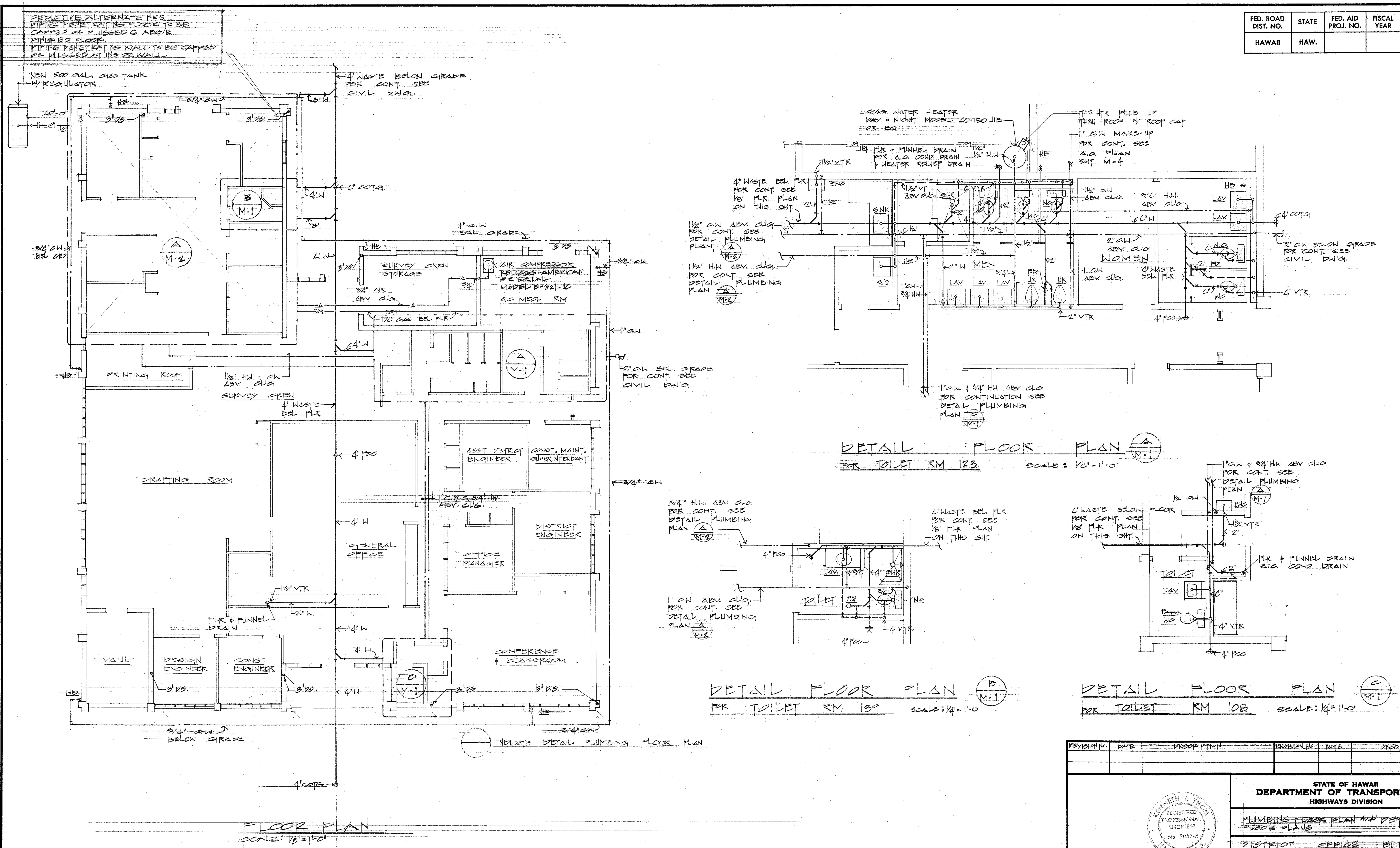
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				



REVISION No.	DATE	DESCRIPTION	REVISION No.	DATE	DESCRIPTION

KENNETH J. THOM REGISTERED PROFESSIONAL ENGINEER No. 2057-E HAWAII, U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLUMBING FLOOR PLAN AND DETAIL FLOOR PLANS

DISTRICT OFFICE BUILDING
MAUI DISTRICT BASEYARD
KAHULUI MAUI HAWAII
KOBAYASHI - NISHIMURA ARCHITECT - ENGINEER APRIL 1972

