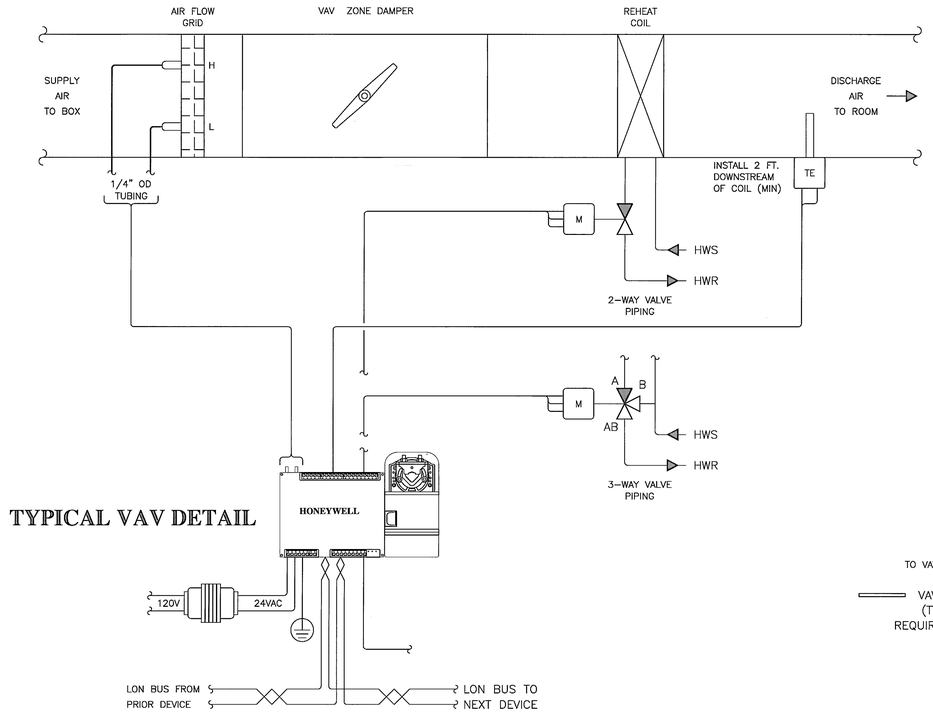


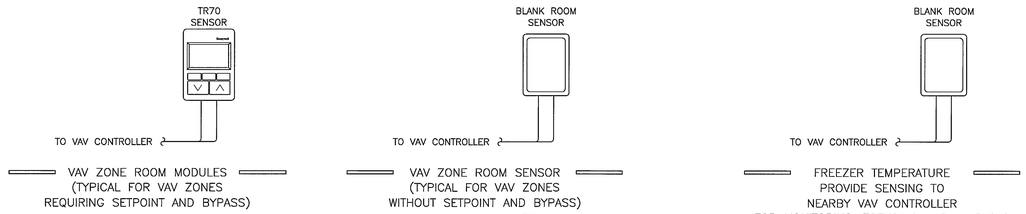
TYPICAL VAV DETAIL

SEQUENCE OF OPERATION

THE VAV ZONE CONTROLLER WILL PROVIDE VARYING AMOUNTS OF AIR INTO THE ZONE BASED ON THE ROOM LOAD VS. SETPOINT. THE REHEAT VALVE WILL BE MODULATED OPEN AS REQUIRED TO MAINTAIN THE LOAD. THE CONTROLLER WILL ALLOW FOR BYPASS OPERATION WHERE REQUIRED. ZONE DATA WILL BE CONDITIONED AND PROVIDED TO THE AC UNITS FOR CONTROL OF THE SPACE. VAV BOX DISCHARGE AIR TEMPERATURE (AFTER THE REHEAT COIL) WILL BE MONITORED.

NOTES:

1. FIELD VERIFY VAV CONTROLLER INSTALLATION AND WIRING.
2. 120 VAC POWER TO TRANSFORMER PROVIDED BY DIV 16
3. VERIFY PROPER VAV DAMPER ROTATION AND REHEAT VALVE OPERATION.
4. FOR REHEAT VALVE INFORMATION SEE VAV ZONE SCHEDULES.



