DATE: 05/22/96 TIME: 10:16:30
DESIGN FILE: I:\ligo\site\mu\wah142.soz

INPUT/OUTPUT SUMMARY FOR AIR HANDLING UNIT AH-03

SYSTEM, APPARATUS, OR AREA POINT DESCRIPTION	INPUTS: ANALOG: MEASURED: TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	LEVEL	GALLONS	VIBRATIONS	INPUTS: ANALOG: CALCULATED: KWH	ENTHALPY	RUN TIME	EFFICIENCY	WET BULB TEMP	INPUTS: BINARY: STATUS	FILTER	SMOKE	FREEZE	AIR FLOW	METER	OUTPUTS: DIGITAL: OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	MULTI-STAGE	OUTPUTS: ANALOG: DAMPER POSITION	VALVE POSITION	SET POINT ADJUSTMENT	VANE POSITION	SCR CONTROL	SYSTEM FEATURES: ALARMS: HI ANALOG	LOW ANALOG	HI BINARY	LOW BINARY	PROOF	SYSTEM FEATURES: PROGRAMS: TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	START/STOP OPTION	ENTHALPY OPTION	SMOKE CNT	TREND	ALARM INSTRUCT	MAINT WK ORD	GENERAL: COLOR GRAPHIC	SUPPLEMENTARY NOTES
OUTSIDE TEMERATURE	●																																										
OUTSIDE RELATIVE HUMIDITY (H)			●																																								
PREHEAT COIL, HC-11	●													●									●						●			●									●	●		
PREHEAT COIL, HC-12	●													●									●						●			●									●	●		
AIR FILTER, AF-03 (TYP 2)		●																											●												●		2 SENSORS
COOLING COIL, CC-05	●																								●				●											●	●		
COOLING COIL, CC-06	●																								●				●											●	●		
HEATING COIL, HC-09	●													●									●						●			●									●	●		
HEATING COIL, HC-10	●													●									●						●			●									●	●		
HUMIDIFIER, HU-05			●											●									●						●			●	●								●	●		
HUMIDIFIER, HU-06			●											●									●						●			●	●								●	●		
SUPPLY FAN, SF-05							●			●			●	●				●		●							●			●				●			●			●	●		
SUPPLY FAN, SF-06							●			●			●	●				●		●							●			●				●			●			●	●		
COLD AIR DECK	●	●		●																									●	●									●				
WARM AIR DECK	●	●		●																									●	●									●				
WARM AIR RELATIVE HUMIDITY			●																										●										●				
SPACE AVERAGE RELATIVE HUMIDITY			●																										●	●									●				
ROOM TEMPERATURE (TYPICAL 17 ZONES)	●																												●	●									●				
SMOKE DETECTOR (SD-02)															●																									●				RETURN AIR
MIXING AIR TEMP	●																																										
MIXING AIR RELATIVE HUMIDITY			●																																								
ROOM PRESSURIZATION (TYP 2)		●																												●														
AIR FLOW DIAGRAM																																									●		
FUME HOOD EXHAUST SYSTEM (TYP 2)											●			●						●																			●		●		
HEPA FILTER		●																												●												●		LOCATE SENSOR AT THE MOST REMOTE HEPA FILTER
RETURN & OUTSIDE AIR DAMPERS (TYP 3)																										●															●		
FLOOR PLANS																																										●		
VIBRATIONS FOR FANS							●																							●														

INPUT/OUTPUT SUMMARY FOR AIR HANDLING UNIT AH-04

SYSTEM, APPARATUS, OR AREA POINT DESCRIPTION	INPUTS: ANALOG: MEASURED: TEMPERATURE	PRESSURE	RH	KW	AIR FLOW	LEVEL	GALLONS	VIBRATIONS	INPUTS: ANALOG: CALCULATED: KWH	ENTHALPY	RUN TIME	EFFICIENCY	WET BULB TEMP	INPUTS: BINARY: STATUS	FILTER	SMOKE	FREEZE	AIR FLOW	METER	OUTPUTS: DIGITAL: OFF-ON	OFF-AUTO-ON	OFF-HI-LO	OPEN-CLOSE	MULTI-STAGE	OUTPUTS: ANALOG: DAMPER POSITION	VALVE POSITION	SET POINT ADJUSTMENT	VANE POSITION	SCR CONTROL	SYSTEM FEATURES: ALARMS: HI ANALOG	LOW ANALOG	HI BINARY	LOW BINARY	PROOF	SYSTEM FEATURES: PROGRAMS: TIME SCHEDULING	DEMAND LIMITING	DUTY CYCLE	START/STOP OPTION	ENTHALPY OPTION	SMOKE CNT	TREND	ALARM INSTRUCT	MAINT WK ORD	GENERAL: COLOR GRAPHIC	SUPPLEMENTARY NOTES
OUTSIDE TEMERATURE	●		●							●			●																														
OUTSIDE RELATIVE HUMIDITY (H)			●																																								
PREHEAT COIL, HC-13	●													●									●						●			●									●	●		
AIR FILTER, AF-03		●																											●												●		
COOLING COIL, CC-05	●																								●				●											●	●		
HUMIDIFIER, HU-05			●											●									●						●			●	●								●	●		
SUPPLY FAN							●			●			●	●				●		●							●			●				●			●			●	●		
SUPPLY AIR	●	●																											●	●									●				
SUPPLY AIR RELATIVE HUMIDITY			●																										●										●				
ROOM TEMPERATURE (TYPICAL 20 ZONES)	●																												●	●									●				
SPACE AVERAGE RELATIVE HUMIDITY			●																										●	●									●				SEE PLANS FOR LOCATION
ZONE DUCT HEATERS (TYPICAL 20 ZONES)	●													●									●																●				
EXHAUST FAN, EF-01											●			●						●																			●		●		
EXHAUST FAN, EF-02											●			●						●																			●		●		
SMOKE DETECTOR															●																									●				
AIR FLOW DIAGRAM																																										●		
ECONOMIZER DAMPERS																										●															●		
FLOOR PLANS																																										●		

NOTES:

1. FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEETS WA-H-001 AND WA-H-002.
2. FOR SEQUENCE OF OPERATION SEE SHEET WA-H-141.

LIGO-D960358-B-O

REVISIONS NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
B	5-22-96	CLP	MER	AA	TDM	BID ADDENDUM #2
A	4-19-96	CLP	ME	AA	TDM	FINAL DESIGN REVIEW & BID

REFERENCES — DRAWING NO. / DESCRIPTION

DRAWN	CLP
CHECKED	
ENGINEER	
PROJ	

PARSONS
100 WEST WALNUT STREET
PASADENA, CALIFORNIA

LIGO
CALIFORNIA INSTITUTE OF TECHNOLOGY
MASSACHUSETTS INSTITUTE OF TECHNOLOGY

LASER INTERFEROMETER
GRAVITATIONAL-WAVE OBSERVATORY
SITE NO. 1 - HANFORD, WASHINGTON

TITLE: HVAC - CORNER STATION SEQUENCES OF OPERATION & I/O SUMMARY SHEET 2

SCALE	CONTRACT NUMBER	PROJECT NUMBER
NONE	PP150969	8094

SHEET NUMBER: WA-H-142 REVISIONS: B

LIGOWAF.BOR

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