 136 MIN.



SYSTEM PUMP CURVE

GRUNDFOS UPS 50-160 MODEL

NOTES:
PLUMBING ISOMETRICS AND WELL LOG WERE TAKEN FROM PROJECT JAN-8231 (2) PROPOSED PLANS & TRANSCRIBED. INSTALLED AS PART OF THIS PROJECT ARE HIGHLIGHTED

DATE	REVISIONS	INITIALS
2/9/84	AS BUILT	PCS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

PLUMBING ISOMETRIC & DETAILS

PUBLIC LAW 86-121 PROJECT

PROJECT NO. AN-86-339

SHEET NO. M-2 OF 4 TOTAL SHEETS

DRAWN BY: D.F / WKTLOWDERMILK DATE: JULY, 1982 / 10-872-88

CHECKED BY: JRD DATE: 9/82

Design Engineer

Maintenance Review

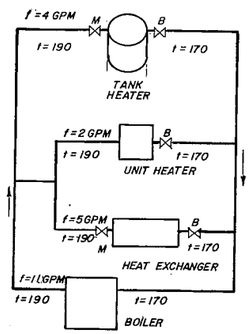
Material Take-off

STATE OF ALASKA — STEVEN LARS WISNER — 15 Feb 86 — REGISTERED PROFESSIONAL ENGINEER

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

U.S. GOVERNMENT PRINTING OFFICE: 1978-786-319

NOTE: FOR NORMAL OPERATION
TANK HEAT ADD SET AT 48°F
CIRCULATING LOOP HEAT ADD SET AT 45°F

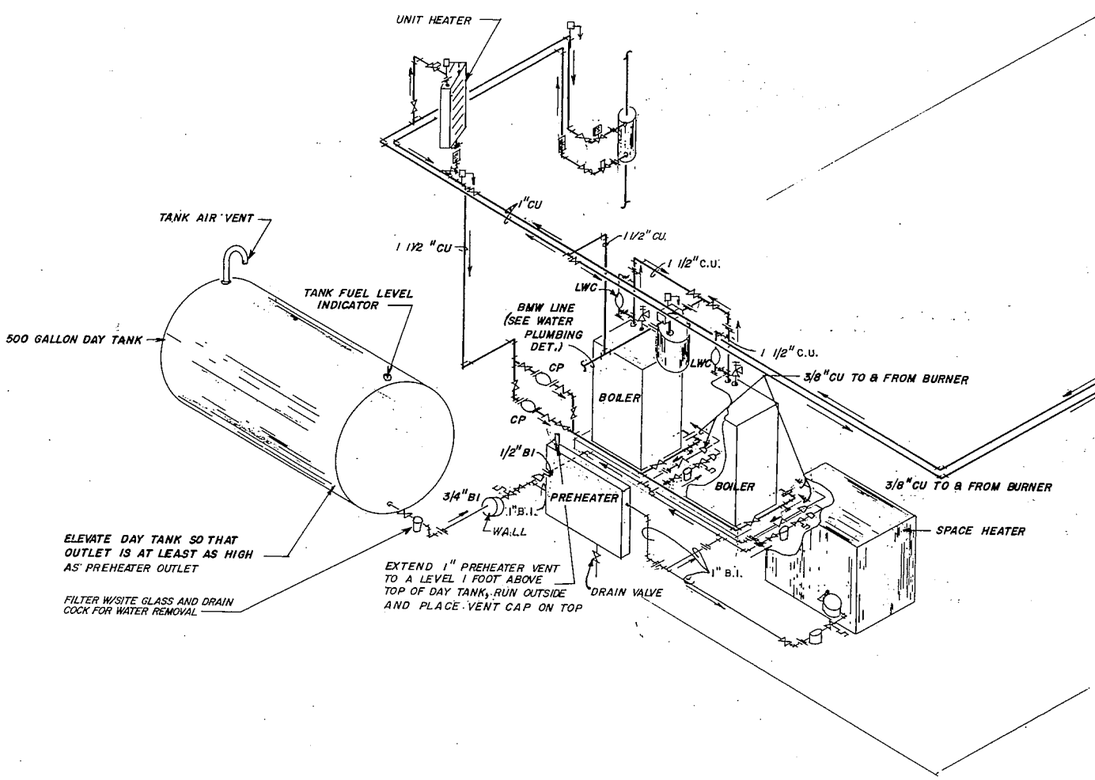


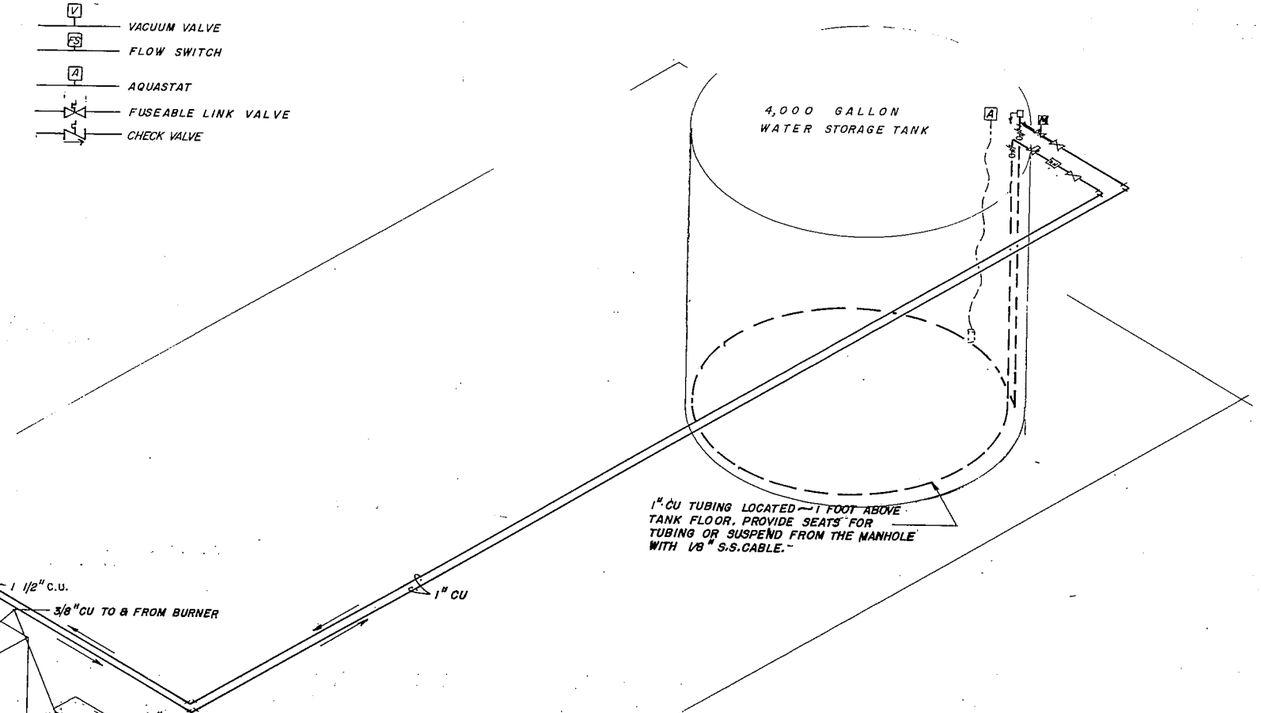
M - MOTORIZED VALVE
B - BALANCING VALVE

HYDRONICS FLOW & TEMPERATURE DIAGRAM

LEGEND

- BMW — BOILER MAKE-UP WATER
- GATE VALVE
- CHECK VALVE
- SOLENOID VALVE
- UNION
- HB — HOSE BIB
- PRESSURE RELIEF VALVE
- PRESSURE GAUGE
- PS — PRESSURE SWITCH
- THERMOMETER
- FLEX COUPLING
- M — WATER METER
- REDUCER
- V — VACUUM VALVE
- FS — FLOW SWITCH
- A — AQUASTAT
- FUSEABLE LINK VALVE
- CHECK VALVE
- M — MOTORIZED VALVE
- CP — CIRCULATING PUMP
- LWC — LOW WATER CUT OFF
- FLOW INDICATOR
- AUTOMATIC AIR RELIEF
- PRESSURE REDUCING VALVE





NOTES:

1. ALL EXPOSED PIPING SHALL BE PAINTED USING THE FOLLOWING COLOR CODE:
   - GREEN - RAW WATER
   - BLUE - POTABLE WATER
   - BLACK - HEATING
   - RED - FIRE
   - BROWN - SEWAGE
   - GRAY - COMPRESSED AIR
   - ORANGE - FUEL
2. TYPE OF PAINT TO BE USED SHALL BE GARLOCK OR APPROVED EQUAL.
3. DIRECTION OF FLOW SHALL BE INDICATED BY ARROWS AND A NAME PLATE SHALL BE ATTACHED DESCRIBING MATERIAL BEING CARRIED.
4. ALL PIPE SHALL BE COPPER UNLESS OTHERWISE INDICATED.
5. ALL SOLDER CONNECTIONS SHALL BE MADE WITH TIN-ANTIMONY 95-5 SOLDER

THIS SHEET TAKEN FROM PROJECT AN-82-127 PROPOSED PLANS. ALL ADDITIONS HIGH LIGHTED.