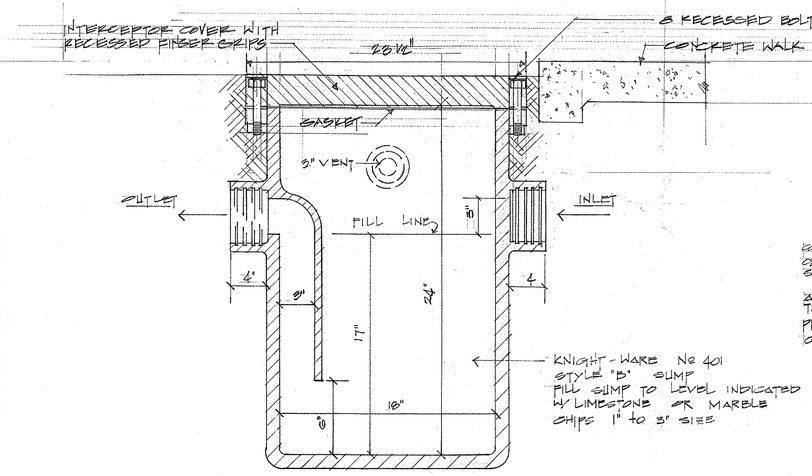
SHEET No. M-1 OF 40 SHEETS

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
	DESIGNED BY	
NOTE BOOK	QUANTITIES BY	
No.	CHECKED BY	

PRINTED ON NO. 1000H CLEARPRINT

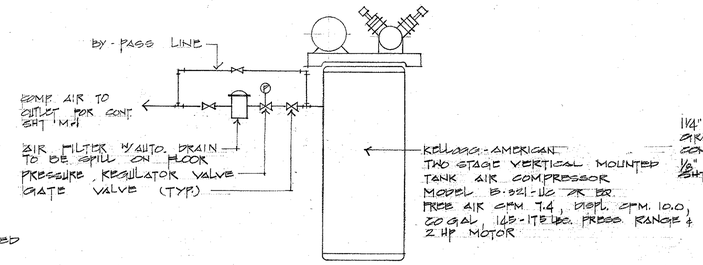
M-1

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				



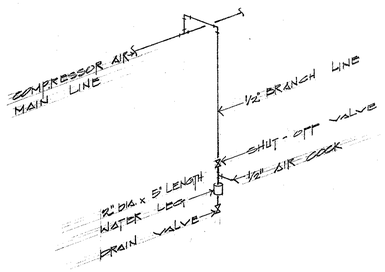
ACID INTERCEPTOR DETAIL

No SCALE



AIR COMPRESSOR PIPING

No SCALE :

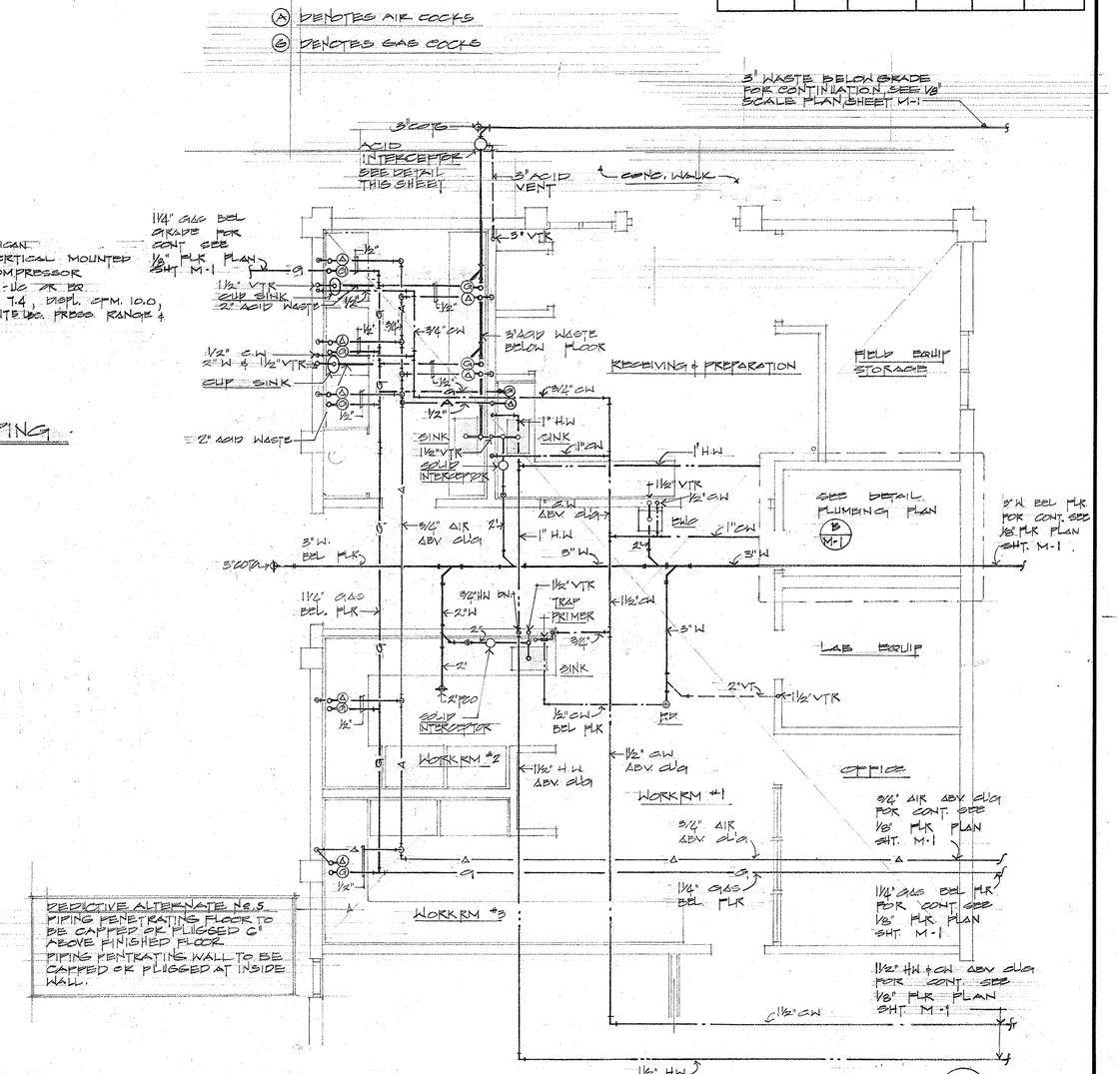


AIR OUTLET PIPING DETAIL

No. SCALE

Ⓐ DENOTES AIR COCKS

Ⓑ DENOTES GAS COCKS



DETAIL FLOOR PLAN A M-2

FOR MATERIAL TESTING AREA SCALE: 3/4" = 1'-0"

DEDUCTIVE ALTERNATE No. 5
PIPING PENETRATING FLOOR TO BE CAPPED OR PLUGGED 6" ABOVE FINISHED FLOOR.
PIPING PENTRATING WALL TO BE CAPPED OR PLUGGED AT INSIDE WALL.

