WARWICK VALLEY CENTRAL SCHOOL DISTRICT

FEDERAL GRANT/ CAPITAL BOND HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND AIR CONDITIONING UPGRADE

225 WEST STREET EXT, WARWICK, NY 10990

ISSUED FOR BID - DATE: 11/09/2022

WARWICK VALLEY — WARWICK VALLEY — MIDDLE SCHOOL



LOCATION PLAN

LIST OF DRAWINGS:

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A-100 PARTIAL ROOF PLANS - NEW WORK
A-101 STRUCTURAL PLANS AND MISCELLANEOUS DETAILS

MECHANICAL
M-001 ABBREVIATIONS AND SYMBOLS
MD-100 PARTIAL BASEMENT AND FIRST FLOOR PLANS - REMOVALS
MD-101 PARTIAL FIRST FLOOR PLAN - REMOVALS
MD-102 PARTIAL SECOND FLOOR PLAN - REMOVALS
M-100 PARTIAL BASEMENT AND FIRST FLOOR PLANS - NEW WORK
M-101 PARTIAL FIRST FLOOR PLAN - NEW WORK

M-101 PARTIAL FIRST FLOOR PLAN - NEW WORK
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UV-C LIGHT FIXTURE DETAILS

CONTROL SCHEMATICS

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PLUMBING
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P-101 PARTIAL FIRST FLOOR PLAN - NEW WORK
P-102 PARTIAL SECOND FLOOR PLAN - NEW WORK

RISER DIAGRAM - EXISTING & NEW WORK

SCHEDULE AND DETAILS

Eisenbach & Ruhnke Engineering, l

291 Genesee Street – Utica, NY 135

Ph: 315-735-1916 Fax: 315-735-6365

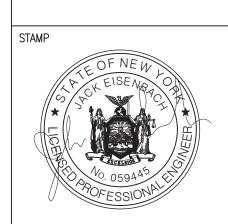
www.erengpc.com

CONSULTANT(S):

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AL SCHOOL DISTRICT
OR REPLACEMENT AND
MCK, NY 10990

RWICK VALLEY CENTRAL SCHOT SCHOOL UNIT VENTILATOR REPLONDITIONING UPGRADE
ST STREET EXT, WARWICK, NY 10990

1 SCHOOL - 89 SANFORDVILLE ROAD. WARWICK, NY 10990

BID ADDENDUM 11.23.2022
ISSUED FOR BID 11.09.2022

SED SET 10.19.2022

REVISION DATE

DRAWN BY

CHECKED BY

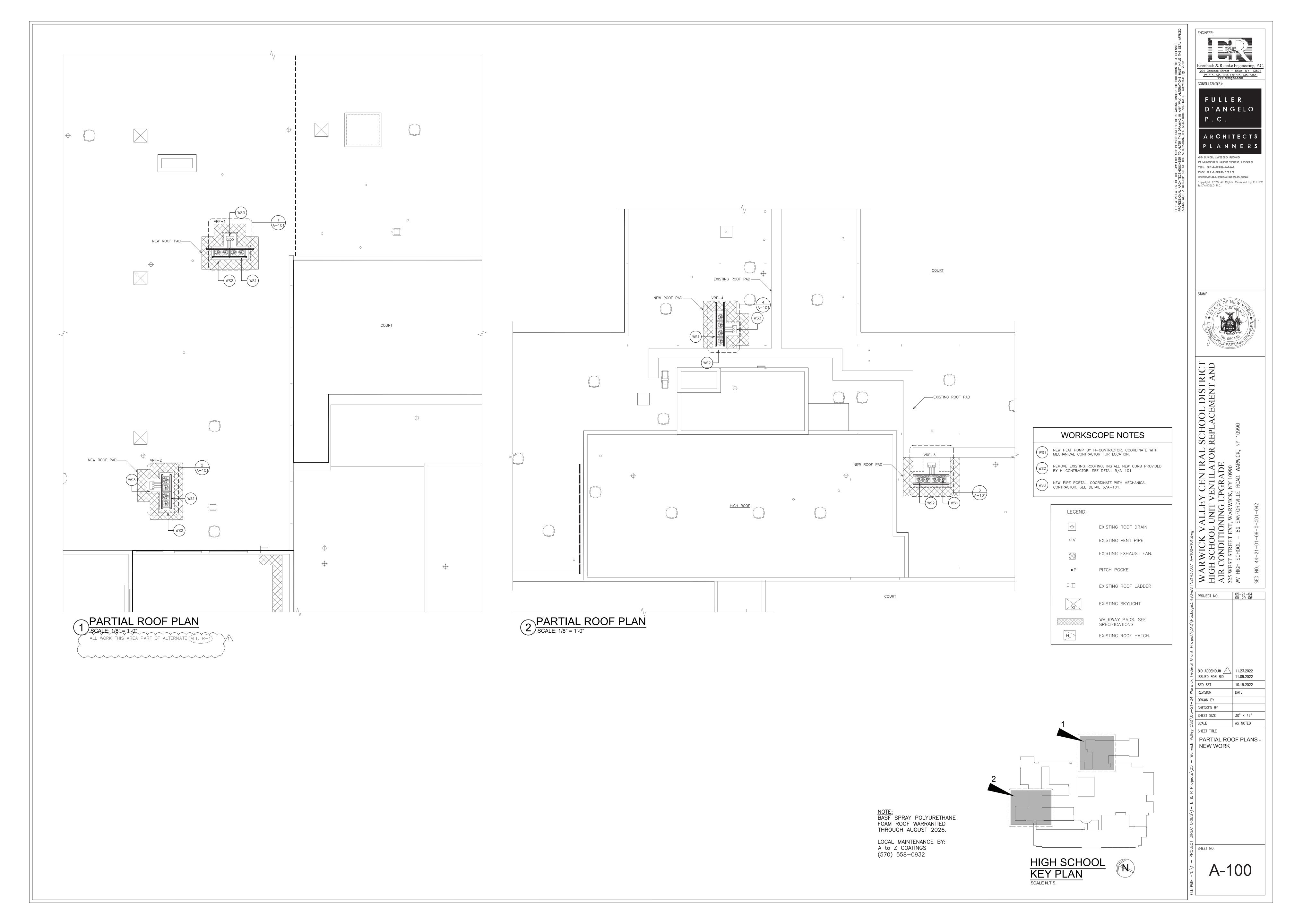
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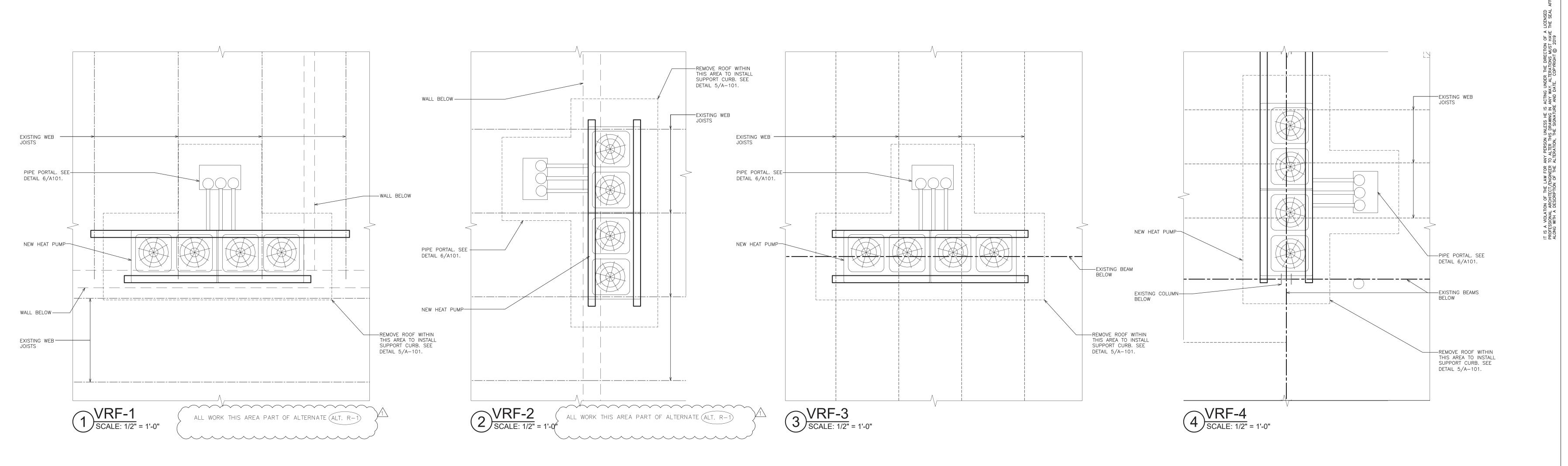
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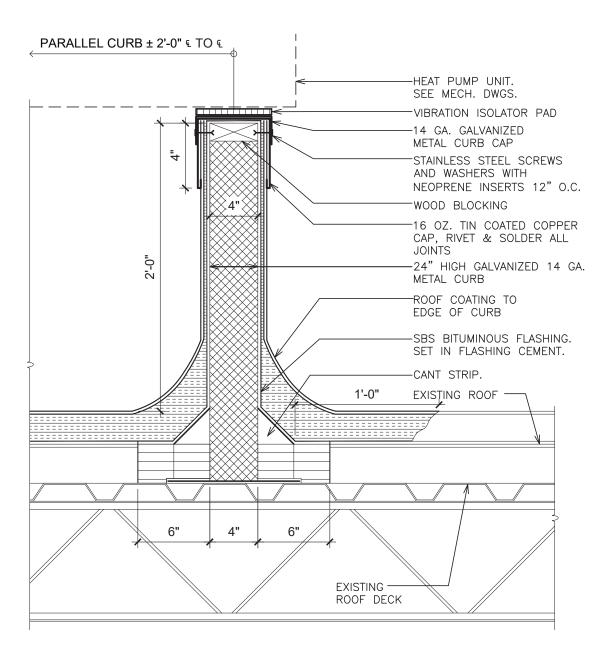
COVER PAGE