ISOMETRIC - HYDRONICS & FUEL SYSTEM

1/2 = 1'-0"

DATE	REVISIONS	INITIALS
2/9/82	AS BUILT	PCS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA
HYDRONICS & FUEL SYSTEM
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-86-339

SHEET NO. M-3 OF 4 TOTAL SHEETS

DRAWN BY: D. FLOWDERMILK
DATE: JULY 1982 2-'88
CHECKED BY: JFD
DATE: 9/82

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

Design Engineer
Maintenance Review
Material Take-off

STATE OF ALASKA 49TH STEVEN MARK WEAVER # CE 7387 19 Feb 82 REGISTERED PROFESSIONAL ENGINEER

☆U.S. GOVERNMENT PRINTING OFFICE: 1978-786-319

WATER SYSTEM

PUMPS

ITEM	QNTY	MAKE	MODEL	SERIAL//SERIES	SUC	DIS	IMP	OTHER

MOTORS

EQUIPMENT DRIVEN	QNTY	MAKE	MODEL	TYPE	SERIAL/ SERIES	HP	PH	VOLT	AMP	FRAME	RPM

TREATMENT EQUIPMENT

ITEM	QNTY	MAKE	SIZE	OTHER

CHEMICAL EQUIPMENT

EQUIPMENT	QNTY	MAKE	MODEL/SERIES	SERIAL No.	TYPE	OTHER
CHEMICAL PUMPS	3	L.M.I.	W101-151S	87050490		
				87050491		
				87050500		

WATER METERS

METER No.	MAKE	MODEL	TYPE	SIZE	OTHER

OTHER EQUIPMENT

ITEM	QNTY	MAKE	MODEL	SERIAL	OTHER

WASTE WATER SYSTEM

LIFT STATION

L.S. No.	MAKE	MODEL	SERIAL/SERIES	SIZE SUC	SIZE DIS	OTHER

WASTE WATER TREATMENT

MANUFACTURER	CAPACITY MOD	MODEL/TYPE	VOLT	PHASE	OTHER

PUMPS - BLOWERS

ITEM	QNTY	MAKE	MODEL	SERIAL/SERIES	SIZE SUC	SIZE DIS	IMP	OTHER

SEPTIC TANKS

SIZE	QNTY	TYPE	INLET	OUTLET	RISER	OTHER

OTHER EQUIPMENT OR TREATMENT

ITEM	INFORMATION

BOILER/HYDRONIC SYSTEM

BOILERS

BOILER No.	MANUFACTURER	MODEL/SERIES	NET BTU	SERIAL No.	OTHER

BOILER BURNERS

BOILER No. BURNER	MANUFACTURER	MODEL	SERIAL No.	OTHER

WASTE HEAT CONTROLS

ITEM	MAKE	SIZE	OTHER

HYDRONIC PUMPS

ITEM	MAKE	MODEL No.	SERIAL/SERIES	SIZE SUC	SIZE DIS	OTHER

HEAT EXCHANGERS

No.	MAKE	MODEL No.	SERIAL/SERIES	INLET	OUTLET	OTHER

BUILDING HEATERS

ITEM	MAKE	MODEL	SERIAL/SERIES	

FLOW REGISTRATION & MEASUREMENT

ITEM	QNTY	MAKE	SIZE	INFORMATION

HOT WATER GENERATOR

INFORMATION

WASHETERIA EQUIPMENT

EQUIPMENT	QNTY	MAKE	MODEL	OTHER
WASHERS				
DRYERS				
SHOWER VALVES				
WATER CLOSETS				

STANDBY GENERATOR

EQUIPMENT	MAKE	MODEL/TYPE	SERIAL No.	VOLT	PH	KW	FRAME	OTHER
GEN UNIT								
GENERATOR								
MOTOR								
EXCITER								

MISCELLANEOUS EQUIPMENT

ITEM	INFORMATION

Design Engineer

Maintenance Review

Material Take-off

DATE	REVISIONS	INITIALS

U. S. Department of Health & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

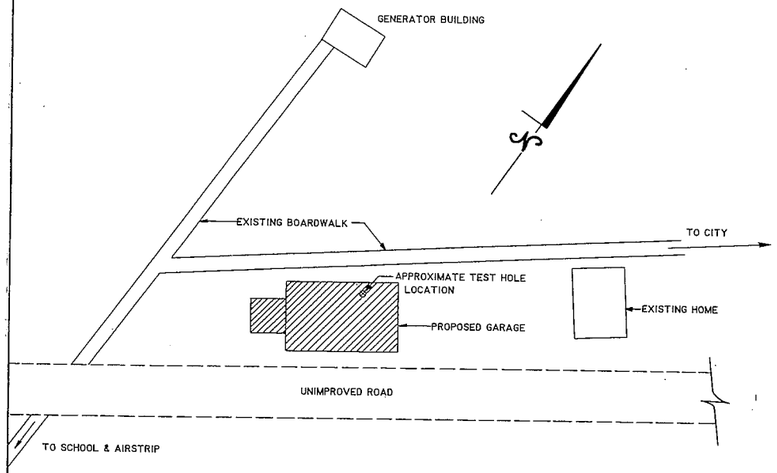
SPECIFICATION SHEET
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-86-339

SHEET NO. SP-1 OF 1 TOTAL SHEETS

DRAWN BY: WKT
DATE: 10-87
CHECKED BY:
DATE:

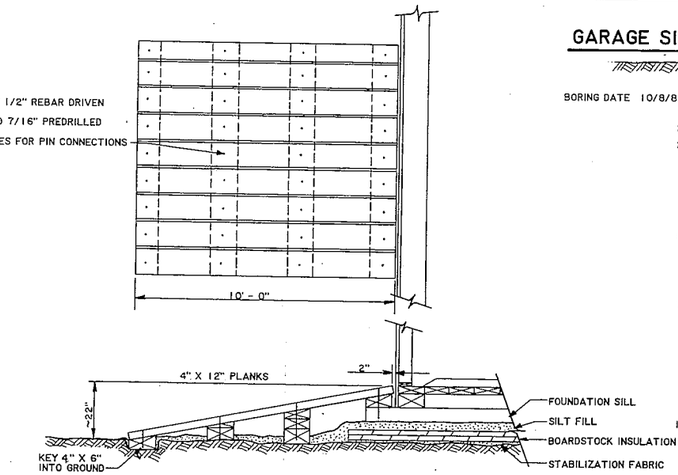
SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

O.P.S. GOVERNMENT PRINTING OFFICE 1974-756-319



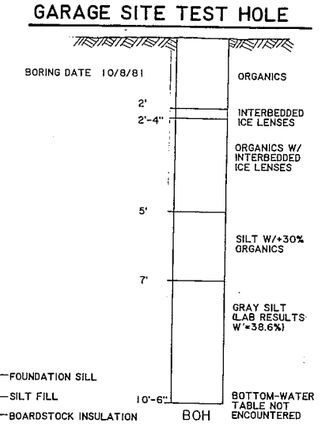
SITE PLAN

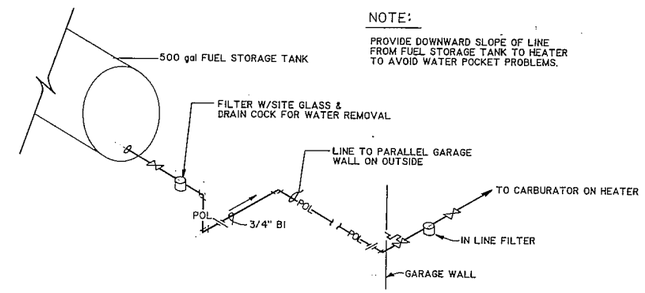
NOT TO SCALE



GARAGE ENTRANCE RAMP

SCALE: 3/8" = 1' 0"



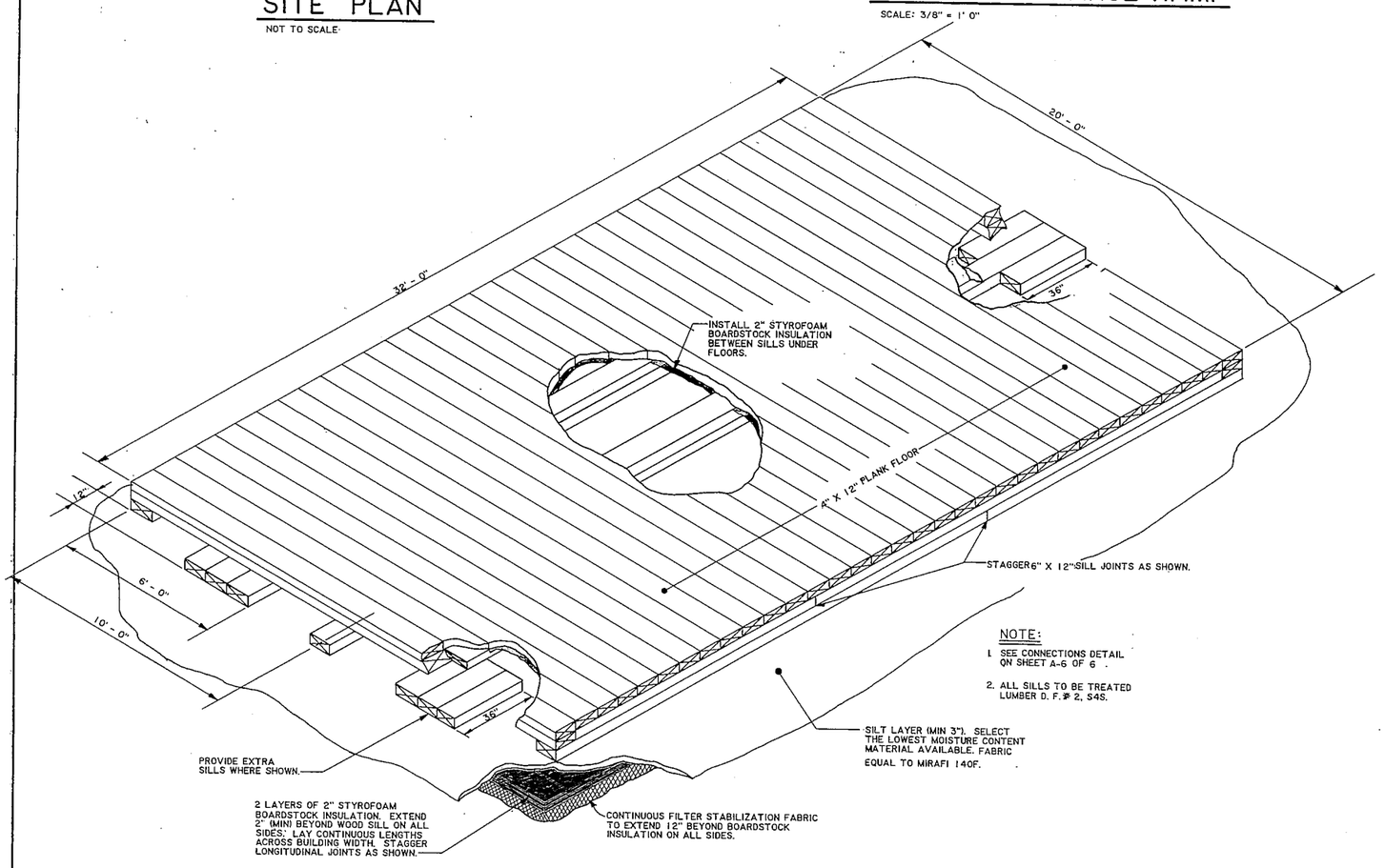


NOTE:

PROVIDE DOWNWARD SLOPE OF LINE FROM FUEL STORAGE TANK TO HEATER TO AVOID WATER POCKET PROBLEMS.