REVISION NO.	DATE	DESCRIPTION	REVISION NO.	DATE	DESCRIPTION

ORIGINAL PLAN
NOTE BOOK No.
SURVEY PLOTTED BY DATE
DRAWN BY
TRACED BY
DESIGNED BY
QUANTITIES BY
CHECKED BY

KENNETH J. THOM REGISTERED PROFESSIONAL ENGINEER No. 2057-E HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLUMBING DETAIL PARTIAL FLOOR PLAN & W DETAILS

DISTRICT OFFICE BUILDING

MAUI DISTRICT BASEYARD

KAHULUI MAUI HAWAII

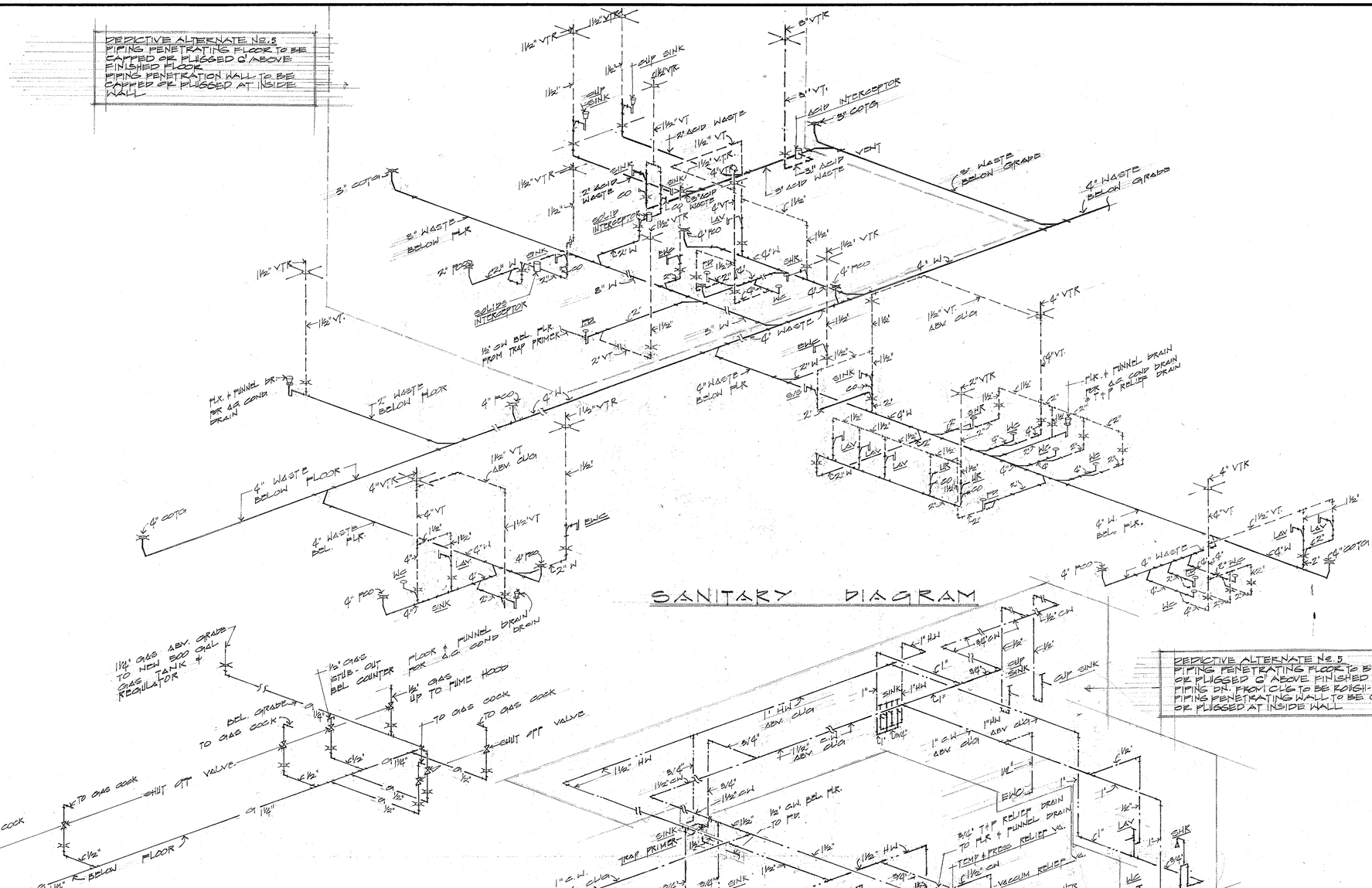
KOBAYASHI - NISHIMURA
ARCHITECT & ENGINEER APRIL 1972

SHEET No. M-2 OF 40 SHEETS

PRINTED ON NO. 1000H CLEARPRINT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				

DEDUCTIVE ALTERNATE NO. 5
PIPING PENETRATING FLOOR TO BE CAPPED OR PLUGGED 6" ABOVE FINISHED FLOOR.
PIPING PENETRATION WALL TO BE CAPPED OR PLUGGED AT INSIDE WALL



DEDUCTIVE ALTERNATE NO. 5
PIPING PENETRATING FLOOR TO BE CAPPED OR PLUGGED 6" ABOVE FINISHED FLOOR.
PIPING DN. FROM C.I.G. TO BE ROUGH-IN ONLY
PIPING PENETRATING WALL TO BE CAPPED OR PLUGGED AT INSIDE WALL

REVISION NO	DATE	DESCRIPTION	REVISION NO.	DATE	DESCRIPTION

ORIGINAL PLAN
SURVEY PLOTTED BY:
DRAWN BY:
TRACED BY:
DESIGN BY:
QUANTITIES BY:
CHECKED BY:
NOTE BOOK
No.
DATE

KENNETH J. THOM
REGISTERED PROFESSIONAL ENGINEER
No. 2057-E
HAWAII U.S.A.

THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION.

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PLUMBING SANITARY, WATER AND GAS PIPING DIAGRAMS

DISTRICT OFFICE BUILDING
MAUI DISTRICT BASEYARD

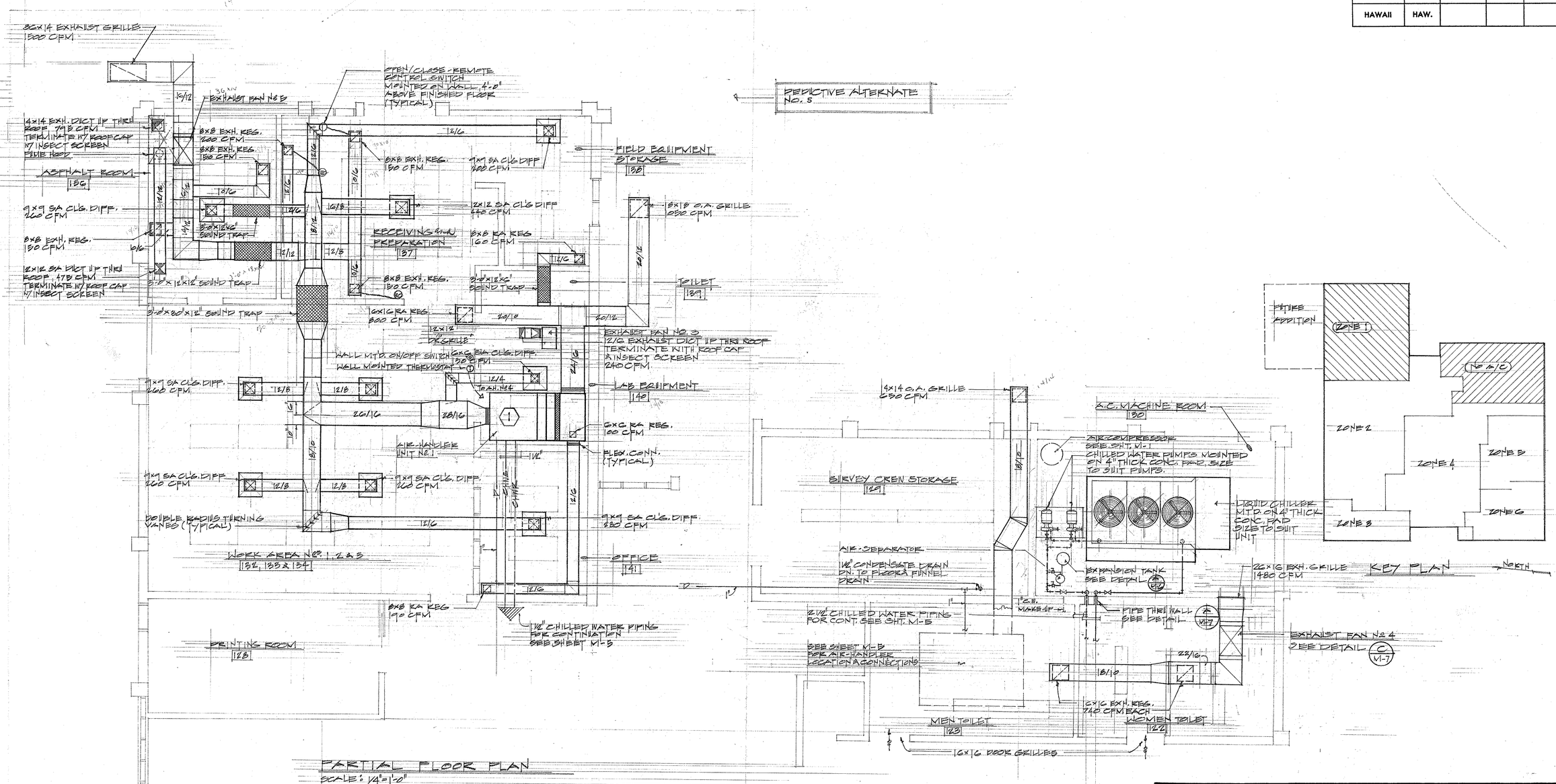
KAHULUI MAUI HAWAII

KOBAYASHI - NISHIMURA
ARCHITECT & ENGINEERS APRIL 1974

SHEET No. M-3 OF 40 SHEETS

PRINTED ON NO. 1000H CLEARPRINT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				



PARTIAL FLOOR PLAN

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

NOTES:

1. ALL SIZES SHOWN FOR CEILING DIFFUSERS ARE NECK SIZES.
2. ALL SUPPLY AIR CEILING DIFFUSERS FACE TO BE 24" SQUARE.
3. ALL DUCTWORK PENETRATING CEILING SHALL BE EQUIPPED WITH FIRE DAMPERS. SEE DETAIL E/M-6

