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### PACKAGED AIR HANDLING UNIT SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	MIN SP (IN. WG)	FAN			MOTOR				CHILLED WATER COIL							ELECTRIC HEATING COIL						FILTERS			OPER WT (LB)	MANUFACTURER/ MODEL NO.	MIN OUTSIDE AIR CEM	REMARKS										
					ACFM	BHP	RPM	HP	VOLTS/ PH/Hz	RPM	TYPE	TOTAL CAPACITY (BTUH)	SENSIBLE CAPACITY (BTUH)	MAX FACE VEL (FPM)	ACFM	MAX AIR PD (IN. WG)	ROWS	MAX FPI	EAT *FDB *FWB *FDB *FWB	LAT (*F) (*F)	LWT (*F) (*F)	GPM	HEATING CAPACITY (KW)	NUMBER OF STAGES	VOLTS/ PH/Hz	DUCT SIZE (IN)	TYPE					EFF (%)	OTY	SIZE (IN.)	PD (IN. WG) CLEAN	REPLACE- MENT					
L-CS-160-AH-04	OSB	OSB (OFFICES)	DRAW THRU SINGLE ZONE	4.5	CENT	10600	13	1100	15	460/3/60	1750	DP	475	360	445	9700	0.95	8	11	86.5	68.1	52.0	51.8	42	54.3	BB	11	---	---	---	---	TA	65	3	16X25X4 20X20X4	0.35	1.0	900	CARRIER CENTRAL 39L-B-2-21-3	2880	
L-CS-191-AH-05	MAINTENANCE BUILDING	MAINTENANCE BUILDING	DRAW THRU	1.75	CENT	1500	0.8	1500	1.0	460/3/60	1750	DP	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	TA	30	2	16X16X2	0.2	0.75	150	CARRIER CENTRAL 39L-B-1-2-4	750	

NOTES:  
1. FOR LEGEND, ABBREVIATIONS AND GENERAL NOTES SEE SHEETS LA-H-001 AND LA-H-002.

### CONVECTOR SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	POWER		OPER WT (LB)	MANUFACTURER/ MODEL NO.	REMARKS
				KW	VOLTS/PH/Hz			
L-CS-195-HT-01	MAINTENANCE BUILDING	FIRE PUMP ROOM	ELECTRIC	1.5	277/1/60	50	CHROMALOX HCH	
L-CS-195-HT-02	MAINTENANCE BUILDING	FIRE PUMP ROOM	ELECTRIC	1.5	277/1/60	50	CHROMALOX HCH	
L-CS-194-HT-03	MAINTENANCE BUILDING	DOMESTIC PUMP ROOM	ELECTRIC	1.5	277/1/60	50	CHROMALOX HCH	
L-CS-196-HT-04	MAINTENANCE BUILDING	ELECTRIC ROOM	ELECTRIC	1.5	277/1/60	50	CHROMALOX HCH	

### AIR FILTER SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	ACFM	EFFICIENCY PERCENT (%)	OTY	SIZE (IN.)	PD (IN. WG)		MANUFACTURER/ MODEL NO.	REMARKS
								CLEAN	REPLACE- MENT		
L-CS-107-AF-01	CORNER STATION	LVEA	TA	33,200	90	24	24X24X12	0.56	1.5	AAF VARICELL X	PRE-FILTER
L-CS-107-AF-02	CORNER STATION	LVEA	TA	33,200	90	24	24X24X12	0.56	1.5	AAF VARICELL X	PRE-FILTER
L-CS-107-AF-03	CORNER STATION	OSB (LAB)	TA	24,000	90	16	24X24X12	0.56	1.5	AAF VARICELL X	PRE-FILTER
L-EA-203-AF-01	END STATION A	END STATION A	TA	13,200	90	8	24X24X12	0.56	1.5	AAF VARICELL X	PRE-FILTER
L-EA-203-AF-02	END STATION A	END STATION A	TA	13,200	90	8	24X24X12	0.56	1.5	AAF VARICELL X	PRE-FILTER
L-EB-203-AF-01	END STATION B	END STATION B	TA	13,200	90	8	24X24X12	0.56	1.5	AAF VARICELL X	PRE-FILTER
L-EB-203-AF-02	END STATION B	END STATION B	TA	13,200	90	8	24X24X12	0.56	1.5	AAF VARICELL X	PRE-FILTER