FUEL LINE FOR GARAGE HEATER

NOT TO SCALE

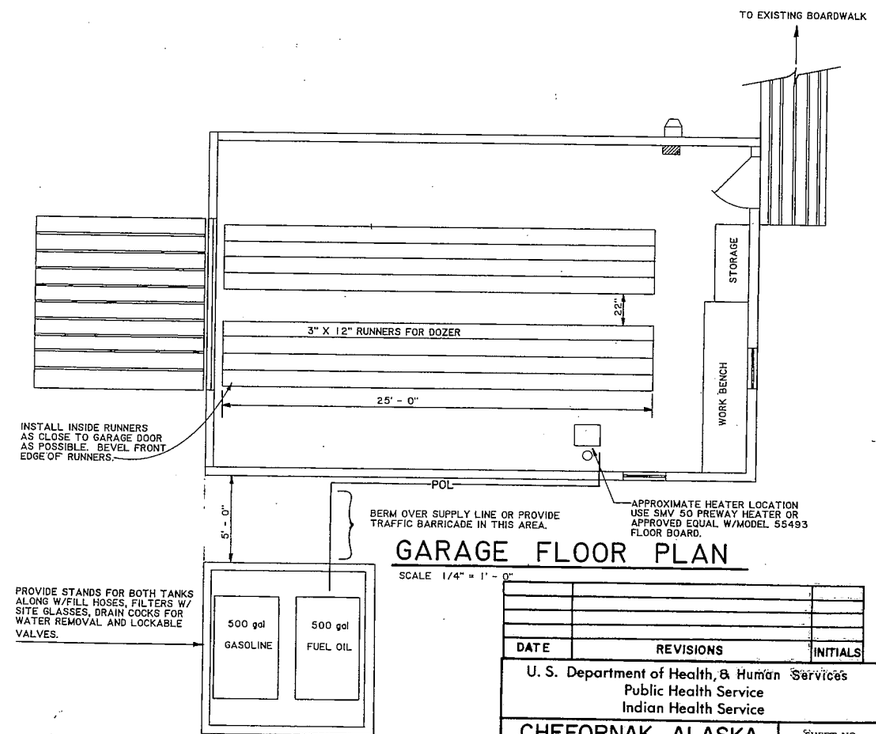


NOTE:

1. SEE CONNECTIONS DETAIL ON SHEET A-6 OF 6 .
2. ALL SILLS TO BE TREATED LUMBER D. F. #2, S4S.

FOUNDATION & FLOOR ISOMETRIC

NOT TO SCALE



GARAGE FLOOR PLAN

SCALE 1/4" = 1' - 0"

DATE	REVISIONS	INITIALS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

GARAGE
SITE & FOUNDATION PLAN
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-82-127

SHEET NO. A-8 OF 13 TOTAL SHEETS

DRAWN BY: LOWDERMILK
DATE: 3-'83
CHECKED BY:
DATE:

Reid W. Bond
Design Engineer

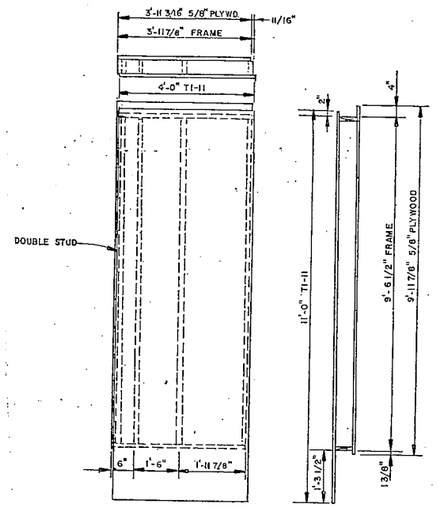
Maintenance Review

Material Take-off

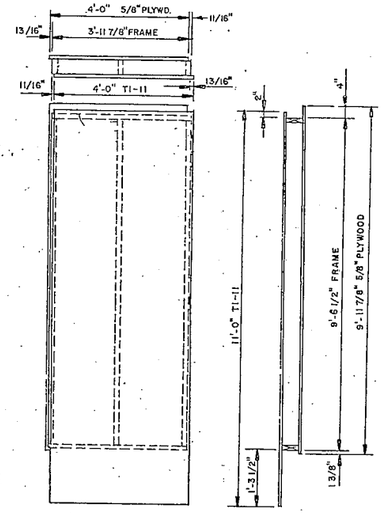
STATE OF ALASKA 49TH REID W. BOND CE-5415 Registered Professional Engineer

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

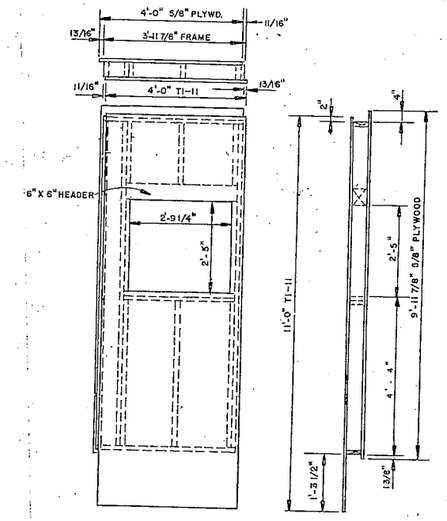
☆U.S. GOVERNMENT PRINTING OFFICE: 1978—786-318



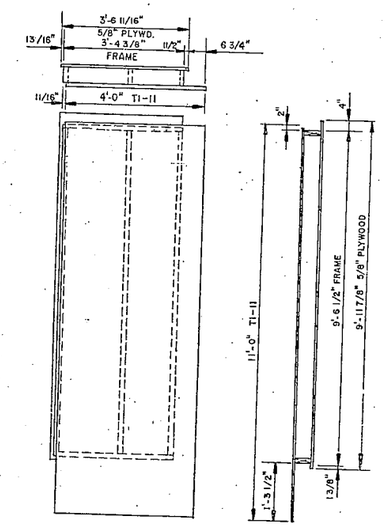
PANEL 1
2 REQUIRED



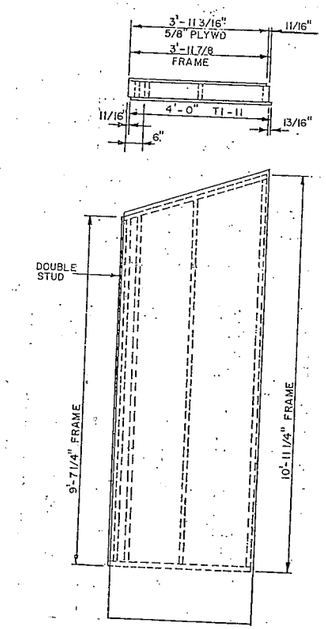
PANEL 2
11 REQUIRED



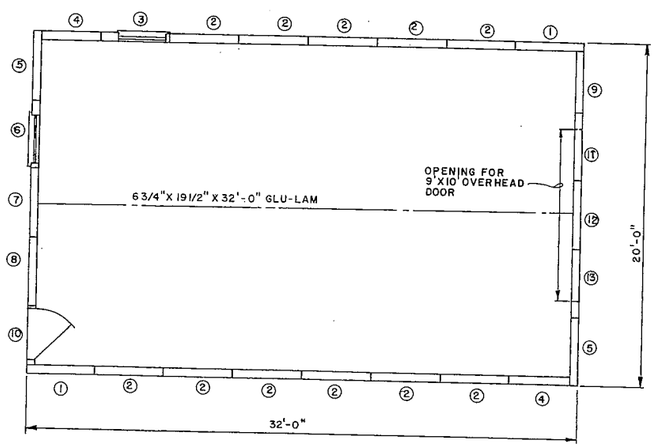
PANEL 3
1 REQUIRED



PANEL 4
2 REQUIRED



PANEL 5 - 2 REQ'D



WALL PANEL PLAN
SCALE 1/4"=1'-0"

NOTES

1. GLU-LAM'S, SUPPORT, DOOR, AND WINDOWS ARE NOT PART OF THIS CONTRACT.
2. HIDDEN (DASHED) LINES FOR PLYWD SKINS ON PANEL DETAIL DRAWING ARE OMITTED FOR CLARITY

DATE	REVISIONS	INITIALS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

GARAGE - WALL PANELS
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-82-127

SHEET NO. A-9 OF 13 TOTAL SHEETS

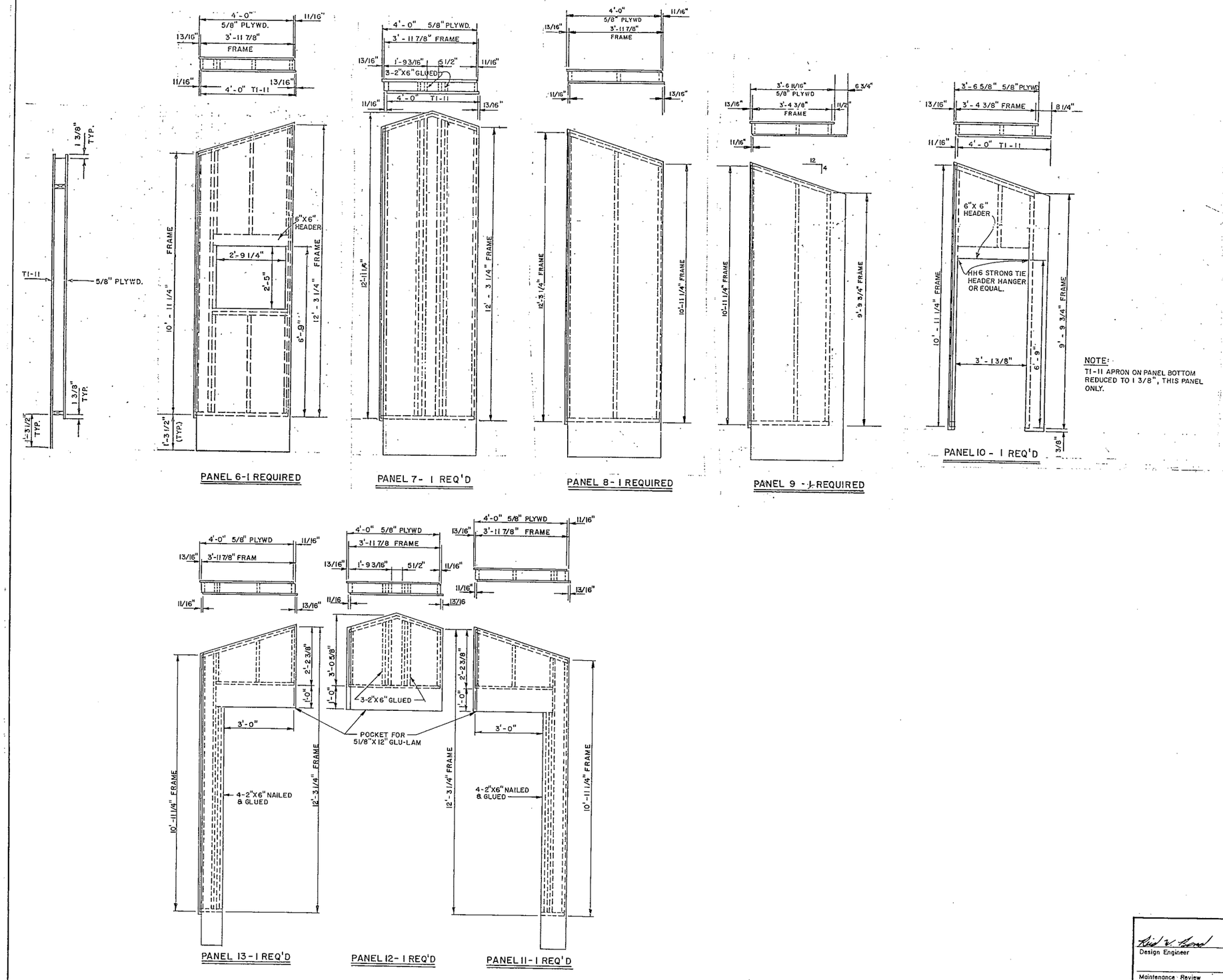
DRAWN BY: JAQ
DATE: NOV 82
CHECKED BY: AJT
DATE: 11-12-82

