														ROOF TOP HV	AC UNITS											
TAG#	SERVES	COOLING	DESIGN	SUP	PĻY FAN	DATA				COOLING	DATA (95°F A	MBIENT)			GAS FURNA	CE		FILTERS		OUTE	OOR ELEC	TRIC		OUTDOOR	MANUFACTURER AND MODEL	NOTES
		CAPACITY	0A	CFM	RPM	ESP	HP	TOTAL	SENSIBLE	COOLING	AIR DATA	EER	STAGES	HEATING	HEATING A	AIR DATA	TYPE	THICKNESS	MERV	VOLTAGE	PHASE	MCA	HACR	WEIGHT		
		TONS	CFM					MBH	MBH	ENT. DB	ENT. WB			MBH	ENT. DB	LVG. DB								LBS		
RTU-1	PUBLIC WORKS	15.0	725	6000	-	0.75	3.0	161.1	122.2	77	64	12.1	2	208.0	57	87	PLEATED	2"	8	208	3	68.0	90	2700	TRANE YHD180	1,5
RTU-2	WATER RESOURCES		500	2400	855	0.75	1.0	69.8	45.5	79	66	12.4	1	-	-	-	PLEATED	2"	8	208	3	30	45	943	TRANE THC072	2,5
RTU-3	PARKS AND REC SPACE	∃ 3.0	200	1200	938	0.75	1.0	27.0	20.9	78	64	12.7	1	-	-	-	PLEATED	2"	8	208	3	20.6	30	767	TRANE THC036	2,5
RTU-4	FUTURE EXPANSION	7.5	310	3000	1145	0.75	1.5	67.9	54.2	77	64	12.6	2	117.2	60	90	PLEATED	2"	8	208	3	41.9	50	1276	TRANE YHC092	2,3,4
RTU-5	FACILITIES	5.0	180	2000	1008	0.75	1.0	47.8	38.5	76	63	13.4	1	-	-	-	PLEATED	2"	8	208	3	27.7	40	1065	TRANE THC060	2,4
								•																		

1. PROVIDE WITH 100% OA COMPARATIVE ENTHALPY ECONOMIZER, MODULATING GAS FURNACE, THROUGH THE BASE ELECTRICAL CONNECTION, UNIT MOUNTED NON-FUSED DISCONNECT, CONVENIENCE OUTLET, MULTI-SPEED SUPPLY FAN, MANUFACTURER'S UNIT CONTROLS, ROOF CURB, SMOKE DETECTOR 2. PROVIDE WITH 100% OA COMPARATIVE ENTHALPY ECONOMIZER, THROUGH THE BASE ELECTRICAL CONNECTION, UNIT MOUNTED NON-FUSED DISCONNECT, CONVENIENCE OUTLET, MANUFACTURER'S UNIT CONTROLS, ROOF CURB, SMOKE DETECTOR

3. PROVIDE WITH MULTI-SPEED FAN AND TWO STAGE GAS FURNACE

4. PROVIDE WITH BAROMETRIC RELIEF DAMPER PROVIDE POWERED EXHAUST

TYPICAL MANUFACTURER AND MODEL ARE FOR REFERENCE ONLY. PRODUCTS FROM OTHER MANUFACTURERS THAT MEET THE PERFORMANCE AND SPECIFICATION REQUIREMENTS ARE ALSO ACCEPTABLE.

												S	PLIT AIR CON	IDITIONERS											
T.	4G #	SERVES	COOLING	SUPPLY	FAN DAT	4		COOLING D	ATA (95°F AM	(BIENT)	HYDR	ONIC REHEA	T COIL		FILTERS	INDOO	RELECTRIC	INDOOR	OUTE	OOR ELECT	RIC		OUTDOOR	MANUFACTURER AND MODEL	NOTES
	_		CAPACITY	CFM	TSP H	PTOTAL	SENSIBLE	COOLING A	R DATA	SEER	HEATING	GPM	HEATING A	AIR DATA	TYPE	MCA M	IOCP VOLTAGI	E WEIGHT	VOLTAGE	PHASE	MCA	HACR	WEIGHT		
INDOOF	OUTDO)R	TONS		IN. WC	MBH	MBH	ENT. DB (°F)	ENT. WB (°F))	MBH	AT 170°F	ENT. DB	LVG. DB				LBS					LBS		
AH-1	AC-	ARCH VAULT	2.0	800	1.75 0.	5 18.5	12.7	76	68	13.0	10.0	1.0	70	80	2" MERV 8	5.33	15 230/1Ø	177	230	1	18	30	142	TRANE BCHD024 INDOOR, TRANE 4TTR3024 OUTDOOR	1

NOTES: 1. PROVIDE FAN COIL AND AIR CONDITIONER FROM SAME MANUFACTURER. PROVIDE WITH ACCESSORIES FOR LOW AMBIENT COOLING. PROVIDE INDOOR AND OUTDOOR UNITS WITH UNIT DISCONNECTS.

