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LABORATORY FIXTURES AND EQUIPMENT																				
EQUIPMENT AND FIXTURES IN THIS SCHEDULE ARE FURNISHED UNDER OTHER SECTIONS OF WORK. THE CONTRACTOR SHALL COORDINATE ROUGH-IN LOCATIONS AND MAKE FINAL CONNECTIONS TO INCLUDE PIPING, SHUT-OFF VALVES, REGULATORS, HOSES, SHOCK ARRESTORS, FILTERS OR OTHER APPURTENANCES NECESSARY TO MAKE FULLY OPERATIONAL. CONTRACTOR SHALL INSTALL ALL TRIM ITEMS FURNISHED LOOSE W/ EQUIP. (FIXTURES, VALVES, ETC.)																				
UNIT NO.	DESCRIPTION	MIN. FIXTURE BRANCH SIZES (IN.)																REMARKS		
		S	V	CW	HW	LW	LWV	ICW	HW	ICW	DI	D	G	LV	CO	LA	OZ		RO	
LS1	LAB SINK	-	-	-	-	2	1 1/2	1/2	1/2	-	1/2	-	-	-	-	-	-	-	-	
LS2	LAB SINK	-	-	-	-	2	1 1/2	1/2	-	-	-	-	-	-	-	-	-	-	-	
LS3	LAB SINK	-	-	-	-	2	1 1/2	1/2	1/2	-	-	-	-	-	-	-	-	-	-	
FH1	FUME HOOD	-	-	-	-	2	1 1/2	1/2	-	-	-	-	1/2	3/4	-	1/2	-	-	-	
FH2	FUME HOOD	-	-	-	-	-	-	-	-	-	-	-	1/2	3/4	-	1/2	-	-	-	
AO	AIR OUTLET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	
CO	CARBON DIOXIDE OUTLET	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	-	
GO	NATURAL GAS OUTLET	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	-	-	-	
VO	VACUUM OUTLET	-	-	-	-	-	-	-	-	-	-	-	-	3/4	-	-	-	-	-	
OO	OXYGEN OUTLET	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	
CSP1	CEILING SERVICE PANEL	-	-	-	-	-	-	-	-	-	-	-	-	3/4	-	1/2	-	-	-	
CSP2	CEILING SERVICE PANEL	-	-	-	-	-	-	-	-	-	-	-	1/2	3/4	-	1/2	-	-	-	
VS1	VIVARIUM SINK	2	1 1/2	1/2	1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
KS1	KITCHEN SINK	2	1 1/2	1/2	1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	SEE KITCHEN CONSULTANT PLANS.	
KS2	KITCHEN SINK	-	-	1/2	1/2	-	-	-	-	-	-	-	•	-	-	-	-	-	SEE KITCHEN CONSULTANT PLANS.	
BSC	BIO SAFETY CABINET	-	-	-	-	-	-	-	-	-	-	-	-	3/4	-	-	-	-	SOV AT 96" AFF.	
INC	INCUBATOR	-	-	-	-	-	-	-	-	-	-	-	-	-	1/2	-	-	-	SOV AND PRESSURE REGULATOR AT 96" AFF.	
GW	GLASS WASHER	-	-	-	-	-	1	1	-	1/2	2	-	-	-	-	1/2	-	-	INSTALL PRESSURE REGULATOR AND PRESSURE GAUGE ON WATER SUPPLY. ROUTE DRAIN FULL SIZE TO FLOOR SINK.	
STR1	STERILIZER	-	-	-	-	-	-	-	1 1/4	-	1 1/2	-	-	-	-	-	-	-	INSTALL PRESSURE REGULATOR AND PRESSURE GAUGE ON WATER SUPPLY. ROUTE DRAIN FULL SIZE TO FLOOR SINK.	
STR2	STERILIZER	-	-	-	-	-	-	-	1 1/2	-	2	-	-	-	-	-	-	-	INSTALL PRESSURE REGULATOR AND PRESSURE GAUGE ON WATER SUPPLY. ROUTE DRAIN FULL SIZE TO FLOOR SINK.	
