

LOCATION	UNIT TAG	GENERAL											INDOOR UNIT							CONDENSING UNIT												
		CAPACITY			EER	SEER	ENT. AIR		REFRIGERANT	REFRIGERANT LBS	REFRIGERANT SAFETY CLASS	TONS	ELECTRICAL DATA				CFM	DRAIN CONNECTION	WEIGHT	MODEL NO.	UNIT TAG	ELECTRICAL DATA				COMPRESSOR		REFRIGERANT LINES		WEIGHT (LBS.)	MODEL NO.	
		TOTAL COOLING MBH	SENSIBLE COOLING MBH	TOTAL HEATING @ 17° F MBH			DB °F	WB °F					VOLTS	PHASE	Hz.	MIN. AMPACITY						VOLTS	PHASE	Hz.	MOCAP	MIN. AMPACITY	R.L.A	L.R.A	SUCTION IN			LIQUID IN
SOFTBALL PRESSBOX	AHU - 1	12	9.6	10.6	13.3	21.3	95	75	410A	4.4375	A1	1	208	1	60	1	290	5/8	28	TPKA0A0121LA10A	ACCU-1	208	1	60	28	11	7	12	1/2	1/4	93	TRUZA0121KA70NA
BASEBALL PRESSBOX	AHU - 2	12	9.6	10.6	13.3	21.3	95	75	410A	4.4375	A1	1	208	1	60	1	290	5/8	28	TPKA0A0121LA10A	ACCU-2	208	1	60	28	11	7	12	1/2	1/4	93	TRUZA0121KA70NA
FIELD HOCKEY PRESSBOX	AHU - 3	12	9.6	10.6	13.3	21.3	95	75	410A	4.4375	A1	1	208	1	60	1	290	5/8	28	TPKA0A0121LA10A	ACCU-3	208	1	60	28	11	7	12	1/2	1/4	93	TRUZA0121KA70NA

1. INSTALL INDOOR UNITS ACCORDING TO THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
2. PROVIDE MANUFACTURER'S STANDARD PROGRAMMABLE, WIRED THERMOSTAT.
3. MECHANICAL CONTRACTOR TO FURNISH DISCONNECT SWITCH, ELECTRICAL CONTRACTOR TO INSTALL AND WIRE TO UNIT.
4. PROVIDE STAND ALONE FACTORY INSTALLED DIRECT DIGITAL CONTROLS AS NECESSARY TO SATISFY THE SEQUENCE OF OPERATIONS.
5. PROVIDE VIBRATION ISOLATION/NEOPRENE PADS AT OUTDOOR UNIT.

1. ALL MECHANICAL EQUIPMENT IS TO UTILIZE STAND-ALONE OEM CONTROLS. CONTROLS ARE TO BE INTEGRAL WITH THE EQUIPMENT AND BE EITHER FACTORY OR FIELD INSTALLED, AS REQUIRED.
2. REFER TO SEQUENCE OF OPERATION, SPECIFICATION 230993 FOR MORE INFORMATION.



1	09/17/24	BIDDING DOCUMENTS	
No.	Date	Revisions	

UNIT									COOLING COIL - CHW								HEATING COIL - HW								FILTERS		ELECTRICAL					BASIS OF DESIGN					
TAG	SERVES	SUPPLY				RETURN			EAT		LAT	EWT (°F)	LWT (°F)	GPM	ROWS	TOTAL CAPACITY (MBH)	ROWS	EDB (°F)	LDB (°F)	EWT (°F)	LWT (°F)	GPM	TOTAL CAPACITY (MBH)	FACE VELOCITY (FT/MIN)	EFFICIENCY	V/PH/HZ	FLA	MCA	MAX FUSE (A)	WEIGHT (LBS)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	MANUFACTURER	MODEL		
		TOTAL AIRFLOW	OUTSIDE AIRFLOW (CFM)	ESP/TSP	MOTOR POWER (HP)	TOTAL AIRFLOW	ESP/TSP	MOTOR POWER (HP)	EDB (°F)	EWB (°F)																										LDB (°F)	
H-1	CLASSRM / OFFICE	7590	1975	1.25/4.54	8.05	7590	1.25/1.97	8.05	80.2	66.09	56.74	45.0	59.0	35.83	6	232	1	53.28	74.85	180.0	140	8.88	177.59	526	MERV 14	460/3/60	25.22	27.28	35.00	3120	212	72	47.7	TRANE	CSAA014UB		
F-2	AUDITORIUM	12300	4400	1.00/4.32	7.5	10193	1.00/3.64	5	80.36	68.09	61.36	45.0	59.0	46.46	4	300.82	2	49.4	93.18	180.0	140.0	29.19	584.04	376	MERV 14	460/3/60	40.57	43.32	50.00	7988	297	80	29.4	TRANE	CSAA025UB		
B-2	CLASSRM / LABORTRY	6565	1825	3.99/6.60	8.05	6565	0.50/1.04	8.05	80.8	67.7	58.1	45.0	59.0	33.07	6	214.12	1	52.4	75.81	180	140	8.33	166.66	455	MERV 14	460/3/60	25.22	27.28	35.00	3103	212	72	45	TRANE	CSAA014UB		
B-3	CLASSRM / LABORTRY	6170	1900	4.19/7.31	8.05	6170	0.50/1.10	8.05	89.0	74.3	62.9	45.0	59.0	40.12	8	259.79	1	52.4	76.10	180	140	16.74	158.12	463	MERV 14	460/3/60	25.22	27.28	35.00	2943	211	67	45	TRANE	CSAA012UB		