Design Engineer
Maintenance Review
Material Take-off

STATE OF ALASKA 49TH
REG. NO. 8 OHD CE-5415
Registered Professional Engineer

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

☆U.S. GOVERNMENT PRINTING OFFICE: 1975 - 747-



DATE	REVISIONS	INITIALS

U. S. Department of Health & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

GARAGE - WALL PANELS
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-82-127

SHEET NO. A-10 OF 13 TOTAL SHEETS

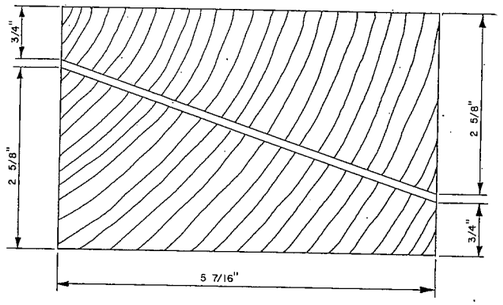
DRAWN BY: JAQ
DATE: NOV 82
CHECKED BY: [illegible]
DATE: 11-12-82

Design Engineer
Maintenance Review
Material Take-off

STATE OF ALASKA 49th
REID W. BOND
CE-5415
Registered Professional Engineer

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

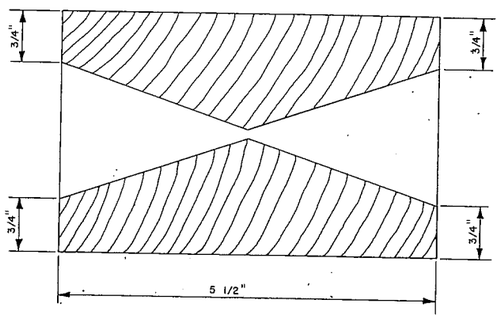
U.S. GOVERNMENT PRINTING OFFICE: 1978-796-315



BEVEL TOP PLATE

SCALE: 1" = 1"

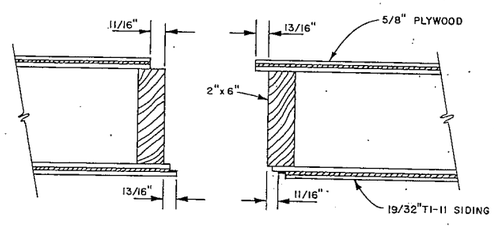
68 L.F. REQ'D
CUT FROM 4"x6"



GLU-LAM RIDGE PLATE

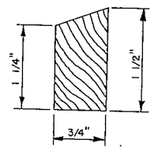
SCALE: 1" = 1"

36 L.F. REQ'D
CUT FROM 4"x6"



TYPICAL SHIP LAP JOINT

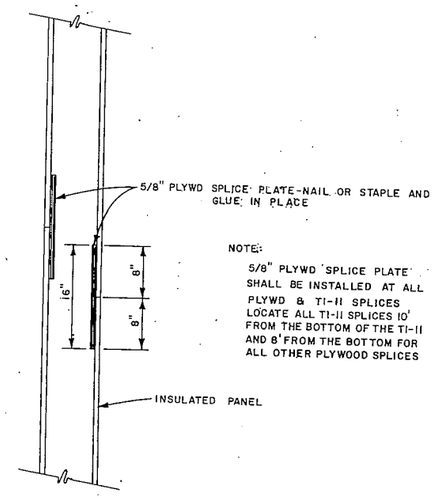
SCALE: 3" = 1'-0"



BEVEL TRIM

SCALE: 1" = 1"

120 L.F. REQ'D
BEVEL FROM 1"x2"

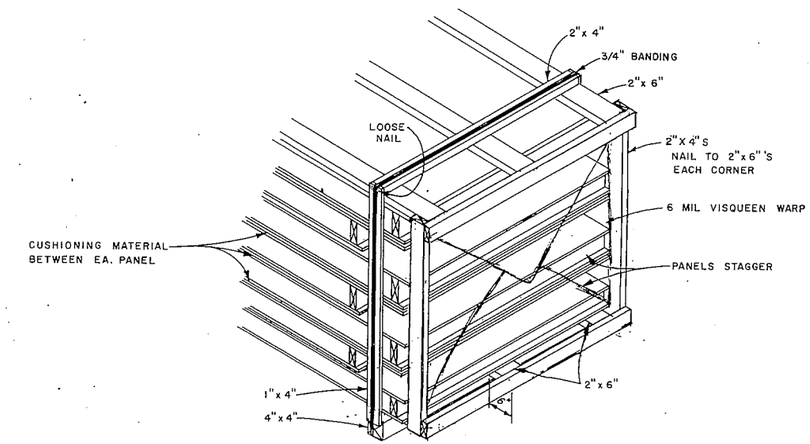


NOTE:

5/8" PLYWD SPLICE PLATE SHALL BE INSTALLED AT ALL PLYWD & T1-11 SPLICES LOCATE ALL T1-11 SPLICES 10' FROM THE BOTTOM OF THE T1-11 AND 8' FROM THE BOTTOM FOR ALL OTHER PLYWOOD SPLICES

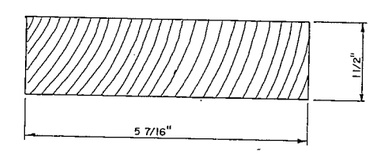
SPLICES PLATE INSTALLATION

SCALE: 1 1/2" = 1'-0"



TYPICAL PALLET CONSTRUCTION FOR SHIPMENT

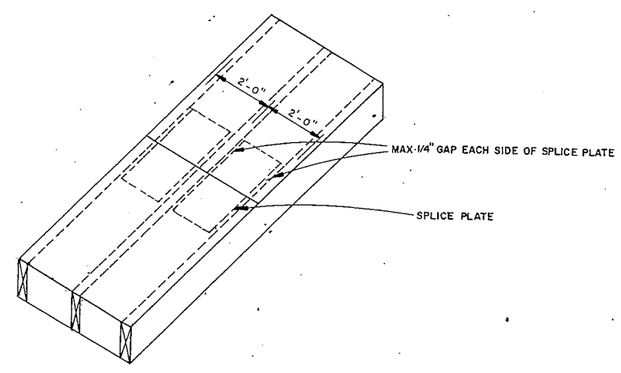
NTS



360 L.F REQ'D

2"X6" PLATES

NTS



SPLICE PLATE

NTS

DATE	REVISIONS	INITIALS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

MISCELLANEOUS DETAILS
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-82-127

SHEET NO. A-12 OF 13 TOTAL SHEETS

DRAWN BY: T. DZUBAY
DATE: NOVEMBER 1981
CHECKED BY: [illegible]
DATE: 11-2-82

Design Engineer

Maintenance Review

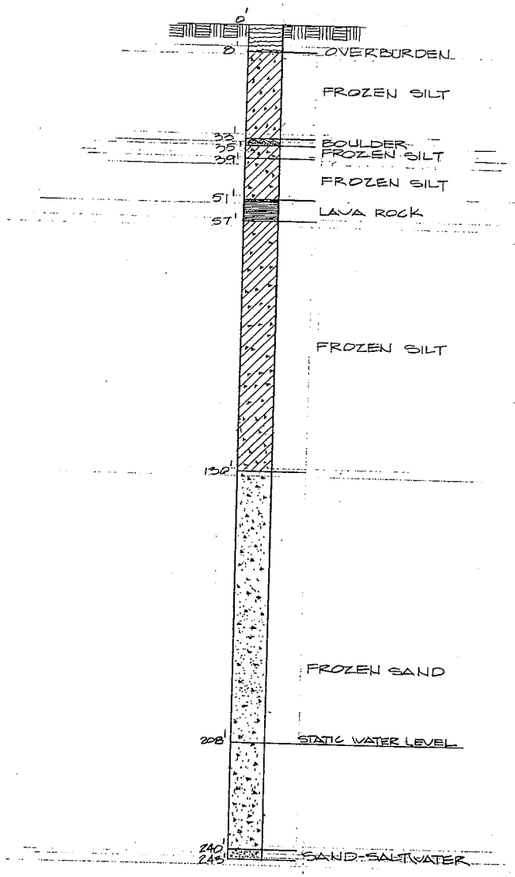
Material Take-off

STATE OF ALASKA 49TH REID W. BOND CE-5415 Registered Professional Engineer

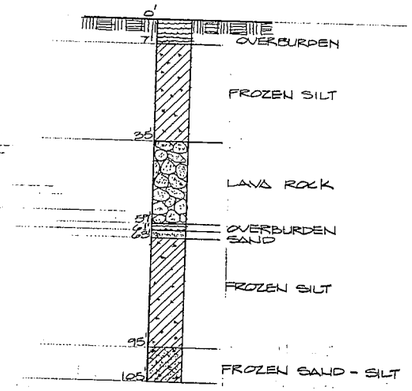
SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

U.S. GOVERNMENT PRINTING OFFICE: 1974-726-319

CHEFORNAK
TOPO OF DUMP SITE (POSSIBLE.)
SCALE 1" = 100'
SCB 12/6/82

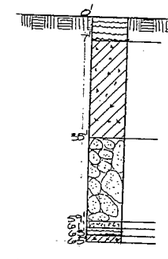


LOCATION —
DEPTH OF WELL — 243'
STATIC LEVEL — 208'
DRAW DOWN (FT.) — 40%
GAL. PER HR. — 1800 EST.
KIND OF CASING — 6 IN. - A 53
DRILLED BY — JAY WILLIAMS & CO.
DATE DRILLED — 2-29/3-9-80