STR3	STERILIZER	-	-	-	-	-	-	-	1	-	2	-	-	-	-	1/2	-	-	INSTALL PRESSURE REGULATOR AND PRESSURE GAUGE ON WATER SUPPLY. ROUTE DRAIN FULL SIZE TO FLOOR SINK.	
DRY	GLASSWARE DRYER	-	-	-	-	-	-	-	-	-	-	•	-	-	-	-	-	-	ROUTE DRAIN FULL SIZE TO FLOOR SINK.	
DW	DISHWASHER	-	-	-	1/2	-	-	-	-	-	-	•	-	-	-	-	-	-	SEE DETAIL #12 ON SHEET P5001.	
EW	EYEWASH	-	-	1/2	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
IM	ICE MACHINE	-	-	1/2	-	-	-	-	-	-	-	•	-	-	-	-	-	-	ROUTE DRAIN FULL SIZE TO FLOOR SINK.	
ES	EMERGENCY SHOWER & EYEWASH	-	-	1 1/4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	RECESSED IN WALL.	
SG	STEAM GENERATOR	-	-	-	-	-	-	-	-	3/4	-	-	-	-	-	-	-	-	INSTALL PRESSURE REGULATOR AND PRESSURE GAUGE ON WATER SUPPLY. ROUTE DRAIN FULL SIZE TO FLOOR SINK.	
CWD	CLOTHES WASHER & DRYER	-	-	3/4	3/4	-	-	-	-	-	-	•	-	-	-	-	-	-	CONNECT CW, HW, AND D TO LAUNDRY BOX LB-1	
XP	XRAY PROCESSOR	-	-	-	-	-	1/2	-	-	-	-	•	-	-	-	-	-	-	ROUTE DRAIN FULL SIZE TO FLOOR SINK.	
																				
LS4	LAB SINK	2	1 1/2	-	-	-	-	1/2	1/2	-	-	-	-	-	-	-	-	1/2	ROUTE DRAIN THRU DILUTION TRAP.	
UGW	UNDERCOUNTER GLASS WASHER	-	-	-	-	-	-	1/2	1/2	-	-	•	-	-	-	-	-	1/2	ROUTE DRAIN FULL SIZE TO A 2" STANDPIPE DRAIN.	

WATER SOFTENERS															
UNIT NO.	MANUFACTURER & MODEL NO.	SERVICE	LOCATION	TYPE	PRE-PIPED & WIRED SKID (Y/N)	EXCHANGE CAPACITY (KG) & SALT DOSEAGE (LBS)	SYSTEM SERVICE FLOW RATE CAPACITY (GPM)		ELECTRICAL	BACKWASH FLOW RATE (GPM)	OPER. HEIGHT (LBS.)	OVERALL DIMENSIONS (L x W x H)	REMARKS		
						MAXIMUM	CONTINUOUS	PEAK						V / PH / Hz	
WS 1	CULLIGAN QMS 300-320-PF	SCW	PLUMB. EQUIP. ROOM	REGEN.	Y	300/100	150	210	120 / 1 / 60		20	6,700	115"x45"x85"	DUPLEX PARALLEL, PROGRESSIVE FLOW SYSTEM, METER INITIATED REGENERATION, W/RECLAIM SYSTEM FOR PARTIAL RE-USE OF REGENERATION DRAIN WATER. SET PROGRESSIVE FLOW TO ACTIVATE SECOND SOFTNER AT 50 GPM.	

VACUUM PUMPS														
UNIT NO.	MANUFACTURER & MODEL NO.	SERVICE	LOCATION	TYPE	CAPACITY			ELECTRICAL			OPER. WEIGHT (LBS.)	OVERALL DIMENSIONS (L x W x H)	REMARKS	
					RECEIVER (GALLONS)	PRESSURE (IN. HG)	PUMP (SCFM)	HP (EACH)	V/PH/Hz	EMERG. POWER (Y/N)				
VP 1	BUSCH TYOD-2-LAB225	LV	PLUMB. EQUIP. ROOM	ROTARY VANE	200	24	62	10	460 / 3 / 60	N	3,200	61 x 50 x 89	SKID MOUNTED, DUPLEX SYSTEM, VERTICAL RECEIVER, CONTROL PANEL.	