1. BASIS OF DESIGN IS TRANE.
2. PROVIDED 4" PLEATED AIR FILTER, MERV 14 RATING, SEE SPEC 234100 FOR MORE INFO.
3. PROVIDE START-UP BY MANUFACTURER'S AUTHORIZED TECHNICIAN.
4. PROVIDED FACTORY INSTALLED 0-100% ECONOMIZER WITH DIFFERENTIAL ENTHALPY CONTROL.
5. UNIT SHALL BE SHIPPED IN SEPARATE SPLITS AND RIGGED VIA CRANES. ALL NECESSARY PERMITS FOR RIGGING REQUIRED.

6. MC TO PROVIDE FACTORY INSTALLED VFD WITH INTEGRAL MOTOR STARTERS FOR EACH FAN, EC TO FURNISH AND INSTALL FUSIBLE TYPE DISCONNECT SWITCHES IN THE FIELD.
7. TRANS TO PROVIDE FACNET INTEGRATION ASSISTANCE TO EXISTING TRACER SC+ TRACER FULL BOD CONTROL OF ENERGY WHEELS (WHERE APPLICABLE) INCLUDING FROST PROTECTION VIA ENERGY WHEEL VFD SPEED CONTROL, 100% ECONOMIZER MODE VIA ENERGY WHEEL BYPASS DAMPERS.
8. DEMAND CONTROL VENTILATION REQUIRED FOR ALL UNITS.
9. CHILLED WATER SYSTEM COILS TO BE SIZED FOR 30% PROPYLENE GLYCOL.

10. TRANE TO PROVIDE HEATING AND COOLING CONTROL VALVE, SEE COIL PIPING DETAILS.
11. PROVIDE FACTORY INSTALLED FAN CONTROL PANEL FOR HIGH VOLTAGE AND LOW VOLTAGE POWER. SHALL INCLUDE INDIVIDUAL MOTOR OVER-CURRENT PROTECTION WITH FUSED PANEL DISCONNECT.
12. OUTDOOR UNITS CONTAINING AIR-TO-AIR ENERGY RECOVERY DEVICES AND SHALL BE PROVIDED IN STACKED AIR TUNNEL CONFIGURATION. ALL OTHER OUTDOOR UNIT CONFIGURATIONS ARE PREFERRED TO BE PROVIDED IN STACKED AIR TUNNEL

13. PROVIDE UNITS THAT DO NOT EXCEED THE WEIGHT OR DIMENSIONS AS SCHEDULED.

14. SOUND DATA SHALL BE PROVIDED USING AHRI 260 METHODS. UNIT DISCHARGE INLET , AND RADIATED SOUND POWER LEVELS IN Db SHALL BE PROVIDED FOR 63, 125, 250, 500, 1000, 2000, 4000 AND 8000Hz.