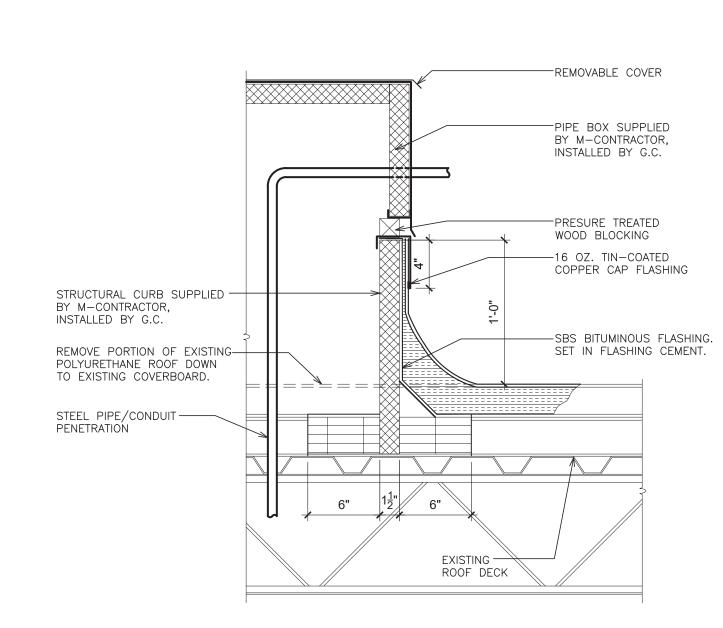
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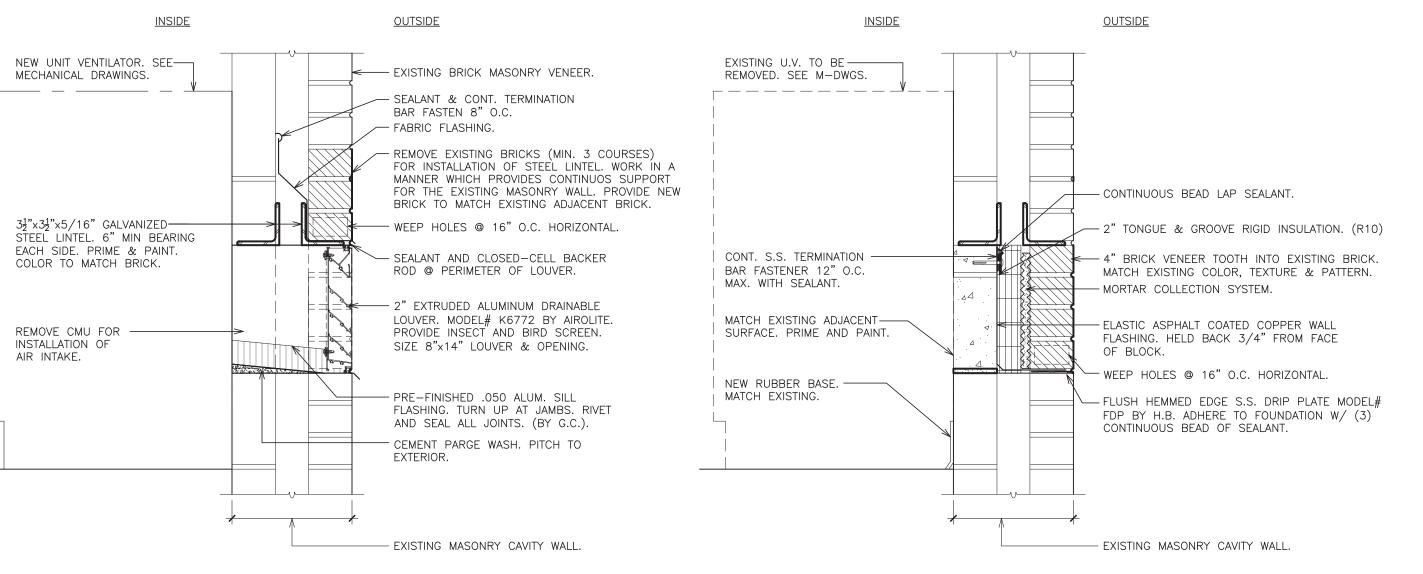