ORIGINAL PLAN	SURVEY PLOTTED BY	DATE
	DRAWN BY	
	TRACED BY	
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

REVISION NO.	DATE	DESCRIPTION	REVISION NO.	DATE	DESCRIPTION

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

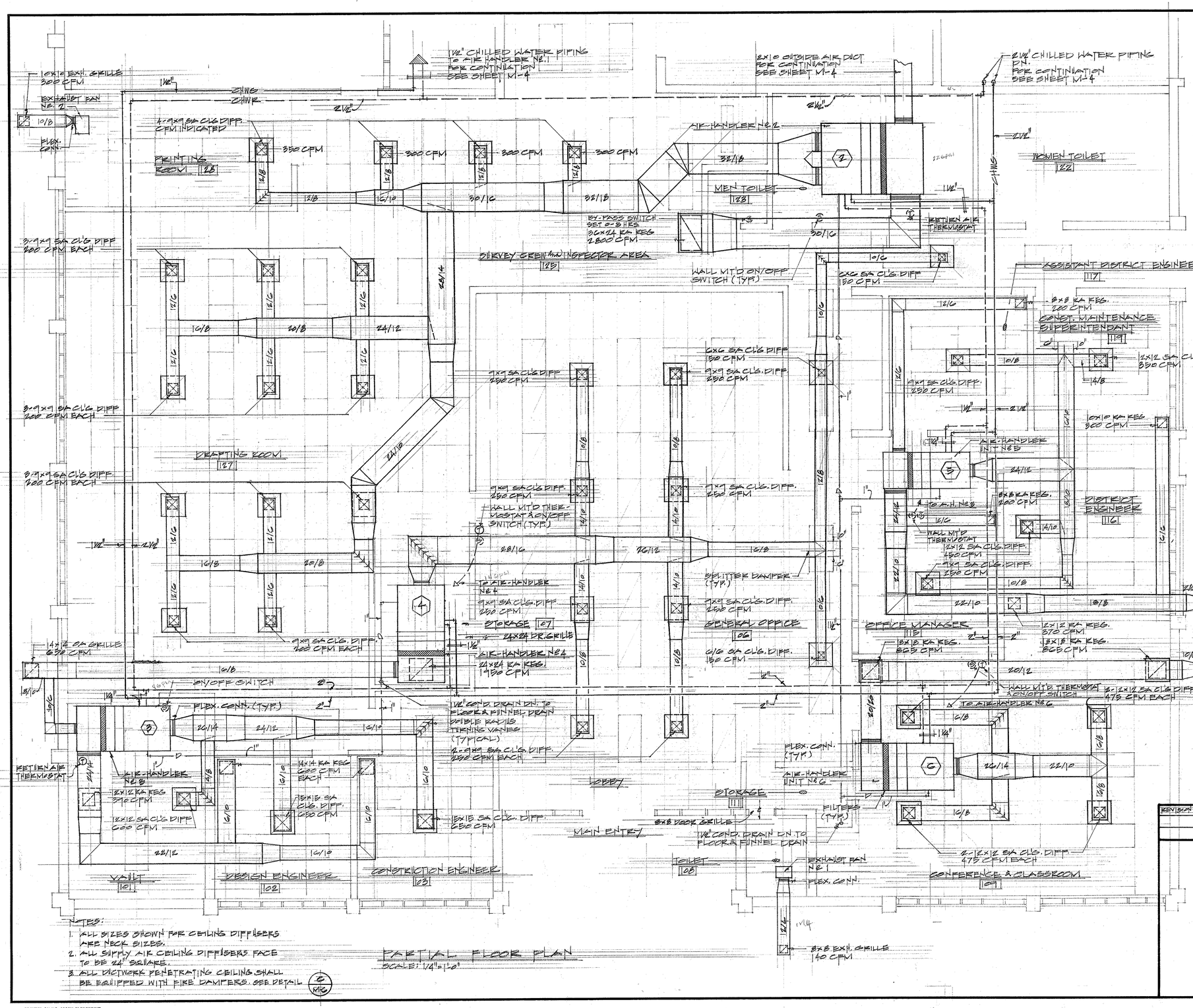
PARTIAL AIR-CONDITIONING FLOOR PLAN

DISTRICT OFFICE BUILDING
MAUI DISTRICT BASEYARD
KAHULUI MAUI HAWAII
KOBAYASHI - NISHIMURA
ARCHITECT & ENGINEER APRIL 1972

SHEET No. M-4 OF 40 SHEETS

PRINTED ON NO. 1000H CLEARPRINT

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				



NOTES:
1. ALL SIZES SHOWN FOR CEILING DIFFUSERS ARE NECK SIZES.
2. ALL SUPPLY AIR CEILING DIFFUSERS FACE TO BE 24" SQUARE.
3. ALL DUCTWORK PENETRATING CEILING SHALL BE EQUIPPED WITH FIRE DAMPERS. SEE DETAIL E/M6

PARTIAL FLOOR PLAN
SCALE: 1/4"=1'-0"

ORIGINAL PLAN	DRAWN BY	DATE
	TRACED BY	
NOTE BOOK	DESIGNED BY	
No.	QUANTITIES BY	
	CHECKED BY	

REVISION NO.	DATE	DESCRIPTION	REVISION NO.	DATE	DESCRIPTION

KENNETH I. TSUJI
REGISTERED PROFESSIONAL ENGINEER
No. 2057-E
HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

PARTIAL AIR-CONDITIONING FLOOR PLAN

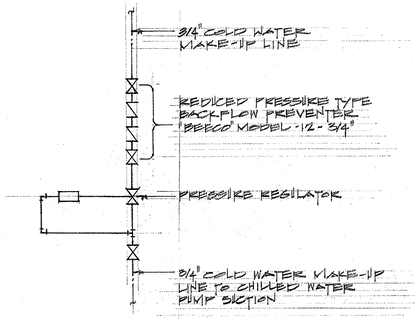
DISTRICT OFFICE BUILDING
MAUI DISTRICT BASEYARD
KAHULUI MAUI HAWAII
KOBAYASHI - NISHIMURA
ARCHITECT & ENGINEER APRIL 1972