\* IN ACCORDANCE WITH ASHRAE STD 52.1

### FAN SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	FAN		MOTOR				OPER WT (LB)	MANUFACTURER/ MODEL NO.	REMARKS			
				ACFM	MIN TSP (IN. WG)	RPM	DRIVE	BHP	HP				VOLTS/ PH/Hz	RPM	TYPE
L-CS-107-SF-01	LVEA	LVEA	VANE AXIAL	16,600	6.0	1770	DIRECT	23.3	30	460/3/60	1770	DP	1800	JOY 29-17-1000-1770	TWO STAGE, 1000 SERIES
L-CS-107-SF-02	LVEA	LVEA	VANE AXIAL	16,600	6.0	1770	DIRECT	23.3	30	460/3/60	1770	DP	1800	JOY 29-17-1000-1770	TWO STAGE, 1000 SERIES
L-CS-107-SF-03	LVEA	LVEA	VANE AXIAL	16,600	6.0	1770	DIRECT	23.3	30	460/3/60	1770	DP	1800	JOY 29-17-1000-1770	TWO STAGE, 1000 SERIES
L-CS-107-SF-04	LVEA	LVEA	VANE AXIAL	16,600	6.0	1770	DIRECT	23.3	30	460/3/60	1770	DP	1800	JOY 29-17-1000-1770	TWO STAGE, 1000 SERIES
L-CS-107-SF-05	LVEA	OSB	VANE AXIAL	12,000	6.5	1770	DIRECT	21.7	25	460/3/60	1770	DP	1800	JOY 29-21-2000-1770	TWO STAGE, 2000 SERIES
L-CS-107-SF-06	LVEA	OSB	VANE AXIAL	12,000	6.5	1770	DIRECT	21.7	25	460/3/60	1770	DP	1800	JOY 29-21-2000-1770	TWO STAGE
L-EA-203-SF-01	END STATION A	END STATION A	VANE AXIAL	13,200	6.0	1770	DIRECT	18.5	25	460/3/60	1770	DP	1800	JOY 29-17-1000-1770	TWO STAGE
L-EA-203-SF-02	END STATION A	END STATION A	VANE AXIAL	13,200	6.0	1770	DIRECT	18.5	25	460/3/60	1770	DP	1800	JOY 29-17-1000-1770	TWO STAGE STANDBY
L-EB-203-SF-01	END STATION B	END STATION B	VANE AXIAL	13,200	6.0	1770	DIRECT	18.5	25	460/3/60	1770	DP	1800	JOY 29-17-1000-1770	TWO STAGE
L-EB-203-SF-02	END STATION B	END STATION B	VANE AXIAL	13,200	6.0	1770	DIRECT	18.5	25	460/3/60	1770	DP	1800	JOY 29-17-1000-1770	TWO STAGE STANDBY
L-CS-149-EF-01	OSB	OSB	IN-LINE	950	0.5	1725	DIRECT	---	1/3	120/1/60	1160	DP	82	GREENHECK BSO-130-B	
L-CS-137-EF-02	OSB	OSB	IN-LINE	200	0.5	1725	DIRECT	---	1/6	120/1/60	1550	DP	46	GREENHECK BSO-90-D	
L-EA-203-EF-01	END STATION A	END STATION A	IN-LINE	80	0.375	1725	DIRECT	---	1/12	120/1/60	1300	DP	25	GREENHECK BSO-75-G	
L-EB-203-EF-01	END STATION B	END STATION B	IN-LINE	80	0.375	1725	DIRECT	---	1/12	120/1/60	1300	DP	25	GREENHECK BSO-75-G	
L-CS-168-EF-03	OSB	FUME HOOD #1	IN-LINE	800	0.5	1160	DIRECT	0.20	0.25	120/1/60	1160	EP	30	HARTZELL GDVA-1B	FIBERGLASS CONSTRUCTION EXPLOSION PROOF MOTOR
L-CS-168-EF-04	OSB	FUME HOOD #2	IN-LINE	800	0.5	1160	DIRECT	0.20	0.25	120/1/60	1160	EP	30	HARTZELL GDVA-1B	FIBERGLASS CONSTRUCTION EXPLOSION PROOF MOTOR

