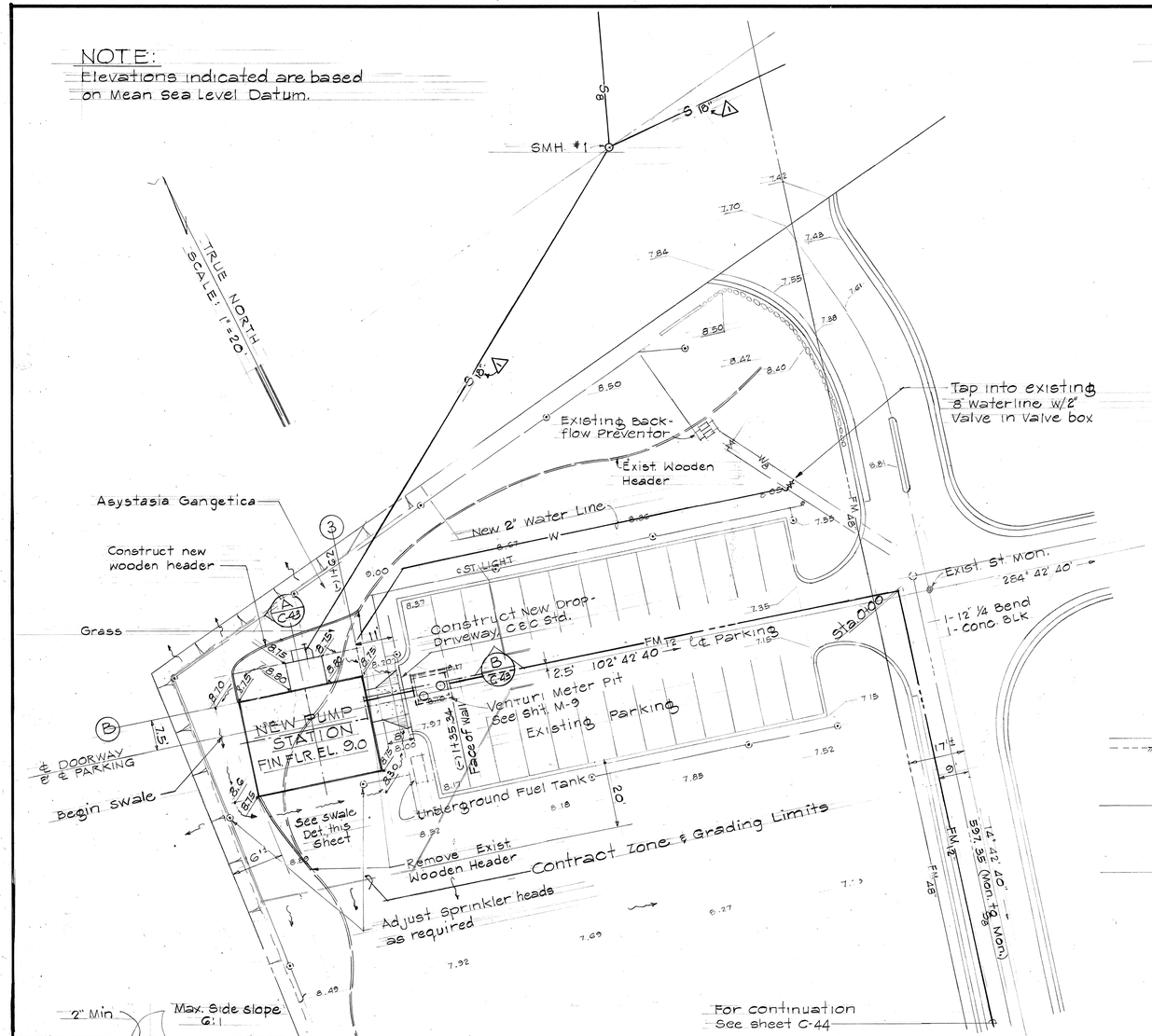
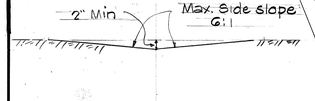
NOTE:
Elevations indicated are based on Mean Sea Level Datum.