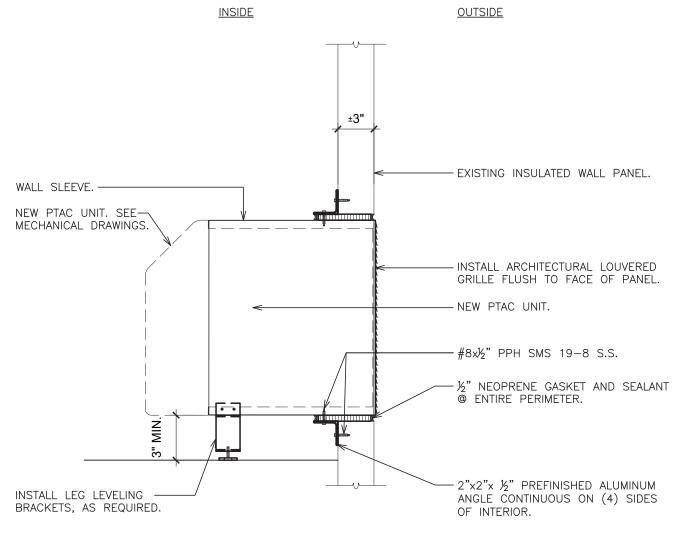




5 DETAIL - SUPPORT CURB SCALE: 1 1/2" = 1'-0"

6 DETAIL - PIPE PORTAL CURB SCALE: 1 1/2" = 1'-0"





7 TYPICAL LOUVER OPENING @ U.V. SCALE: 1 1/2" = 1'-0"

8 DETAIL - EXISTING U.V. INFILL SCALE: 1 1/2" = 1'-0"

9 TYPICAL PTAC WALL SLEEVE
SCALE: 1 1/2" = 1'-0"

WORKSCOPE NOTES

- WS1 NEW HEAT PUMP BY H-CONTRACTOR. COORDINATE WITH MECHANICAL CONTRACTOR FOR LOCATION.
- WS2 REMOVE EXISTING ROOFING, INSTALL NEW CURB PROVIDED BY H-CONTRACTOR. SEE DETAIL 5/A-101.
- WS3 NEW PIPE PORTAL. COORDINATE WITH MECHANICAL CONTRACTOR. SEE DETAIL 6/A-101.

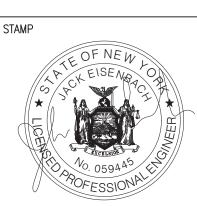
<u>LEGEND:</u>	
lack	EXISTING ROOF DRAIN
○ V	EXISTING VENT PIPE
	EXISTING EXHAUST FAN.
■P	PITCH POCKE
EΙ	EXISTING ROOF LADDER
SL	EXISTING SKYLIGHT
	WALKWAY PADS. SEE SPECIFICATIONS

EXISTING ROOF HATCH.

ENGINEER: CONSULTANT(S): FULLER D'ANGELO P.C.

ARCHITECTS PLANNERS 45 KNOLLWOOD ROAD

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HOOL I

RWICK VALLEY

SCHOOL UNIT VE

CONDITIONING UP

ST STREET EXT, WARWICK,

1 SCHOOL - 89 SANFORDVILLE WARNHIGH SAIR CC 225 WEST WW HIGH S

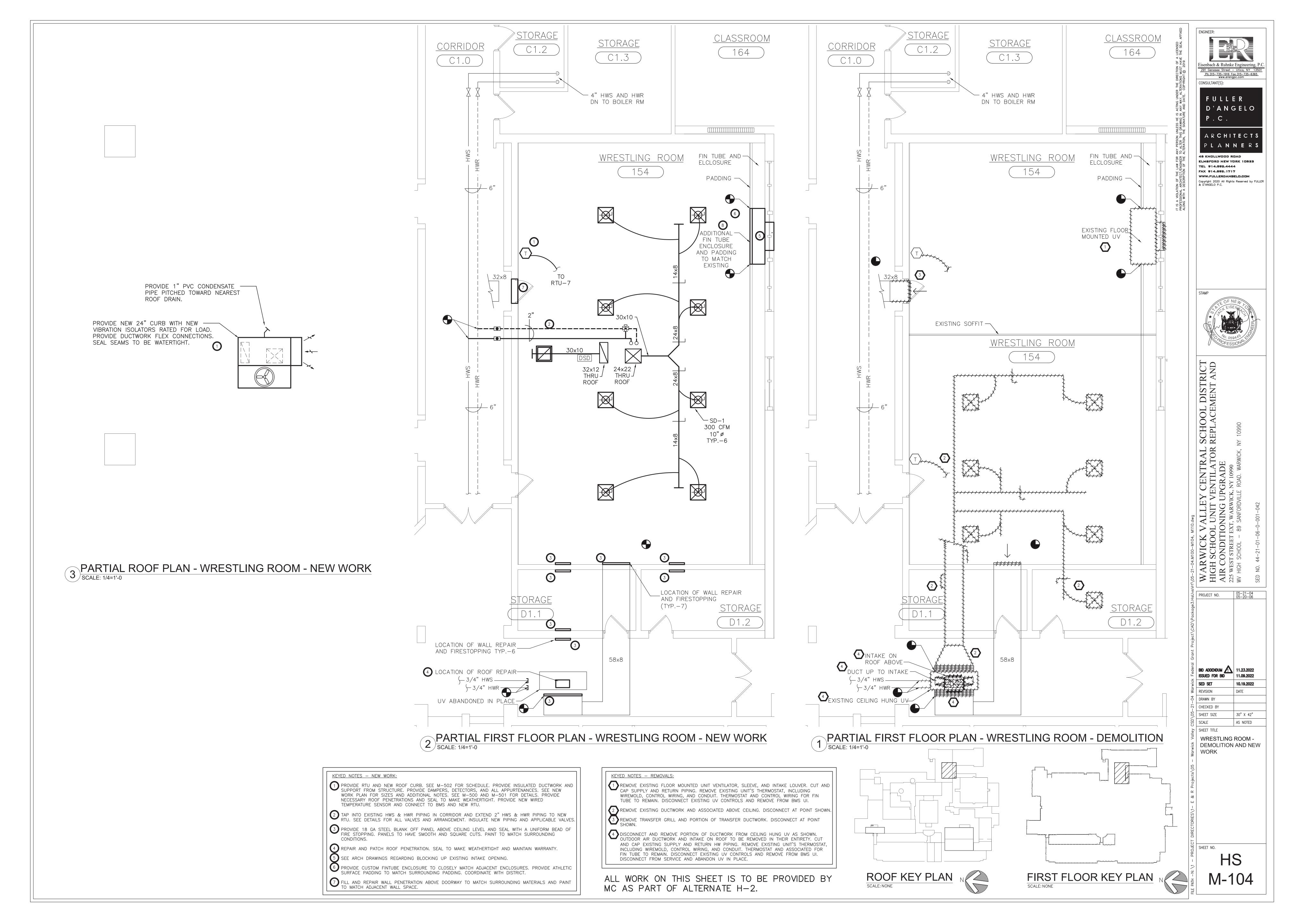
PROJECT NO. BID ADDENDUM /1 \ 11.23.2022 ISSUED FOR BID 11.09.2022 10.19.2022 € SED SET REVISION DATE DRAWN BY CHECKED BY