AIR COMPRESSORS													
UNIT NO.	MANUFACTURER & MODEL NO.	SERVICE	LOCATION	TYPE	CAPACITY			ELECTRICAL			OPER. WEIGHT (LBS.)	OVERALL DIMENSIONS (L x W x H)	REMARKS
					RECEIVER (GALLONS)	PRESSURE (PSIG)	PUMP (CFM)	HP (EACH)	V/PH/Hz	EMERG. POWER (Y/N)			
AC 1	INGERSOLL-RAND 2-010C10	LA	PLUMB. EQUIP. ROOM	OIL-LESS RECIPROCATING	120	100	64	10	460 / 3 / 60	N	1,600	72 x 54 x 58	DUPLEX SYSTEM, COMPRESSORS MOUNTED ON HORIZONTAL TANK, CONTROL PANEL.

COMPRESSED AIR DRYERS														
UNIT NO.	MANUFACTURER & MODEL NO.	SERVICE	LOCATION	TYPE	CAPACITY			ELECTRICAL			OPER. WEIGHT (LBS.)	OVERALL DIMENSIONS (L x W x H)	REMARKS	
					SCFM	PRESSURE (PSIG)	DEW POINT TEMP. (°F)	HP	V/PH/Hz	EMERG. POWER (Y/N)				
AD 1	ZEPH 60 AMPS		LA PLUMB. EQUIP. ROOM	DESICCANT	60	100	-40	-	115 / 1 / 60	N	160	22 x 15 x 56	ROUTE PURGE DRAINS FULL SIZE TO FLOOR SINK.	

PLUMBING FIXTURES																
FIXTURE SYMBOL	FIXTURE	MIN. FIXTURE BRANCH SIZES (IN.)						REMARKS								
		S	OR	W	V	CW	HW		RW							
WC-1	WATER CLOSET	4	2	-	-	1	1/4	WALL MOUNTED, 1.6/1.1 GPF MANUAL DUAL FLUSH VALVE. MOUNT AT ACCESSIBLE HEIGHT WHERE REQUIRED.								
U-1	URNAL	2	1 1/2	-	-	3/4		WALL MOUNTED, 0.125 GPF AUTOMATIC FLUSH VALVE. MOUNT AT ACCESSIBLE HEIGHT WHERE REQUIRED.								
L-1	LAVATORY	2	1 1/2	1/2	1/2	-		UNDER COUNTER MOUNTED, SELF RIMMING, SELF CLOSING ELECTRONIC 0.5 GPM FAUCET.								
L-2	LAVATORY	2	1 1/2	1/2	1/2	-		WALL MOUNTED, SELF CLOSING ELECTRONIC 0.5 GPM FAUCET.								
S-1	SINK (BREAK ROOM)	2	1 1/2	1/2	1/2	-		SINGLE BOWL, STAINLESS STEEL, SINGLE LEVER FAUCET, GARBAGE DISPOSER 120V, 1/2HP. ROUTE 1/4" COPPER TUBING W/SOV TO REFRIGERATOR ICE MAKER CONNECTION.								
SH-1	SHOWER	2	1 1/2	1/2	1/2	-		PRE-FAB ADA ACCESSIBLE STALL, PRESSURE BALANCING VALVE, FIXED HEAD AND HAND HELD HEAD, FLOOR DRAIN WITH CHROME PLATED STRAINER.								
SH-2	SHOWER	2	1 1/2	1/2	1/2	-		ADA ACCESSIBLE TILED STALL BY OTHERS, PRESSURE BALANCING VALVE, FIXED AND HAND HELD HEAD, FLOOR DRAIN WITH CHROME PLATED STRAINER.								
HB-1	HOSE BIBB	-	-	3/4	-	-		RECESSED IN WALL MOUNTED STAINLESS STEEL LOCKABLE BOX, VACUUM BREAKER.								
HB-2	HOSE BIBB	-	-	3/4	-	-		WALL MOUNTED, BRASS BODY, VACUUM BREAKER, CHROME PLATED FINISH FOR INTERIOR LOCATIONS, AND ROUGH BRASS FINISH FOR EXTERIOR LOCATIONS.								