SWALE DET.
NOT TO SCALE



SITE PLAN
SCALE: 1" = 20'

LEGEND

Exist.	New	
8.42		Spot Elevations
W	W	Waterline
S	S 18"	Sewerline
SP	SP	Sprinkler line
		Curb line
8.9	8.9	Spot elevation
		Contract Zone Limits Line & Grading Limit

DESIGN DATA - SAND ISLAND SPS

A. DESIGN FLOW (INITIAL)
Avg. = 0.144 MGD = 100 GPM
Max. = 0.655 MGD = 455 GPM
Peak = 0.886 MGD = 615 GPM

DESIGN FLOW (ULTIMATE)
Avg. = 0.714 MGD = 490 GPM
Max. = 2.320 MGD = 1610 GPM
Peak = 2.830 MGD = 1960 GPM

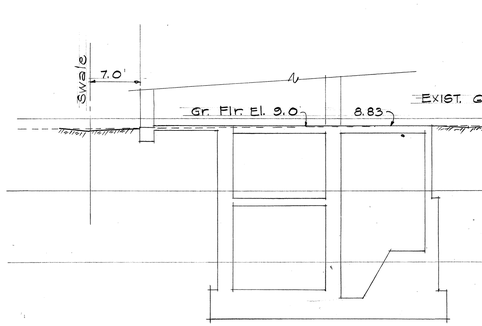
B. PUMP CAPACITIES
Initial Flow: One pump 1000 GPM @ 44 Ft.
Shutoff Head: 69 Ft.
Future Flow: Two pump 1960 GPM @ 42 Ft.

C. DESIGN HEAD (ULTIMATE)
Static (Max.) = 31.5 Ft.
Friction = 10.5 Ft.
Total Pumping Head = 42 Ft.

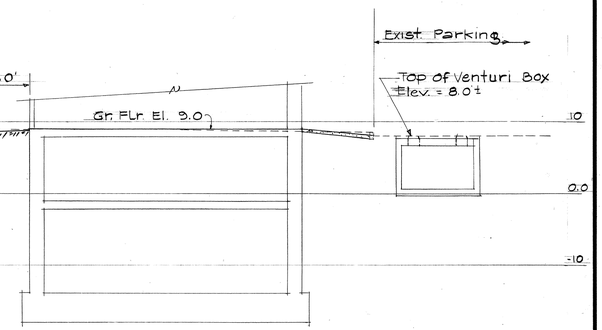
D. FORCE MAIN
760 L.F. Single Line - 12" Diameter

E. VENTILATION
Station Volume below grade: 9009 cf.
Extraction Fan (in-duct): 3200 cfm @ 1/4" SWG
Ventilation Rate: 2.8 minutes/air change

F. EQUIPMENT COVERED BY GENERATOR
2 pump motors
Station Lighting
Station Ventilation



SECTION A / C-43
Scale: 1" = 10'



SECTION B / C-43
Scale: 1" = 10'

WILSON OKAMOTO & ASSOC.
ENGINEERS - ARCHITECTS - PLANNERS
HONOLULU HAWAII

SYM	DESCRIPTION	DATE	APP'D
	REVISIONS		
1	SEWER LINE CHANGED 21" TO 18",	8-25-80	

APPROVED:
CHIEF, DIV. OF ENGR. (FOR GRADING ONLY) DATE
CHIEF, DIV. OF WASTEWATER MANAGEMENT 6/24/80 DATE

HENRY S. HOSHIDE REGISTERED PROFESSIONAL ENGINEER No. 2448 HAWAII, U.S.A.

