

SPLIT SYSTEM VRV SCHEDULE														
INDOOR UNIT FCU	SERVING	AIR FLOW RATE CFM			BRANCH CONTROLLER	HEATING		COOLING		INDOOR UNIT				NOTES
		LOW	MED	HI		TOTAL CAP. (BTUH)	TOTAL CAP. (BTUH)	LG MODEL	TYPE	MCA	MOCF	FLA	V-PH-HZ	
		UNIT NO.	UNIT NO.	UNIT NO.		UNIT NO.	UNIT NO.	UNIT NO.	UNIT NO.	UNIT NO.	UNIT NO.	UNIT NO.	UNIT NO.	
2-1	CHAPEL 201	890	1,020	1,140	BS 2-1	40,200	36,200	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-2	MEETING 205	350	390	400	BS 2-2	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-3	LAUNDRY 206	250	270	280	BS 2-3	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-4	BEDROOM 207	250	270	280	BS 2-2	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-5	BEDROOM 208	250	270	280	BS 2-3	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-6	BEDROOM 209	250	270	280	BS 2-2	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-7	BEDROOM 210	250	270	280	BS 2-3	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-8	VISITOR'S LOUNGE 211	350	390	400	BS 2-4	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-9	COMPUTER ROOM 212	350	390	400	BS 2-5	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-10	BEDROOM 213	250	270	280	BS 2-4	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-11	BEDROOM 214	250	270	280	BS 2-5	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-12	BEDROOM 215	250	270	280	BS 2-4	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-13	BEDROOM 216	250	270	280	BS 2-5	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-14	COORIDOR	350	390	400	BS 2-6	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
2-15	COORIDOR	350	390	400	BS 2-6	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-1	COMMUNITY ROOM 301	890	1,020	1,140	BS 3-1	40,200	36,200	ARNU3638GA2	DUCTED HIGH STATIC	3	15	2.3	208-1-60	1,2,3,5,6
3-2	DINING 302	890	1,020	1,140	BS 3-1	40,200	36,200	ARNU3638GA2	DUCTED HIGH STATIC	3	15	2.3	208-1-60	1,2,3,5,6
3-3A	KITCHEN 305	350	390	400	BS 3-2	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-3B	KITCHEN 305	350	390	400	BS 3-2	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-4	LAUNDRY 306	250	270	280	BS 3-3	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-5	BEDROOM 307	250	270	280	BS 3-2	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-6	BEDROOM 308	250	270	280	BS 3-3	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-7	BEDROOM 309	250	270	280	BS 3-2	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-8	BEDROOM 310	250	270	280	BS 3-3	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-9	VISITOR'S LOUNGE	350	390	400	BS 3-4	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-10	LIBRARY 312	250	270	280	BS 3-5	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-11	BEDROOM 313	250	270	280	BS 3-4	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-12	BEDROOM 314	250	270	280	BS 3-5	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-13	BEDROOM 315	250	270	280	BS 3-4	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-14	BEDROOM 316	250	270	280	BS 3-5	10,900	9,600	ARNU093TRC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-15	COORIDOR	350	390	400	BS 3-6	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6
3-16	COORIDOR	350	390	400	BS 3-6	21,500	19,100	ARNU183TQC2	CEILING CASSETTE	2	15	0.2	208-1-60	1,2,3,4,5,6

NOTES:
 1. ALL UNITS SHALL BE BALANCED TO HIGH SPEED FOR FANS.
 2. VENTILATION AIR FOR SPACE VIA NATURAL VENTILATION.
 3. UNITS BRANCH CONTROLLER BOX SERVED BY ROOF MOUNTED HEAT RECOVERY UNIT.
 4. UNIT SHALL COME WITH (1) FAN.
 5. PROVIDE UNIT WITH REMOTE THERMOSTAT.
 6. PROVIDE FACTORY FURNISHED CONDENSATE PUMP, PROVIDE CHECK VALVE IN CONDENSATE DISCHARGE LINE