MANUFACTURER SHALL BE BASIS OF DESIGN OR APPROVED EQUIVALENT.

												HEAT PUM	IP SYSTEM												
T/	\G #	TYPE	SERVES	COOLING	SUPPL'	Y FAN DAT	Ā		COOLING I	DATA (95°F A	(MBIENT)	HEAT PUM	P HEATING DATA (47°F AMBI	ENT) FILTERS	INDC	OR ELECTRIC	INDOO	R OUT	DOOR ELEC	TRIC		OUTDOOR		MANUFACTURER AND MODEL	NOTES
				CAPACIT\				SENSIBLE	COOLING A		SEER	HEATING	HEATING AIR DATA	TYPE	VOLTAGE	PHASE MCA	WEIGH		PHASE		HACR	WEIGHT	SOUND		
INDOOF	OUTDOOR	$\overline{\mathbb{R}}$		TONS			MBH	MBH	ENT. DB (°F			MBH	ENT. DB (°F)				LBS					LBS	dBA		
	HP-1	VRF HEAT PUMP	NORTH OFFICE	S 3.0	-	-	31.0	-	-	-	13.0	19.0	-	-	-		-	230	1	31	40	269	53	MITSUBISHI PUMY-P36NKMU1	1
FC-1	HP-1	AIR HANDLER	N. PW OFFICES	3 2.0	735	650	21.0	17.5	76	61	13.0	12.0	70	WASHABLE	230	1 3.0	113	-	-	-	-	-	38	MITSUBISHI PVFY-P24NAMU-E1	1
FC-2	HP-1	WALL MOUNT	ADMIN PAO 119	9 0.5	200	30	5.4	4.5	75	67	13.0	3.5	70	WASHABLE	230	1 0.2	22	-	-	-	-	-	35	MITSUBISHI PKFY-P06NBMU-E2R1	1
FC-3	HP-1	WALL MOUNT	ENG. ADMIN 12	0.5	200	30	4.6	4.0	75	67	13.0	3.5	70	WASHABLE	230	1 0.2	22	-	-	-	-	-	35	MITSUBISHI PKFY-P06NBMU-E2R1	1
	HP-2	VRF HEAT PUMP	CORE RMS	3.0	-	-	31.9	-	-	-	13.0	24.1	-	-	-		-	230	1	31	40	269	53	MITSUBISHI PUMY-P36NKMU1	1
FC-4	HP-2	CEILING - CONCEALED	MEETING 126	0.5	210	50	5.9	3.4	75	67	13.0	5.7	70	WASHABLE	230	1 0.5	42	-	-	-	-	-	24	MITSUBISHI PEFY-P06NMSU-ER2	1,2
FC-5	HP-2	WALL MOUNT	ADMIN PFO 128	8 0.5	200	30	1.5	0.9	75	67	13.0	1.6	70	WASHABLE	230	1 0.2	22	-	-	-	-	-	35	MITSUBISHI PKFY-P06NBMU-E2R1	1
FC-6	HP-2	CEILING - CONCEALED	MEETING 104	1.0	370	70	11.5	6.8	75	67	13.0	5.1	70	WASHABLE	230	1 0.75	46	-	-	-	-	-	35	MITSUBISHI PEFY-P12NMSU-ER2	1,2
FC-7	HP-2	CEILING - RECESSED	RECEPT. 102	0.5	350	50	5.4	3.3	75	67	13.0	4.3	70	WASHABLE	230	1 0.3	34	-	-	-	-	-	38	MITSUBISHI PLFY-P08NCMU-ER4	1,2
FC-8	HP-2	WALL MOUNT	SERVER 209	1.0	413	30	7.6	7.6	76	57	13.0	0	70	WASHABLE	230	1 0.5	42	-	-	-	-	-	24	MITSUBISHI PEFY-P06NM-SU-ER2	1
	HP-3	VRF - HEAT PUMP	WATER RES	4.0	-	-	41.9	-	-	-	13.0	23.7	-	-	-		-	230	1	31	40	269	54	MITSUBISHI PUMY-P48NKMU1	1
FC-9	HP-3	WALL MOUNT	PRKS COM. 13°	1 0.5	200	30	5.9	5.5	75	67	13.0	3.5	70	WASHABLE	230	1 0.2	22	-	-	-	-	-	24	MITSUBISHI PKFY-P06NBMU-E2R1	1,2
FC-10	HP-3	CEILING - CONCEALED	BREAK 132	1.0	370	70	8.4	4.9	75	67	13.0	6.0	70	WASHABLE	230	1 0.75	I	-	-	-	-	-	35	MITSUBISHI PEFY-P12NMSU-ER2	1,2
FC-11	HP-3	CEILING - CONCEALED	WR OFFICES	2.5	880	170	27.6	26.8	75	67	13.0	14.2	70	WASHABLE	230	1 2.73	67	-	-	-	-		39	MITSUBISHI PEFY-P30NAMU-E3	1,2
	HP-4	VRF HEAT PUMP	SOUTH OFFICE	S 1.5	-	-	13.5	-	-	-	13.0	9.5	-	-	-		-	230	1	17.2	20	126	54	MITSUBISHI MXZ-2C20NA2	1
FC-12	HP-4	WALL MOUNT	ENG ARCH 139	0.5	170	30	4.4	3.7	75	67	13.0	3.5	70	WASHABLE	230	1 1.0	22	-	-	-	-	-	22	MITSUBISHI MSZ-GL06NA-U1	1,2
FC-13	HP-4	CEILING - CONCEALED	MEETING 140	1.0	388	131	9.1	6.0	75	67	13.0	6.0	70	WASHABLE	230	1 1.0	50	-	-	-	-	-	33	MITSUBISHI SEZ-KD12NA4	1,2
	AC-5	SPLIT AIR CONDITIONER	SV OFFICES	1.5	-	-	13.5	-	-	-	13.0	0	-	-	-		-	230	1	11	20	99	44	MITSUBISHI PUZ-A18NKA7	1,3
FC-14	AC-5	CEILING CONCEALED	SV OFFICES	1.5	600	85	13.3	10.6	75	67	13.0	0	-	WASHABLE	230	1 1.7	62	-	-	-	-	-	33	MITSUBISHI PEAD-A18AA7	1,2,3
	NOTES: 1	ALL MULTIZONE HEAT DUE	AD COMPONENTS	CHVII DE D	V THE CAN	AE NAANI IE	ACTUDED									•									