SHEET No. M-5 OF 40 SHEETS

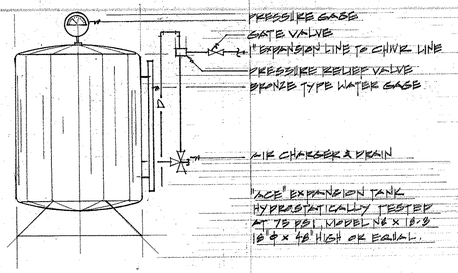
PRINTED ON NO. 1000H CLEARPRINT

M-5

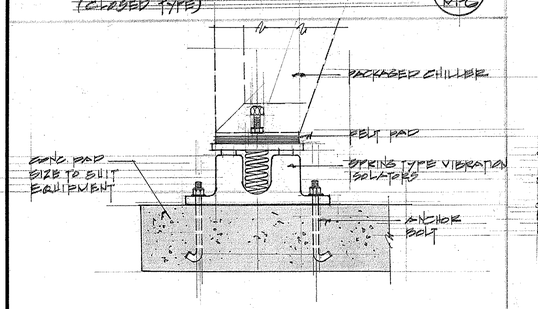
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				



COLD WATER MAKE-UP DIAGRAM for CHILLED WATER

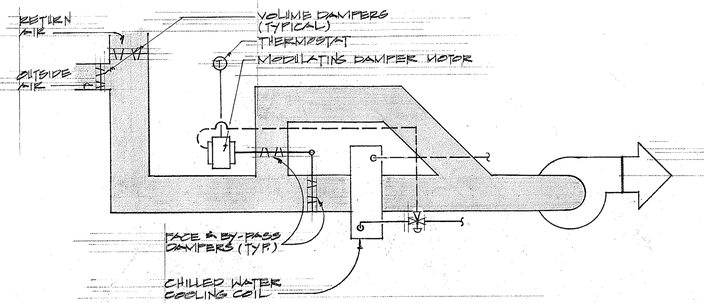


EXPANSION TANK DETAIL (CLOSED TYPE)

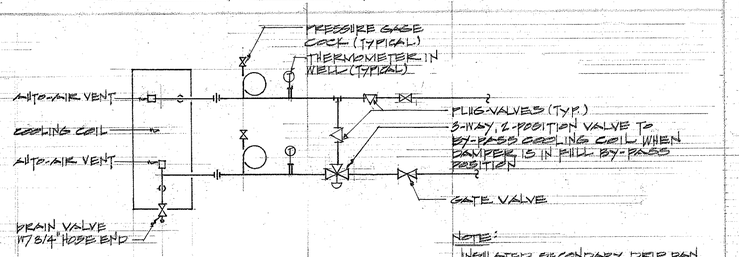


VIBRATION ISOLATOR DETAIL

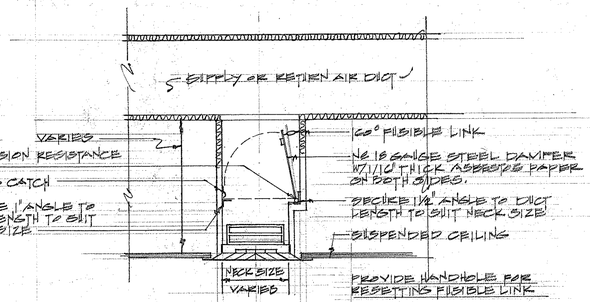
NO SCALE



TEMPERATURE CONTROL DIAGRAM



AIR-HANDLER PIPING DIAGRAM



TYPICAL FIRE DAMPER DETAIL

NO SCALE

EQUIPMENT SCHEDULE

WATER CHILLER

TYPE: PACKAGED RECIPROCATING WATER CHILLER, COMPLETE WITH HERMETIC RECIPROCATING COMPRESSORS, DIRECT EXPANSION SHELL & TUBE TYPE EVAPORATOR AND VERTICAL DISCHARGE AIR-COOLED CONDENSERS COMPLETE WITH MOTOR, BELTS AND DRIVES, FACTORY WIRED CONTROL PANEL, VIBRATION ISOLATORS, ALL REFRIGERANT PIPING AND ACCESSORIES.
"CARRIER" 30 GA 045 OR APPROVED EQUAL.
CAPACITY: 38.7 TONS MINIMUM CAPACITY WITH 90 GPM OF WATER COOLED TO 44°F LEAVING TEMPERATURE WITH 12.0 FT MAXIMUM PRESSURE DROP THRU EVAPORATOR, 56.6 KW INPUT.
POWER: 3/60/208V = 125.4 FLA/457 LRA

CHILLED WATER PUMPS (2-REQUIRED)

TYPE: SINGLE-STAGE, END SUCTION, CENTRIFUGAL CLOSE-COUPLED PUMP, BRONZE FITTED, CAST IRON CASING, BALL BEARING AND ENCLOSED MOTOR. "AURORA" 4X2 1/2X9, SERIES 340 OR APPROVED EQUAL.
CAPACITY: 90 GPM AGAINST 70 FT. TOTAL DISCHARGE HEAD, 1750 RPM, 8" DIAMETER IMPELLER, 3 HP MOTOR

AIR-HANDLER

TYPE: HORIZONTAL, DRAW-THRU, CEILING HUNG UNIT, COMPLETE WITH FACE & BY-PASS DAMPERS, FAN SECTION, COPPER TUBES AND ALUMINUM FINS, WATER COILS, FILTERS, DRIP PAN, MOTOR, DRIVES AND VIBRATION ISOLATORS. INSULATED SECONDARY DRIP PAN TO BE INSTALLED UNDER VALVES.
"CARRIER" MODEL 39 F OR APPROVED EQUAL.
CAPACITY:

UNIT NO.	S.A. CFM	TOTAL S.P. IN. OF H_2O	FAN RPM	COIL FACE VEL.-FPM	H_2O QUANTITY ENT.@44° F	H_2O PD. THRU COIL-FT. H_2O	ENT. AIR TEMP °F DB	°F WB	MIN. STH CAP. BTU/HR.	MOTOR HP	MODEL
1	2800	0.75	700	446	20	7.0	80.5	69.0	99,190	1/2	39 B060
2	3450	1.0	975	424	22	7.0	77.4	65.4	107,420	1.0	39 B070
3	1740	0.75	680	557	8	5.0	76.0	65.8	42,900	1/2	39 B060
4	2450	1.0	810	475	14	13.0	77.4	65.4	74,950	1.0	39 B060
5	1300	0.75	820	498	7	6.0	77.1	65.1	37,240	1/2	39 B050
6	1900	0.75	690	368	10	8.0	76.1	65.9	50,620	1/2	39 B060

POWER: 3/60/208V

EXHAUST FANS NO. 1, 2 & 3 ROOMS 108, 128 & 137

TYPE: CENTRIFUGAL, CEILING EXHAUST FAN COMPLETE WITH FAN MOTOR, BACKDRAFT DAMPER, HOUSING AND INTAKE GRILLE.
"PENN" ZEPHYR OR APPROVED EQUAL.
CAPACITY:

FAN NO.	LOCATION	CFM	S.P.	RPM	HP	MODEL	POWER
NO. 1	RM. NO. 108	140	1/4"	1080	1/10	Z-8	120V/1/60
NO. 2	RM. NO. 128	320	1/4"	1080	1/10	Z-10	120V/1/60
NO. 3	RM. NO. 137	240	1/4"	1080	1/10	Z-10	120V/1/60

EXHAUST FANS NO. 4 & 5, ROOMS 121, 122, 123 & 137

TYPE: CENTRIFUGAL, IN-LINE, CEILING HUNG, BELT-DRIVEN EXHAUST FAN, COMPLETE WITH MOTOR, DRIVES & VIBRATION ISOLATORS
"GREENHECK" MODEL SQB OR APPROVED EQUAL.
CAPACITY:

FAN NO.	LOCATION	CFM	S.P.	RPM	T.S.	HP	MODEL	POWER
NO. 4	RM. NO. 122	1480	3/8"	1970	3082	1/4	SQB-14-4	120V/1/60
NO. 5	RM. NO. 137	800	1/2"	1360	3961	1/4	SQB-10-4	120V/1/60

FUME HOOD for ASPHALT ROOM NO. 136

TYPE: FIBERGLASS ADD-AIR-47 WITH TWO EXPLOSION PROOF MOTOR AND BLOWER SETS AND AN EXPLOSION-PROOF LIGHT. "LABCONCO" OR APPROVED EQUAL.
BOTH EXPLOSION PROOF MOTORS AND LIGHT TO BE UL APPROVED.
CAPACITY: EXHAUST BLOWER MOTOR TO BE A 1/2 HP OPERATING ON 115V, 60 CYCLE, AC. EXHAUST BLOWER SHALL REMOVE 795 CFM AT 1/4" SP. THE INDICING MOTOR AND BLOWER SHALL DELIVER 475 CFM AT 1/4" SP. THE MOTOR WILL BE 1/4 HP OPERATING ON 115V, 60 CYCLE, AC.

REVISION NO.	DATE	DESCRIPTION	REVISION NO.	DATE	DESCRIPTION

KENNETH J. THOM REGISTERED PROFESSIONAL ENGINEER No. 2037-E HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

AIR-CONDITIONING DIAGRAMS, DETAILS AND EQUIPMENT SCHEDULE

DISTRICT OFFICE BUILDING
MAUI DISTRICT BASEYARD
KAHULUI MAUI HAWAII

KOBAYASHI - NISHIMURA
ARCHITECT & ENGINEER APRIL 1972

SHEET NO. M-6 OF 40 SHEETS

ORIGINAL PLAN
SURVEY PLOTTED BY
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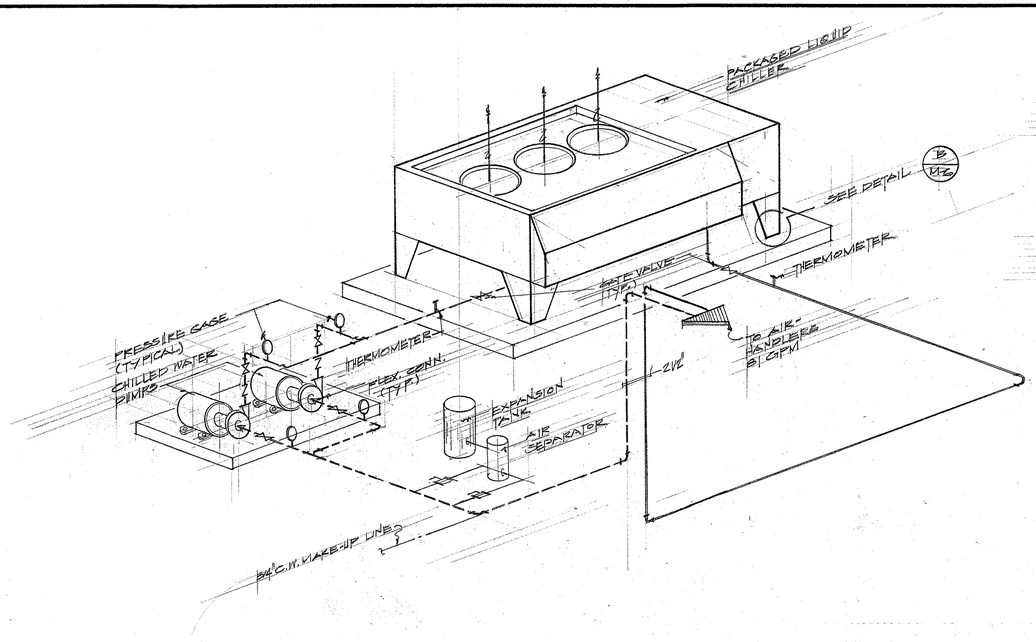
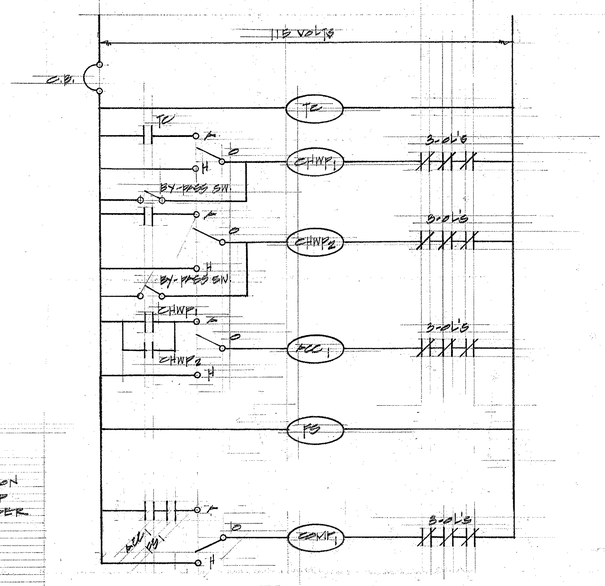
M-6