HB-3	HOSE BIBB	-	-	3/4	-	-		RECESSED IN WALL MOUNTED CHROME PLATED LOOKABLE BOX IN CONCRETE WALL, VACUUM BREAKER.								
SS-1	SERVICE SINK	3	1 1/2	3/4	3/4	-		FLOOR MOUNTED, TERRAZZO, WALL MOUNTED FAUCET. 1, 2, OR 3 TILING FLANGES AS NECESSARY.								
ES-1	EMERGENCY SHOWER & EYEWASH	-	-	1 1/4	-	-		FREE STANDING, COMBO UNIT								
HS-1	HOSE STATION	-	-	3/4	3/4	-		WALL MOUNTED, CW AND HW MIXING, HOSE AND SPRAY NOZZLE								
DE-1	DRINKING FOUNTAIN	2	1 1/2	1/2	-	-		HIGH/LOW DUAL HEIGHT TYPE WATER CHILLER, BARRIER FREE, STAINLESS STEEL, ELECTRIC CHILLER RECESSED IN WALL.								
LB-1	LAUNDRY BOX	2	1 1/2	3/4	3/4	-		RECESSED GALVANIZED STEEL BOX WITH 2" DRAIN, SINGLE LEVER VALVE AND HAMMER ARRESTERS								
FD-1	FLOOR DRAIN	2	1 1/2	-	-	-		CAST IRON BODY WITH 6" DIA. NICKEL BRONZE STRAINER, 2" OUTLET								
FD-2	FLOOR DRAIN	2	1 1/2	-	-	-		CAST IRON BODY, 6" DIA. NICKEL BRONZE DOME STRAINER, 2" OUTLET.								
FD-3	FLOOR DRAIN	4	2	-	-	-		CAST IRON BODY, 8" DIA. NICKEL BRONZE STRAINER, 4" OUTLET. ZURN #2415-BB.								
FD-4	FLOOR DRAIN	4	2	-	-	-		CAST IRON BODY & DOME STRAINER, ST. STL. MESH SCREEN OVER DOME, 4" OUTLET. ZURN #234B.								
FS-1	FLOOR SINK	2	1 1/2	-	-	-		CAST IRON BODY WITH ACD RESISTANT COATED INTERIOR. 12" SQUARE, 6" DEEP, 2" OUTLET.								
FS-2	FLOOR SINK	3	1 1/2	-	-	-		CAST IRON BODY WITH ACD RESISTANT COATED INTERIOR. 12" SQUARE, 8" DEEP, 3" OUTLET.								
FS-3	FLOOR SINK	4	2	-	-	-		CAST IRON BODY WITH ACD RESISTANT COATED INTERIOR. 12" SQUARE, 8" DEEP, 4" OUTLET.								
D-1	DRAIN	3	1 1/2	-	-	-		CAST IRON BODY WITH 8" DIA NICKEL BRONZE STRAINER, 3" OUTLET.								
DR-1	DRAIN RECEPTOR	3	1 1/2	-	-	-		11" DIA. WITH 2" HIGH DAM.								
DD-1	DECK DRAIN	-	-	-	-	-		CAST IRON BODY, 9" DIA CAST IRON GRATE, 3" OUTLET, WIDE FLANGE.								
RD-1	ROOF DRAIN	-	-	-	-	-		CAST IRON BODY AND DOME STRAINER.								
ORD-1	OVERFLOW ROOF DRAIN	-	-	-	-	-		CAST IRON BODY AND DOME STRAINER, 2" HIGH DAM								
GT-1	GREASE TRAP	4	2	-	-	-		POLYETHYLENE CONSTRUCTION, 616 LBS. GREASE CAPACITY, 75 GPM MAX. FLOW. WITH SAMPLE BOX, AIR TIGHT GASKETED SOLID COVER. TRAP AND SAMPLE BOX COVERS SHALL BE FLUSH WITH FINISHED FLOOR.								
DT-1	DILUTION TRAP	2	1 1/2	-	-	-		ROUTE LAB SINK L/W TO DILUTION TRAP INLET. ROUTE S FROM DILUTION TRAP OUTLET WITH V TAKE OFF DOWN STREAM OF DILUTION TRAP. LOCATE DILUTION TRAP IN CABINETRY BELOW SINK. IPEX #9611								