								\mathbf{F}	AN (COII	L UN	IT S	SCH	EDU	LE				DAIKIN AS STI
				мотс	DR DATA			СН	HILLED M	NATER	COIL DA	хта 		HOT WA	TER		UNIT PHYSICAL SIZE		
UNIT NO	TYPE	MODEL	SA		VOLTS		ENT H20	мвн	ENT AIR	LVG AIR	GPM	ENT H20	мвн	ENT AIR	LVG AIR	GPM		UNIT PHYSICAL MEIGHT	REMARKS
		NUMBER		HP	PHASE	ROWS	LVe H2C	SENS TTL	DB MB		P.D. FT MC	LVE H2O	SENS	DB	DB	P.D. FT MC	L"XM"XH"		
FCU 02	VERTICAL	FCVH-102	189	1/20	277	4	45 54	4.0 4.4	74	54.7	0.q 0.3	120	6.5	72.0	103.2	0.6 0.13	18.8" X 9.6" X 24.0"	56	-UNIT MOUNTED 3-SPEED SWITCH WITH OFF POSITION -DISCONNECT SWITCH (BY ELECTRICAL
FCU 03	VERTICAL	FCVH-103	243	1/20	277	4	45 54	4.8 5.2	74	56.1	1.0	120	9.0	72.0	105.9	0.9 0.28	24.3" X 9.6" X 24.0"	64	CONTRACTOR) -PROVIDE WITH MANUFACTURER'S BACNET ENABLED THERMOSTAT FOR
FCU 04	VERTICAL	FCVH-104	343	1/25	277	4	45 54	7.9 9.0	74	53.0 52.8	1.8 3 1.6	120	14.4	72.0	11 <i>0</i> .3	1.4 0.70	29.8" X 9.6" X 24.0"	76	CONNECTION TO BMS, MODEL IM-1234-1
FCU 06	VERTICAL	FCVH-106	553	1/12	דד2 1	4	45 54	11.4	74	55.1 53.	2.7	120	20.2	72.0	105.3	2.8 19.6	40.8" X 9.6" X 24.0"	94	

VAN DON WITH 1 DOW HVDDOMIC COH

							VA	AV BOX	WITH 1	ROW HYDRONI	C COIL	
	PRIM	1ARY AIR V	∕AL∨E		HOI	MATER COIL			PHYSICAL SIZE			
EXMBO			MIN	ENT HQ	No	GPM AIR TEMP		INLET SIZE	DUCT DISCHARGE	BOX DIMENSION	MANUFACTURER	PENAPPE
STMBOL	MIN CFM	MAX CFM	S.P. IN.W.G.	LVG HD	OF ROMS	H20 P.D. MBTI FT.WG HR.	P.D. FT.MG.	DIAMETER	М х Н	L X W X H (INCLUDING CONTROL BOX)	NUMBER	REMARND:
	60	300	0.27	120/ 100	1	1 - 0.2 -	0.07	5Φ	1 <i>0</i> " × 1 <i>0</i> "	215 ⁵ 8" x 16 ¹ 2" x 10"	EZTS	PROVIDE THE FOLLOWING FACTORY OPTIONS (TYPICAL FOR ALL SIZES)
2 VAV	90	450	0.23	120	1	1 - 0.2 -	0.23	бФ	1 <i>0</i> " x 1 <i>0</i> "	21 ⁵ / ₈ " × 16 ¹ / ₂ " × 10"	EZTS	1. FACTORY MOUNTED DDC CONTROLS (PROVIDED
VAV 3	160	700	0.25	120	1	2 - 2.9 -	0.24	ВΦ	1 <i>2</i> " × 1 <i>0</i> "	2178" × 18 1/2" × 10"	EZTS	BY BMS) 2. 1 ROW HOT WATER COIL
VAV 4	270	1,000	0.24	120	1	2 - 3.9 -	0.23	1 <i>0</i> Ф	14" × 12½"	23 7 8" 20 1/2" × 12 1/2"	EZTS	 3. INSULATED HINGED BOTTOM ACCESS DOOR 4. 1" DUAL DENSITY MATTE FACED FIBERGLASS INSULATION
VAV 5	360	1,400	0.25	120	1	3 - 0.5 -	0.23	12Φ	1 <i>6</i> " x 15"	275/8" 22 1/2" × 15"	EZTS	5. 24V ACTUATORS - ACTUATORS WIRED BY BMS

					EXH	AUST	Г FA	N S	CHEDULE					GREENHECK AS STD.
		FAI	N DATA				мото	R DATA		1				
NO	SERVICE	LOCATION	TOTAL AIR CFM	FAN SPEED RPM	EXT. STATIC PRESS	. ВНР	HP	SPEED RPM	MODEL NO.	WEIGHT LBS.	DIMENSIONS (LXWXH)	DRIVE	ELECTRIC DATA VOLTS / PHASE	REMARKS:
EF 1	MCC UNISEX BATH	ROOF	75	1321	0.25	0.0 1	1/15	1725	CUE-060-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOM:
EF 2	DPS PANTRY	ROOF	1 <i>00</i>	1424	0.25	0.02	1/15	1725	CUE-060-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOM:
EF 3	DPS FEMALE LOCKERS, DPS MALE LOCKERS	ROOF	150	1672	0.25	0.03	1/15	1725	CUE-060-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOM:
EF 4	DLS PANTRY	ROOF	100	1424	0.25	0.02	1/15	1725	CUE-060-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOM:
EF 5	DLN PANTRY	ROOF	100	1424	0.25	0.02	1/15	1725	CUE-060-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOM:
EF 6	PUBLIC RESTROOMS	ROOF	700	1725	0.46	0.11	1/10	1725	CUE-090-VG	32	22.25"X 22.25"X 13.3 <i>8</i> "	DIRECT	115	SEE NOTES BELOM:
EF 7	DLR PANTRY	ROOF	100	1424	0.25	0.02	1/15	1725	CUE-060-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOW:
EF 8	PUPANTRY	ROOF	100	1424	0.25	0.02	1/15	1725	CUE-060-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOM:
EF 9	LUNCH/BREAK	ROOF	150	1672	0.25	0.03	1/15	1725	CUE-060-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOM:
EF 10	STAFF RESTROOMS	ROOF	635	1702	0.5	0.11	1/10	1725	CUE-090-VG	32	22.25"X 22.25"X 13.38"	DIRECT	115	SEE NOTES BELOM:
EF 11	DOF PANTRY, WCC PANTRY	ROOF	200	1725	0.47	0.03	1/15	1725	CUE-070-VG	24	19.63"X 19.63"X 13.5 <i>0</i> "	DIRECT	115	SEE NOTES BELOM:
EF 12	NORTH ELECTRICAL ROOM	MCC UNISEX BATHR <i>OO</i> M	100	1177	0.1	0.0 1	1/15	1725	5Q-060-VG	32	1 2.00"X 1 2.00"X 1 6.00"	DIRECT	115	SEE NOTES BELOM:
EF 13	CENTRAL ELECTRICAL ROOM	PUBLIC RESTR <i>OO</i> MS MALE	100	1177	0.1	0.0 1	1/15	1725	5Q-060-VG	32	1 2.00"X 1 2.00"X 1 6.00"	DIRECT	115	SEE NOTES BELOM:
NOTES: 1. SMITC 2. MANUF 3. INTEGR	H, NEMA- 1, TOGGL ACTURER'S ROOF RAL ISOLATION DA	.E, SHIPPED WI CURB .MPER	ITH UNIT											
				TTC				TTOK	COULDDI					

				H	IOT	WA	ΓER	CO	IL S	CHE	DUI	LE				
					COIL	SIZE				ENT. WATER	ENT. AIR					
NO	LOCATIONS	SERVICE	CFM	FACE VELOCITY (FPM)	MIDTH	HEIGHT	FACE AREA SQ.FT.	ROMS	FINS/F001	LVG. MATER	LVG. AIR	MBH/HR	G.P.M.	MATER MAX P.D.	AIR P.D. IN M.G.	MODEL
HMC 1	STAGING BREAK ROOM	GRAND JURY ROOM	1450	892	19	12	1.63	4	80	120 100	60.0 80.3	31.91	3.20	0.36	0.68	DMOB190 12GODA08 0GABAOAA

								RO	0F '	ТОР	UN	IT	SCHI	EDUL	ĿΕ
	SYS	STEM DATA			EVAPC	RATOR	FAN DAT	A	EVAF	PORATO	R COOLI	NG COIL	DATA	UNIT ELE	C. DATA
						FAN	MOTO	R DATA	NET	CAPACI	TIES	AIR T * (LEA \	EMP °F /ING UNIT)	VOLTS	MIN CKT
NO.	SERVICE		MANUFACTURER/ MODEL	TOTAL	STATIC		MOTOR B.H.P.	MOTOR	C ENC		TOTAL	ENT	LVG *		AMPS
			NUMBER	CFM	(IN. MG.)	MHEEL	OTY	SPEED RPM	MBH	MBH	MBH	DB	DB		
						DIA.						ME	3 MB	/ PHASE	
RTU			TRANE	1450		1033	1.0					76.5	54.0	460	14.0
1	JURY ROOM	ROOF	THCO47E4ROA	1450	1.0	-	1		33.1	11.4	44.5	63.5	53.0	з	20.0
-MER\ -BOTI	/ 13 FILTER		-PROVIDE WITH ENABLED THERI	MANUFA	CTURER'S	BACNE		5			1				

-INTEGRAL DISCONNECT -ECONOMIZER

-PROVIDE WITH MANUFACTURER'S CURB MODEL BAYCURB043

ANEMOSTAT	AS	ST

REMARKS:

O -TO BE CONTROLLED THROUGH RTU-1. CONNECT TO THERMOSTAT SERVING A RTU-1.