GENERAL PROJECT NOTES

- PROVIDE ACCESS DOORS WHERE REQUIRED TO ALLOW FOR ACCESS TO EQUIPMENT (VALVING ETC...)
- COORDINATE REFRIGERANT PIPING ROUTING WITH OTHER TRADES, SUPPORT, SIZE AND INSTALL RS/RL PER MFR'S RECOMMENDATIONS.
- COORDINATE MOTORS AND OTHER ELECTRICAL EQUIPMENT FURNISHED UNDER DIVISION 15 WITH DIVISION 16. PROVIDE EQUIPMENT COORDINATION TABLE AS A SHOP DRAWING FOR REVIEW. TABLE SHALL INCLUDE BUT NOT BE LIMITED TO THE FOLLOWING INFORMATION:
 A) EQUIPMENT POWER REQUIREMENTS INCLUDING AMPS & VOLTAGES.
 B) DISCONNECTING MEANS AND OVER CURRENT PROTECTION REQUIREMENTS.
 C) CONTROL REQUIREMENTS.
- COORDINATE THE INSTALLATION OF LIGHTING FIXTURES WITH PIPING AND EQUIPMENT BEING INSTALLED IN THE FACILITY SUCH THAT PIPING AND EQUIPMENT DO NOT BLOCK OR IMPEDE LIGHTING.
- INSTALL EQUIPMENT, IE: AHU'S, BRANCH BOX CONNECTORS, FANS, ETC... IN SUCH A MANNER AS TO PROVIDE ADEQUATE SPACE FOR MAINTENANCE AND EQUIPMENT ACCESS.
- COORDINATE MOUNTING HEIGHTS AND LOCATIONS OF THERMOSTATS SERVING EQUIPMENT WITH THE OWNER AND/OR ARCHITECT.
- FIRE STOP ALL PIPING AND DUCT PENETRATIONS THRU FIRE WALLS AND FLOORS, IN ADDITION PROVIDE FIRE DAMPERS IN ALL DUCTS THAT PASS THROUGH FIRE WALLS-REFER TO ARCHITECTURAL DWG. 'S' FOR FIRE WALL LOCATIONS.
- COORDINATE INSTALLATION OF AHU'S, BRANCH BOX CONNECTOR AND HRV-1 CONTROLS WITH DIVISION 16
- REPLACE AIR FILTERS SERVING AIR HANDLING UNIT EQUIPMENT PRIOR TO FINAL BALANCING OF ALL AIR DISTRIBUTION SYSTEMS
- PROVIDE WEATHER TIGHT WALL & ROOF DUCT AND PIPING PENETRATIONS, ALL SEALING MATERIALS TO BE APPROVED BY ARCHITECT.
- ROUTE DOMESTIC WATER PIPING, HVAC PIPING, ETC. IN PIPE CHASES AND FURRED OUT AND ABOVE CEILINGS. NO PIPING SHALL BE EXPOSED UNLESS APPROVED BY THE ARCHITECT OR OWNER.
- UNLESS OTHERWISE INDICATED, ALL WORK SHOWN IS NEW WORK.

BRANCH CONTROLLER SCHEDULE									
UNIT DESIGN	ASSOCIATED AHU	UNIT LOCATION	# OF PORTS	ELECTRICAL AMP	V-PH-HZ	UNIT WEIGHT (LBS)	LG ELECTRONICS MODEL	NOTES	
BS 2-1	FCU 2-1	CHAPEL 201	2	0.2	208-1-60	45	PRHR020A		
BS 2-2	FCU 2-2, FCU 2-4, FCU 2-6	BEDROOM 207	3	0.2	208-1-60	49	PRHR030A		
BS 2-3	FCU 2-3, FCU 2-5, FCU 2-7	BEDROOM 208	3	0.2	208-1-60	49	PRHR030A		
BS 2-4	FCU 2-8, FCU 2-10, FCU 2-12	BEDROOM 213	3	0.2	208-1-60	49	PRHR030A		
BS 2-5	FCU 2-9, FCU 2-11, FCU 2-13	BEDROOM 214	3	0.2	208-1-60	49	PRHR030A		
BS 2-6	FCU 2-14, FCU 2-15	ABOVE CORRIDOR CLG	2	0.2	208-1-60	45	PRHR020A		
BS 3-1	FCU 3-1, FCU 3-2	COMMUNITY 301	2	0.2	208-1-60	45	PRHR020A		
BS 3-2	FCU 3-3A, FCU 3-3B, FCU 3-5, FCU 3-7	BEDROOM 307	4	0.2	208-1-60	53	PRHR040A		
BS 3-3	FCU 3-4, FCU 3-6, FCU 3-8	BEDROOM 308	3	0.2	208-1-60	49	PRHR030A		
BS 3-4	FCU 3-9, FCU 3-11, FCU 3-13	BEDROOM 313	3	0.2	208-1-60	49	PRHR030A		
BS 3-5	FCU 3-10, FCU 3-12, FCU 3-14	BEDROOM 314	3	0.2	208-1-60	49	PRHR030A		
BS 3-6	FCU 3-15, FCU 3-16	ABOVE CORRIDOR CLG	2	0.2	208-1-60	45	PRHR020A		

NOTES:
 1. PROVIDE BALL VALVES AND CAP ALL ADDITIONAL UNUSED RS/RL PORTS ON BOX.
 2. MAINTAIN ACCESS TO BRANCH CONTROLLER BOX IN CEILING SPACE.