KENNETH O. NAGAI REGISTERED PROFESSIONAL ENGINEER No. 3265 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER AND LAND DEVELOPMENT

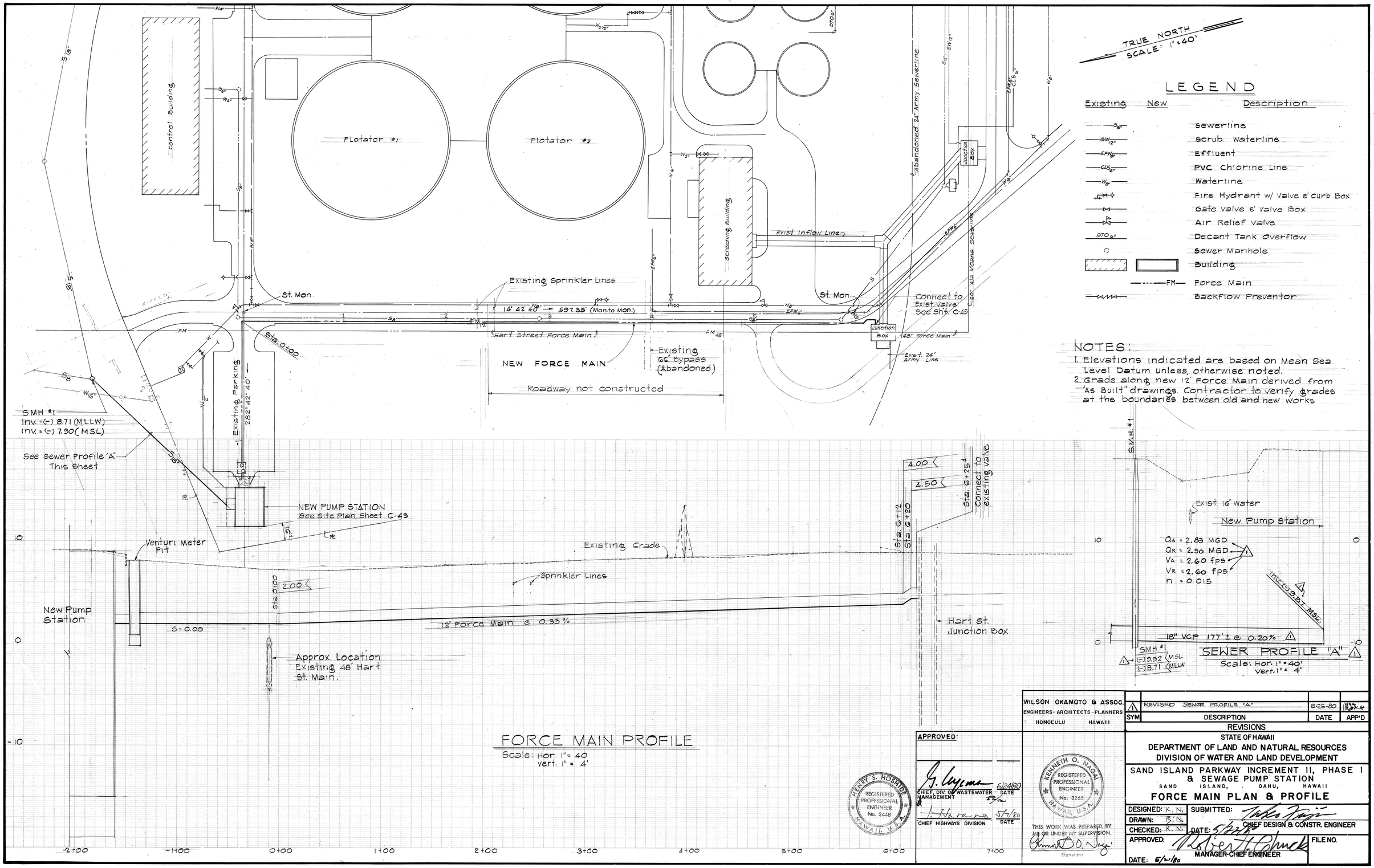
SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION
SAND ISLAND, OAHU, HAWAII

SITE PLAN - NEW PUMP STATION

DESIGNED: KON, RY
DRAWN: A.O
CHECKED: KON
APPROVED: DATE: 5/21/80
SUBMITTED: CHIEF DESIGN & CONSTR ENGINEER
DATE: 5/21/80
MANAGER-CHIEF ENGINEER
FILE NO.