NOTES: 1. ALL MULTIZONE HEAT PUMP COMPONENTS SHALL BE BY THE SAME MANUFACTURER 2. PROVIDE WITH MANUFACTURERS INTEGRAL CONDENSATE PUMP

3. PROVIDE WITH ACCESSORIES FOR COOLING BELOW 23°F OAT. 4. NOT IN CONTRACT. TO BE INSTALLED BY OTHERS.

MANUFACTURER AND MODEL ARE BASIS OF DESIGN. APPROVED EQUIVALENTS ARE ACCEPTABLE.

								ENERG\	Y RECOVERY \	√ENTILAT	ORS				
TAG#	TYPE		OUTSIDE A	AIR (WINTER)			RELIEF AIR	(WINTER)			ELECT	RICAL	WEIGHT	TYPICAL MANUFACTURER AND MODEL	NOTES
		CFM	EAT (°F)	LAT (°F)	FAN ESP	CFM	EAT (°F)	LAT (°F)	FAN ESP	FLA	MOP	VOLTS/PHASE	LBS.		
ERV-1	PLATE	200	-20	47	0.5	250	70	3	0.5	3.3	15	115/1	72	RENEWAIRE EV300	1
ERV-2	PLATE	440	-20	47	0.5	1225	70	3	0.5	14.0	15	230/1	400	RENEWAIRE HE1.5XINH	2
ERV-3	PLATE	60	-20	47	0.5	100	70	3	0.5	1.3	15	115/1	48	RENEWAIRE EV130	1

NOTES: 1. PROVIDE WITH MANUFACTURERS SOLID STATE FAN SPEED CONTROL, WHITE FINISH COAT, BACKDRAFT DAMPERS, AND WALL HOODS.