SCALE AS NOTED SHEET TITLE STŘUCŤUŘAĽ PĽANŠ ặ (AND MISCELLANEOUS DETAILS

30" X 42"

SHEET SIZE

SHEET NO. HS A-101



NOTE 1: PROVIDE DAMPERS SHOWN ON THE DRAWINGS AND ADDITIONAL DAMPERS AS NECESSARY FOR AIR BALANCING OR AS NEEDED TO COMPLY WITH ECCCNYS C403.7.7 REQUIREMENTS FOR INTAKES AND EXHAUST OPENINGS.

NOTE 2: OBSERVE REQUIRED AND RECOMMENDED CLEARANCES FOR UNIT DURING PLACEMENT. INSTALL UNIT ACCORDING TO MANUFACTURER RECOMMENDATIONS.

NOTE 3: MAINTAIN MINIMUM OF 10' FROM ROOF EDGE WHEN PLACING UNIT.

							UNIT	VENT	LATO	R SC	HEDUL	E(3)	30)								
				TO TAL			X COOLING COIL				HEATING COI	L		MOTOR	(ECM)	ELE	ECTRICAL			LOUVER	
MARK	SERVICE	MFR / MODEL	TYPE	TOTAL CFM	O/A MIN	тот. мвн	SENS. MBH	ROWS	МВН	ROWS	FLUID	EWT	LWT	QTY	HP	VOLTAGE	FLA	MCA	MOP	SIZE	REMARKS
BASEMENT				I					ı			1		-1					l		
UV-70-A	107 01100 70	MAUVF3-P1FFB223	VERTICAL	1000	282	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-70-B	ART CLASS. 70	MAUVF3-P1FFB223	VERTICAL	1000	282	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
FIRST FLOOR		·																			
UV-128	CLASSROOM 128	MAUVF2-P1FFB223	VERTICAL	750	283	23.4	15.6	4	47.2	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9
UV-130	CLASSROOM 130	MAUVF3-P1FFB223	VERTICAL	1000	297	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9
UV-132	CLASSROOM 132	MAUVF3-P1FFB223	VERTICAL	1000	310	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20		SEE NOTES 1,2,3,6,8,9
UV-147	CLASSROOM 147	MAUVF3-P1FFB223	VERTICAL	1000	417	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-149	CLASSROOM 149	MAUVF3-P1FFB223	VERTICAL	1000	414	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-151	CLASSROOM 151	MAUVF3-P1FFB223	VERTICAL	1000	415	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-153	CLASSROOM 153	MAUVF3-P1FFB223	VERTICAL	1000	430	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-155	CLASSROOM 155	MAUVF3-P1FFB223	VERTICAL	1000	429	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-157	CLASSROOM 157	MAUVF3-P1FFB223	VERTICAL	1000	402	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-159	CLASSROOM 159	MAUVF3-P1FFB223	VERTICAL	1000	401	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-162	CLASSROOM 162	MAUVF5-P1FFB223	VERTICAL	1500	356	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-164	CLASSROOM 164	MAUVF2-P1FFB223	VERTICAL	750	297	23.4	15.6	4	47.2	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-166	CLASSROOM 166	MAUVF4-P1FFB223	VERTICAL	1250	417	37.3	24.3	4	58.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-168	CLASSROOM 168	MAUVF4-P1FFB223	VERTICAL	1250	415	37.3	24.3	4	58.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-170	CLASSROOM 170	MAUVF4-P1FFB223	VERTICAL	1250	415	37.3	24.3	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
UV-171	CLASSROOM 171	MAUVF5-P1FFB223	VERTICAL	1500	653	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9 (ALT.
SECOND FLOOR	?				1			1	1	'		1	1	1			1		1		
UV-231	SCI. LAB 231	MAUVF5-P1FFB223	VERTICAL	1500	434	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9
UV-232	SCI. LAB 232	MAUVF5-P1FFB223	VERTICAL	1500	520	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9
UV-233	SCI. LAB 233	MAUVF5-P1FFB223	VERTICAL	1500	609	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9
UV-234	SCI. LAB 234	MAUVF5-P1FFB223	VERTICAL	1500	377	49.3	31.7	4	62.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9
UV-235	SCI. LAB 235	MAUVF3-P1FFB223	VERTICAL	1000	499	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9
UV-236	SCI. LAB 236	MAUHF3-PAADD223	HORIZONTAL	1000	342	32.9	21.5	4	46.7	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9
UV-238	SCI. LAB 238	MAUHF3-PAADD223	HORIZONTAL	1000	459	32.9	21.5	4	46.7	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9
UV-239	SCI. LAB 239	MAUHF4-PAA-D223	HORIZONTAL	1250	397	37.3	24.3	4	58.9	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9,10
UV-240	SCI. LAB 240	MAUHF5-PAADD223	HORIZONTAL	1500	438	49.3	31.7	4	64.3	2	WATER	180	150	1	3/4	115/60/1		12.00	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9
UV-241	SCI. LAB 241	MAUVF3-P1FFB223	VERTICAL	1000	337	32.9	21.5	4	54.6	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,6,8,9
UV-243	SCI. LAB 243	MAUHF3-PAADD223	HORIZONTAL	1000	396	32.9	21.5	4	46.7	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9
UV-245	SCI. LAB 245	MAUHF3-PAADD223	HORIZONTAL		375	32.9	21.5	4	46.7	2	WATER	180	150	1	1/3	115/60/1		6.30	20	NOTE 3	SEE NOTES 1,2,3,4,6,8,9

NOTE 1: PROVIDE ADDITIONAL DAMPERS AS NECESSARY TO AID IN AIR BALANCING.