### AIR COMPRESSOR SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	ACFM	PSIG	MIN TANK CAPACITY (GAL)	HP	VOLTS/ PH/Hz	OPER WT (LB)	MANUFACTURER	REMARKS
L-CS-190-AC-01	CHILLER YARD	CORNER STATION	RECIPROCATING	17	100	120	5	460/3/60	1250	INGERSOLL RAND	AFTERCOOLER DESICCANT DRYER FOR -40°F DEW POINT, OUTDOOR CONSTRUCTION. THE AIR DRYER SHALL BE INSTALLED NEXT TO THE AIR COMPRESSOR AT CHILLER YARD.
L-CS-190-AC-02	CHILLER YARD	CORNER STATION	RECIPROCATING	17	100	120	5	460/3/60	1250	INGERSOLL RAND	AFTERCOOLER DESICCANT DRYER FOR -40°F DEW POINT, OUTDOOR CONSTRUCTION. THE AIR DRYER SHALL BE INSTALLED NEXT TO THE AIR COMPRESSOR AT CHILLER YARD.
L-EA-200-AC-01	CHILLER YARD	END STATION "A"	RECIPROCATING	17	100	120	5	460/3/60	1250	INGERSOLL RAND	AFTERCOOLER DESICCANT DRYER FOR -40°F DEW POINT, OUTDOOR CONSTRUCTION. THE AIR DRYER SHALL BE INSTALLED NEXT TO THE AIR COMPRESSOR AT CHILLER YARD.
L-EA-200-AC-02	CHILLER YARD	END STATION "A"	RECIPROCATING	17	100	120	5	460/3/60	1250	INGERSOLL RAND	AFTERCOOLER DESICCANT DRYER FOR -40°F DEW POINT, OUTDOOR CONSTRUCTION. THE AIR DRYER SHALL BE INSTALLED NEXT TO THE AIR COMPRESSOR AT CHILLER YARD.
L-EB-200-AC-01	CHILLER YARD	END STATION "B"	RECIPROCATING	17	100	120	5	460/3/60	1250	INGERSOLL RAND	AFTERCOOLER DESICCANT DRYER FOR -40°F DEW POINT, OUTDOOR CONSTRUCTION. THE AIR DRYER SHALL BE INSTALLED NEXT TO THE AIR COMPRESSOR AT CHILLER YARD.
L-EB-200-AC-02	CHILLER YARD	END STATION "B"	RECIPROCATING	17	100	120	5	460/3/60	1250	INGERSOLL RAND	AFTERCOOLER DESICCANT DRYER FOR -40°F DEW POINT, OUTDOOR CONSTRUCTION. THE AIR DRYER SHALL BE INSTALLED NEXT TO THE AIR COMPRESSOR AT CHILLER YARD.

### GLYCOL FEED PUMP SCHEDULE

UNIT NO.	LOCATION	SERVICE	FLOW RATE (GPM)	PRESSURE RANGE (PSIG)	HP	VOLTS/ PH/Hz	OPERATING WT (LBS)	MANUFACTURER/ MODEL NO.	TANK CAPACITY (GAL)	REMARKS
L-CS-107-GP-01	MECH ROOM	CORNER STATION	1.7	10-70	0.5	110/3/60	1000	WESSELLS GMP-2102	100	SELF-CONTAINED CONTROLS
L-EA-203-GP-01	MECH ROOM	END STATION "A"	1.7	10-70	0.5	110/3/60	500	WESSELLS GMP-2052	50	SELF-CONTAINED CONTROLS
L-EB-203-GP-01	MECH ROOM	END STATION "B"	1.7	10-70	0.5	110/3/60	500	WESSELLS GMP-2052	50	SELF-CONTAINED CONTROLS