2. PROVIDE WITH MANUFACTURERS INDEPENDENT BLOWER CONTROL, WHITE FINISH COAT, BACKDRAFT DAMPERS AND DISCONNECT MANUFACTURER AND MODEL ARE BASIS OF DESIGN. APPROVED EQUIVALENTS ARE ACCEPTABLE.

						BOILERS				
TAG#	TYPE	CAPACITY	MINIMUM	AFUE	LWT	WATER FLOW RATE	ELECTRICA	AL	TYPICAL MANUFACTURER AND MODEL	NOTES
		OUTPUT	FIRING RATE		(°F)	GPM	VOLTS/PHASE	AMPS		
B-2	NATURAL GAS CONDENSING	256 MBH	70 MBH	94.5%	175	20	120/1	15	VIESSMANN 200-W B2HA 88	1,2
B-3	NATURAL GAS CONDENSING	256 MBH	70 MBH	94.5%	175	20	120/1	15	VIESSMANN 200-W B2HA 88	1,2

1. PROVIDE WITH MANUFACTURER'S CONTROL PACKAGE INCLUDING SAFETY VALVE, HIGH LIMIT AQUASTAT, LOW WATER LEVEL SHUT-OFF, AND SUPPLY TEMPERATURE CONTROL.

2. PROVIDE WITH MANUFACTURER'S COAXIAL DIRECT VENT PIPING AND TERMINATION. PROVIDE WITH MANUFACTURER'S BOILER WALL MOUNT BRACKET. PROVIDE WITH MANUFACTURER'S LOW LOSS HEADER MANUFACTURER AND MODEL ARE BASIS OF DESIGN. APPROVED EQUIVALENTS ARE ACCEPTABLE.

				HVAC PL	IMPS						
TAG#	SERVICE	LOCATION	FLOW RATE GPM	HEAD FT OF WATER	RPM	END CONNECTION	SIZE	VOLTS/PHASE	HP	TYPICAL MANUFACTURER AND MODEL	NOTES
P-1	BOILER CIRCULATOR	MECH RM	25	25	1750	FLANGED	1.5"x1.5"	230/1	1/2	TACO 1915 - 5.1" IMPELLER	-
P-2	BOILER CIRCULATOR	MECH RM	25	25	1750	FLANGED	1.5"x1.5"	230/1	1/2	TACO 1915 - 5.1" IMPELLER	-
P-3	NORTH LOOP	MECH RM	17.0	35	1750	FLANGED	1.5"X1.5"	230/1	3/4	TACO 1915 - 5.8" IMPELLER	1
P-4	SOUTH LOOP	MECH RM	22.5	41	1750	FLANGED	1.5"X1.5"	230/1	3/4	TACO 1915 - 6.3" IMPELLER	1
NOTES:	1. PROVIDE WITH MANUFACTURERS	INTEGRAL VFD WITH 0	-10 VDC INPUT CON	TROL.							

MANUFACTURER AND MODEL ARE BASIS OF DESIGN. APPROVED EQUIVALENTS ARE ACCEPTABLE.