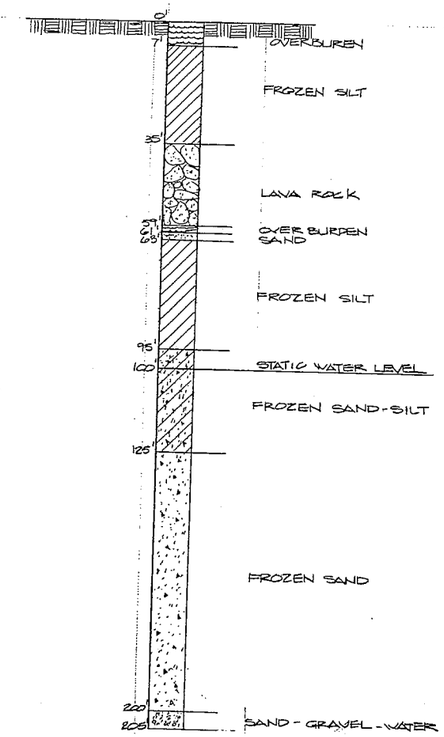
LOCATION —
DEPTH OF WELL — 105'
STATIC LEVEL — DRY
DRAW DOWN (FT.) — 100%
GAL. PER HR. — NONE
KIND OF CASING — 6"- SE 50
DRILLED BY — JAY WILLIAMS & CO.
DATE DRILLED — 3-9/3-11-80

NOTE: WELL CASING DID NOT PENATRATE LAVA ROCK

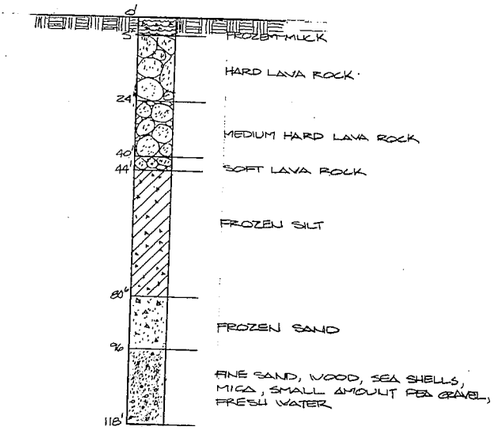


LOCATION
DEPTH OF WELL — 60'
STATIC LEVEL — 0' (DRY)
DRAW DOWN (FT.) — 100%
GAL. PER. HR. — NONE
KIND OF CASING — 6"- SE 50
DRILLED BY — JAY WILLIAMS & CO.
DATE DRILLED — 3-11/3-13-80

NOTE: COULD NOT PENATRATE LAVA ROCK PAST 54' WITH CASING

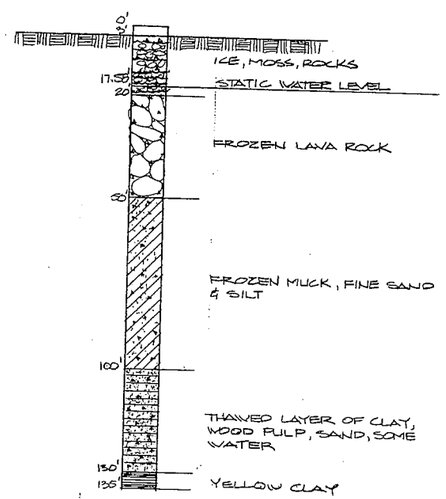


LOCATION —
DEPTH OF WELL — 205'
STATIC LEVEL — 100'
DRAW DOWN (FT) — 30% EST.
GAL. PER HR. — 900 EST.
KIND OF CASING — 6" SC 53
DRILLED BY — JAY WILLIAMS & CO.
DATE DRILLED — 3-14/3-20-80

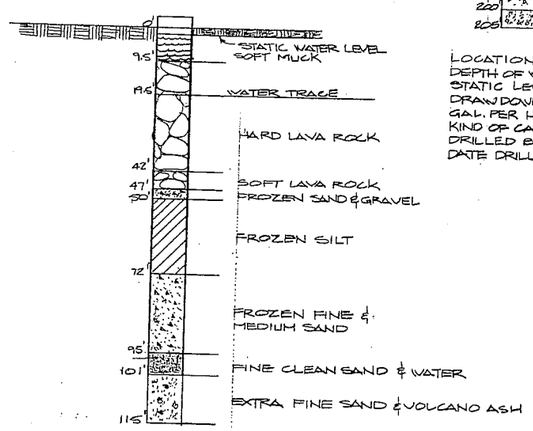


LOCATION —
DEPTH OF WELL — 118.3'
STATIC LEVEL — 5.8'
DRAWDOWN (FT) — 14.4'
GAL. PER HR. — 9
KIND OF CASING — 4"
DRILLED BY — PHS (W.O. 6029)
DATE DRILLED — 3/20 - 5/16/65

NOTE: FRESH WATER (118')



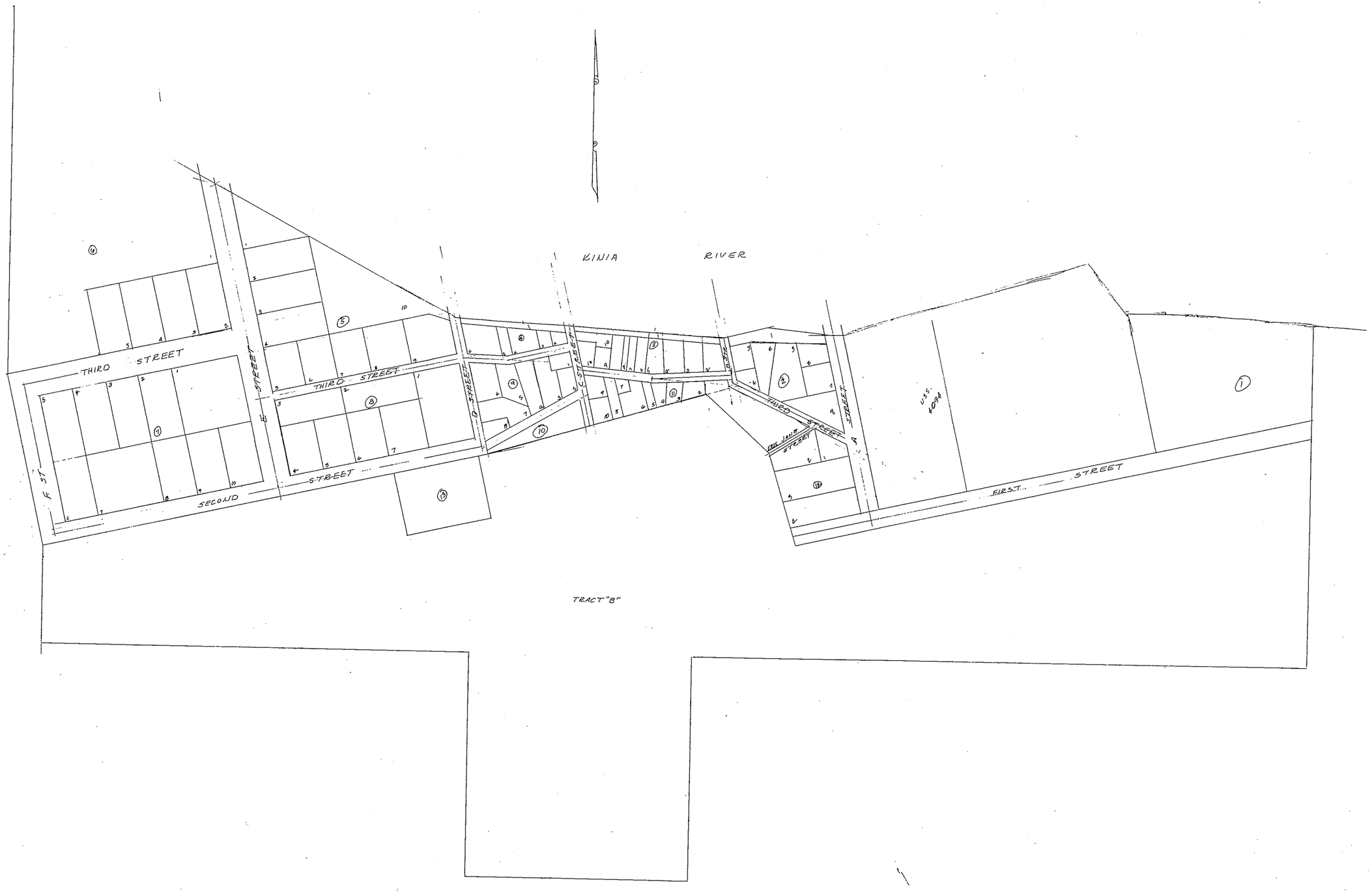
LOCATION —
DEPTH OF WELL — 130.17'
STATIC LEVEL — 117.58'
DRAW DOWN (FT.) — (3 g.p.m.)
GAL. PER HR. — (1.33 g.p.m.)
KIND OF CASING — ?
DRILLED BY — B.I.A.
DATE DRILLED — 5-9/6-24-64



LOCATION —
DEPTH OF WELL — 115'
STATIC LEVEL — 2'
DRAW DOWN — 39'
GAL. PER. HR. — 22
KIND OF CASING — ?
DRILLED BY — ?
DATE DRILLED — ?

CHEFORNAK, ALASKA

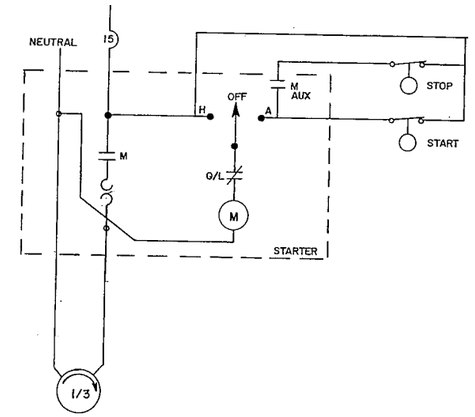
WATER WELL LOGS



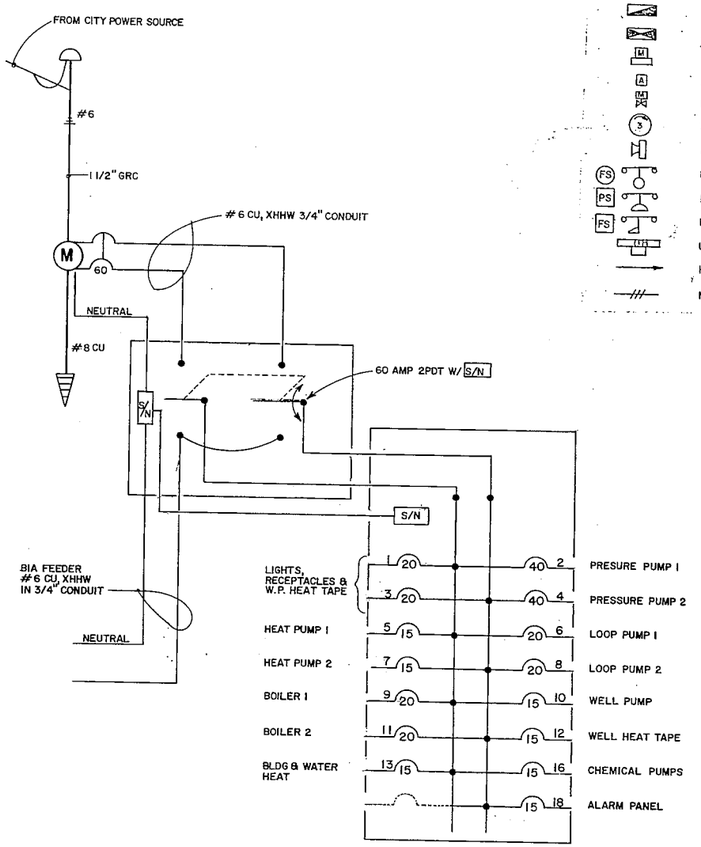
Cherokee
SCALE 1"=100

LEGEND

- LIGHT INCANDESENT
- FIXTURE WALL MOUNDED
- JUNCTION BOX
- LIGHT VAPOR
- DUPLEX RECEPTACLE
- FLUORESENT FIXTURE
- SPECIAL PURPOSE RECEPTACLE
- SINGLE POLE SWITCH
- 3 WAY SWITCH
- FIRE ALARM DEVICES
- THERMOSTAT
- TRANSFORMER
- CONTROLLER
- POWER PANEL
- ALARM PANEL
- MOTOR START MANUL
- SWITCHING PANEL
- METER BASE
- AQUASTAT
- MOTOR OPERATED VALVE (ZONE VALVE)
- MOTOR & HP
- ALARM HORN
- FLOAT SWITCH
- PRESSURE SWITCH
- FLOW SWITCH
- UNIT HEATER
- HOME RUN TO PANEL
- NUMBER OF WIRES
- HEAT DETECTOR
- SMOKE DETECTOR
- BELL
- MOTOR START MAGMETIC