VAV ZONE ROOM MODULES (TYPICAL FOR VAV ZONES REQUIRING SETPOINT AND BYPASS)

VAV ZONE ROOM SENSOR (TYPICAL FOR VAV ZONES WITHOUT SETPOINT AND BYPASS) ANIMAL ROOMS ETC.

FREEZER TEMPERATURE PROVIDE SENSING TO NEARBY VAV CONTROLLER FOR MONITORING, TRENDING AND ALARMING

VAV ZONE CONTROLS

(SEE MECHANICAL SCHEDULES)

R & R CONTROLS, INC.
4564 B ALVARADO CANYON ROAD
SAN DIEGO, CA. 92120
PHONE: 619-516-1880
FAX: 619-516-1881

PALM SPRINGS ANIMAL CARE FACILITY
ENERGY MANAGEMENT SYSTEM ARCHITECTURE

C			PALM SPRINGS ANIMAL CARE FACILITY
B			4575 E. MESQUITE AVENUE
A			PALM SPRINGS, CALIFORNIA 92262
REVISIONS		DATE	VAV ZONE CONTROLS
DATE: 12/01/09	SALES: / ENG:	DWG: * OF *	DWG. PS_ACF_004

SWATT | MIERS ARCHITECTS
5845 Doyle Street, Suite 104
Emeryville, CA 94608
Tel: 510 985 9779
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www.swattmiers.com

JAN 19 2010

BID SET

PREVAILING WAGE JOB

REGISTERED PROFESSIONAL ENGINEER DAVID P. LEDDICK No. 22271 EXP. 12/31/11 MECHANICAL STATE OF CALIFORNIA

MERRICK & ASSOCIATES
MECHANICAL CONSULTING AND ENGINEERING
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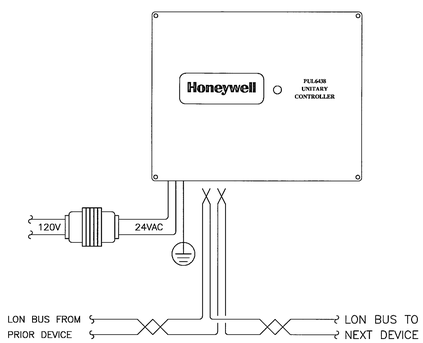