P	UNIT PHYSICAL DIMENSIONS L,W,H	TOTAL UNIT WEIGHT	UNIT EER UNIT COP	REMARKS:
			1.0.0	
	88.7"		13.0	SEE NOTES BELOW
	53.3"	653		
	40.9"			

TRANE AS STD.

	ABBREVIATI	ONS	
ABBREV	DESCRIPTION	AREDE	DESCI
			.0230
A.C.	AIR CONDITIONING CONTRACTOR	FT.	FEET
A.D.	ACCESS DOOR	GA.	GAUG
AFF	ABOVE FINISH FLOOR	G.C.	GENER
AL		G.I.	GALV
ALD	AUTOMATIC LOUVER DAMPER	GPM	GALLO
A.L.N.S.M.S	ALUMINUM LOUVER AND WIRE MEGH GOREEN	H.C.	
	ACCESS PANEL		HUNG
ATC	AUTOMATIC TEMPERATURE CONTROLS	п.с. цр	HORS
вв	BASE BOARD RADIATION	HPR	HIGH F
B.F.	BLIND FLANGE	HPS	HIGH F
B.G.	BOTTOM GRILLE	HT.	HEIGH
B.I.	BLACK IRON	HVAC	HEATI
BLDG.	BUILDING		COND
BMS	BUILDING MANAGEMENT SYSTEM	HMR	HOTM
В.О.	BLANK OFF	HMS	HOTM
C.C.	COOLING COIL	HTHMR	HIGH-1
CD	CEILING DIFFUSER	HTHMS	HIGH-1
C.F.M.	CUBIC FEET PER MINUTE	I.B.	INTER
СН	CABINET HEATER	IN.	INCHES
CHMR	CHILLED/HOT WATER RETURN	KE	KITCH
CHMS	CHILLED/HOT WATER SUPPLY	LB.	POUNI
CLG			LONF
C.L.O.		LPS	LONF
COR		M.D.H. MCC	MOTO
CP.		MD	MOTO
CR	CEILING REGISTER	MPR	MEDIU
CT	COOLING TOWER	0.A.	OUTLE
CM	CITY COLD WATER	0.A.I.	OUTSI
CMR	CONDENSER WATER RETURN	<i>0</i> .V.	OUTLE
CMS	CONDENSER WATER SUPPLY	P.C.	PLUME
D	DRAIN	PD	PUMP
DIA.	DIAMETER	P.H.C.	PRE-H
DN	DOWN	P.O.	PLUGO
DWG	DRAWING	₽.R.V.	PRESS
EF	EXHAUST FAN	P.S.I.	POUNI
EH		P.T.	PITOT
ELEC.		R.A.	RETUR
ELEC.CONTR.		R.A.G.	REIUR
	ELEVATION	R.H.C.	
EQUIF. EXH	EXHAUST	5.A. 6 P	SUFFL
EXIST	EXISTING	SPRINK	SPRIN
F	FILTER	SOFT	SOUAR
F.A.I.	FRESH AIR INTAKE	T.C.	TOPC
F.B.O.	FURNISH BY OTHERS	T.D.	TRAN
FC	FLEXIBLE CONNECTION	T.G.	TOP G
FD	FLOOR DRAIN	T.R.	TOP R
FFD	FUNNEL DRAIN	TR.GR.	TRANS
FL	FLOOR	U.A.	UNDER
F.L.	FINNED LENGTH	U.H.	UNIT H
FLD	FUSIBLE LINK DAMPER	V.D.	VOLUN
F.L.T.G.	FUSIBLE LINK TOP GRILLE	V.F.D.	VARIA
F.L.T.R.	FUSIBLE LINK TOP REGISTER	V.O.	VALV
F5D	COMBINATION MOTORIZED FIRE &	M.M.S.	MIREN
		M.U.	MINDO

	DRAWING-ISSUE LIST	
Sheet #	Sheet Title	
M-010	SYMBOLS, ABBREVIATIONS, SCHEDULES, AND NOTES	
M-011	SCHEDULES	
M-020	DETAILS	
M-021	DETAILS	
M-030	AIR RISER DIAGRAM	
M-098	GROUND FLOOR KEY PLAN	
M-099	GROUND FLOOR MECHANICAL ROOM	
M-101	MECHANICAL PLAN - 3RD FLOOR WEST WING	
M-102	MECHANICAL PLAN - 3RD FLOOR CENTRAL WING	
M-103	MECHANICAL PLAN - 3RD FLOOR NORTH WING	
M-104	MECHANICAL PLAN - ROOF	
M-201	MECHANICAL PIPING PLAN - 3RD FLOOR WEST WING	
M-202	MECHANICAL PIPING PLAN - 3RD FLOOR CENTRAL WING	
M-203	MECHANICAL PIPING PLAN - 3RD FLOOR NORTH WING	
M-901	MECHANICAL DEMOLITION PLAN - 3RD FLOOR WEST WING	
M-902	MECHANICAL DEMOLITION PLAN - 3RD FLOOR CENTRAL WING	
M-903	MECHANICAL DEMOLITION PLAN - 3RD FLOOR NORTH WING	





									SYN	I BO	L LIST			
DIDTION					SYMBO			DES	CRIPTION		SYMBOL		DESCRIP	TION
							NEN DUO	CTWOR CATION	K- REFER TO			INDICA MITH C	ATES REMOTE I CABLE OPERAT	OAMPER OR
GE ERAL CON VANIZED II	ITRAC	TOR						CTMOR	K MADE WITH	EEL		FUSIBI	LE LINK DAMPEI	R RIZED SMOKE
ONS PER	MINUT	E									-E== FSD -CCCCC- ALD		MATIC LOUVER	DAMPER
EXCHANCE BE POWER	GER R	4.V -	ET			\sum_{n}							ME DAMPER	
PRESSUR PRESSUR HT	E STE/	AM R AM S	UPPL	KN Y			EXISTING	G DUCT. REMOVE	NORK Ed			CHILLI	ED/HOT WATER	RETURN
ING VENT DITIONING WATER RI	ILATIN , ETURN	G AN	ID Ali	<			EXISTING	G DUCT.	WORK TO RE	MAIN	← HWS ← ↔	нот и нот и	NATER SUPPLY	
NATER SL TEMP HO TEMP HO	UPPLY OT MAT	ER R ER S		RN		F	LEXIBL	E DUCT	WORK			HIGH-		ER SUPPLY
RNAL BOO ES HEN EXHA	OT UST						DUCT UF	>			→ H IH WK →	VENT	ON RELIEF LINE	ERRETURN
PRESSUR	E STE	AM R		ZN							← PD ← ←	PUMP DRAIN	DISCHARGE	
2'S BTU/H	R. ROLC		R			I	DUCT DO	OMN			← cw ←		NATER	
JM PRESS ET AIR	SURE S	TEAN	MRE	TURN		e	BUPPLY	AIR DU	CT				20WN	
ET VELOG BING CON	NTAKE CITY NTRAC	TOR				F	RETURN	OR EX	HAUST DUCT		×	PIPE S	DIRECTIONS	
' DISCHAR HEAT COI GED OUTI	RGE IL LET					e	BUPPLY	DIFFUS	ER		,►_, +	PITCH	PIPE UP OR DO	MN
SURE REI DS PER S I TUBE	DUCING	S VA E INC	LVE CH					BECIC	TED			GATE	VALVE	_VE
RN AIR RN AIR GI FAT COIL	RILLE					יז 	KEIUKN	REGIS			, b a ,	GLOB	E VALVE	7CK
LY AIR IC PRESS	OURE		D			→ S	BIDE MA	ALL SUP	PLY GRILLE		→ N →	CHECH	< VALVE	
RE FEET						~- e	BIDE MA	ALL EXH	AUST GRILLE		۲ <u>۲</u> ۲ ۲	AIR VI	F VALVE ENT (H= HI-CAPA	
SRILLE REGISTER	2				T	E	3MS TH	ERMOS	TAT		<u>ب</u> ابــــــ	UNION	FITTING	
ISFER GR RWRITER IEATER	SAPP	rov	ED		Ē	c				-		COME		ORT BALL
ME DAMF ABLE FRE 'ED OUTL	PER (M EQUENO .ET	ANUA	×L) PRI∨E						THERMOSTAT	-,	, <u> </u>	2-MA		
MESH SC OM UNIT	REEN					+ 4	BENSOR		UR, AND 602		↔ ₩ ↔	CONT		
					Ū _s	f	PROGR	ONTAINE AMMAE	ED BLE THERMOS	TAT	↓ X	3-MA CONT	ROL VALVE	
					Ī	-	TEMPER	RATURE	SENSOR			STRA VALV	NNER WITH BLO	MDOMN
					Ħ	(COMBIN AND HUI	NATION ' MIDITY S	TEMPERATUR SENSOR	E	(CV)	CONT SEE F	ROL VALVE ST	ATION TAIL
					67				TEMPERATUR	E	(T2)	OUTD		ND
							JO2 9E					CEILI	NG MOUNTED BI	NCR MS
×					(H)	+	HUMIDIS	TAT			<u>C</u> B	0000	PANCY SENSO	R
×					H	+	HUMIDIT	Y SENS	OR		(T)		OOR SOLAR A	ND DOR
×					SP	4	STATIC	PRESSI	URE TRANSMI	TTER	\bigcirc	CO2	SENSOR	
×					(Ţ)		EXISTIN	C THER	MOSTAT			BEAN		
×												ARFA		
×							INDICAT TO EXIS	TES NEV STING	N CONNECTIC	'n	-\(XX)	RETU	RN AIR IN SQUA AREA	RE FEET
×							NDICAT	TES CAF	PPED DFF EXISTING					
<														
×														
<														
<					CONSULTANT SEAL		CC	ONSULTAN	IT INFORMATION					
<					OF NE				Gr	. af	° & Lev	ven	t B	
									U		Architect	s LL	P	
					Partie Poeta	A LUNAL			90-	-30 1	61st Street, Jar	naica,	NY 11432	_
									-	. / 18	דיני-ס-ויני-ס-ויני-ס-ט-ד: רוניס-ט	ι Iŏ-2	5 I DY Y DY Y	
					REVISION NUMBER	DATE	M	IADE BY	APP'D BY		0.0555	REVISIO	ON	
						ILT - CHAM	NGES AS	RE S NOTFI	ECORD DR	AWIN	G CERTIFICATIO	N		
						ILT - NO C	HANGE	S				0.0		
					NAME:	CO	NTRAC	CTOR			NAME:	CONTF	RACTOR	
ROVED ONLY FI IFICATION SHE UPON OR TO P	OR THE WO EET. ALL OT BE CONSID	IRK IND THER MA	ICATED ATTERS S S EITHF	ON SHOWN R BEING	SIGNATURE:			דעם	ſE:					
RDANCE WITH	APPLICABL	E CODE	5.				WESTC	HESTER	R COUNTY, N	EW YO	RK			SHEET NUMBE
			5	F	DI	EPARTME	NT OF I	PUBLIC	WORKS AND	TRAN	SPORTATION		19-514	M-01
SULTING	GENG	INEI	ERS	D P C					OF ENGIN		NG MPROVEMENTS		SHEET NO.	1 OF 17
	133 W NEV T	EST 1 V YORI	9TH 5 K, NY 2.645	TREET 10011 .1002		110	DR. MAI WHI	RTIN LU	THER KING, JE	R. BOUL K 1060	LEVARD		DATE: MAY 20, 20	21
	ſ	∟∟ ⊿∣ WWW.F	45ت.ط POLISE	Z CE.COM	SYI	MBOLS,	ABBR	REVIAT	TIONS, SCH	IEDUI	_ES AND NOTES		UPW FILE NO. 52-01-H	V-551