NOTE 2: DAMPERS CONTROLLING OUTDOOR AIR INTAKE VOLUME TO BE MOTORIZED.

NOTE 3: CONNECT NEW UNIT VENTILATOR TO EXISTING LOUVER/INTAKE. PROVIDE NEW SLEEVE AND SEAL CONNECTIONS TO BE WEATHER TIGHT. PROVIDE NECESSARY MODIFICATIONS NEEDED FOR NEW CONNECTION. NOTE 4: SECURELY HANG FROM STRUCTURE USING STEEL THREADED RODS AND FRAMING. MUST INSTALL UNIT TO ALLOW FOR MAINTENANCE CLEARANCES AND FILTER CHANGES. REFER TO MANUFACTURER'S RECCOMENDATIONS.

NOTE 5: NOT USED

NOTE 6: PROVIDE CONDENSATE PAN. PITCH DRAIN LINE WITH MINIMUM 1/8" PER 12" SLOPE. PROVIDE CONDENSATE PUMP WHEN MINIMUM PITCH CANNOT BE MET. DISCHARGE TO A NEARBY VENT LINE OR TO EXTERIOR WHEN POSSIBLE. SEE DETAIL.

NOTE 8: PROVIDE VRF COMPATIBLE UNITS, WHICH INCLUDE VRF ELECTRONIC EXPANSION VALVE KITS, VRF COMMUNICATION BOXES, ETC. PROVIDE 12" MINIMUM EXTENDED UTILITY CABINET. HOUSE EEV AND CONTROLS IN UTILITY CABINET.

NOTE 9: SEE PLANS FOR CONDENSATE PIPING AND ASSOCIATED. COORDINATE WITH PLUMBING CONTRACTOR.

NOTE 10: BOTTOM RETURN, BOTTOM SUPPLY, REAR OA CONFIGURATION.

						PTA	C S	CHE	DULE	- - -										
		,		1147/	MINI O A	14474			OLING COII	_ _		HEATING	GOIL			TRICAL		UNIT		
MARK	SERVICE	BRAND/MODEL NO.	TYPE	MAX CFM	MIN OA CFM	MAX OA CFM	DB	AT WB	OUTPUT (MBH)	EER	EAT DB (°F)	OUTPUT (MBH)	GPM	EWT	V/PH/HZ (A)	A MOP (A)	FACTORY DISC.	UNIT WEIGHT (LB)	LOUVER SIZE	REMARKS
PTAC-1	CLASSROOM 237	AMANA/PTC092G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	60	65	78.0	85.0	9.0	11.3	42.0	16.9	1	180	115/1/60 8.3	3 15	YES	102	16"x42"	SEE NOTES 1-7
PTAC-2	DET. OFFICE 236.A	AMANA/PTC092G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	55	65	78.0	85.0	9.0	11.3	42.0	16.9	1	180	115/1/60 8.3	3 15	YES	102	16"×42"	SEE NOTES 1-7
PTAC-5	OFFICE 154.1	AMANA/PTC092G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	35	65	78.0	85.0	9.0	11.3	42.0	16.9	1	180	115/1/60 8.3	3 15	YES	102	16"x42"	SEE NOTES 1-7 (ALT. H-1)
PTAC-4	OFFICE 154.2	AMANA/PTC072G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	25	65	78.0	85.0	7.0	11.9	42.0	14.9	1	180	115/1/60 6.9) 15	YES	98	16"x42"	SEE NOTES 1-7 (ALT. H-1)
PTAC-3	OFFICE 154.3	AMANA/PTC072G00H	THRU WALL PACKAGE TERMINAL AC W/HYDRONIC HEAT	310	25	65	78.0	85.0	7.0	11.9	42.0	14.9	1	180	115/1/60 6.9) 15	YES	98	16"x42"	SEE NOTES 1-7 (ALT. H-1)

NOTE 1: PROVIDE NEW WALL SLEEVE (WS900E). REPAIR OR ALTER EXISTING WALL PENETRATION AS NEEDED. MAINTAIN STRUCTURAL INTEGRITY. SEAL CONNECTIONS TO BE WEATHER TIGHT.

NOTE 2: PROVIDE REQUIRED AND RECOMMENDED CLEARANCES FOR UNIT BEFORE CUTTING OR INSTALLING. INSTALL UNIT ACCORDING TO MANUFACTURER RECOMMENDATIONS.

NOTE 3: PROVIDE DRAIN KIT (DK900D). DRAIN ALL CONDENSATE TO EXTERIOR.

NOTE 4: PROVIDE HYDRONIC WATER KIT (HWK03E) WITH 1/2" I.D. (5/8" O.D.) CONNECTIONS.

NOTE 5: PROVIDE HARD WIRE KIT AND TIE INTO EXISTING CIRCUIT. NOTE 6: PROVIDE EXTRUDED ALUMINUM AMANA PTAC LOUVER (AGKO1). COLOR TO MATCH NEAREST ADJACENT LOUVER COLORS OR AS SELECTED BY DISTRICT.

NOTE 7: DAMPER THAT MODULATES OA MUST BE MOTORIZED AND CONTROLLED TO AUTOMATICALLY CLOSE WHEN THE UNIT FAN IS DE-ENERGIZED.

