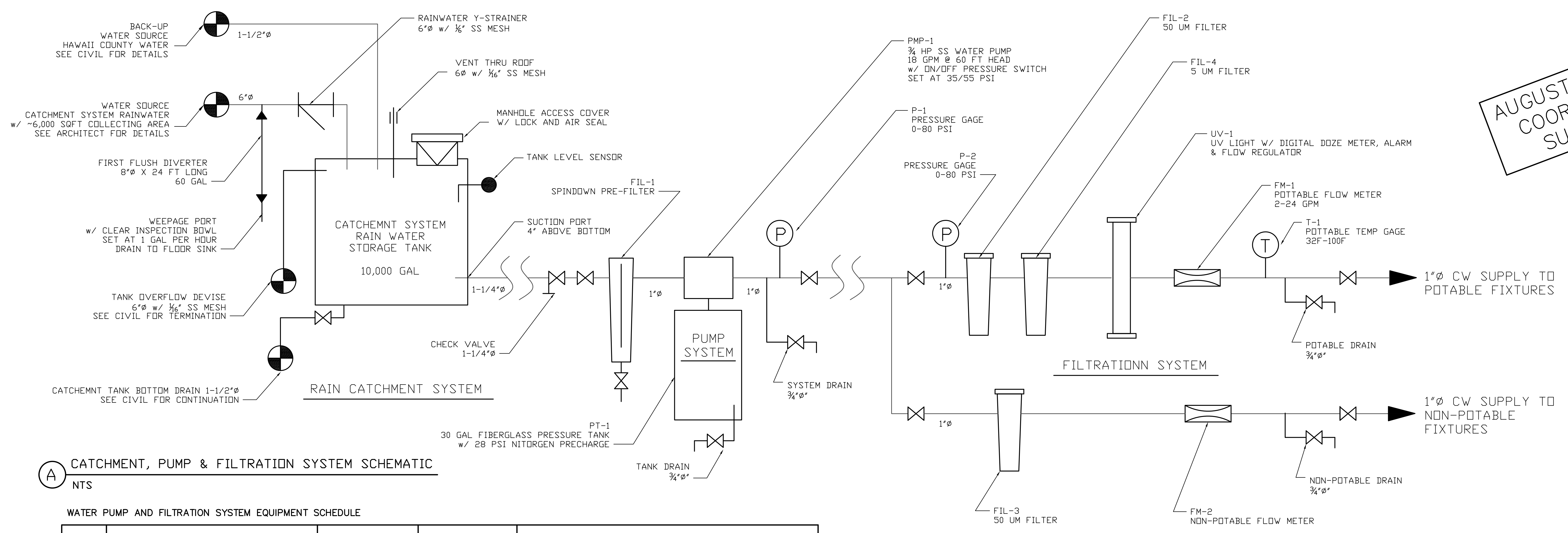


**AUGUST 11, 