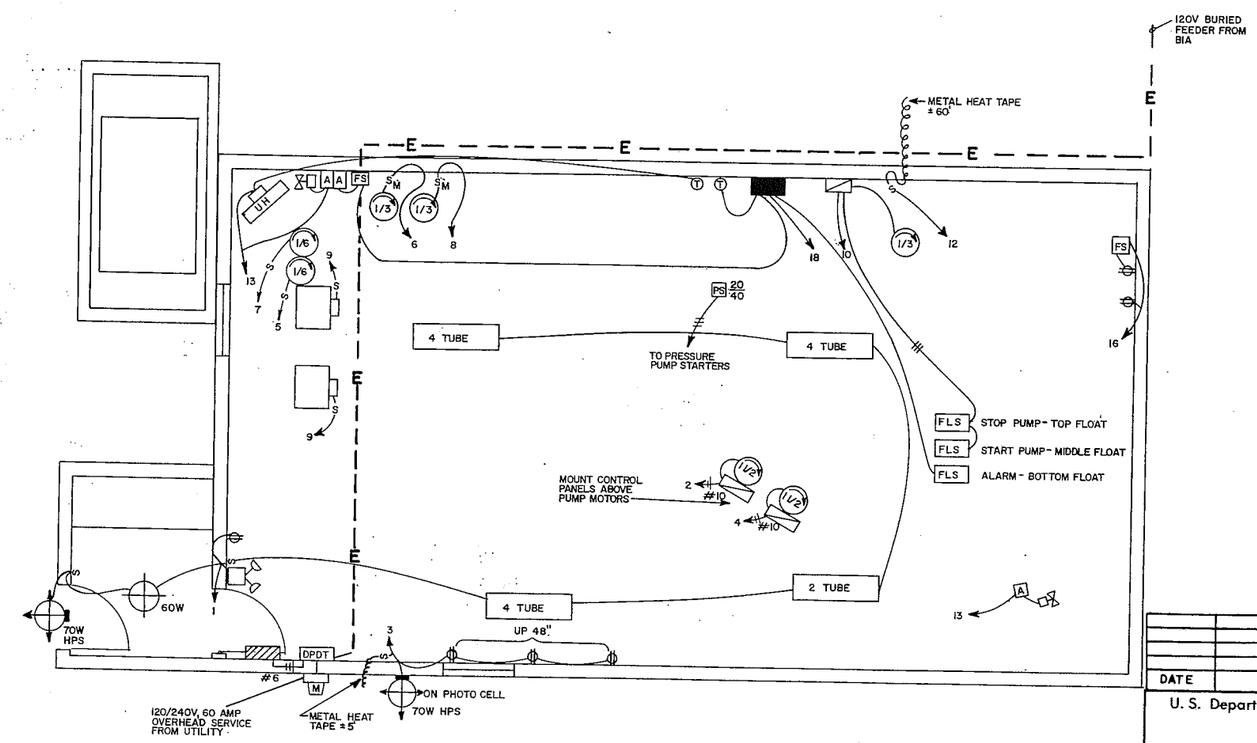


WELL PUMP CONTROL



PLANT AC POWER

NOTE: WIRE ALL EQUIPMENT 120VAC.



ELECTRICAL FLOOR PLAN

DATE	REVISIONS	INITIALS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA

ELECTRICAL PLAN
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-82-127

SHEET NO. E-1 OF 2 TOTAL SHEETS

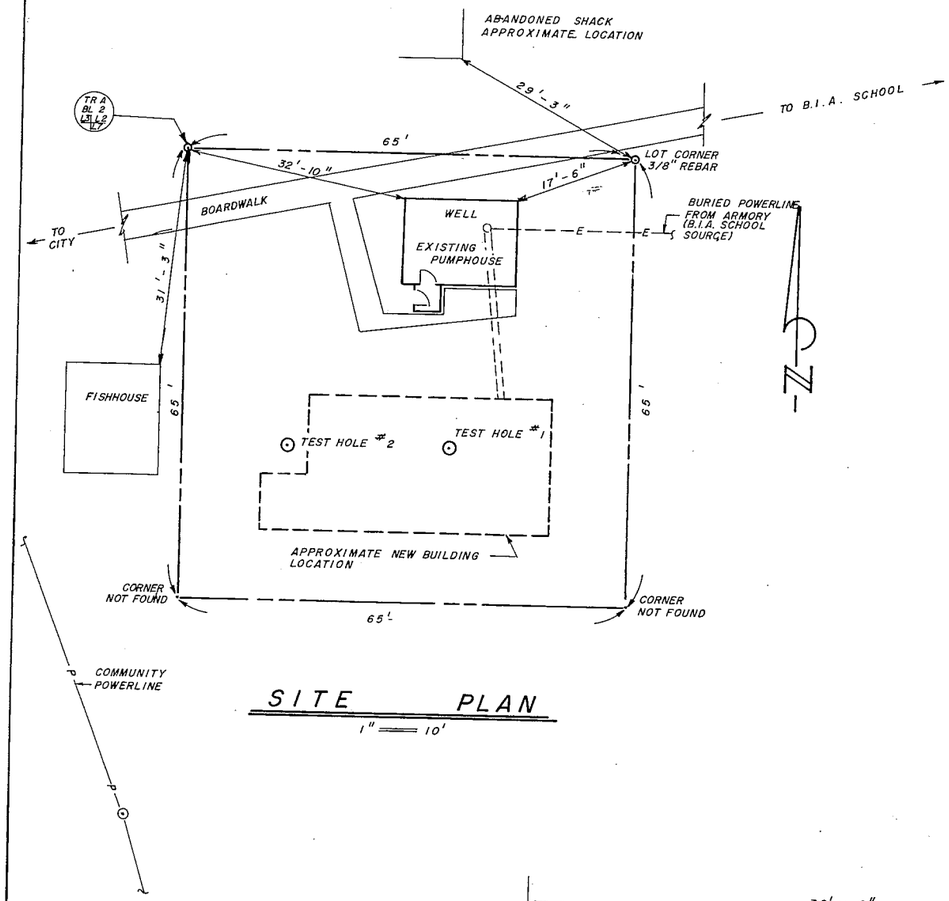
DRAWN BY: J. BOWEN
DATE: JULY 1982
CHECKED BY: JRD
DATE: 9/82

Design Engineer
Maintenance Review
Material Take-off

STATE OF ALASKA 49TH Thomas W. Longstreth No. 4293-E REGISTERED PROFESSIONAL ENGINEER

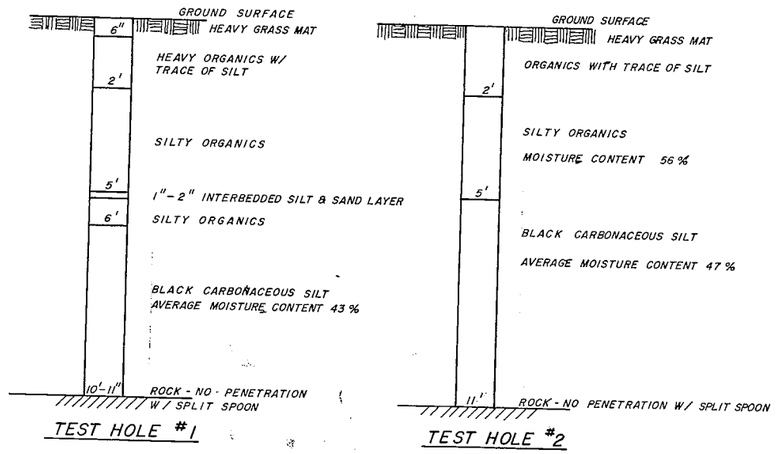
SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978—796-319



SITE PLAN

1" = 10'

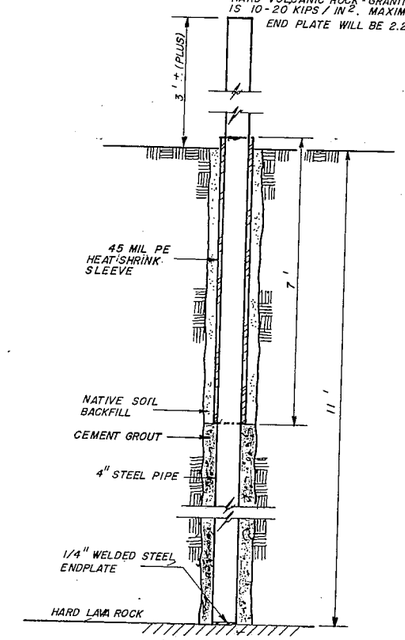


SOIL PROFILES

(SEE SITE PLAN FOR TEST HOLE LOCATIONS)