					VRF	SCHEDUL	E.								
MARK	SERVICE	DDAND (HODEL NO	7.05	CAPACITY	AMBIENT	TOTAL UNIT POWER (KW)	EER	DEEDIO	CONN	IECTIONS	UNIT ELECT	RICAL DATA	4	WEIGHT	DEMARKO
WARK	SERVICE	BRAND/MODEL NO.	TYPE	(TONS)	TEMP. (°F)	COOLING/HEATING	AHRI	REFRIG.	L	G	VOLTAGE	MOPD	MCA	LBS.	REMARKS
VRF-1	SEE DWG M-111	LG ARUM288BTE5	AIR SOURCE HEAT PUMP	24	95	18.94 / 22.20	12.2	R410A	3/4"	1-3/8"	208/3PH	40+80	29+58	534+694	SEE NOTES 1,2,3,4,5,6 (ALT. H-1)
VRF-2	SEE DWG M-111	LG ARUM264BTE5	AIR SOURCE HEAT PUMP	22	95	17.56 / 20.72	12.5	R410A	3/4"	1-3/8"	208/3PH	40+70	29+54	534+666	SEE NOTES 1,2,3,4,5,6 (ALT. H-1)
VRF-3	SEE DWG M-111	LG ARUM336BTE5	AIR SOURCE HEAT PUMP	28	95	23.09 / 26.95	10.8	R410A	3/4"	1-3/8"	208/3PH	40+80	31+61	534+688	SEE NOTES 1,2,3,4,5,6
VRF-4	SEE DWG M-111	LG ARUM264BTE5	AIR SOURCE HEAT PUMP	22	95	17.56 / 20.72	11.5	R410A	3/4"	1-3/8"	208/3PH	40+70	29+54	534+666	SEE NOTES 1,2,3,4,5,6

NOTE 1: MAINTAIN REQUIRED AND RECOMMENDED CLEARANCES FOR UNIT DURING PLACEMENT. INSTALL AND CHARGE UNIT ACCORDING TO MANUFACTURER RECOMMENDATIONS.

NOTE 2: PROVIDE WEATHERPROOF PAD FOR UNIT AND 24" CURB.

NOTE 3: PROVIDE APPLICABLE SUCTION AND LIQUID LINES. PROVIDE INSULATION, SUPPORT, AND ENCLOSURES AS NOTED. PROVIDE ALL PIPING ENCLOSURES, WIRING ENCLOSURES, AND PENETRATIONS.

NOTE 4: MAINTAIN MINIMUM OF 10'-0" FROM ROOF EDGE AND AIR INTAKES WHEN PLACING UNIT. COORDINATE ALL TRADES BEFORE PLACEMENT.

NOTE 5: COORDINATE TRADES TO MINIMIZE NUMBER OF ROOF PENETRATIONS. PROVIDE ONE PIPING PORTAL TO HOUSE ALL PENETRATIONS ASSOCIATED WITH UNIT. NOTE 6: UNIT TO BE EITHER IN ALL COOLING OR ALL HEATING MODE. COOLING SEASON: UNIT IN USE. HEATING SEASON: UNIT IN USE UNTIL CHANGEOVER TO CENTRAL BOILER HYDRONIC HEAT. REFER TO MANUFACTURER FOR SEASONAL DEACTIVATION AND PROTECTION.

		GRIL	LES AI	ND SU	PPLY	DIFFUSER SO	CHEDULE		
MARK	TYPE	MODEL	GRILLE/ DIFFUSER FACE SIZE	MODULE SIZE	NECK SIZE	FRAME TYPE	MATERIAL	FINISH	REMARKS
SD-1	SUPPLY	TITUS TMS	24"×24"	24"x24"	10"ø	FULL FACE, 1" LAY—IN	STEEL	WHITE	SEE NOTES 1,2
RG-1	RETURN	TITUS 50R	24"×24"	24"x24"	20"x20"	FULL FACE, 1" LAY—IN	STEEL/ALUMINUM	WHITE/ALUM.	SEE NOTE 1
I						IAL DAMPERS AS NECESSAND TOP INSULATION.	ARY FOR AIR BALA	ANCING.	

ALTERNATE NOTE (ALT. H-1) EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE H-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

(ALT. H-2) EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE H-2 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

		INIC	SULATION CLA	cc (a)		JACKETING C	1100 (b)				THICKNES	SS (IN)	
TYPE	EQUIPMENT OR	IINS	SULATION CLA	33 (u)		JACKETING C	LASS (D)		NOMINA	AL PIPE SIZE	(IN)		DUCTWORK
	SYSTEM SERVED	INTERIOR CONCEALED	INTERIOR EXPOSED	EXTERIOR	INTERIOR GENERAL	EQUIPMENT ROOMS	EXTERIOR	<1"	$1" - < 1\frac{1}{2}"$	1½"- <4"	4 "- <8"	≥8" & UP	(c)
А	RS, RL	FE	FE	FE	0	0	4	0.5	1.5	1.5	1.5	1.5	
В	DCW, COOLING	FE			0			0.5	0.5	1.0	1.0	1.0	
В	COIL CONDENSATE		FE			4		0.5	0.5	1.0	1.0	1.0	
		FG			1			1.5	1.5	2	2	2	
С	HWS, HWR		FG		1	1		1.5	1.5	2	2	2	
				UR			6	1.5	1.5	2	2	2	
		FG (d)			2								1.5(g)
D	DUCTWORK		FG (e)		2	2							2 (f)(g)
				UR(e) R-12			3						2 (i)
FE UR	- FIBROUS GLASS (- FLEXIBLE ELASTOMERIC - URETHANE - CALCIUM SILICATE		UMINUM FOIL DLYVINYL CHLO	3 - ORIDE 5 -	– ALL SERVI – CANVAS – STAINLESS – EPDM	O S STEEL M	UPPLY AIR UTSIDE AIR IXED AIR ETURN AIR	(e) RIGID BC (d) BLANKET	(g)				

ALL INSULATION TO COMPLY WITH 2020 NYS ENERGY CONSERVATION CONSTRUCTION CODE

				HIGH SCHOOL			
EQUIPMENT MARK(S)	HOLDING REFRIGERANT CHARGE (LBS)	EST. ADDITIONAL REFRIG. CHARGE (LBS)	EST. TOTAL REFRIG. (LBS)	CALCULATED MIN. FLOOR AREA (FT2)	SMALLEST OCCUPIED ROOM IN SYSTEM	B APPROX. FLOOR AREA (FT2)	NOTES
VRF-1	54.10	15.96	70.06	317	CLASSROOM 164	561	8'-6" C.H., R-410A, NON-INS
VRF-2	49.70	15.74	65.44	296	CLASSROOM 162	673	8'-6" C.H., R-410A, NON-INS
VRF-3	60.70	15.59	76.29	345	CLASSROOM 130	550	8'-6" C.H., R-410A, NON-INS
VRF-4	49.70	11.94	61.64	224	SCIENCE LAB 241	678	8'-6" C.H., R-410A, NON-INS
MINIMUM ALL	OWED FLOOR AREA			EFRIGERANT CHARGE (LE LBS/1000 FT3) x CEILII	X 1000		A ST RM. > CALCULATED MIN. SQFT. ALLOWABLE RM. SQFT
RCL FOR	NON-INSTITUTION	TRATION LIMIT (RCL) AL OCCUPANCY APPL CUPANCY APPLICATIO	ICATIONS = 26 LE	•	10 ADDENDUM L.	PROCEDURES FOR AND SYSTEM. DO	MFR. SPECIFICATIONS AND PROPER CHARGING OF EQUIPMENT NOT INSTALL REFRIGERATION PIPING I IOLATE ASHRAE—15 REQUIREMENTS.