### CHEMICAL POT FEEDER SCHEDULE

UNIT NO.	LOCATION	MIN SIZE (GAL)	OPER WT (LB)	CONSTRUCTION PRESSURE (PSIG)	MANUFACTURER/ MODEL NO.	REMARKS
L-CS-107-CF-01	CORNER STATION	5	100	125	J.L. WINGERT 5	INGERSOLL RAND
L-EA-203-CF-01	END STATION A	5	100	125	J.L. WINGERT 5	
L-EB-203-CF-01	END STATION B	5	100	125	J.L. WINGERT 5	

### CHILLED WATER CIRCULATING PUMP SCHEDULE

UNIT NO.	LOCATION	SERVICE	TYPE	FLUID	MAX FLUID TEMP (°F)	MOTOR				OPER WT (LB)	MANUFACTURER/ MODEL NO.	REMARKS				
						GPM	TOTAL HEAD (FT)	NPSH (FT)	BHP				HP	VOLTS/ PH/Hz	RPM	TYPE
L-CS-190-WP-01	CORNER STN	CORNER STN	CENTRIFUGAL	40% GLYCOL	60	367	125	10	17	20	460/3/60	3500	CENT	650	PACO, TYPE L 2570-7 (24X3X7)	25% GLYCOL
L-CS-190-WP-02	CORNER STN	CORNER STN	CENTRIFUGAL	40% GLYCOL	60	367	125	10	17	20	460/3/60	3500	CENT	650	PACO, TYPE L 2570-7 (24X3X7)	25% GLYCOL
L-CS-190-WP-03	CORNER STN	CORNER STN	CENTRIFUGAL	40% GLYCOL	60	367	125	10	17	20	460/3/60	3500	CENT	650	PACO, TYPE L 2570-7 (24X3X7)	25% GLYCOL (STANDBY)
L-EA-200-WP-01	END STN A	END STN A	CENTRIFUGAL	40% GLYCOL	60	105	120	6	5	7 1/2	460/3/60	3500	CENT	400	PACO, TYPE I 1270-7 (14X11/2 X7)	25% GLYCOL
L-EA-200-WP-02	END STN A	END STN A	CENTRIFUGAL	40% GLYCOL	60	105	120	6	5	7 1/2	460/3/60	3500	CENT	400	PACO, TYPE I 1270-7 (14X11/2 X7)	25% GLYCOL (STANDBY)
L-EB-200-WP-01	END STN B	END STN B	CENTRIFUGAL	40% GLYCOL	60	105	120	6	5	7 1/2	460/3/60	3500	CENT	400	PACO, TYPE I 1270-7 (14X11/2 X7)	25% GLYCOL
L-EB-200-WP-02	END STN B	END STN B	CENTRIFUGAL	40% GLYCOL	60	105	120	6	5	7 1/2	460/3/60	3500	CENT	400	PACO, TYPE I 1270-7 (14X11/2 X7)	25% GLYCOL (STANDBY)

### LIGO-D960963-02-0

LASER INTERFEROMETER GRAVITATIONAL-WAVE OBSERVATORY SITE NO.2 - LIVINGSTON, LOUISIANA

HVAC EQUIPMENT SCHEDULES SHEET 2

SCALE	CONTRACT NUMBER	PROJECT NUMBER
NONE	PP150969	8094
SHEET NUMBER	REVISONS	
LA-H-004	2 8-7-98 DJB AA AA WNK 1 3-20-97 WNK AA AA TDM	

100 WEST WALNUT STREET PASADENA, CALIFORNIA

CALIFORNIA INSTITUTE OF TECHNOLOGY MASSACHUSETTS INSTITUTE OF TECHNOLOGY

ISSUED FOR CONSTRUCTION

DRAWN	CLP	11-15-96
CHECKED	MN	10-25-96
ENGINEER	AA	10-23-96
PROJ	TDM	11-15-96

AS-BUILT DRAWINGS

DRAWING NO.	DESCRIPTION	NO.	DATE	BY	CHKD	ENGR	PROJ	DESCRIPTION
2	ISSUED FOR AS-BUILT	1	3-20-97	WNK	AA	AA	TDM	REVISED AIR COMP AND AHU SCHEDULE