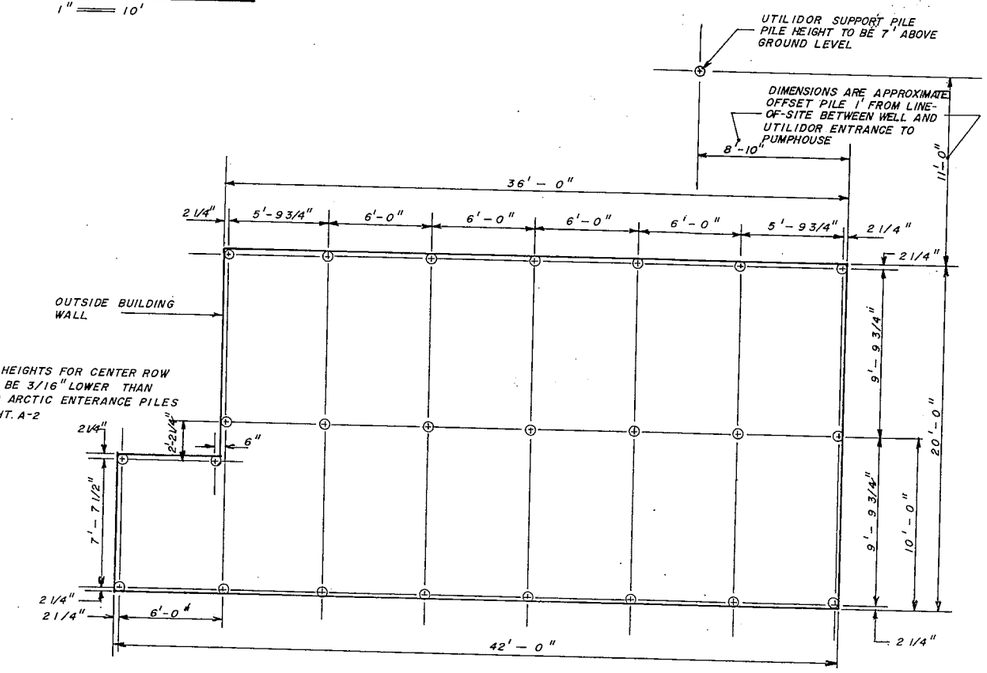
NOTE: MAXIMUM ANTICIPATED LOADING IS ON PILE UNDER CENTER BUILDING COLUMN DESIGN VALUE: 35 KIPS

ANTICIPATED BEARING CAPACITY OF HARD VOLCANIC ROCK - GRANITE IN APPEARANCE IS 10-20 KIPS / IN 2. MAXIMUM LOADING W/ END PLATE WILL BE 2.2 KIPS / IN 2.



TYP. PILE CROSS-SECTION

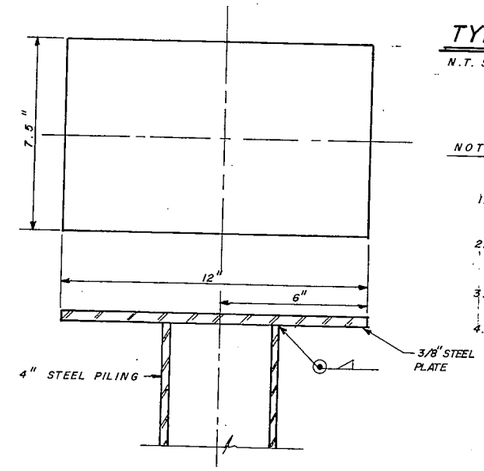
N.T.S.



NOTE: FINAL PILE HEIGHTS FOR CENTER ROW WILL NEED TO BE 3/16" LOWER THAN SIDEWALL AND ARCTIC ENTERANCE PILES SEE DETAIL SHT. A-2

PILE LOCATION PLAN

1/4" = 1'-0"



PILE TOP PLATE DETAIL

N.T.S.

NOTES: TOP PLATE ORIENTATION ON PILE WILL VARY DEPENDING ON PILE LOCATION UNDER BUILDING AND TRUENESS OF PILE ROWS.

1. OUTSIDE ROWS EXCEPT GABLE ENDS: PLATES SHOULD BE FLUSH WITH OUTSIDE EDGE OF BEAM.
2. OUTSIDE ROWS ON GABLE ENDS: PLATES SHOULD BE FLUSH WITH BOTH OUTSIDE EDGES OF BEAMS.
3. INSIDE ROW: PLATES SHOULD BE CENTERED ON BEAMS.
4. INSIDE ROW GABLE ENDS: PLATES SHOULD BE FLUSH WITH END OF BEAM AND CENTERED ON THE PILE.

DATE	REVISIONS	INITIALS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA
PILE LOCATION PLAN, SITE PLAN
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-82-127

SHEET NO. S-1 OF 1 TOTAL SHEETS

DRAWN BY: D.F
DATE: JULY 1982
CHECKED BY: JRD
DATE: 9/82

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

R. Bond
Design Engineer

Maintenance Review

Material Take-off

STATE OF ALASKA 49TH
REID W. ADKYD
CE-5415
Registered Professional Engineer

☆U.S. GOVERNMENT PRINTING OFFICE: 1978-796-319

WASTEWATER TREATMENT PLANT

MANUFACTURER _____ CAPACITY _____ MGD YEAR BUILT _____

TYPE _____ SERVICE VOLTAGE _____ PHASE _____

PUMPS — BLOWERS

ITEM	QNTY. No.	MAKE	MODEL	SERIAL/SERIES	SIZES SUC.	DIS.	IMP.	OTHER

MOTORS

EQUIPMENT DRIVEN	QNTY. No.	MAKE	MODEL	TYPE	SERIAL/SERIES	H.P.	PH.	VOLT.	AMP.	FRAME	R.P.M.
CIRC. PUMP MOTOR	2	MARATHON	MQD48S17D1053A		1725RPM	33					
PRESSURE PUMP	3	FRANKLIN ELECTRIC	4103032402			1					
WELL SET PUMP	1		S48H2DB145	31		1/3					

WATER PUMPS — COMPRESSORS — BLOWERS

ITEM	QNTY. No.	MAKE	MODEL	SERIAL/SERIES	SIZES SUC.	DIS.	IMP.	DRIVE
WELL PUMP	2	GOULDS	J03N	511393	1 1/4	3/4		
PRESSURE PUMPS	3	GOULDS	3462	18F11012	1 1/4	1		
CIRC. PUMPS	3	B&G	60-115 34685-1 1/2 F		1 1/4	1 1/4		
CIRCULATING PUMP	1	ARMSTRONG	NO. 52	8206				

PUMPS

LIFT STATION	No.	MAKE	MODEL	SERIAL/SERIES	SIZES SUC.	DIS.	IMP.	OTHER

OTHER PUMP OR MOTOR COMPONENTS

ITEM	QNTY.	PUMP/MOTOR	DATA

ELECTRICAL EQUIPMENT

ITEM	QNTY.	MAKE	MODEL	CLASS/TYPE	SERVICE VOLT.	COIL VOLT.	PH.	AMP.	FUNCTION

OTHER EQUIPMENT

ITEM	QNTY.	MAKE	MODEL	SERIAL	OTHER

BOILER — WATER HEATER Nos. 1, 2, 3, 4

LOCATION _____

MANUFACTURER WEIL-MCLAIN MODEL / SERIES 466E/3 NET BTU 125,200

BURNER: MANUFACTURER BECKETT RWB MODEL A&AF MP 1192 SERIAL No. UL7480365

4-3 GAL/HR 5.8 AMPS

BOILER SERIAL (No.1) 792091, (No.2) 792098, (No. 3) _____, (No.4) _____

PUMPS

ITEM	MAKE	MODEL No.	SERIAL/SERIES	SIZES SUC.	DIS.	OTHER
		A2VA7116				

HEATER — BOILER COMPONENTS

ELECTRICAL

ITEM	MAKE	MODEL/TYPE	VOLT.	AMP.
TRANSFORMER				
CONTR. RELAY				
LOW H_2O CONTR.				
AQUASTAT				
PHOTO CELL				
SEL. FUEL VALVE				

MECHANICAL

ITEM	MAKE	SIZE	TYPE
NOZZLE			
ELECTRODE			
REL. VALVE			
REL. VALVE			
REGULATOR			

OTHER HEATING EQUIPMENT

ITEM	MAKE	MODEL	SERIAL/SERIES	OTHER
UNIT HEATER	TRANE	UHSA 18-5 8A - AAA	S78M19743	TYPE NO. 136 - 0101 - 1
STAND-BY HEATER	PREWAY	SVM 50		MAX. OUTPUT 37,000 BTU/HR
HEAT EXCHANGER	YOUNG	F 861 EYIP		498625
THERMOFLOW BALANCER	BELL & GOSSETT			

CHEMICAL EQUIPMENT

EQUIPMENT	QNTY.	MAKE	MODEL/SERIES	SERIAL No.	TYPE	OTHER
FLUORIDATION PUMP	1	PRECISION	10611-321	81110779		3.4 GPM OUTPUT, PRESS. 75 PSI
CHLORINATION PUMP	1	"	"	81110783		115 V., 1.5 AMPS, 50760 HZ
FLUORIDATION TANK	1	LMI	10330-1			30 GAL. CAPACITY
CHLORINATION TANK	1	LMI	10330	0782		" " "

STANDBY GENERATOR

EQUIPMENT	MAKE	MODEL/TYPE	SERIAL No.	VOLT.	PH.	KW.	FRAME	OTHER
GEN. UNIT								
GENERATOR								
MOTOR								
EXCITER								

FLOW METERS

METER No.	QNTY.	MAKE	MODEL	TYPE	SIZE	OTHER
		BADGER	RECORDALL	25		0-20 GPM CAPACITY
	1	BELL & GOSSETT	THERMOFLOW INDICATOR		1 1/4"	
WATER METER	1	BADGER	40			SER. 3410 - 003

MISCELLANEOUS EQUIPMENT

EQUIPMENT	INFORMATION
CARBON FILTER	MFR. FILTERITE, MODEL 6FMOIA-2, MAX. FLOW 60 GPM SER. 6423HF
ROOFING MTL	STEEL, RIB, BRAND NAME: HUSKY, 29 GAGE, 80,000 PSI
DOORS	EVER-STRAIT MODEL E-1 OR EQUAL; RH SWING FOR WATERING
	POINTS, L.H. SWING FOR PUMPHOUSE
WINDOWS	HURD 2723 OR EQUAL. PROVIDE EXTRA LEXAN PANE W/METAL
	TRIM TO CLIP TO OUTSIDE OF WINDOW.
HYDROPNEUMATIC PRESSURE TANK 3	120 GAL. POZ-AIR; VINYL AIR CELL PRECHARGED TO 28PSI, 2" FIP.T OPENING.
	DOZ NR 100, MOD. 82781 - 12002824, 12002781, 12002837

ELECTRICAL EQUIPMENT

EQUIPMENT	QNTY.	MAKE	MODEL/TYPE	VOLT.	COIL VOLT.	POLE	AMP.	LOCATION — FUNCTION

DATE	REVISIONS	INITIALS

U. S. Department of Health, Education & Welfare
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA
SPECIFICATION SHEET

PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-82-127

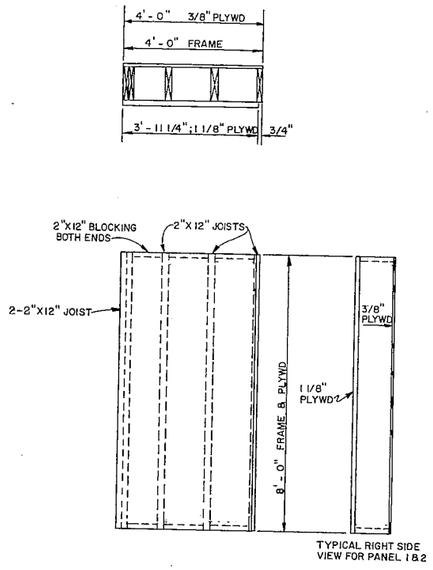
SHEET NO. 1 OF 1 TOTAL SHEETS

DRAWN BY: ALG
DATE: DEC. 6, 1976
CHECKED BY: H. Bond
DATE: 8/82

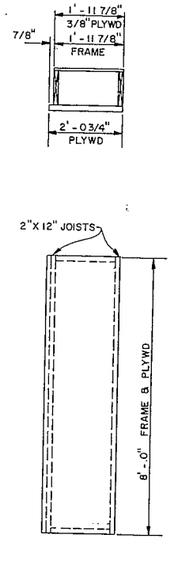
SANITATION FACILITIES CONSTRUCTION BRANCH
OFFICE OF ENVIRONMENTAL HEALTH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

☆ U. S. GOVERNMENT PRINTING OFFICE: 1977—787-713

NOTE:
EQUAL SPACING SHALL BE PROVIDED ON ALL JOISTS EXCEPT WHERE AS NOTED.