TAG#	TYPE	MAX	FACE SIZE	NECK SIZE	MAX SP DROP	MAX NC	TYPICAL MANUFACTURER AND MODEL	NOTES
		CFM	(H" X L")	(INCHES)	(INCHES W.C.)			
R-1	RETURN, MILL, ALUMINUM, 1/2" EGGCRATE, CEILING MOUNT, SURFACE OR LAY-IN WITH 24"X24" MODULE	300	10X10	10X10	0.06	20	TITUS 50F	1,2
R-2	RETURN, MILL, ALUMINUM, 1/2" EGGCRATE, CEILING MOUNT, SURFACE OR LAY-IN WITH 24"X24" MODULE	800	16X16	16X16	0.06	20	TITUS 50F	1,2
R-3	RETURN, WHITE, STEEL, BLADE GRILLE, ANGLED BLADES PARALLEL TO LONG DIMENSION, WALL MOUNT SURFACE FRAME	500	12X12	12X12	0.08	20	TITUS 350RL	1,2
R-4	RETURN, WHITE, STEEL, BLADE GRILLE, ANGLED BLADES PARALLEL TO LONG DIMENSION, WALL MOUNT SURFACE FRAME	1600	30x16	30x16	0.08	20	TITUS 350RL	1,2
R-5	RETURN, WHITE, STEEL, BLADE GRILLE, ANGLED BLADES PARALLEL TO LONG DIMENSION, WALL MOUNT SURFACE FRAME	1200	30x12	30x12	0.08	20	TITUS 350RL	1,2
R-6	RETURN, MILL, ALUMINUM, 1/2" EGGCRATE, CEILING MOUNT, SURFACE OR LAY-IN WITH 24"X24" MODULE	2000	24X24	24X24	0.06	20	TITUS 50F	1,2
R-7	RETURN, WHIE, FIRE RATED WITH CEILING RADIATION DAMPER, SQUARE, SURFACE MOUNT, PERFORATE FACE.	100	12X12	6	0.06	20	TITUS PAR-FR	1,2
E-1	EXHAUST, WHITE, STEEL, BLADE GRILLE, ANGLED BLADES PARALLEL TO LONG DIMENSION, SURFACE OR 24X24 CEILING MODULE	285	10x10	10x10	0.08	20	TITUS 350RL	1,2
E-2	EXHAUST, MILL, ALUMINUM, 1/2" EGGCRATE, CEILING MOUNT, SURFACE OR LAY-IN WITH 24"X24" MODULE	800	16X16	16X16	0.06	20	TITUS 50F	1,2
S-1	SUPPLY, WHITE, STEEL, ADJUSTABLE PATTERN, SQUARE CEILING DIFFUSER, SURFACE OR LAY-IN, 24"X24" MODULE	120	12X12	6	0.08	20	TITUS TMSA	1,2,
S-2	SUPPLY, WHITE, STEEL, ADJUSTABLE PATTERN, SQUARE CEILING DIFFUSER, SURFACE OR LAY-IN, 24"X24" MODULE	220	24X24	8	0.08	20	TITUS TMSA	1,2,
S-3	SUPPLY, WHITE, STEEL, ADJUSTABLE PATTERN, SQUARE CEILING DIFFUSER, SURFACE OR LAY-IN, 24"X24" MODULE	330	24X24	10	0.08	20	TITUS TMSA	1,2,
S-4	SUPPLY, WHITE, STEEL, ADJUSTABLE PATTERN, SQUARE CEILING DIFFUSER, SURFACE OR LAY-IN, 24"X24" MODULE	450	24X24	12	0.08	20	TITUS TMSA	1,2,
S-5	SUPPLY, WHITE, STEEL, DOUBLE DEFLECTION, SHORT BLADES FRONT, DUCT MOUNT	480	18X8	18X8	0.08	20	TITUS 300RL	1,2
T-1	TRANSFER, E-1 INLET, S-1 OUTLET	-	-	10X10	-	-	TITUS 350RL AND TMS	2

1. PROVIDE EACH DIFFUSER, REGISTER AND GRILLE WITH ITS OWN VOLUME DAMPER IN THE RUN OUT DUCT. PROVIDE PLENUMS TO TRANSITION FROM GRILLE NECK SIZE TO DUCT SIZE. PROVIDE 24X24 PANEL WHERE GRILLE/DIFFUSER IS LESS THAT CEILING GRID DIMENSIONS.

2. TYPICAL MANUFACTURER AND MODEL ARE FOR REFERENCE ONLY. PRODUCTS FROM OTHER MANUFACTURERS THAT MEET THE PERFORMANCE AND SPECIFICATION REQUIREMENTS ARE ALSO ACCEPTABLE. 3. PROVIDE BLANK OFF PLATES FOR DIRECTIONAL THROW WHERE INDICATED ON PLANS

TAG#	TYPE	SIZE	CFM	INITIAL PRESSURE DROP	EFFICIENCY	PREFILTER	TYPICAL MANUFACTURER AND MODEL	NOTES
				IN. W.C.	AT 0.3 MICROMETERS			
F-1	HIGH CAPACITY, SIDE ACCESS	24"X24"X11.5"	800	0.4	99.97%	NONE	AAF ASTROCELL HCX FILTER WITH AFF HVAC HEPA HOUSING	1

				HUMIDIFIERS						
TAG#	TYPE	LOCATION	CFM	SP	CAPACITY		ELECTI	RICAL	TYPICAL MANUFACTURER AND MODEL	NOTES
					GAL/DAY	FLA	MOP	VOLTS/PHASE		
H-1	STEAM, DISPERSION TUBE	MECHANICAL ROOM 219	280	0.1	10.1	16.0	20	240/1	APRILAIRE 801LC-W	1,2
NOTES:		URER'S ROOM MOUNTED SE				D HUMID	IFIER.			