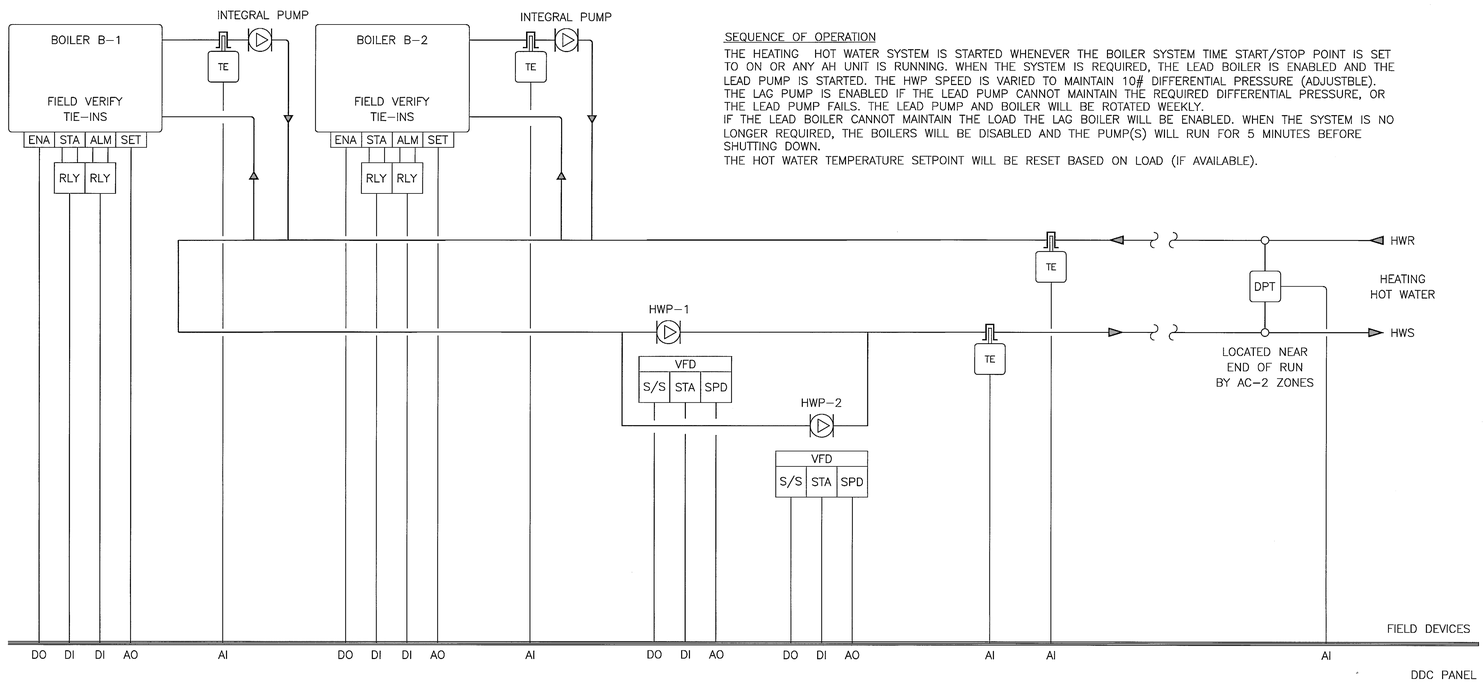

SEQUENCE OF OPERATION

THE HEATING HOT WATER SYSTEM IS STARTED WHENEVER THE BOILER SYSTEM TIME START/STOP POINT IS SET TO ON OR ANY AH UNIT IS RUNNING. WHEN THE SYSTEM IS REQUIRED, THE LEAD BOILER IS ENABLED AND THE LEAD PUMP IS STARTED. THE HWP SPEED IS VARIED TO MAINTAIN 10# DIFFERENTIAL PRESSURE (ADJUSTBLE). THE LAG PUMP IS ENABLED IF THE LEAD PUMP CANNOT MAINTAIN THE REQUIRED DIFFERENTIAL PRESSURE, OR THE LEAD PUMP FAILS. THE LEAD PUMP AND BOILER WILL BE ROTATED WEEKLY.
IF THE LEAD BOILER CANNOT MAINTAIN THE LOAD THE LAG BOILER WILL BE ENABLED. WHEN THE SYSTEM IS NO LONGER REQUIRED, THE BOILERS WILL BE DISABLED AND THE PUMP(S) WILL RUN FOR 5 MINUTES BEFORE SHUTTING DOWN.
THE HOT WATER TEMPERATURE SETPOINT WILL BE RESET BASED ON LOAD (IF AVAILABLE).

HEATING HOT WATER SYSTEM CONTROLS

(SEE MECHANICAL SCHEDULES)

R & R CONTROLS, INC.
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SAN DIEGO, CA. 92120
PHONE: 619-516-1880
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PALM SPRINGS ANIMAL CARE FACILITY
ENERGY MANAGEMENT SYSTEM ARCHITECTURE

C			PALM SPRINGS ANIMAL CARE FACILITY
B			4575 E. MESQUITE AVENUE
A			PALM SPRINGS, CALIFORNIA 92262
REVISIONS		DATE	HEATING HOT WATER SYSTEM CONTROLS
DATE: 12/01/09	SALES: / ENG:	DWG: * OF *	DWG. PS_ACF_005

PALM SPRINGS ANIMAL CARE FACILITY

4575 E. MESQUITE AVE.
PALM SPRINGS, CA 92262

CITY OF PALM SPRINGS
PROJECT NO. CP. 07-24

APN: 680-020-010

Issue

Rev	Date	By	Description
1	8/18/09	TH	DD SET
2	10/6/09	BL	PROGRESS SET
3	11/23/09	BL	Bldg. Permit Set
4	01/04/10	BL	Bldg. Permit Re-Submittal
5	01/18/10	BL	Bid Set

NOT FOR CONSTRUCTION

Drawn By	RO
Checked By	DM
Job No.	0903
Issue Date	01/18/10
Scale	1/8"=1'-0"

Reference North

Drawing Title

MECHANICAL CONTROLS

M1.5

Sheet

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