2008  
COORDINATION  
SUBMITTAL**

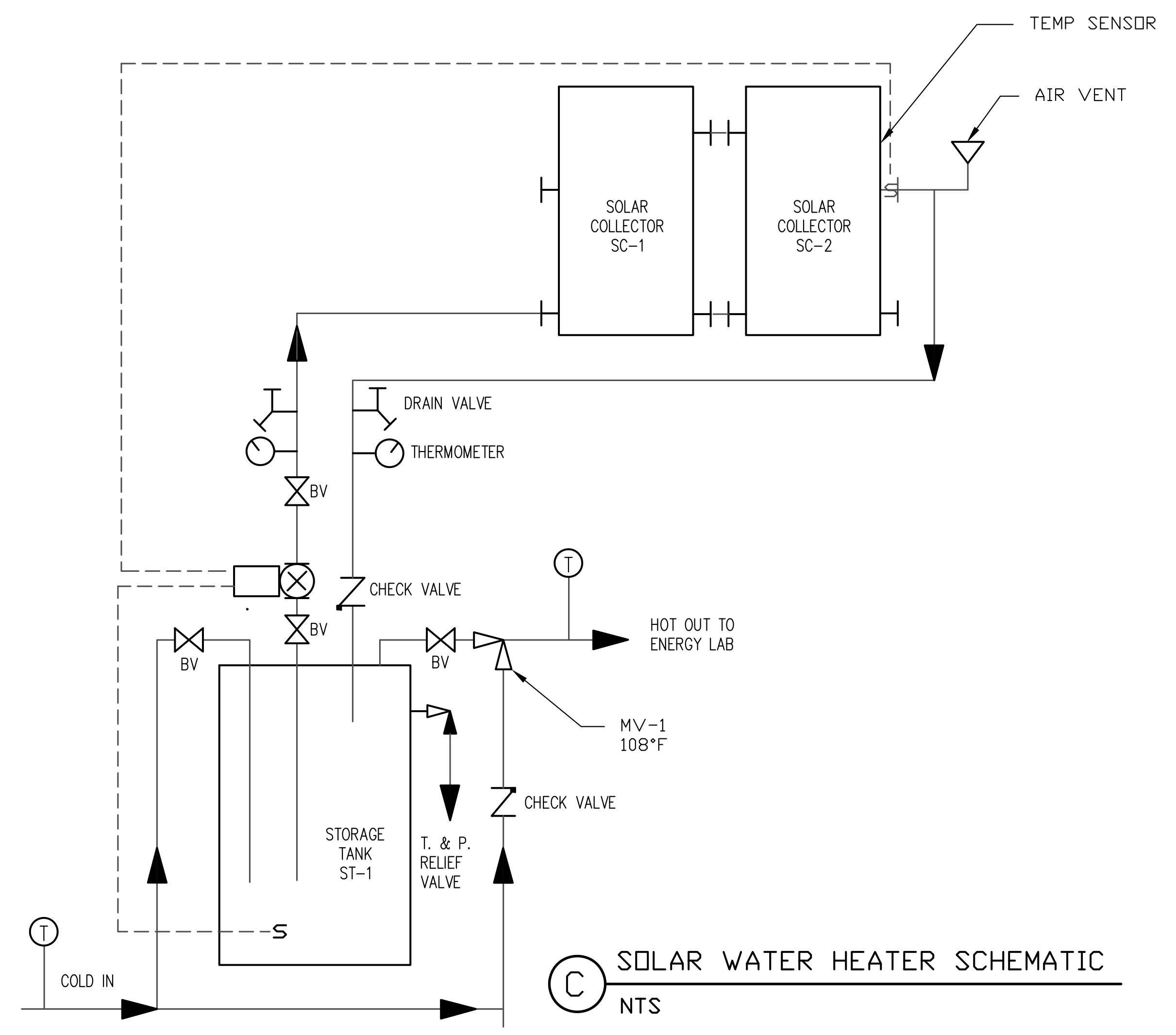