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
HAWAII	HAW.				



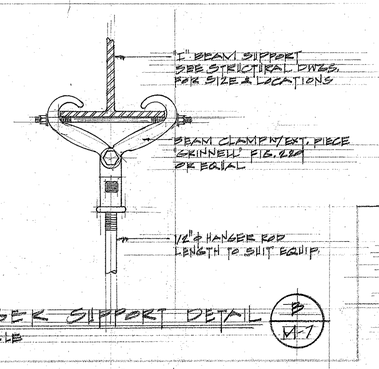
EQUIPMENT PIPING DIAGRAM



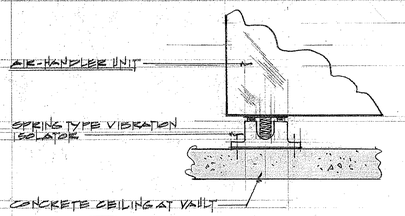
LEGEND

TC	7-DAY TIME CLOCK
CB	CIRCUIT BREAKER
O.L.	OVERLOAD PROTECTION
CHWP	CHILLED WATER PUMP
ACC	AIR-COOLED CONDENSER
PS	FLOW SWITCH
COMP	COMPRESSOR
—||—	RELAY
A	AUTOMATIC
H	HAND
O	OFF

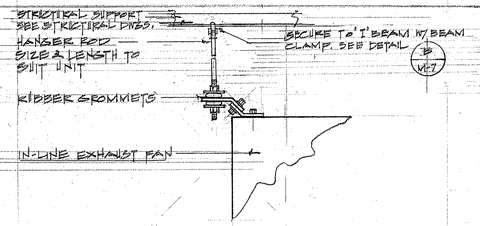
CONTROL WIRING DIAGRAM



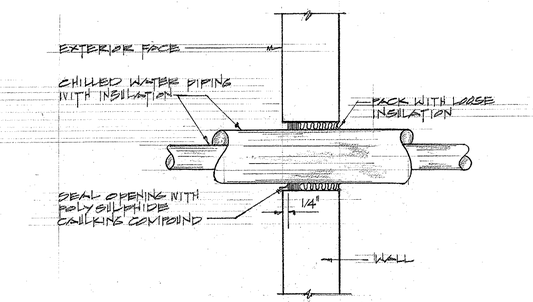
HANGER SUPPORT DETAIL B M-7
NO SCALE



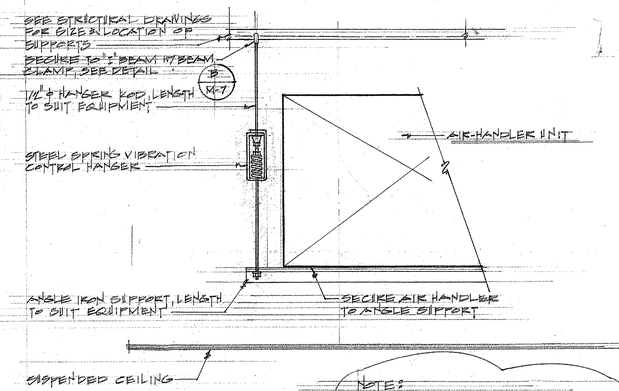
NOTE:
CONDITION @ AIR-HANDLER UNITS NO.5 ONLY



C M-7 EXHAUST FAN MOUNTING DETAIL
NO SCALE



PIPE PENETRATION THRU WALL DETAIL A M-7
N SCALE



NOTE:
CONDITION @ AIR-HANDLER UNITS NO. 1, 2, 4, 5 & 6

AIR-HANDLER SUPPORT DETAILS
NO SCALE

REVISION No.	DATE	DESCRIPTION	REVISION No.	DATE	DESCRIPTION

KENNETH J. TSUJI REGISTERED PROFESSIONAL ENGINEER No. 2027-E HAWAII, U.S.A.

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STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HIGHWAYS DIVISION

AIR-CONDITIONING DETAILS AND DIAGRAMS

DISTRICT OFFICE BUILDING
MAUI DISTRICT BASEYARD
KAHULUI MAUI HAWAII

KOBAYASHI - NISHIMURA
ARCHITECT & ENGINEER APRIL 1972

SHEET No. M-7 OF 40 SHEETS

ORIGINAL PLAN
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