					DUCT INSULATION	SCH	EDULE						
					SPECIFIED INSULATION							CODE REQUIR ASHRAE 90.1	EMENTS -2013
DUCT LOCATION		SUPF (HEATING AN	LY AIR DUCTWO	RK Systems)			RETURN AIR DUCTMOR	ĸ			HTG SUPPLY SUPPLY	CLG SUPPLY	HTG / CLG
		TYPE (SEE SPECS FOR ADD'L DETAILS)	THICKNESS (INCH)	R - VALUE	REMARKS		TYPE (SEE SPECS FOR ADD'L DETAILS)	THICKNESS (INCH)	R - VALUE	REMARKS			
CONDITIONED SPACE	D-1	MINERAL FIBER BLANKET	1.5	4.5	REQUIRED WHERE DUCT IS NOT INTERNALLY LINED	-	-	1.5	4.5	NOT REQUIRED	NR	NR	NR
UNCONDITIONED SPACE [A]	D-1	MINERAL FIBER BLANKET	2	6.0		D-1	MINERAL FIBER BLANKET	2	6.0		NR	R-1.9	R-3.5

NOTES: 1. DUCTWORK CONVEYING OUTDOOR AIR TO BE INSULATED WITH TYPE D-1 MINERAL FIBER BLANKET INSULATION MINIMUM 2" THICK PROVIDING VALUE OF R-6 2. PLENUMS FOR OUTDOOR AIR INTAKE OR RELIEF/EXHAUST AIR WHICH ARE EXPOSED TO OUTDOOR AIR TO BE INSULATED WITH TYPE D-1 MINERAL FIBER BLANKET 2" THICK W/ R-VALUE OF 6 OR D-2 MINERAL FIBER BOARD 1.5" THICK W/ R-VALUE OF 6.5. PROVIDE WATER PROOF FOIL SCRIM AND INSURE EXTERIOR FACING IS WATER PROOF AFTER INSTALLATION.

GENERATOR EXHAUST PIPING TO BE INSULATED WITH (3) LAYERS OF 1.5" THICK TYPE P-4 CALCIUM SILICATE INSULATION MINIMUM 4.5" THICK TO LIMIT SURFACE TEMPERATURES TO 200F AS REQUIRED BY 2014 NYC MC 811.1.3 4. KITCHEN GREASE HOOD EXHAUST TO BE EXTERNALLY INSULATION WITH TYPE D-3 FIRE RATED BLANKET OR AS REQUIRED TO MAINTAIN MINIMUM 2HR FIRE RESISTANCE RATING.

[A]. INCLUDES CRAWL SPACES, BOTH VENTILATED AND NONVENTILATED, SHAFTS OUTSIDE OF BUILDING'S THERMAL ENVELOPE [B]. INCLUDES RETURN AIR PLENUMS M/ OR M/O EXPOSED ROOFS ABOVE, SHAFTS M/IN BUILDING'S THERMAL ENVELOPE, UTILITY ROOMS WHOLLY OR MOSTLY ENCLOSED BY CONDITIONED SPACES.

									PL	PE INSULATION SCHED	ULE								
			CODE REQUIREMEN	T (ASHRAE	90.1-201	3)						SPECIFIED IN	SULATIC	N					
	EL UID		INSULATION		NOMINAL	PIPE SIZE (INCHES)			INS	BULATION					NOMINA	L PIPE SIZE (INC	HES)	
APPLICATION	OPERATING TEMP	MEAN RATING TEMP		0.75	1.0 to 1.25	1.5 t <i>o</i> 3.5	4.0 to 7.0	≥8.0			Jacket Type (Interior	Jacket Type (Exterior			0.75	1.0 to 1.25	1.5 to 3.5	4.0 to 7.0	≥8.0
	(°F)	(°F)	DTU.IN / (H.I 12.1)		INSULATION	THICKNESS	3 (INCHES)				Installation)	Installation)				INSULATIC	N THICKNESS (IN	ICHES)	
CHILLED WATER	40-60	75	0.21-0.27	0.5	0.5	1.0	1.0	1.0	P-1	MINERAL-FIBER	LEA	0.16" Aluminum	75	0.23	0.5	1.0	1.0	1.0	1.0
HEATING HOT WATER	105-140	1 <i>00</i>	0.22-0.28	1.0	1.0	1.5	1.5	1.5	P-1	MINERAL-FIBER	LEA	0.16" Aluminum	1 <i>00</i>	0.24	1.0	1.0	1.5	1.5	1.5
CONDENSATE DRAIN	40-60	-	NR	NR	NR	NR	NR	NR	P-3	CLOSED CELL FLEXIBLE ELASTOMERIC	NOT REQUIRED	0.16" Aluminum	75	0.245	0.5	0.5	0.5	0.5	0.5

NOTES:

NR - NOT REQUIRED BY CODE 1. TYPE P-1: MINERAL FIBER, PREFORMED PIPE INSULATION:

PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, ASTM C547 GLASS FIBER PIPE INSULATION WITH THERMAL CONDUCTIVITY (K FACTOR) NOT EXCEEDING 0.23 (BTU X IN) / (HR X FT 2 X DEG F) AT 75 DEG F MEAN TEMPERATURE. INSULATION SHALL BE JACKETED WITH WHITE REINFORCED ALL SERVICE VAPOR RETARDING JACKETING. VAPOR BARRIER MASTIC SHALL BE FOSTER 30-80 OR CHILDERS CP-35. ADHESIVE SHALL BE CHILDERS CP-35. ADHESIVE SH II. TYPE I, 850 DEG F MATERIALS: MINERAL OR GLASS FIBERS BONDED WITH A THERMOSETTING RESIN. COMPLY WITH ASTM C 547, TYPE I, GRADE A. III. TYPE II, 1200 DEG F MATERIALS: MINERAL OR GLASS FIBERS BONDED WITH A THERMOSETTING RESIN. COMPLY WITH ASTM C 547, TYPE II, GRADE A.

B. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, TRYMER 2000 XP BY ITW INSULATION, POLYISOCYANURATE FOAM PIPE INSULATION WITH THERMAL CONDUCTIVITY (K FACTOR) NOT EXCEEDING 0.19 (BTU X IN) / (HR X FT 2 X DEG F) AT 75 DEG F MEAN TEMPERATURE. INSULATION SHALL BE JACKETED WITH SARAN, 560 OR 520 PVDC VAPOR RETARDER TAPE AND FILM WITH SELF SEALING TAPE. ASJ PAPER IS NOT ACCEPTABLE. EACH 36"LONG PIPE INSULATION SECTION SHALL BE ADDITIONALLY SECURED WITH FILAMENT TAPE OR 2" SARAN TAPE DOUBLE-WRAPPED CENTERED ON 15". VAPOR BARRIER MASTIC SHALL BE FOSTER 85-20 OR CHILDERS CP-35. ADHESIVE FOR LAPS SHALL BE FOSTER 85-75 OR CHILDERS CP-82. PUMPS, VALVES AND FITTINGS SHALL BE THE FABRICATED TRYMER WITH 20 X 20 GLASS FABRIC SEALED WITH FOSTER 80-20 VAPOR BARRIER MASTIC. TYPE B POLYISOCYANURATE FOAM INSULATION SHALL BE INSTALLED ONLY ON CHILLED AND HEATING HOT WATER PIPING (NOT EXCEEDING 300 DEG F) OR EQUAL. COMPARABLE PRODUCTS SUBJECT TO COMPLIANCE WITH THE REQUIREMENTS BY ONE OF THE FOLLOWING: APACHE PRODUCTS COMPANY, DUNA USA INC, DUPONT, ELLIOT COMPANY

COMPLY WITH ASTM C 591, TYPE I OR TYPE IV, EXCEPT THERMAL CONDUCTIVITY (K-VALUE) SHALL NOT EXCEED 0.19 BTU X IN./H X SQ. FT. X DEG F AT 75 DEG F AFTER 180 DAYS OF AGING. FLAME-SPREAD INDEX SHALL BE 25 OR LESS AND SMOKE-DEVELOPED INDEX SHALL BE 50 OR LESS FOR THICKNESS UP TO 1-1/2 INCHES AS TESTED BY ASTME 84. IV. FABRICATE SHAPES ACCORDING TO ASTM C450 AND ASTM 585

3. TYPE P-3: FLEXIBLE ELASTOMERIC: CLOSED-CELL, SPONGE- OR EXPANDED-RUBBER MATERIALS. COMPLY WITH ASTM C 534, TYPE I FOR TUBULAR MATERIALS AND TYPE II FOR SHEET MATERIALS. PRODUCTS: SUBJECT TO COMPLIANCE WITH REQUIREMENTS, ARMSTRONG TYPE AP ARMAFLEX OR RUBATEX R 180-FS 25/50 RATED FLEXIBLE ELASTOMER PIPE INSULATION. INSULATION SHALL HAVE A THERMAL CONDUCTIVITY (K FACTOR) OF NOT MORE THAN 0.245 (BTU X IN) / (HR X FT2 X DEG F) AT 75 DEG F MEAN TEMPERATURE WHEN TESTED BY ASTM C177 AND A WATER VAPOR PERMEABILITY OF 0.20 OR LESS WHEN TESTED BY ASTM C355 WATER METHOD. ADHESIVE SHALL BE ARMAFLEX 520 BVL. COMPARABLE PRODUCTS SUBJECT TO COMPLIANCE WITH THE REQUIREMENTS BY ONE OF THE FOLLOWING: AEROFLEX USA INC. , AEROCEL ; RBX CORP. , INSUL-SHEET 1800 & INSUL-TUBE 180

	DUCT CO	ONSTRUCTION,	SEALI	NG AN	ID LEAK	AGE	TESTING	G SCH	EDULE					
							INDOOR	DUCTMORI	<		OUTDOOR	DUCTWO	RK	
	DUCTWORK			OP. PRESS (INCH	DUCT SEAL. CLASS	DUC	T LEAKAGE CLASS (CL)	Li A	EAKAGE LLONED (F)	DUC	T LEAKAGE CLASS (CL)	LE Al	EAKAGE _LOWED (F)	REMARKS
FUNCTION	CONNECTED TO	MATERIAL	PRESS DIFF	M.G.)		RECT.	ROUND FLAT OVAL	RECT.	ROUND FLAT OVAL	RECT.	ROUND FLAT OVAL	RECT.	ROUND FLAT OVAL	
SUPPLY	FAN COIL UNITS, FURNACES, HEAT PUMPS, TERMINAL	GALVANIZED SHEET	+	1	A	16	8	16.0	8.0	4	4	4.0	4.0	
	OTHER EQUIPMENT	GALVANIZED SHEET	+	2	A	16	8	25.1	12.6	4	4	6.5	6.5	
RETURN	FAN COIL UNITS, FURNACES, HEAT PUMPS, TERMINAL	GALVANIZED SHEET	+/-	2	A	16	8	16.0	8.0	4	4	4.0	4.0	
	OTHER EQUIPMENT	GALVANIZED SHEET	+/-	2	A	16	8	25.1	12.6	4	4	6.5	6.5	
EXHAUST	TOILET EXHAUST	GALVANIZED SHEET	+/-	2	A	16	8	16.0	8.0	4	4	4.0	4.0	

LEAKAGE ALLOWED CALCULATED AS FOLLOWS: F = (CL)(PO.65)

MHERE:

F = ALLOWABLE LEAKAGE RATE IN CFM/100 SF OF DUCT SURFACE

CL = LEAKAGE CLASS P = TEST STATIC PRESSURE

THE FOLLOWING SYSTEMS SHALL BE REQUIRED TO BE FIELD LEAK TESTED:

SUPPLY AND RETURN DUCTWORK FROM AIR HANDLING EQUIPMENT TO INLET SIDE OF AIR TERMINAL UNIT (VAV BOXES, AIR VALVES ETC) SUPPLY AND RETURN DUCTWORK RISERS IN VERTICAL ENCLOSED SHAFTS.

CONSTANT VOLUME SUPPLY AND REUTRN DUCTWORK ON SYSTEMS OVER 2" W.G. STATIC PRESSURE FROM AIR HANDLER TO BRANCH TAKE-OFFS. DUCTWORK LOCATED OUTDOORS REGARDLESS OF PRESSURE CLASSIFICATION

							SPLIT	SYS	ГЕМ	SCHEDU	JLE								MITS	BUBISHI AS STD
					INDO	OR EVAPO	ORATOR UNIT	DATA					OUTE	DOORCO	ONDENS	ING UNIT	DATA			
EVAP No.	LOCATION & SERVICE	TYPE	EVAPORATO MODEL NUMBER	R SUPPLY CFM H/L	HEATING CAPACITY MBTU	COOLING CAPACIT MBTU	ESP VOLTS	MCA MAX CKT BKF	MEIGHT (LBS)	DIMENSIONS (LXWXH)	COND UNIT NO.	CONDENSER MODEL NUMBER	CAPACIT [®]	Y (MBH) HEATING	VOLTS	MCA MAX CKT BKR	COMP. RLA	ARI SEER	WEIGHT (LBS)	DIMENSIONS (LXWXH)
E∨AF 24	SEE PLANS	MALL MOUNTED	PKA-A24KA6	775/ 635	-	24.0	- 208	1	46	14-3/8" X 46-1/16" X 11-5/8"	CU 24	PUY-A24NHA6	24.0	-	208	18.0 30.0	-	17	163	37-1/8" X 37-3/8" X 14-3/16"

ALL UNITS PROVIDED WITH R-410A REFRIGERANT, MANUFACTURER WIRED THERMOSTAT. ALL REFRIGERANT PIPE SIZING AND ROUTING TO BE PER MANUFACTURER BASED ON FINAL FIELD CONDITIONS AND ROUTING.

					CA	ABIN	ET H	IEATEF	R SC	HED	ULE			
			ESP	MOTOR D	ATA	H	EATING	COIL DATA			PHYSICAL SIZE			
UNIT NO	TYPE	NOM CFM	CFM	RPM VOLTS BHP PHASE	WATTS	ENT H20 LVG H20	NO.OF ROMS	CAPACITY MBH		GPM P.D. FT H20	ΓΧΟΧΗ	WEIGHT (LBS)	FILTER TYPE	MODEL NUMBER
CAB 1	HORIZONTAL CONCEALED MODEL C	240	- 240	626 115 0.13 1	15	180 160	2	1 <i>0</i> .8	72 144	1.1 5.1	28-1/16 X 27-3/16 X 10-1/16	81	1" THROM	TRANE FFHB020

ELECTRIC BASEBOARD SCHEDULE

NO	DESCRIPTION	MATTS/F1	VOLTS	PHASE	ENCLOSURE H x M	MODEL NO.	REMARKS:
EBB X'-X"	ELECTRIC DRAFT BARRIER HEATER	150	208	1	5 X 3	SBT	-PROVIDE WITH DISCONNECT AND UNIT MOUNTED THERMOSTAT.