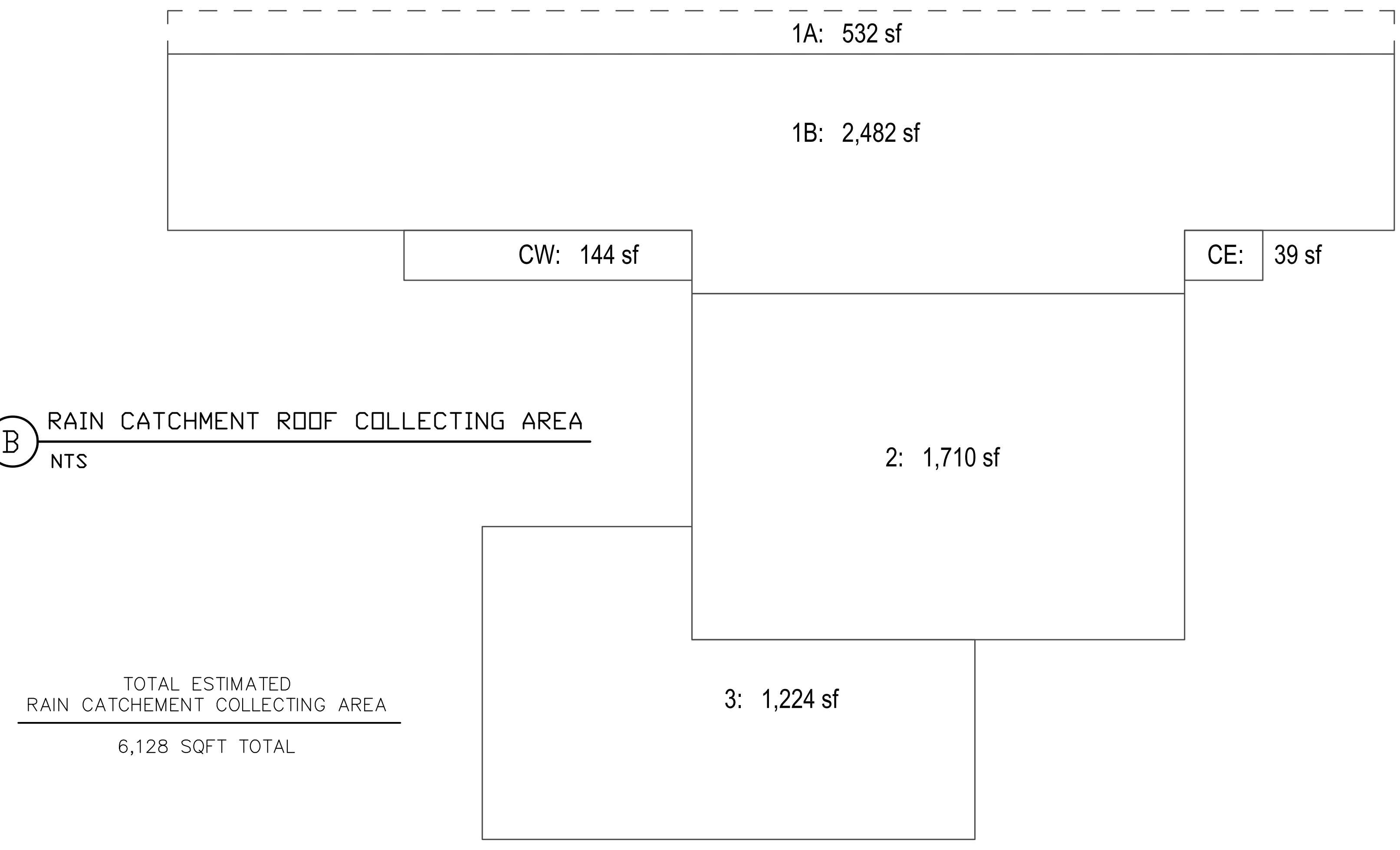