2. PROVIDE HARD WIRED MODEL WITH MANUFACTURERS LOW CONDUCTIVITY CARTRIDGE. MANUFACTURER AND MODEL ARE BASIS OF DESIGN. APPROVED EQUIVALENTS ARE ACCEPTABLE. DEHUMIDIFIER AND HUMIDIFIER TO BE BY SAME MANUFACTURER.

				DEHUMIDIFIE	RS					
TAG#	TYPE	LOCATION	CFM	SP	CAPACITY		ELECT	RICAL	TYPICAL MANUFACTURER AND MODEL	NOTES
					PINTS/DAY	FLA	MOP	VOLTS/PHASE		
DH-1	DUCTED, REFRIGERANT	MECHANICAL ROOM 219	280	0.1	120	8.3	15	120/1	APRILAIRE 1870W	1

MANUFACTURER AND MODEL ARE BASIS OF DESIGN. APPROVED EQUIVALENTS ARE ACCEPTABLE. DEHUMIDIFIER AND HUMIDIFIER TO BE BY SAME MANUFACTURER.

			FIN TU	BE CONVECTOR					
TAG#	TYPE	BTU/FT	TUBE SIZE	FINS/FT	EWT (°F)	LWT (°F)	EAT (°F)	TYPICAL MANUFACTURER AND MODEL	NOTES
FT-1	FIN TUBE BASE BOARD AND ENCLOSURE	590	3/4"	50	170	150	65	VULCAN LC-209-VR04	1,3
FT-2	CONVECTOR, WALL SUPPORTED, 24"H X 8"DEEP, SLOPE TOP	2300	3/4"	-	170	150	65	VULCAN CONVECTOR SW-A-8XX-18	2,3

1. PROVIDE COPPER TUBE AND ALUMINUM FIN. 18 GA. STEEL ENCLOSURE PAINTED WHITE. PROVIDE ENCLOSURE WITH DAMPER WHERE INDICATED. LENGTH NOTED ON DRAWING IS ACTIVE LENGTH OF FINNED TUBE. PROVIDE END CAPS. PROVIDE ADDITIONAL ENCLOSURE TO COVER RUNOUT PIPING WHERE REQUIRED.

2. PROVIDE 18 GA. STEEL ENCLOSURE PAINTED ALMOND. LENGTH NOTED ON DRAWING IS LENGTH OF CABINET.

3. TYPICAL MANUFACTURER AND MODEL ARE FOR REFERENCE ONLY. APPROVED EQUIVALENT IS ALSO ACCEPTABLE

				HOT W	ATER DUCT COIL	L							
TAG#	SERVES	TYPE	SIZE (IN X IN)	CFM	CAPACITY (MBH)	VELOCITY (FPM)	AIR PD (IN WC)	GPM (AT 170°F)	WATER PD (FT WC)	EAT (°F)	ROWS	TYPICAL MANUFACTURER AND MODEL	NOTES
DC-1	RTU-2	VERTICAL FINNED COIL IN MANUFACTURERS CASING	48X24	2400	85.0	670	0.12	8.5	5.0	55	1	US AIRCOIL F108-24X48	1
DC-2	RTU-3	VERTICAL FINNED COIL IN MANUFACTURERS CASING	24X12	1200	20.0	670	0.12	2.0	5.0	55	1	US AIRCOIL F108-12X24	1
DC-3	RTU-5	VERTICAL FINNED COIL IN MANUFACTURERS CASING	36X16	2000	35.0	670	0.12	3.5	5.0	55	1	US AIRCOIL F108-18X24	1

NOTES: 1. PROVIDE VENT AND FREEZESTAT ON EACH COIL MANUFACTURER AND MODEL ARE BASIS OF DESIGN. APPROVED EQUIVALENTS ARE ACCEPTABLE.