DIDE INCLU ATION CONDINE

4	4		6.5	6	5							1.3. ALL COP CO., CHAS	PER TU BE BRA
4	4		4.0	4	0							CONTINU 1.4. PIPING SF 1.5. PROVIDE	PECIFIC
- PLACE	HOLDER F	ORITS	PLIT SYS	STEM.			AIR V.	ALVE	SCHE	DULE	AA J	NEMOSTAT AS ST	Ъ.
FINAL U PENDIN ON DRA	NIT TO BE G IT REQU AWING M-	DETER NREMEN 101	MINED ITS. SEE	NOTE 3	NO	DESCRIPTION	MODEL #	SERVICE	DUCT SIZE	CFM	REMARKS):	
	MITS		AS STD		AV 1	PRESSURE INDEPENDENT AIR VALVE	RF-11	SEE DWG M-030	16X12	2100			
ARI SEER	WEIGHT (LBS)	DIME (LX	NSIONS MXH)	 	AV 2	PRESSURE INDEPENDENT AIR VALVE	RF-11	SEE DWG M-030	16X12	2280			
1 7	163	37-1/	(8" X	•	AV 3	PRESSURE INDEPENDENT AIR VALVE	RF-11	SEE DWG M-030	18X14	2280			
	100	14-3/	8 X 16"		AV 4	PRESSURE INDEPENDENT AIR VALVE	RF-11	SEE DWG M-030	36X14	7960			
	· ·	· ·			AV 5	PRESSURE INDEPENDENT AIR VALVE	RF-11	SEE DWG M-030	42X20	7960			
					AV 6	PRESSURE INDEPENDENT AIR VALVE	RF-11	SEE DNG M-030	36X14	8400			
					AV 7	PRESSURE INDEPENDENT AIR VALVE	RF-11	SEE DNG M-030	42X20	8400			



			DUCT	SILE	ENC	ER	S	CHE	EDU	LE			VIBRO-ACOUSTICS AS STD.
Z		I ENGTH	FACE	OCTAVE BAND	1	2	з	4	5	6	Т	8	REMARKS:
NO			VELOCITY (FPM)	ΗZ	63	125	250	500	1K	2К	4K	ðК	
DS	20712		-1250		5	9	14	16	18	14	12	10	
	5 20X12 RD-MV-F1X36	3'	0		4	8	13	16	17	14	12	10	
			+1250		4	Г	12	15	17	15	12	10	







		DII	FUSER	SCHEI	OULE		ANEMOSTAT AS STD.
					CFM	RANGE	
SYMBOL	DESCRIPTION	MODEL NUMBER	FRAME SIZE	NECK SIZE	FROM (MIN)	Т <i>О</i> (МАХ)	REMARKS
				6Ф	0	200	360° HORIZONTAL PATTERN
				8Φ	201	325	- 24"x 24" FRAME - 18" PLAQUE
CD S	SUPPLY	PARAGON PG	24" x 24"	1 <i>Ο</i> Φ	326	450	1/8" DROP FACE
	DIFFUSER			12Φ	451	600	
				14Φ	601	750	
CR	CEILING RETURN PERFORATED	3P SERIES LAY IN 3PRD	24" x 24"	22" x 22"	-	-	3PRD FOR DUCTED RETURNS 3PL FOR OPEN TO H.C. APP.
LD-1.5C 1 SLOT	CONCEALED CEILING SUPPLY LINEAR DIFFUSER	FFCM150 1-1/2"SL01	1-1/2" CEILING OPENING	3-5/16"	0	90/ FT	LATERAL ADJUSTMENT BAR REMOVED ON LINEAR DIFFUSER USED FOR RETURN
LD-1.5C2 1 SLOT	CONCEALED CEILING SUPPLY LINEAR DIFFUSER	FFCM150 1-1/2" SLOT	1-1/2" CEILING OPENING	3-5/16"	0	60/ FT	LATERAL ADJUSTMENT BAR REMOVED ON LINEAR DIFFUSER USED FOR RETURN

MATERIALS FOR PIPING UNDER 10"

	PIPINO	G AND FITTINGS SCHEI	DULE
SERVICE	SIZE	PIPE	FITTINGS
CHILLED, HOT WATER, AND RISERS-(UP TO	2-1/2" AND UNDER	COPPER TYPE K, HARD DRAWN	150 PSI AND UNDER MALLEABLE IRON 150 LB., SCREWED 151 PSIG-300PSI: MALLEABLE IRON300 LB. SCREWED
300 PSIG), VENTS AND RELIEFS	3"-1 <i>0</i> "	SCHEDULE 40, ASTM-A53, GRADE B, SEAMLESS TYPE "S"	SCHEDULE 40 WELD END
CONDENSATE PIPING	4" AND UNDER	COPPER TYPE L HARD DRAWN	WROUGHT OR COPPER WITH LEAD FREE 95/5 SOLDER OR BRAZED
VENTS AND RELIEFS		SAME MATERIALS AS PIPE SYSTEMS THEY SERVE	SAME MATERIAL AND FITTINGS AS SYSTEMS THEY SERVE

. MATERIALS FOR PIPE & FITTINGS

1.1. ALL STEEL PIPING SHALL BE TYPE ASTM-A-53 GRADE B SEAMLESS UNLESS NOTED OTHERWISE. FURNACE BUTT WELD PIPE IS NOT ACCEPTABLE. ALL PIPE SHALL BE OF THE DOMESTIC MANUFACTURER, DELIVERED TO THE JOB PROPERLY PRIMED AND MARKED AND SUPPLIED WITH THE INTERIOR SURFACES CLEAN AND RUST FREE. EACH END SHALL BE CAPPED TO AVOID THE RUSTING OF THE INTERIOR SURFACE. PIPING FOUND TO BE IN VIOLATION OF THIS SPECIFICATION MAY BE REQUIRED TO BE REMOVED FROM THE JOB SITE WHETHER OR NOT ALREADY INSTALLED.

1.2. ALL STEEL PIPE SHALL BE MANUFACTURED IN THE UNITED STATES BY LACLEDE, LTV, MAVERICK, NEWPORT, SAWHILL, TUBULARS, TEX-TUBE, US STEEL, OR WHEATLAND. SUBMIT MILL CERTIFICATIONS FROM THE PIPE MANUFACTURER REFER TO SECTION 15010 FOR REQUIREMENTS.

IBING SHALL BE NOT LESS THAN 99.9 PERCENT PURE COPPER, AS MANUFACTURED IN THE UNITED STATES BY REVERE COPPER AND BRASS ASS AND COPPER CO., INC. BRIDGEPORT BRASS CO., HALSTEAD, MUELLER OR WOLVERINE WHEREVER POSSIBLE, TUBING SHALL BE ITH COUPLINGS UP TO 20 FEET IN LENGTH. TUBING SHALL CONFORM TO ASTM B88.

CATIONS SHALL BE SUBMITTED WITH SHOP DRAWINGS.

ECTRIC FITTING FOR ALL CONNECTIONS OF DISSIMILAR METALS. BRASS FITTINGS ARE NOT ACCEPTABLE.

	CONSULTANT SEAL		CONSULTANT	INFORMATION						
	A DE A DE			G I 90	-30 1 -: 718	Archited 61st Street, Ja 3-651-6200	Wen cts LL amaica, I F: 718-2	NY 11432 51-6989		
	REVISION NUMBER	DATE	MADE BY	APP'D BY			REVISIO	N		
	AS BUIL	_T - CHANGI _T - NO CHA	ES AS NOTED							
		CONT	RACTOR			NAME:	CONTR	ACTOR		
X INDICATED ON ER MATTERS SHOWN ŁED AS EITHER BEING CODES.	TITLE:		DATI	E:		TITLE:		DATE:		_
СГ	DEI	WE PARTMENT	ESTCHESTER	COUNTY, N WORKS ANI	IEW YO D TRAN	RK SPORTATION		CONTRACT NUMBER 19-514	SHEET NUM	BER
JE			DIVISION	OF ENGIN	IEERII	NG		SHEET NO.	2 OF 17	
NEERS DPC LOW RISE BUILD ST 19TH STREET 110 DR. N YORK, NY 10011 V			DING RENOV MARTIN LUT WHITE PLAIN	ATIONS AND THER KING, J NS, NEW YOR	HVAC I R. BOUI RK 1060	MPROVEMENTS _EVARD 1		SCALE: AS NOTED DATE: MAY 20, 202 DPW FILE NO.	21	F
YWW.PULISELE.CUM			SCH	IEDULES				52-01-H	V-552	N







3 COOLING COIL CONNECTION CHILLED WATER (SINGLE COIL) DETAIL



(M.021) N.T.S.