**(A) CATCHMENT, PUMP & FILTRATION SYSTEM SCHEMATIC**  
NTS

**WATER PUMP AND FILTRATION SYSTEM EQUIPMENT SCHEDULE**

TAG ID	DESCRIPTION	RATING	ELECT REQ	COMMENTS
FIL-1	SPIN-DOWN SEDIMENT PRE-FILTER CAMPBELL # FT4-250	250 MESH 20 GPM MAX	- -	1" SLIP
FIL-2 FIL-3	SEDIMENT FILTER 50 micron CAMPBELL # 2PP-B1H w/ 1SSHD	50 micron 12 GPM MAX	- -	1" FNPT, DOUBLE FILTER, OPAQUE w/ PRESSURE RELEASE
FIL-4	SEDIMENT FILTER 5 micron CAMPBELL # 2PP-B1H w/ 1SS-24S	5 micron 12 GPM MAX	- -	NSF CERTIFIED 1" FNPT, DOUBLE FILTER, OPAQUE w/ PRESSURE RELEASE
UV-1	ULTRAVIOLET DISINFECTION SYSTEM CAMPBELL # DWSW-15 w/ ATS-254E	15 GPM MAX	120V/1P/2A	3/4" MNPT, DOUBLE LIGHT, INTEGRAL WIPER & FLOW REGULATOR WITH UV DIGITAL DOSAGE METER AND ALARM
PT-1	PRE-PRESSURIZED DIAPHRAGM STAND TANK AMTROL WELL-XTROL # WX-302	86 GAL 54% ACCEPTANCE	- -	NSF CERTIFIED, 48"H x 26" DIA, 1-1/4" FNPT, 123 LBS 38 PSI CHARGE
PMP-1	SS CENTRIFUGAL WATER PUMP GRUNDFOS # JPS4	22 GPM @ 35 PSI	115V/230V/1P 1 HP	1" NPT SUCTION & DISCHARGE 30 LBS w/ INTEGRAL PRESSURE SWITCH 30/50 PSI

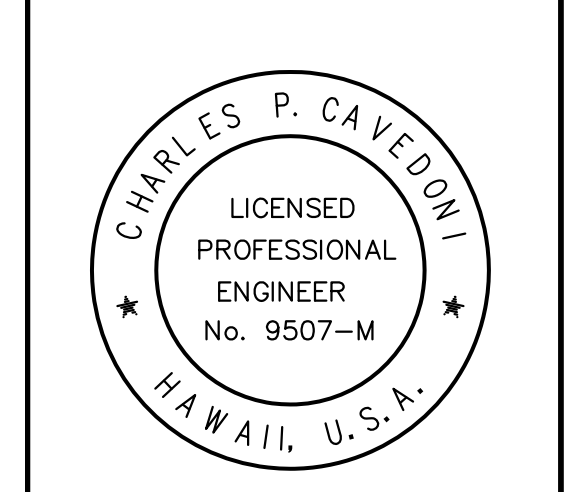
**(B) RAIN CATCHMENT ROOF COLLECTING AREA**  
NTS



**(C) SOLAR WATER HEATER SCHEMATIC**  
NTS

**SOLAR WATER HEATER EQUIPMENT SCHEDULE**

TAG ID	DESCRIPTION	CAPACITY	ELEC REQ	COMMENTS
ST-1	SOLAR ELECTRIC WATER STORAGE TANK RUDD SERVANT #RSPER80-1	80 GAL 4,500 W @ 240 V	4,500 W @ 240 V	59"H X 25"Ø, 192 LB, R-17.3 INSULATION UL LISTED
SC-1 SC-2	SOLAR COLLECTOR GLAZED FLAT PLATE SUN EARTH EMPIRE SERIES #EC32	29.81 SQFT NET APERTURE	- -	48"W X 98"L X 3.25" H, 106 LB DRY UL LISTED & SRCC CERTIFIED
CP-1	CIRCULATING PUMP, SINGLE STAGE GRUNDFOS #UP15-18SU		115/60/1 85W	SS PUMP
TC-1	DIFFERENTIAL TEMP CONTROLLER SUNEARTH #SETR 0301 U		115/60/1 1W	
MV-1	TEMP ACTUATED MIXING VALVE CASH ACME # 110-D 3/4" NPT			



THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION AND CONSTRUCTION OF THIS PROJECT WILL BE UNDER MY OBSERVATION.

SIGNATURE: \_\_\_\_\_

**HAKALAU  
ENGINEERING, LLC.**  
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HAKALAU, HI 96710  
(808) 961-6202

PROPOSED NEW BUILDING:  
**ENERGY LAB  
HAWAII PREPARATORY ACADEMY**  
KAMUELA, HAWAII 96720

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DATE ISSUED: XX/XX/XX

DRAWN BY: RH

SHEET NO. P1.4

5 OF 6 SHEET