PANEL 1 - 1 REQ'D



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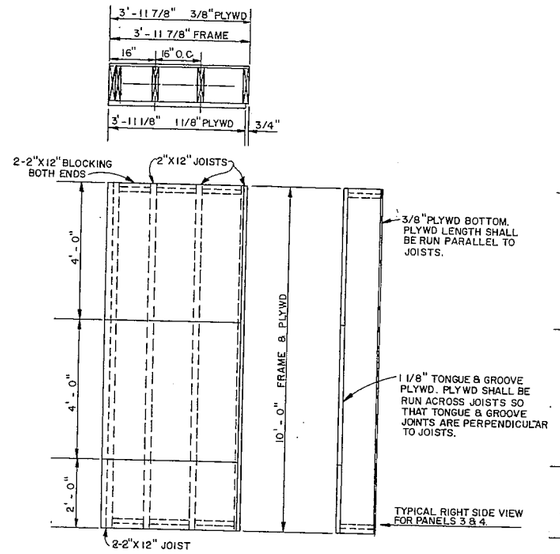
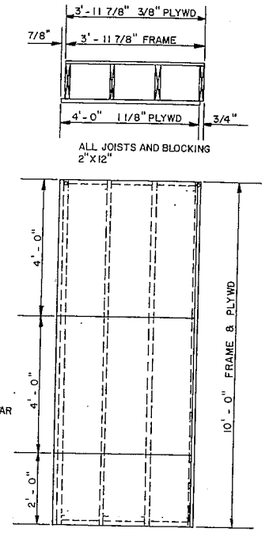
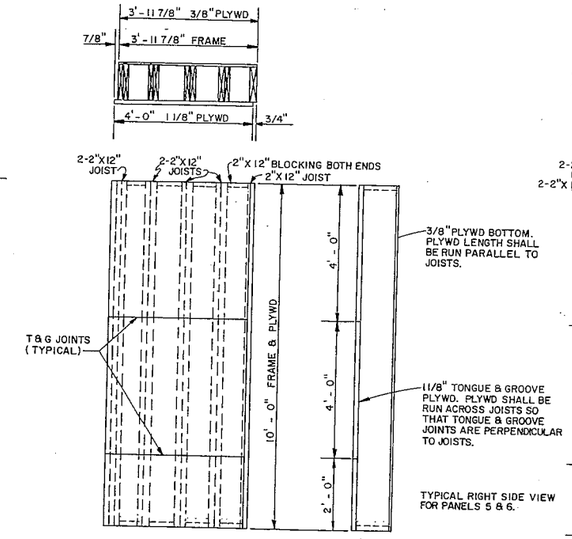


PANEL 3 - 2 REQ'D



PANEL 4 - 6 REQ'D



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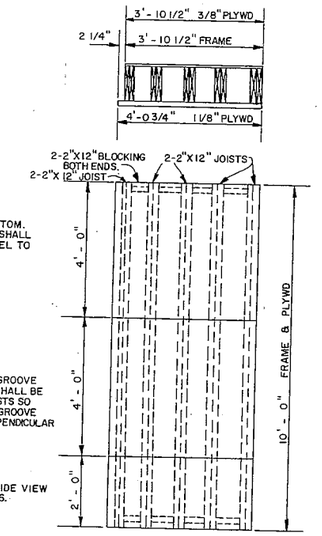
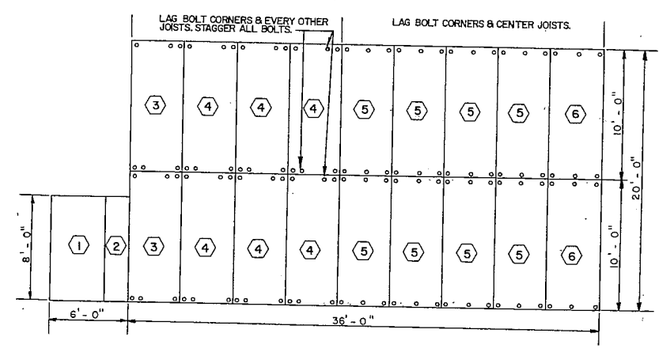


PANEL 6 - 2 REQ'D



FLOOR PANEL PLAN
NOT TO SCALE

DATE	REVISIONS	INITIALS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA
WATER TREATMENT PLANT
FLOOR PANELS - PLAN & DETAILS
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN - 82 - 127

SHEET NO. A-5 OF 13 TOTAL SHEETS

R. Bond
Design Engineer

Maintenance Review

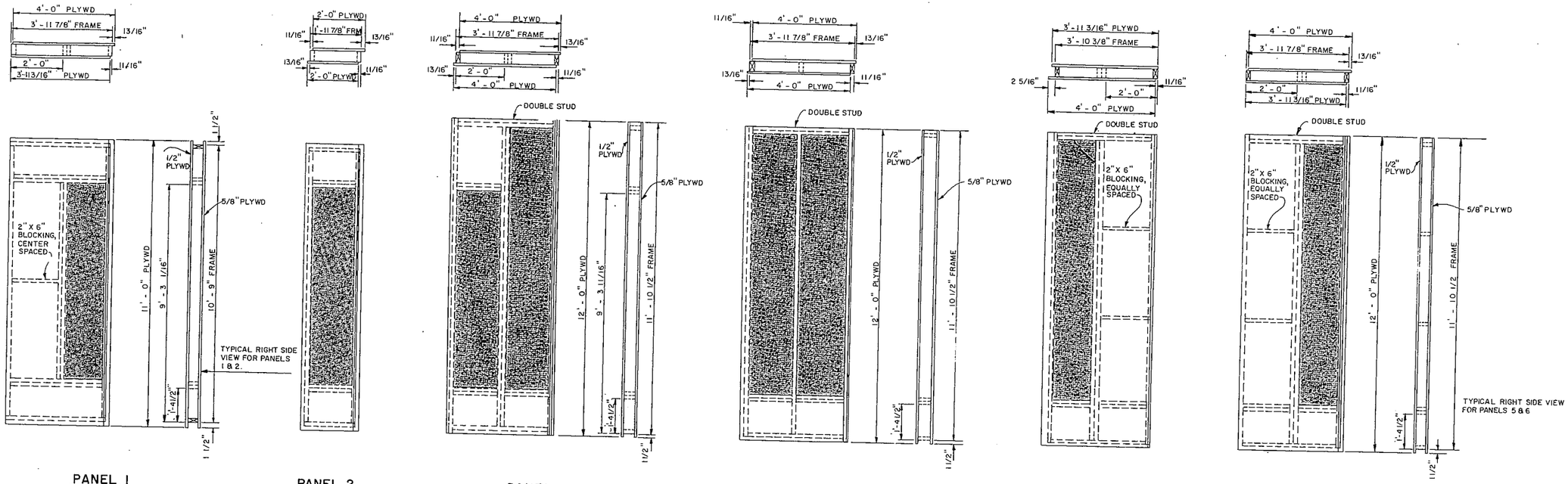
Material Take-off

STATE OF ALASKA 49TH
REID W. BOND
CE - 5415
Registered Professional Engineer

DRAWN BY: LOWDERMILK
DATE: 2 - '82
CHECKED BY: JRD
DATE: 7/82

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

☆U.S. GOVERNMENT PRINTING OFFICE: 1978—795-318



PANEL 1
1 REQ'D

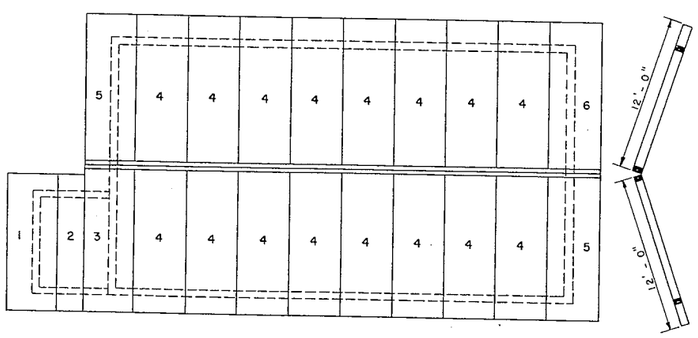
PANEL 2
1 REQ'D

PANEL 3
1 REQ'D

PANEL 4
16 REQ'D

PANEL 5
2 REQ'D

PANEL 6
1 REQ'D



ROOF PANEL PLAN
SCALE: 3/16" = 1'-0"

LEGEND

INSULATED AREA

NO INSULATION REQ'D

DATE	REVISIONS	INITIALS

U. S. Department of Health, & Human Services
Public Health Service
Indian Health Service

CHEFORNAK, ALASKA
WATER TREATMENT PLANT
ROOF PANEL PLAN & DETAILS
PUBLIC LAW 86-121 PROJECT
PROJECT NO. AN-82-127

SHEET NO. A-6 OF 13 TOTAL SHEETS

DRAWN BY: LOWDERMILK
DATE: 2-'82
CHECKED BY: [illegible]
DATE: 9/82

R. Bond
Design Engineer

Maintenance Review

Material Take-off

SANITATION FACILITIES CONSTRUCTION BRANCH
ENVIRONMENTAL HEALTH BRANCH
ALASKA AREA NATIVE HEALTH SERVICE
ANCHORAGE, ALASKA

☆ U.S. GOVERNMENT PRINTING OFFICE: 1974-756-318