SYSTEM	ROOM	OCCUPANCY CLASSIFICATION	FLOOR AREA SF Az	OCCUPANT LOAD OCCUPANT/ 1,000 SF	# OF OCCUP-ANTS Pz	REQUIRED CFM/ OCCUPANT Rp	REQ. CFM/SF Ra	BREATHING ZONE OUTDOOR AIRFLOW Vbz=RpPz+ RaAz	ZONE DISTRIBUTION EFFECTIVE NESS Ez	TOTAL ROOM OUTDOOR AIR REQUIRED Vot=Vbz/Ez	ACTUAL RM OUTSIDE AIR SUPPLY AIRFLOW CFM	REQ. EXHAUST AIRFLOW RATE CFM/SF	REQUIRED EXHAUST AIRFLOW CFM	ACTUAL EXHAUST AIRFLOW CFM
H1	108	CLASSROOM	1080	35	38	10	0.12	508	0.8	635	650	-	-	-
	109	CLASSROOM	1075	35	38	10	0.12	505	0.8	632	650	-	-	-
	110	CLASSROOM	845	35	30	10	0.12	397	0.8	496	500	-	-	-
	110A	OFFICE	430	5	2	5	0.06	37	0.8	46	50	-	-	-
	110B	CONFERENCE RM	300	50	15	5	0.06	93	0.8	116	125	-	-	-
B2	308	CLASSROOM	950	35	33	10	0.12	444	0.8	555	575	-	-	-
	310	CLASSROOM	895	35	31	10	0.12	417	0.8	522	525	-	-	-
	311	CLASSROOM	1020	35	36	10	0.12	482	0.8	603	625	-	-	-
	CORRIDOR (BETWEEN 311&309)	CORRIDOR	475	-	-	-	0.06	29	0.8	36	50	-	-	-
	CORRIDOR (BETWEEN 309/308&307/306)	CORRIDOR	640	-	-	-	0.06	38	0.8	48	50	-	-	-
B3	307	CLASSROOM	1040	35	36	10	0.12	485	0.8	606	625	-	-	-
	306	CLASSROOM	1055	35	37	10	0.12	497	0.8	621	625	-	-	-
	309	CLASSROOM	930	35	33	10	0.12	442	0.8	552	575	-	-	-
	CORRIDOR (BETWEEN 307& 305A)	CORRIDOR	775	-	-	-	0.06	47	0.8	58	75	-	-	-
F2	AUDITORIUM (1/3)	AUDITORIUM	4300	150	645	5	0.06	3483	0.8	4354	4400	-	-	-

1. VENTILATION CALCULATIONS COMPLY WITH THE 2020 NYS MECHANICAL CODE.
2. AIRFLOWS ARE EXPRESSED IN CFM UNLESS OTHERWISE NOTED.

UNIT HEATER SCHEDULE																	
TAG	SERVES	MODEL NUMBER	MANUFACTURER	POWER (KW)	DIMENSIONS			HEATING CAPACITY (BTU)	VOLTAGE (VOLTS)	PHASE	CURRENT (AMPS)	CONTROL VOLTAGE	TEMPERATURE RISE (°F)	AIR THROW (FEET)	AIRFLOW (CFM)	MOUNTING HEIGHT (FEET)	WEIGHT (LBS)
					HEIGHT (INCH)	WIDTH (INCH)	DEPTH (INCH)										
UH-1	SOFTBALL PRESSBOX	F2FUH05C03	MARKEL	5	17.75"	14.47"	6.5"	17100	208	1 OR 3	24.1 / 14.0	208	40	26	400	9	44
UH-2	BASEBALL PRESSBOX	F2FUH05C03	MARKEL	5	17.75"	14.47"	6.5"	17100	208	1 OR 3	24.1 / 14.0	208	40	26	400	9	44
UH-3	FIELD HOCKEY PRESSBOX	F2FUH05C03	MARKEL	5	17.75"	14.47"	6.5"	17100	208	1 OR 3	24.1 / 14.0	208	40	26	400	9	44

F-2 RTU ENERGY RECOVERY WHEEL SCHEDULE									
FAN	RECOVERED CAPACITY		MIXED AIR LAT			EFFECTIVENESS			
OUTSIDE AIRFLOW (CFM)	COOLING (MBH)	HEATING (MBH)	COOLING DB (°F)	HEATING DB (°F)	WHEELAPD (INH ₂ O)	TOTAL COOLING	SENSIBLE COOLING	TOTAL HEATING	SENSIBLE HEATING
4400	156.87	306.35	76.7	64.6	0.70	63.40%	65.50%	64.30%	65.50%

Drawing Title
**MECHANICAL
SCHEDULES**

Drawing No.

M-002

NORTH ROCKLAND
HIGH SCHOOL
ELDS - PHASE 2 &
HVAC UPGRADES

HIGH SCHOOL: SED# 50-02-01-06-0-016-036
PRESS BOX - SOFTBALL: SED# 50-02-01-06-7-080-001
PRESS BOX - BASEBALL: SED# 50-02-01-06-7-091-001
Hammond Rd.,
TOWN OF HARVEST
Sills, NY 10984
COUNTY OF ROCK

Landscape
Architect &
Civil

Engineer:
SARATOGA SPRINGS, NY 12868

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Structural & GREENMAN

PME
PEDERSEN, INC.

Engineer:
 2000 STATE DOCKWARD,
 SUITE 202, SUFFERN, NY 10901

Checked by	MC
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WM

Project No.

43045

Scale

AS NOTED

Date