CONDENSING UNIT MOUNTING DETAIL

	ſ		1				
	CONSULTANT SEAL		CONSULTANT	INFORMATION			
	COF NEW SECURICE AS SECURICE A			G 90	-30 1 -: 718	Architects L 61st Street, Jamaic 3-651-6200 F: 718	nt LP 3-251-6989
	REVISION DATE NUMBER			APP'D BY		REV	ISION
	AS BUILT	- CHANGE	RE S AS NOTED	CORD DR	AWIN	G CERTIFICATION	
	ΝΔΜΕ·	CONTF	RACTOR				ITRACTOR
ARE APPROVED ONLY FOR THE WORK INDICATED ON ION SPECIFICATION SHEET. ALL OTHER MATTERS SHOWN IE RELIED UPON OR TO BE CONSIDERED AS EITHER BEING	SIGNATURE:		DATI	E:		SIGNATURE:	DATE:
	DEP	WES ARTMENT	STCHESTER OF PUBLIC V	COUNTY, N WORKS ANI	IEW YO D TRAN	PRK ISPORTATION	CONTRACT SHEET NUMBER NUMBER 19-514 M-021
		[OF ENGIN	IEERIN	NG	SHEET NO. 4 OF 17
133 WEST 19TH STREET NEW YORK, NY 10011 TEL 212.645.1002	LOW	RISE BUILD 110 DR.	DING RENOV MARTIN LUT WHITE PLAIN	ATIONS AND HER KING, J IS, NEW YOF	HVAC I R. BOUL RK 1060	MPROVEMENTS LEVARD 1	SCALE: AS NOTED DATE: MAY 20, 2021
WWW.POLISECE.COM			D	ETAILS			REV









	CONSULTANT SEAL	CONSULTAN	T INFORMATION	of & I o		
	CONTRACTOR OF CO	* NIEER	90- P	Archite 30 161st Street, J 718-651-6200	cts LLP amaica, NY 11432 F: 718-251-6989	
	REVISION NUMBER	DATE MADE BY	APP'D BY		REVISION	
	AS BUILT	- CHANGES AS NOTED - NO CHANGES CONTRACTOR			CONTRACTOR	
OVED ONLY FOR THE WORK INDICATED ON FICATION SHEET. ALL OTHER MATTERS SHOWN JPON OR TO BE CONSIDERED AS EITHER BEING IDANCE WITH APPLICABLE CODES.	SIGNATURE: TITLE:	dat WESTCHESTER	E:	SIGNATURE: TITLE: W YORK	DATE: DATE:	NUMBER
DLISE SULTING ENGINEERS DPC 133 WEST 19TH STREET NEW YORK, NY 10011 TEL 212.645.1002 WWW.POLISECE.COM	DEP <i>A</i>	ARTMENT OF PUBLIC DIVISION RISE BUILDING RENOV 110 DR. MARTIN LUT WHITE PLAI GROUND	WORKS AND OF ENGINE ATIONS AND F THER KING, JR NS, NEW YORK FLOOR KE	TRANSPORTATION ERING VAC IMPROVEMENTS BOULEVARD 10601 Y PLAN	NUMBER 19-514 M- SHEET NO. 6 OF 17 SCALE: AS NOTED 0 0 DATE: MAY 20, 2021 0 0 DPW FILE NO. 52-01-HV-556 52-01-HV-556 52-01-HV-556	-098 Z



AHU 7 EX				
	I REBALANCE REQUIRED. I REBALANCE I REBALANCE I REBALANCE I REBALANCE	EXISTING UNIT TO NEW CFM EXISTING RETURN FAN TO NE ED		
	CONSULTANT SEAL	CONSULTANT INFORMATION Gra 90-30 P: 71	f & Lewe Architects L 161st Street, Jamaica 8-651-6200 F: 718	nt LP a, NY 11432 -251-6989
PPROVED DNLY FOR THE WORK INDICATED DN	REVISION DATE NUMBER AS BUILT - CHANGE AS BUILT - NO CHAN CONTE NAME: SIGNATURE:	MADE BY APP'D BY RECORD DRAWIN S AS NOTED NGES RACTOR	REVI	SION
ED UPON OR TO BE CONSIDERED AS EITHER BEING CORDANCE WITH APPLICABLE CODES.	TITLE: WEST DEPARTMENT [LOW RISE BUILD 110 DR. GROUND FL	DATE: STCHESTER COUNTY, NEW Y OF PUBLIC WORKS AND TRA DIVISION OF ENGINEER DING RENOVATIONS AND HVAC MARTIN LUTHER KING, JR. BOI WHITE PLAINS, NEW YORK 106 OOR MECHANICAL ROC	ORK ORK ING IMPROVEMENTS JLEVARD O1 OM PART PLAN	DATE:



EQUIPM	ENT TAG LI	EGEND	GE	ENERAL NOTES	
3-1*EQU VAV	IPMENT UNIQUE IDENTIF IABLE AIR VOLUME BO BOX SIZE DESIGNATIC	FICATION TAG X NN. SEE	1. ALL DUC EXTERN SCHEDU SPECIFIC PROVID	TWORK TO BE WRAPPED WIT AL INSULATION PER DUCT INSI LE ON DWG M-011 AND CATION SECTION 230700. DC E DUCTWORK WITH INTERNAL	TH ULATION D NOT LINING.
3-1- *EQU FCU - FAN o X - FAN o SCHE	IPMENT UNIQUE IDENTIF COIL UNIT COIL UNIT SIZE DESIGN EDULE ON DWG M-010 SUGGESTED NUMBERIN	ICATION TAG ATION. SEE	2. PHASING DRAWIN CONTRA DETERM ACHIEVII UNFINISH BETWEE COVERI	SONES ARE INDICATED ON T GS FOR PHASING INTENT ONL ACTOR IS RESPONSIBLE FOR INNING THE EXACT SEQUENCE NG SPECIFIED PHASING. PROT ED PIPING AND DUCTWORK LI N PHASES WITH PLASTIC PRO NG TO PREVENT DUST AND D	THE Y. FOR TECT ALL EFT OPEN DTECTIVE EBRIS
TO ILLUSTRATE RESPONSIBLE FO NAMING CONVEN EQUIPMENT IN CO STANDARDS.	INTENT ONLY. CONTRA OR COORDINATING FIN NTIONS AND NUMBERIN OORDINATION WITH BU	ICTOR IS IAL UNIQUE G OF ALL LDING	ACCUMU COOLING CONDITI OCCUPIE TIE INS. 9 ABLE TO COMPLE 3 AND 4 OPERAT	LATION. PROVIDE TEMPORAR 5 AND HEATING AS REQUIRED ON SPACES INTENDED TO BE 50 PRIOR TO COMPLETION OF 50 STEMS IN PHASE 1 WILL NO 50 BE FULLY OPERATIONAL UN 51 TION OF PHASE 2. SYSTEM IN WILL NOT BE ABLE TO BE FU 10 NAL UNTIL COMPLETION OF	RY TO = SYSTEM T BE TIL PHASES LLY = PHASE
			6. COOLING PHASE 1 GRAND CO HEA NORTH J	G/HEATING LOADS BY PHASE : JURY ROOM: OLING: 42 MBH ATING: 36 MBH NING:	: :
			CO HEA PHASE 2 CO HEA PHASE 3 CO	OLING: 235 MBH ATING: 67 MBH 2: OLING: 235 MBH ATING: 58 MBH 3: OLING: 227 MBH	
			HEA PHASE 4 CO HEA PHASE 5 CO HEA	ATING: 40 MBH H: OLING: 180 MBH ATING: 49 MBH 5: OLING: 105 MBH ATING: 22 MBH	
Л. S			PHASE 6 CO HEA PHASE 7 CO HEA	9: OLING: 36 MBH ATING: 10 MBH 1: OLING: 23 MBH ATING: 7 MBH	
				KEY NOTES	
			1 NEW EXTE PIPIN TRIM M-02 SEE ENCL	FAN COIL IN PLACE OF EXISTI END NEW PIPING FROM EXISTIN IG AT MAINS. PROVIDE ALL NE SEE DETAIL 1 AND 3 ON DR 21. PROVIDE ALL NEW BMS CO ARCHITECTURAL PLANS FOR LOSURE DETAIL.	NG. NG BRANCH EM PIPE AWING ONTROLS.
			2 NEW NEW MAIN ALL DRA CON	FAN COIL IN NEW LOCATION. F PIPING CONNECTIONS TO EXIS S AND EXTEND TO NEW UNIT. F NEW PIPE TRIM. SEE DETAIL 1 WING M-021. PROVIDE ALL N TROLS.	PROVIDE STING PROVIDE AND 3 ON EW BMS
	PHASE 4		(3) INCLI ROC ALL CON SIZE, PENI	JDING WALL MOUNTED INDOO F MOUNTED CONDENSING UNI REFRIGERANT PIPING, WIRING TROLS FOR A COMPLETE SYS (CAPACITIES TO BE DETERMI DING FINAL IT COOLING REQUI	AND REMENTS.
				TO RISE AND RUN TIGHT TO NEEN BEAMS.	SLAB
3-10 VAV 3 (600)	CONSULTANT SEAL	CONSULTANT	INFORMATION		
	CLUTCEN PORT		904 F	•af & Lew Architects -30 161st Street, Jama 2: 718-651-6200 F: 7	ent LLP hica, NY 11432 18-251-6989
FCU 04	REVISION DA NUMBER	TE MADE BY	APP'D BY	RI AWING CERTIFICATION	EVISION
	AS BUILT - CH	HANGES AS NOTED			
INLY FOR THE WORK INDICATED ON IN SHEET. ALL OTHER MATTERS SHOWN R TO BE CONSIDERED AS EITHER BEING WITH APPLICABLE CODES	NAME: SIGNATURE: TITLE:			NAME: SIGNATURE: TITLE:	DATE:
LISE	DEPART	WESTCHESTER MENT OF PUBLIC V DIVISION (COUNTY, N WORKS AND OF ENGIN	EW YORK TRANSPORTATION EERING	CONTRACT NUMBER 19-514 SHEET NO. 8 OF 17
ING ENGINEERS DPC 133 WEST 19TH STREET NEW YORK, NY 10011 TEL 212.645.1002 WWW.POLISECE.COM	LOW RISI 1 MEC	E BUILDING RENOVA 10 DR. MARTIN LUT WHITE PLAIN HANICAL PLAN	ATIONS AND HER KING, JF NS, NEW YOR	HVAC IMPROVEMENTS R. BOULEVARD K 10601 OOR WEST WING	SCALE: AS NOTED DATE: MAY 20, 2021 DPW FILE NO. 52-01-HV-558