As Built JOB NO. 46-OL-17 SHEET NO. C-43 OF 78 SHEETS

BRUNING 44-132.30098



TRUE NORTH
SCALE: 1" = 40'

LEGEND

Existing	New	Description
S 6"		Sewerline
SW 12"		Scrub Waterline
EFM 8"		Effluent
CLS 6"		PVC Chlorine Line
W 8"		Waterline
		Fire Hydrant w/ Valve & Curb Box
		Gate Valve & Valve Box
		Air Relief Valve
DTO 6"		Decant Tank Overflow
		Sewer Manhole
		Building
FM		Force Main
		Backflow Preventor

NOTES:

1. Elevations indicated are based on Mean Sea Level Datum unless otherwise noted.
2. Grade along new 12" Force Main derived from "As Built" drawings. Contractor to verify grades at the boundaries between old and new works

FORCE MAIN PROFILE

Scale: Hor. 1" = 40
Vert. 1" = 4'

SEWER PROFILE "A"

Scale: Hor. 1" = 40'
Vert. 1" = 4'

WILSON OKAMOTO & ASSOC.
ENGINEERS - ARCHITECTS - PLANNERS
HONOLULU HAWAII

SYM	DESCRIPTION	DATE	APP'D
1	REVISED SEWER PROFILE "A"	8-25-80	

REVISIONS

APPROVED:

G. Cayetano 6/24/80
CHIEF, DIV. OF WASTEWATER MANAGEMENT DATE

CHIEF HIGHWAYS DIVISION 5/1/80 DATE

HENRY S. HOSHIDE
REGISTERED PROFESSIONAL ENGINEER
No. 2448
HAWAII, U.S.A.

KENNETH O. NAGAI
REGISTERED PROFESSIONAL ENGINEER
No. 3265
HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.
Signature

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER AND LAND DEVELOPMENT

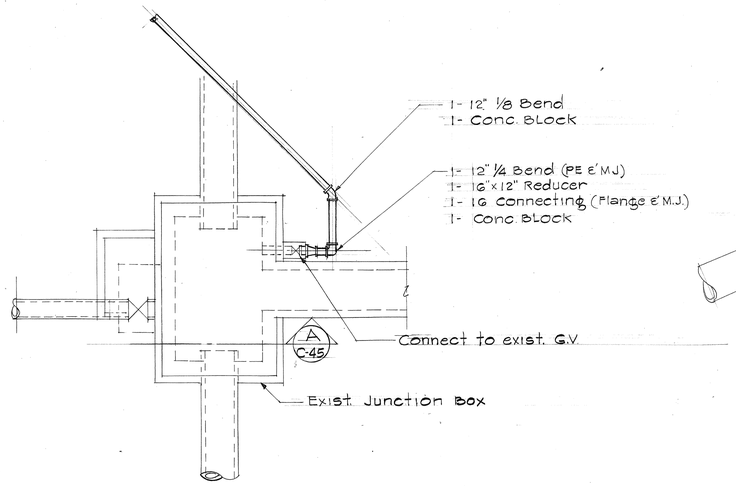
SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION
SAND ISLAND, OAHU, HAWAII