FANS												
TAG#	TYPE	LOCATION	CFM	SP	RPM	SONES	MOTOR	VOLTAGE / PHASE	TYPICAL MANUFACTURER AND MODEL	NOTES		
							HP / WATTS					
EF-1	CEILING EXHAUST	ELEVATOR MACHINE ROOM	300	0.25	1350	4.5	135W	115/1	GREENHECK SP-A390	1,2,4		
EF-2	PROPELLER WALL EXHAUST	BOILER ROOM	500	0.2	1550	11.1	1/10 HP	115/1	GREENHECK SE1-12-426-D	2, 3,4		
EF-3	RESTROOM EXHAUST	FACILITIES RESTROOM	100	0.1	700	1	21W	115/1	GREENHECK SP-B90	1,4		
EF-4	CEILING EXHAUST	SERVER ROOM	300	0.25	1350	4.5	135W	115/1	GREENHECK SP-A390	2,4		
EF-5	PROPELLER ROOF EXHAUST	SMALL VEHICLE	5000	0.2	735	14	3/4 HP	230/1	GREENHECK RBU-1L24-7	2,4,5		

NOTES: 1. PROVIDE WITH MANUFACTURER'S WALL DISCHARGE CAP

2. PROVIDE WITH MANUFACTURER'S ADJUSTABLE THERMOSTATIC SWITCH

3. PROVIDE WITH MANUFACTURER'S WALL HOUSING, WITH OSHA SCREEN, 120 VAC MOTORIZED DAMPER, WEATHERHOOD WITH BIRD SCREEN 4. TYPICAL MANUFACTURER AND MODEL ARE FOR REFERENCE ONLY. PRODUCTS FROM OTHER MANUFACTURERS THAT MEET THE PERFORMANCE AND SPECIFICATION REQUIREMENTS ARE ALSO ACCEPTABLE.

5. NOT IN CONTRACT. TO BE INSTALLED BY OTHERS.

LOUVERS												
TAG#	SERVES	TYPE	SIZE	DEPTH	CFM	FREE AREA	MAX. VELOCITY	PRESSURE DROP	TYPICAL MANUFACTURER AND MODEL	NOTES		
			WxH	SIZE			(FPM)	(IN. WC)				
L-1	MECHANICAL ROOM	ALUMINUM, DRAINABLE, COMBINATION BLADE, 37° ANGLE	18"x24"	6"	500	1.0	500	0.05	RUSKIN ELC 6375DAX	1,2		
L-2	ERV-2	ALUMINUM, DRAINABLE, STATIONARY, INTAKE	24"x30"	6"	1200	2.4	500	0.05	RUSKIN ELF 6375DX	1		
L-3	ERV-2	ALUMINUM, DRAINABLE, STATIONARY, EXHAUST	24"x30"	6"	1200	2.4	500	0.05	RUSKIN ELF 6375DX	1		
L-4	SMALL VEHICLE	ALUMINUM, DRAINABLE, COMBINATION BLADE, 37° ANGLE	48"x60"	6"	5000	9.5	550	0.05	RUSKIN ELC 6375DAX	1,2,3		

NOTES: 1. PROVIDE WITH BIRDSCREEN, MANUFACTURERS BAKED ENAMEL FINISH, OWNER TO CHOOSE FROM MANUFACTURERS STANDARD COLOR PALETTE. 2. PROVIDE WITH MANUFACTURER'S 120 VAC DAMPER ACTUATOR. POWER THROUGH EF-2 THERMOSTAT.

3. NOT IN CONTRACT. TO BE INSTALLED BY OTHERS. PROVIDE WITH MANUFACTURER'S 120 VAC DAMPER ACTUATOR. POWER THROUGH EF-5 THERMOSTAT.

MANUFACTURER AND MODEL ARE BASIS OF DESIGN. APPROVED EQUIVALENTS ARE ACCEPTABLE.



Structural Engineering: STRUCTURAL INTEGRITY CONSULTING ENGINEERS, INC.

46 Forest Avenue Portland, ME 04101 T. 207.774.4614 structuralinteg.com

HVAC & Plumbing Engineering:
HOLBROOK ENGINEERING, LLC

52 Heath Rd Saco, ME 04072 T. 207.283.9127 holbrookengineering.com

Electrical Engineering: SWIFT CURRENT ENGINEERING SERVICES

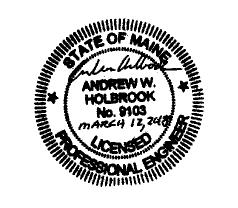
Royal River Center, Unit 8B 10 Forest Falls Drive Yarmouth, ME 04096 T. 207.847.9280

CITY OF PORTLAND DEPARTMENT HEADQUARTERS:

-Parks, Recreation & Facilities -Public Works

RENOVATION PROJECT

212 Canco Road, Portland



REVIEW SET

Scale: 1/8" = 1'-0"

HVAC SCHEDULES

March 12, 2018