EQUIPMENT TAG LEGEND

3-1-*EQUIPMENT UNIQUE IDENTIFICATION TAG VARIABLE AIR VOLUME BOX X VAV BOX SIZE DESIGNATION. SEE SCHEDULE ON DWG M-010

3-1-*EQUIPMENT UNIQUE IDENTIFICATION TAG FCU FAN COIL UNIT X - FAN COIL UNIT SIZE DESIGNATION. SEE

SCHEDULE ON DWG M-010 *ALL TAGS ARE SUGGESTED NUMBERING SYSTEMS TO ILLUSTRATE INTENT ONLY. CONTRACTOR IS RESPONSIBLE FOR COORDINATING FINAL UNIQUE

NAMING CONVENTIONS AND NUMBERING OF ALL EQUIPMENT IN COORDINATION WITH BUILDING STANDARDS.



- EXTEND NEW PIPING FROM EXISTING BRANCH PIPING AT MAINS. PROVIDE ALL NEW PIPE TRIM. SEE DETAIL 1 AND 3 ON DRAWING M-021. PROVIDE ALL NEW BMS CONTROLS. SEE ARCHITECTURAL PLANS FOR ENCLOSURE DETAIL. NEW FAN COIL IN NEW LOCATION. PROVIDE $\left< \frac{2}{2} \right>$ NEW PIPING CONNECTIONS TO EXISTING
- MAINS AND EXTEND TO NEW UNIT. PROVIDE ALL NEW PIPE TRIM. SEE DETAIL 1 AND 3 ON DRAWING M-021. PROVIDE ALL NEW BMS CONTROLS. PROVIDE NEW SPLIT SYSTEM FOR IT ROOM
- INCLUDING WALL MOUNTED INDOOR UNIT AND ROOF MOUNTED CONDENSING UNIT. PROVIDE ALL REFRIGERANT PIPING, WIRING AND CONTROLS FOR A COMPLETE SYSTEM. UNIT SIZE/CAPACITIES TO BE DETERMINED PENDING FINAL IT COOLING REQUIREMENTS.
- 4 PROVIDE LINE VOLTAGE COOLING ONLY THERMOSTAT FOR EXHAUST FAN.

5 DUCT TO RISE AND RUN TIGHT TO SLAB BETWEEN BEAMS.

	CONSULTANT SEAL		CONSULTANT	INFORMATION						
	CF NEW YORK			Graf & Lewent Architects LLP 90-30 161st Street, Jamaica, NY 11432 P: 718-651-6200 F: 718-251-6989						
	REVISION NUMBER	DATE	MADE BY	APP'D BY			REVISIO	N		
			RECORD DRAWING CERTIFICATION							
	AS BUILT	- CHANGES	S AS NOTED GES							
		CONTR	ACTOR				CONTR	ACTOR		
	NAME:					NAME:				
THE WORK INDICATED ON . ALL OTHER MATTERS SHOWN	SIGNATURE:					SIGNATURE:				_
CONSIDERED AS EITHER BEING PLICABLE CODES.	IIILE:		DATE	_:		IIILE:		DATE:		_
	DEPA	WES ARTMENT (STCHESTER OF PUBLIC V	COUNTY, N WORKS ANI	IEW YO D TRAN	RK SPORTATION		NUMBER 19-514	M-1	03
			OF ENGIN	IEERIN	NG		SHEET NO. 10	OF 17		
133 WEST 19TH STREET NEW YORK, NY 10011	LOW	RISE BUILD 110 DR. \	NG RENOV	ATIONS AND HER KING, J IS. NEW YOF	HVAC II IR. BOUL	MPROVEMENTS _EVARD 1		SCALE: AS NOTED DATE: MAY 20, 2021		
TEL 212.645.1002 www.polisece.com	MI	ECHANIC	AL PLAN	- 3RD FL(DOR N	IORTH WING	/ING DPW FILE NO. 52-01-HV-560		REV NO. 0	













	EQU	IPMENT	TAG	LEGEND] [
[3-1- VAV	— *EQUIPMENT I — VARIABLE AI — VAV BOX SIZ SCHEDULE OI	JNIQUE IDE R VOLUME E DESIGN, N DWG M-0	ENTIFICATION TAG E BOX ATION. SEE 010	,	1
[3-1- FCU	— *EQUIPMENT I — FAN COIL UNI — FAN COIL UNI SCHEDULE OI	JNIQUE IDE T T SIZE DES N DMG M-(ENTIFICATION TAG BIGNATION. SEE 010	,	
*A TC RI NA EC	ALL TAG O ILLUSI ESPONS AMING C QUIPMEN TANDAR	S ARE SUGGES TRATE INTENT (DIBLE FOR COO ONVENTIONS A NT IN COORDINA	TED NUME ONLY. CON RDINATING ND NUMBI ATION WITH	BERING SYSTEMS ITRACTOR IS G FINAL UNIQUE ERING OF ALL H BUILDING		

GENERAL NOTES

PHASING ZONES ARE INDICATED ON THE DRAWINGS FOR PHASING INTENT ONLY. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT SEQUENCE FOR ACHIEVING SPECIFIED PHASING. PROTECT ALL UNFINISHED PIPING AND DUCTWORK LEFT OPEN BETWEEN PHASES WITH PLASTIC PROTECTIVE COVERING TO PREVENT DUST AND DEBRIS ACCUMULATION. PROVIDE TEMPORARY COOLING AND HEATING AS REQUIRED TO CONDITION SPACES INTENDED TO BE OCCUPIED PRIOR TO COMPLETION OF SYSTEM TIE INS. SYSTEMS IN PHASE 1 WILL NOT BE ABLE TO BE FULLY OPERATIONAL UNTIL COMPLETION OF PHASE 2. SYSTEM IN PHASES 3 AND 4 WILL NOT BE ABLE TO BE FULLY OPERATIONAL UNTIL COMPLETION OF PHASE

COOLING/HEATING LOADS BY PHASE: PHASE 1 GRAND JURY ROOM: COOLING: 42 MBH HEATING: 36 MBH NORTH WING:

- COOLING: 235 MBH HEATING: 67 MBH
- PHASE 2: COOLING: 235 MBH HEATING: 58 MBH
- PHASE 3: COOLING: 227 MBH HEATING: 40 MBH
- PHASE 4: COOLING: 180 MBH
- HEATING: 49 MBH PHASE 5:
- COOLING: 105 MBH HEATING: 22 MBH PHASE 6:
- COOLING: 36 MBH HEATING: 10 MBH
- PHASE 7: COOLING: 23 MBH HEATING: 7 MBH

KEY NOTES

- \bigwedge NEW FAN COIL IN PLACE OF EXISTING. EXTEND NEW PIPING FROM EXISTING BRANCH PIPING AT MAINS. PROVIDE ALL NEW PIPE TRIM. SEE DETAIL 1 ON DRAWING M-021. PROVIDE ALL NEW BMS CONTROLS
- 2 NEW FAN COIL IN NEW LOCATION. PROVIDE NEW PIPING CONNECTIONS TO EXISTING MAINS AND EXTEND TO NEW UNIT. PROVIDE ALL NEW PIPE TRIM. SEE DETAIL 1 ON DRAWING M-021. PROVIDE ALL NEW BMS CONTROLS.
- (3) PROVIDE NEW ISOLATION VALVES AT EXISTING RISERS.
- 4 PROVIDE NEW BMS CONTROL VALVE FOR HW RADIATION ON EXISTING RETURN PIPING.
- 5 EXISTING FIN TUBE IS IN CONFLICT WITH NEW WALL. TRIM ENCLOSURE AND FINS AT NEW WALL AND INSULATE EXISTING PIPING AT WALL PENETRATION.
- 6 PROVIDE NEW FIN TUBE ENCLOSURE FOR EXISTING FIN TUBE TO MATCH EXISTING.
- RE-INSULATE ALL EXISTING SHWS/R AND SCHWS/R PIPING SERVING FAN COIL UNITS IN ITS ENTIRETY.