FORCE MAIN PLAN & PROFILE

DESIGNED: K. N.
DRAWN: K. N.
CHECKED: K. N.
APPROVED:
DATE: 5/1/80

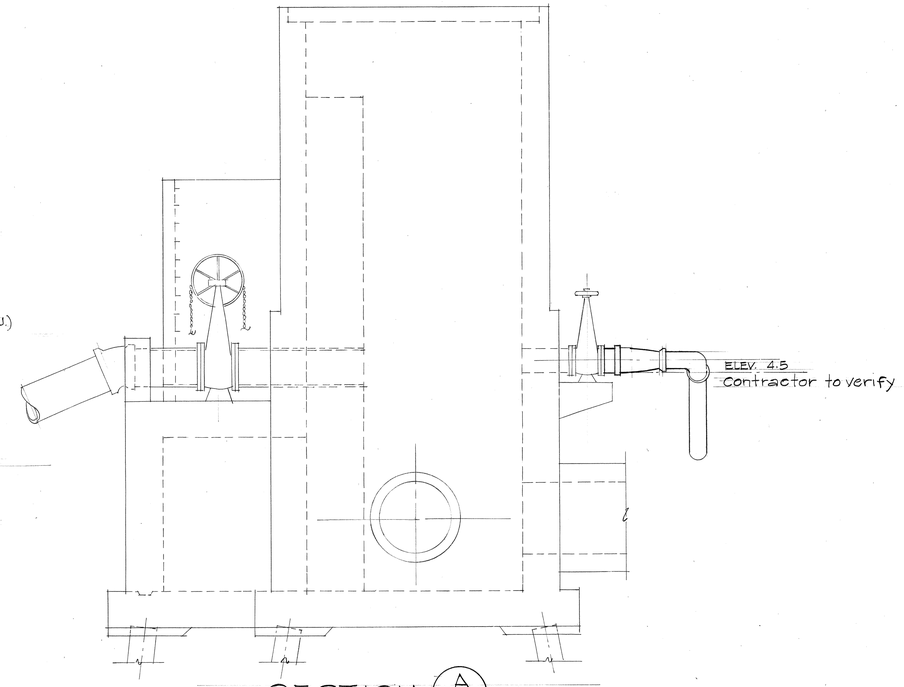
SUBMITTED:
CHIEF DESIGN & CONSTR. ENGINEER
DATE: 5/22/80
MANAGER-CHIEF ENGINEER
FILE NO.

As Built JOB NO 46-0L-17 SHEET NO. C-44 OF 78 SHEETS



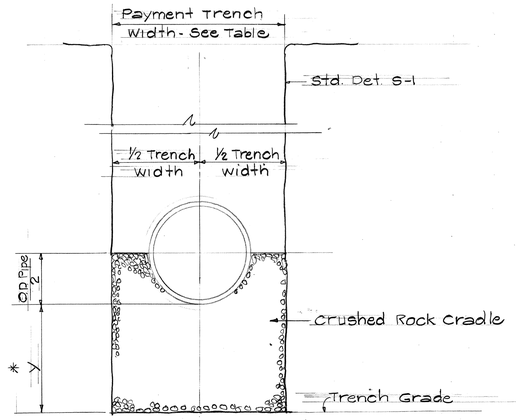
PLAN- HART ST. JUNCTION BOX

SCALE: 1"= 10'



SECTION A C-45

SCALE: 1/4"= 1'-0"



*Trench grade shall be founded on coral or "Y" distance shall be increased to a maximum of 3 feet

TRENCH BEDDING-ALTERNATE (GRAVITY SEWER)

Not to scale

WILSON OKAMOTO & ASSOC.
ENGINEERS - ARCHITECTS - PLANNERS
HONOLULU HAWAII

SYM	DESCRIPTION	DATE	APP'D

REVISIONS

APPROVED:

CHIEF, DIV. OF WASTEWATER MANAGEMENT — DATE 6/24/80

HENRY S. HOSHIDE REGISTERED PROFESSIONAL ENGINEER No. 2448 HAWAII, U.S.A.

KENNETH O. NAGAI REGISTERED PROFESSIONAL ENGINEER No. 3265 HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

Signature

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF WATER AND LAND DEVELOPMENT

SAND ISLAND PARKWAY INCREMENT II, PHASE I & SEWAGE PUMP STATION
SAND ISLAND, OAHU, HAWAII

CONNECTION DETAIL — JUNCTION BOX

DESIGNED: K.N.
DRAWN: K.N.
CHECKED: KON, HH
APPROVED:
DATE: 5/21/80

SUBMITTED:
CHIEF DESIGN & CONSTR. ENGINEER
DATE: 5/21/80
MANAGER-CHIEF ENGINEER

FILE NO.

As Built JOB NO 46-01-17 SHEET NO. C-45 OF 78 SHEETS