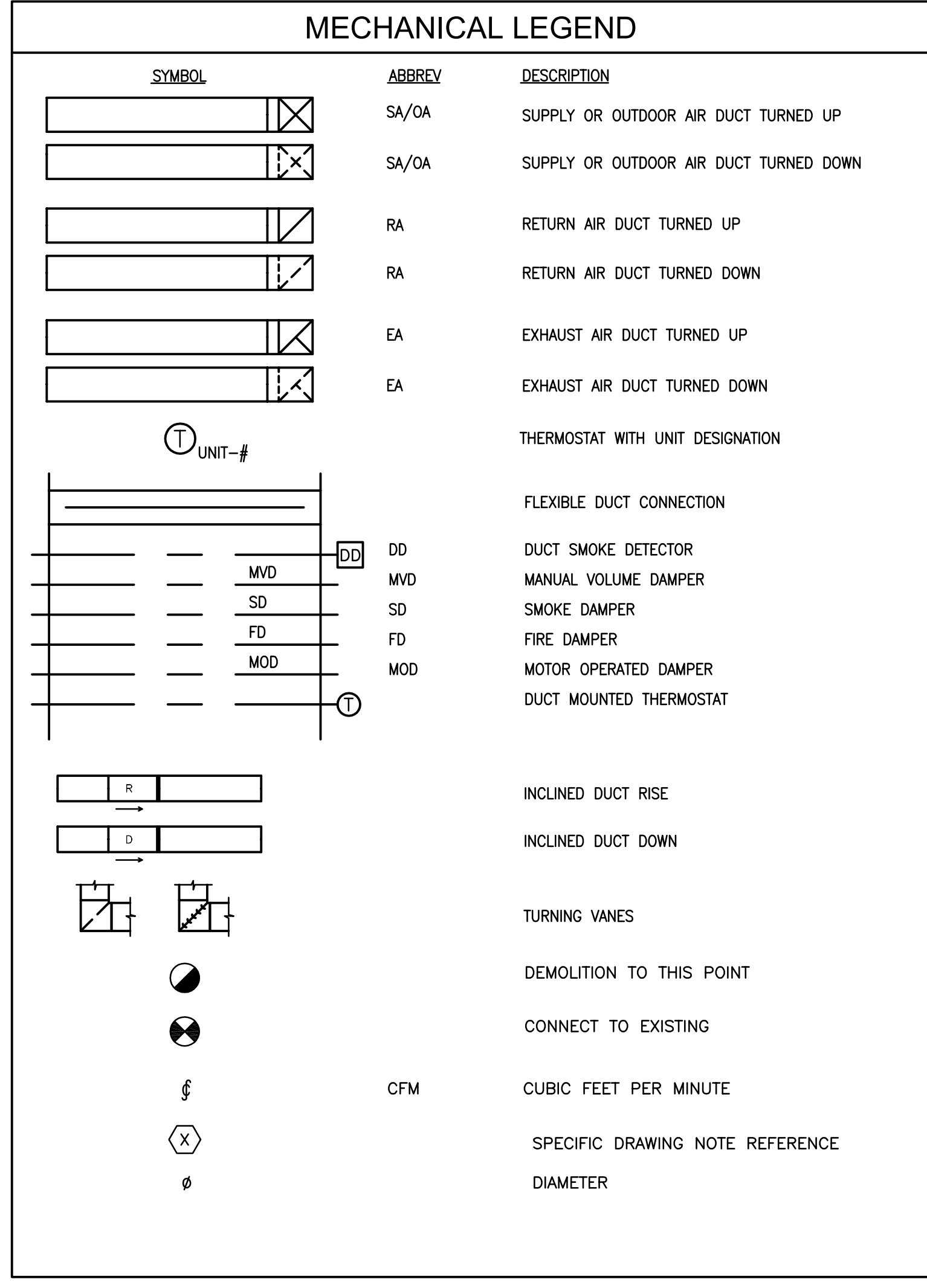
VARIABLE FLOW REFRIGERANT HEAT PUMP SCHEDULE												
UNIT DESIGN	LOCATION	SERVING	COOLING NOMINAL BTUH	COOLING RATED BTUH	HEATING NOMINAL BTUH	HEATING RATED BTUH	EER	ELECTRICAL MCA	MOCF	V-PH	LG ELECTRONICS MODEL	NOTES
HRV-2	ROOF	SECOND FLOOR	216,000	216,000	243,000	243,000	14.2	49.9/23.3	70/35	208-3	ARUR2168T3	1,2,3,4,5,6
HRV-3	ROOF	THIRD FLOOR	216,000	216,000	243,000	243,000	14.2	49.9/23.3	70/35	208-3	ARUR2168T3	1,2,3,4,5,6