CONSULTANT SEAL CONSULTANT INFORM									
ACTING AND FES	VEW KORNA KORNA KORNA KORNA KORNA KORNA KORNA		G 2	0-30 1 P: 718	Architects I 61st Street, Jamai 6-651-6200 F: 71	ca, NY 11432 8-251-6989			
REVISION NUMBER	DATE	MADE BY	APP'D BY		RE	VISION			
		RE		RAWIN	G CERTIFICATION				
AS BU	ILT - CHANGE ILT - NO CHA	ES AS NOTED							
	CONT	RACTOR			CO	NTRACTOR			
NAME:									
TITLE:		DATI	E:		TITLE:	DATE:			
	WF	STCHESTER	COUNTY, N	NEW YC	PRK		SHEET NUMBER		
DEPARTMENT OF PUBLIC WORKS AND TRAN			D TRAN	SPORTATION	19-514	M-203			
DIVISION OF ENGINEE				NEERII	ING SHEET NO. 14 OF 17				
LOW RISE BUILDING RENOVATIONS AND HV					IMPROVEMENTS SCALE: AS NOTED				
		WHITE PLAIN	NS, NEW YOI	RK 1060	D601				
MEC	CHANICAL	PIPING PI	LAN - 3RE	D FLOO					









MECHANICAL DEMOLITION PLAN - 3RD FLOOR WEST WING 1 М.901 1/8"=1'-0"

Ν







		25					
+ 1+ K							
						GENERAL 1. PHASING ZONES ARE IN DRAWINGS FOR PHASIN CONTRACTOR IS RESE DETERMINING THE EXA ACHIEVING SPECIFIED F UNFINISHED PIPING AND BETWEEN PHASES WITH COVERING TO PREVEN ACCUMULATION. PROV COOLING AND HEATING CONDITION SPACES IN OCCUPIED PRIOR TO CO TIE INS. SYSTEMS IN PH ABLE TO BE FULLY OP COMPLETION OF PHAS 3 AND 4 WILL NOT BE A OPERATIONAL UNTIL C 6. COOLING/HEATING LO PHASE 1: GRAND JURY ROOM: COOLING: 235 ME HEATING: 67 MBH PHASE 2: COOLING: 235 ME HEATING: 40 MBH PHASE 3: COOLING: 130 ME PHASE 4: COOLING: 105 ME HEATING: 40 MBH PHASE 5: COOLING: 105 ME HEATING: 22 MBH PHASE 5: COOLING: 105 ME HEATING: 10 MBH PHASE 5: COOLING: 23 MBH PHASE 6: COOLING: 23 MBH HEATING: 10 MBH PHASE 7: COOLING: 23 MBH HEATING: 7 MBH	NOTES NDICATED ON THE NG INTENT ONLY. PONSIBLE FOR CT SEQUENCE FOR PHASING. PROTECT ALL DUCTWORK LEFT OPEN H PLASTIC PROTECTIVE TDUST AND DEBRIS IDE TEMPORARY ASE 1 WILL NOT BE ERATIONAL UNTIL E 2. SYSTEM IN PHASES ABLE TO BE FULLY OMPLETION OF PHASE ADS BY PHASE: H H H H H H H H H H H H H H H H H H H
AB X						 AND REPLACED WI ASSOCIATED CONT EXISTING CABINET I REMOVED AND REI REMOVE ALL ASSO 	TH NEW. REMOVE ALL TROLS. HEATER TO BE PLACED WITH NEW. DCIATED CONTROLS.
						THE EXISTING FLOO RENOVATED. REMO DUCTWORK, CONST COILS, HOT WATER PIPING, AND CONTR AND CAP. REMOVE PERIMETER FAN CO BACK TO HORIZON	DR IS BEING GUT DVE ALL EXISTING FANT VOLUME REHEAT SUPPLY AND RETURN COLS BACK TO MAINS ALL EXISTING DIL UNITS AND PIPING TAL MAINS AND CAP.
	CONSULTANT SEAL		CONSULTANT	T INFORMATION	-30 1 P: 718	Carchitects LL 61st Street, Jamaica, 8-651-6200 F: 718-2	t P NY 11432 51-6989
	REVISION NUMBER	DATE	MADE BY	APP'D BY	RAWIN		DN
	AS BUIL	.1 - CHANGE	S AS NOTED IGES RACTOR	,		CONTF	RACTOR
D ONLY FOR THE WORK INDICATED ON TION SHEET, ALL OTHER MATTERS SHOWN	NAME: SIGNATURE:					NAME:	
OR TO BE CONSIDERED AS EITHER BEING CE WITH APPLICABLE CODES.	IIILE:	WES	STCHESTER	E:	NEW YO	RK	DATE: CONTRACT NUMBER
DLISE TING ENGINEERS DPC		ARTMENT ([]	UF PUBLIC	WURKS AN OF ENGIN	D TRAN NEERII) HVAC I	SPURTATION NG mprovements	19-514 M-902 SHEET NO. 16 OF 17 SCALE: AS NOTED
133 WEST 19TH STREET NEW YORK, NY 10011 TEL 212.645.1002 WWW.POLISECE.COM	MECHAI	110 DR.	MARTIN LUT WHITE PLAIN	THER KING, S NS, NEW YOI N PLAN - 3	JR. BOUI RK 1060 BRD FL	LEVARD 1 LOOR CENTRAL WING	DATE: MAY 20, 2021 DPW FILE NO. 52-01-HV-566



	GENERAL NOTES
1.	PHASING ZONES ARE INDICATED ON THE DRAWINGS FOR PHASING INTENT ONLY. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE EXACT SEQUENCE FOR ACHIEVING SPECIFIED PHASING. PROTECT ALL UNFINISHED PIPING AND DUCTWORK LEFT OPEN BETWEEN PHASES WITH PLASTIC PROTECTIVE COVERING TO PREVENT DUST AND DEBRIS ACCUMULATION. PROVIDE TEMPORARY COOLING AND HEATING AS REQUIRED TO CONDITION SPACES INTENDED TO BE OCCUPIED PRIOR TO COMPLETION OF SYSTEM TIE INS. SYSTEMS IN PHASE 1 WILL NOT BE ABLE TO BE FULLY OPERATIONAL UNTIL COMPLETION OF PHASE 2. SYSTEM IN PHASES 3 AND 4 WILL NOT BE ABLE TO BE FULLY OPERATIONAL UNTIL COMPLETION OF PHASE 6.
	COOLING/HEATING LOADS BY PHASE: PHASE 1:
	GRAND JURY ROOM: COOLING: 42 MBH HEATING: 36 MBH
	NORTH WING: COOLING: 235 MBH HEATING: 67 MBH
	PHASE 2: COOLING: 235 MBH HEATING: 58 MBH
	PHASE 3: COOLING: 227 MBH HEATING: 40 MBH
	PHASE 4: COOLING: 180 MBH HEATING: 49 MBH
	PHASE 5: COOLING: 105 MBH HEATING: 22 MBH
	PHASE 6: COOLING: 36 MBH
	HEATING: TO MBH PHASE 7: COOLING: 23 MBH HEATING: 7 MBH
	DEMOLITION NOTES

DEMC	INU	ILO	

- EXISTING FAN COIL UNIT TO BE REMOVEDAND REPLACED WITH NEW. REMOVE ALLASSOCIATED CONTROLS
- THE EXISTING FLOOR IS BEING GUT RENOVATED. REMOVE ALL EXISTING DUCTWORK, CONSTANT VOLUME REHEAT COILS, HOT WATER SUPPLY AND RETURN PIPING, AND CONTROLS BACK TO MAINS AND CAP. REMOVE ALL EXISTING PERIMETER FAN COIL UNITS AND PIPING BACK TO HORIZONTAL MAINS AND CAP.

	CONSULTANT SEAL	CONSULTANT	CONSULTANT INFORMATION								
	CF NEW 102 STE OF NEW 102 STE UINCEAD 02 STE 0064404 P		G 2	0-30 1 P: 718	Architects 61st Street, Jamai 3-651-6200 F: 71	ent LLP ica, NY 11432 18-251-6989					
	REVISION NUMBER	DATE	MADE BY	APP'D BY		RE	VISION				
	RECORD DRAWING CERTIFICATION										
	AS BUILT - CHANGES AS NOTED AS BUILT - NO CHANGES										
		CONT	ACTOR			CO	NTRACTOR				
UR THE WURK INDIGATED UN EET. ALL OTHER MATTERS SHOWN 3E CONSIDERED AS EITHER BEING APPLICABLE CODES.			DATE	E:		TITLE:	DATE:				
	DEPA	WES ARTMENT	STCHESTER OF PUBLIC V	COUNTY, N WORKS AN	NEW YO D TRAN	RK SPORTATION	CONTRACT NUMBER 19-514	SHEET NUMBER			
		[DIVISION (NEERI	NG	SHEET NO.	7 OF 17			
G ENGINEERS DPC 133 WEST 19TH STREET NEW YORK, NY 10011	LOW	RISE BUILE 110 DR.	DING RENOVA MARTIN LUT WHITE PLAIN	ATIONS AND HER KING, J IS, NEW YOI) HVAC I JR. BOUL RK 1060 ⁷	MPROVEMENTS LEVARD 1	SCALE: AS NOTED DATE: MAY 20, 202	1			
IEL 212.645.1002 WWW.POLISECE.COM	MECHAN	NICAL DE	MOLITION	I PLAN - 3	3RD FL		DPW FILE NO. 52-01-H	IV-567 REV			