					AIR DE	SCHOOL					
EQUIPMENT MARK(S)	ROOM	ROOM TYPE	OCCUPANTS /1000 FT2	RP	APPROX.	RA	APPROX.	VBZ	EZ	MIN. O.A. (CFM)	NOTES
UV-70A											NOILS
UV-70B	70	ART	20	10	27	0.18	1317	507.1	0.9	563	
UV-128	128	CLASSROOM	35	10	19	0.12	542	255.0	0.9	283	
UV-130	130	CLASSROOM	35	10	20	0.12	561	267.3	0.9	297	
UV-132	132	CLASSROOM	35	10	21	0.12	577	279.2	0.9	310	
UV-147	147	CLASSROOM	35	10	28	0.12	793	375.2	0.9	417	
UV-149	149	CLASSROOM	35	10	28	0.12	772	372.6	0.9	414	
UV-151	151	CLASSROOM	35	10	28	0.12	778	373.4	0.9	415	
UV-153	153	CLASSROOM	35	10	29	0.12	809	387.1	0.9	430	
RTU-7	154	WEIGHT ROOM	10	20	18	0.06	1752	465.1	0.9	517	
PTAC-5	154.1	OFFICE	5	5	2	0.06	304	28.2	0.9	31	
PTAC-4	154.2	OFFICE	5	5	1	0.06	186	16.2	0.9	18	
PTAC-3	154.3	OFFICE	5	5	1	0.06	160	14.6	0.9	16	
UV-155	155	CLASSROOM	35	10	29	0.12	801	386.1	0.9	429	
UV-157	157	CLASSROOM	35	10	27	0.12	764	361.7	0.9	402	
UV-159	159	CLASSROOM	35	10	27	0.12	754	360.5	0.9	401	
UV-162	162	CLASSROOM	35	10	24	0.12	673	320.8	0.9	356	
UV-164	164	CLASSROOM	35	10	20	0.12	561	267.3	0.9	297	
UV-166	166	CLASSROOM	35	10	28	0.12	795	375.4	0.9	417	
UV-168	168	CLASSROOM	35	10	28	0.12	778	373.4	0.9	415	
UV-170	170	CLASSROOM	35	10	28	0.12	780	373.6	0.9	415	
UV-171	171	CLASSROOM	35	10	44	0.12	1234	588.1	0.9	653	
UV-231	231	SCI. LAB	25	10	23	0.18	894	390.9	0.9	434	
UV-232	232	SCI. LAB	25	10	24	0.18	928	467.9	0.9	520	
UV-233	233	SCI. LAB	25	10	32	0.18	1266	547.9	0.9	609	
UV-234	234	SCI. LAB	25	10	20	0.18	775	339.5	0.9	377	
UV-235	235	SCI. LAB	25	10	29	0.18	1159	498.6	0.9	554	
UV-236	236	SCI. LAB	25	10	18	0.18	712	308.2	0.9	342	
PTAC-1	237	SCI. LAB	25	10	7	0.18	249	114.8	0.9	60	
UV-238	238	SCI. LAB	25	10	24	0.18	960	412.8	0.9	459	
UV-239	239	SCI. LAB	25	10	21	0.18	818	357.2	0.9	397	
UV-240	240	SCI. LAB	25	10	23	0.18	911	394.0	0.9	438	
UV-241	241	SCI. LAB	25	10	18	0.18	686	303.5	0.9	337	
UV-243	243	SCI. LAB	25	10	21	0.18	814	356.5	0.9	396	
UV-245	245	SCI. LAB	25	10	20	0.18	766	337.9	0.9	375	
PTAC-2	236.A	DET. OFFICE	5	5	6	0.06	320	49.2	0.9		PZ UPPED FROM 2 TO HANDLE EXPEC

NYSMC TABLE 403.3.1.1.1.2 ZONE AIR DISTRIBUTION EFFECTIVENESS a,b,c,d	
AIR DISTRIBUTION CONFIGURATION	EZ
CEILING OR FLOOR SUPPLY OF COOL AIR	1.0(e)
CEILING OR FLOOR SUPPLY OF WARM AIR AND FLOOR RETURN	1.0
CEILING SUPPLY OF WARM AIR AND CEILING RETURN	0.8(f)
FLOOR SUPPLY OF WARM AIR AND CEILING RETURN	0.7
MAKEUP AIR DRAWN IN ON THE OPPOSITE SIDE OF THE ROOM FROM THE EXHAUST OR RETURN	0.8
MAKEUP AIR DRAWN IN NEAR TO THE EXHAUST OR RETURN LOCATION	0.5

a. "COOL AIR" IS AIR COOLER THAN SPACE TEMPERATURE. b. "WARM AIR" IS AIR WARMER THAN SPACE TEMPERATURE.

UNIDIRECTIONAL FLOW AND THERMAL STRATIFICATION.

FR — — FIRE RATED

- c. "CEILING" INCLUDES ANY POINT ABOVE THE BREATHING ZONE. d. "FLOOR" INCLUDES ANY POINT BELOW THE BREATHING ZONE. e. ZONE AIR DISTRIBUTION EFFECTIVENESS OF 1.2 SHALL BE PERMITTED FOR SYSTEMS WITH A FLOOR SUPPLY OF COOL AIR AND CEILING RETURN, PROVIDED THAT LOW-VELOCITY DISPLACEMENT VENTILATION ACHIEVES
- ZONE AIR DISTRIBUTION EFFECTIVENESS OF 1.0 SHALL BE PERMITTED FOR SYSTEMS WITH A CEILING SUPPLY OF WARM AIR. PROVIDED THAT SUPPLY AIR TEMPERATURE IS LESS THAN 15°F ABOVE SPACE TEMPERATURE AND PROVIDED THAT THE 150-FOOT-PER-MINUTE SUPPLY AIR JET REACHES TO WITHIN 4-1/2 FEET OF FLOOR LEVEL.

NYSED EZ CLASSIFICATION NOTE: "FLOOR" REFERS TO THE AREA LOCATED 0-3 INCHES AFF. "CEILING" REFERS TO THE AREA LOCATED 72 INCHES AFF AND ABOVE. THOSE LOCATED BETWEEN 3 INCHES AND 72 INCHES AFF ARE NOTED ABOVE.