NOTES:
 1. UNIT WEIGHT = 1,035 LBS
 2. COMPRESSORS = QUANTITY OF 3, ONE INVERTER SCROLL COMPRESSOR & ON CONSTANT SCROLL COMPRESSOR.
 3. FANS = QUANTITY OF 3, PROPELLER TYPE, 15,100 CFM, DIRECT DRIVE
 4. REFRIGERANT TYPE = R410A
 5. SOUND PRESSURE 3 dB(A) = 61
 6. UNIT IS A COMBINATION OF TWO SMALLER UNITS. TWO ELECTRICAL CIRCUITS REQUIRED.

GENERAL MECHANICAL DEMOLITION NOTES

- NOTIFY THE OWNER, IN WRITING, AT LEAST FOURTEEN (14) DAYS IN ADVANCE OF ALL REQUIRED SHUTDOWNS OF WATER, SEWER, FIRE PROTECTION, GAS, ELECTRICAL SERVICE, OR OTHER UTILITIES. UPON WRITTEN RECEIPT OF APPROVAL FROM OWNER, SHUTDOWNS SHALL BE PERFORMED BETWEEN THE HOURS OF SIX (6) P.M. AND SIX (6) A.M. OR AS DIRECTED OTHERWISE BY THE OWNER AT NO ADDITIONAL CONTRACT COST. AT THE END OF EACH WORK DAY SHUT DOWN ALL SERVICES SHALL BE RESTORED SO THAT NORMAL USE OF UTILITIES CAN CONTINUE.
- WHEN WORKING IN AND AROUND THE EXISTING BUILDING, CARE SHALL BE EXERCISED WITH REGARD TO PROTECTION OF EXISTING STRUCTURE AND MECHANICAL AND ELECTRICAL SERVICES WHICH SHALL REMAIN.
- REPAIR, REPLACE, OR RESTORE TO THE SATISFACTION OF THE ARCHITECT ALL EXISTING WORK DAMAGED IN THE PERFORMANCE OF DEMOLITION AND/OR NEW WORK.
- THE EXISTING CONDITIONS (PIPING, EQUIPMENT, AND MATERIALS) SHOWN ON THE CONTRACT DOCUMENTS ARE BASED ON INFORMATION OBTAINED FROM AVAILABLE RECORD DRAWINGS AND FIELD SURVEYS AND SHALL BE CONSIDERED DIAGRAMMATIC. THE CONTRACTOR SHALL FIELD VERIFY EXACT SIZES AND LOCATIONS OF ALL PIPING, EQUIPMENT, AND MATERIALS PRIOR TO COMMENCING WITH NEW AND DEMOLITION WORK.
- EXISTING MECHANICAL AND ELECTRICAL WORK INDICATED TO BE REMOVE: (PIPES, VALVES, ETC.) SHALL BE REMOVED TO A POINT BELOW THE FINISHED FLOORS OR BEHIND FINISHED WALLS AND INSTALLED. TERMINATION POINTS SHALL BE FAR ENOUGH BEHIND FINISHED SURFACES TO ALLOW FOR THE INSTALLATION OF THE NORMAL THICKNESS OF FINISHED MATERIAL.
- EXISTING PIPING NO LONGER REQUIRED TO REMAIN IN SERVICE SHALL BE DISCONNECTED AND REMOVED BACK TO EXISTING ASSOCIATED SERVICE MAINS UNLESS OTHERWISE INDICATED OR NOTED ON THE CONTRACT DRAWINGS. REMOVE EXISTING PIPE HANGERS, SUPPORTS, VALVES, ETC. EXISTING PIPING INDICATED OR REQUIRED TO REMAIN IN SERVICE OR IN PLACE SHALL BE CAPPED, PLUGGED OR OTHERWISE SEALED. NO EXISTING PIPING SHALL BE LEFT OPEN ENDED.
- PATCH TO MATCH EXISTING ALL NEW AND EXISTING OPENINGS IN WALLS, CEILINGS AND FLOOR SURFACES DAMAGED OR CREATED BY DEMOLITION WORK. PATCHING SHALL MATCH EXISTING ADJACENT SURFACES AS TO THICKNESS, TEXTURES, MATERIALS, AND COLOR. ALL PATCHING SHALL BE PERFORMED TO THE SATISFACTION OF THE ARCHITECT AND AT NO ADDITIONAL CONTRACT COST.
- ALL DEMOLISHED EQUIPMENT SHALL BE OFFERED TO THE OWNER PRIOR TO DISPOSAL. EQUIPMENT RETAINED BY THE OWNER SHALL BE STORED WHERE DIRECTED BY THE OWNER. ANY EQUIPMENT THE OWNER DOES NOT WISH TO RETAIN SHALL BE DISPOSED OF, OFF SITE, BY THE CONTRACTOR.

NATURAL VENTILATION SCHEDULE						
ROOM	DESCRIPTION	FLOOR AREA (SQFT)	% OF FLOOR AREA	OPERABLE WINDOW AREA (SQFT)	OPERABLE WINDOW AREA % OF FLOOR AREA	OPERABLE WINDOW AREA > 4% OF FLOOR AREA (Y/N)
1	CHAPEL 201	850	10.40	34.00	66.6	Y
2	MEETING 205	260	10.40	14.8	Y	
3	STORAGE 203	120	4.80	7.4	Y	
4	LAUNDRY 206	110	4.40	7.4	Y	
5	BEDROOM 207	180	7.20	14.8	Y	
6	BEDROOM 208	180	7.20	14.8	Y	
7	BEDROOM 209	180	7.20	14.8	Y	
8	BEDROOM 210	180	7.20	14.8	Y	
9	VISITOR'S LOUNGE 211	240	9.60	14.8	Y	
10	COMPUTER ROOM 212	260	10.40	14.8	Y	
11	BEDROOM 213	180	7.20	14.8	Y	
12	BEDROOM 214	180	7.20	14.8	Y	
13	BEDROOM 215	180	7.20	14.8	Y	
14	BEDROOM 216	180	7.20	14.8	Y	
15	COMMUNITY 301	530	21.20	64.4	Y	
16	DINING 302	320	12.80	64.4	Y	
17	KITCHEN 305	310	12.40	22.2	Y	
18	LAUNDRY 306	110	4.40	7.4	Y	
19	BEDROOM 307	180	7.20	14.8	Y	
20	BEDROOM 308	180	7.20	14.8	Y	
21	BEDROOM 309	180	7.20	14.8	Y	
22	BEDROOM 310	180	7.20	14.8	Y	
23	VISITOR'S LOUNGE 311	240	9.60	14.8	Y	
24	BEDROOM 313	180	7.20	14.8	Y	
25	BEDROOM 314	180	7.20	14.8	Y	
26	BEDROOM 315	180	7.20	14.8	Y	
27	BEDROOM 316	180	7.20	14.8	Y	



MECHANICAL ABBREVIATIONS

ABBREV	DESCRIPTION	ABBREV	DESCRIPTION
A.C.	AIR CONDITIONER	MBH	THOUSANDS OF BTU'S/HOUR
A.F.F.	ABOVE FINISHED FLOOR	MFGR.'S	MANUFACTURER'S
A.P.D.	AIR PRESSURE DROP	MECH.	MECHANICAL
ARCH.	ARCHITECTURAL	MIN., MAX.	MINIMUM, MAXIMUM
A.T.C.	AUTOMATIC TEMPERATURE CONTROL	NO.	NUMBER
BTUH	BRITISH THERMAL UNITS PER HOUR	O.E.D.	OPEN ENDED DUCT
CAP	CAPACITY	O.A.	OUTDOOR AIR
CFM	CUBIC FEET PER MINUTE	PSIG	POUNDS PER SQUARE INCH GAUGE
COMP.	COMPRESSOR	P-	PLUMBING FIXTURE DESIGNATION
CLG.	CEILING	REG.	REGISTER
CONT.	CONTINUATION	R.P.M.	REVOLUTION PER MINUTE
DN.	DOWN	RA	RETURN AIR
DR.	DRAIN	RAR	RETURN AIR REGISTER
DWG.	DRAWING	RHC	RETURN COIL
D.B.	DRY BULB	R.L.A.	RUNNING LOAD AMPS