OCCUPANCY CLASSIFICATION DERIVED FROM NYSMC TABLE 403.3.1.1 RP=OUTDOOR AIRFLOW RATE PER PERSON (NYSMC TABLE 403.3.1.1)

AZ=OCCUPIABLE FLOOR AREA EZ=ZONE AIR DISTRIBUTION EFFECTIVENESS (NYSMC TABLE 403.3.1.1.1.2)

PZ=QTY. OF OCCUPANTS IN SPACE RA=OUTDOOR AIRFLOW RATE PER UNIT AREA (NYSMC TABLE 403.3.1.1)

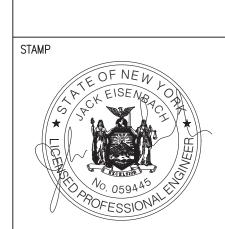
VOZ=ZONE OUTDOOR AIRFLOW RATE

 $VBZ=(RP\times PZ)+(RA\times AZ)$ VOZ=VBZ/EZ



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BID ADDENDUM 11.23.2022 ISSUED FOR BID 11.09.2022 REVISION DRAWN BY CHECKED BY

30" X 42" AS NOTED SHEET TITLE SCHEDULES

SHEET NO.

(HIGH SC	CHOOL UV—C LIGHTII	NG SCHEDULE	(ALTERNATE)			
>	NEW UVC CIRCUIT MARK	LOCATION/SERVICE	HVAC UNIT TYPE	HVAC UNIT NOMINAL AIR FLOW (CFM)	UV-C INSTALL LOCATION	UV-C FIXTURE MODEL NO.	UV-C FIXTURE VOLTAGE/PH	QTY.	HVAC UNIT VOLTAGE/PH
>	FIRST FLOOR								
	UVC-HS-94	154 Wrestling Rm	RTU *	2400	208/3		UV-FCU-CL 90H-P-B-VENT	1	110-240/1
>									K
>									

*) INDICATES UNIT IS PROVIDED NEW AS PART OF CURRENT PROJECT. REFER TO M DRAWINGS FOR MORE INFORMATION. DO NOT PROVIDE UV-C FIXTURES TO EXISTING TO BE REMOVED EQUIPMENT.

NEW UVC CIRCUIT MARK	LOCATION/SERVICE	HVAC UNIT TYPE	HVAC UNIT NOMINAL AIR FLOW (CFM)	UV-C INSTALL LOCATION	UV-C FIXTURE MODEL NO.	UV-C FIXTURE VOLTAGE/PH	QTY.	HVAC UNIT VOLTAGE/PH
IRST FLOOR								
UVC-HS-79	128	UV *	750	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-80	130	UV *	1000	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-81	132	UV *	1000	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
ECOND FLOOR								
UVC-HS-82	231	UV *	1500	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-83	232	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-84	233	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-85	234	UV *	1500			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-86	235	UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-87	236	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-88	238	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-89	239	UV *	1250			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-90	240	HORIZ. UV *	1500			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-91	241	UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-92	243	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-93	245	HORIZ. UV *	1000			UV-FCU-CL 90H-P-B-VENT	1	

*) INDICATES UNIT IS PROVIDED NEW AS PART OF CURRENT PROJECT. REFER TO M DRAWINGS FOR MORE INFORMATION. DO NOT PROVIDE UV-C FIXTURES TO EXISTING TO BE REMOVED EQUIPMENT.

NEW UVC CIRCUIT MARK	LOCATION/SERVICE	HVAC UNIT TYPE	HVAC UNIT NOMINAL AIR FLOW (CFM)	UV-C INSTALL LOCATION	UV-C FIXTURE MODEL NO.	UV-C FIXTURE VOLTAGE/PH	QTY.	HVAC UNIT VOLTAGE/PH
BASEMENT								
UVC-HS-95	70	UV *	1500	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-96	70	UV *	1500	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
FIRST FLOOR								
UVC-HS-97	Main Office Conference Rm.	UV	1000	115/1	IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	110-240/1
UVC-HS-98	Main Office	HORIZ. UV	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-99	147	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-100	149	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-101	151	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-102	153	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-103	155	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	11	
UVC-HS-104	157	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-105	159	UV *	1000		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-106	162	UV *	1500		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-107	164	UV *	750		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-108	166	UV *	1250		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-109	168	UV *	1250		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-110	170	UV *	1250		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	
UVC-HS-111	171	UV *	1500		IN CABINET	UV-FCU-CL 90H-P-B-VENT	1	

*) INDICATES UNIT IS PROVIDED NEW AS PART OF CURRENT PROJECT. REFER TO M DRAWINGS FOR MORE INFORMATION. DO NOT PROVIDE UV-C FIXTURES TO EXISTING TO BE REMOVED EQUIPMENT.

BIDDING NOTE

ALL WORK ON THIS SHEET IS NOT IN CONTACT AND IS PROVIDED FOR REFERENCE ONLY.

UV-C LIGHT FIXTURE SPECIFICATION AND INSTALLATION NOTES

- NOTE 1: PROVIDE UV-C LIGHT FIXTURES AND BULBS FROM COGNITUV BRAND, NO SUBSTITUTION, AND ANY HARDWARE, SHIELDING, WIRING, DRIVERS, RELAYS, TRANSFORMERS, AND ALL APPURTENANCES NECESSARY FOR INSTALLATION.
- NOTE 2: PROVIDE POWER TO LIGHT FIXTURES USING 2#12 -W1#12 GRD WIRING. PROVIDE 3/4" CONDUIT OR METAL CLADDING TO POWER AND CONTROL WIRING. POWER AND CONTROL WIRING TO BE IN SEPARATE CONDUIT/MC TO AVOID INTERFEREANCE.
- NOTE 3: UV-C CONTRACTOR TO PROVIDE AND COORDINATE CUTTING, PATCHING, SEALING, AND REINSULATING OF DISTURBED DUCTWORK TO MAINTAIN RIGIDITY AND PROVIDE SUPPORT TO PREVENT DUCTWORK SAGGING, DEFORMATION, OR VIBRATION. TEST AND SEAL ALL PENETRATIONS TO BE AIRTIGHT.
- NOTE 4: EACH UV-C LIGHTING CIRCUIT MUST INCLUDE AN INDIVIDUAL SERVICE SWITCH. ONE SERVICE SWITCH MUST DISCONNECT POWER TO THE HVAC UNIT, CONTROLLER, OR FAN. THE SERVICE SWITCH FACE PLATES MUST INDICATE ON AND OFF DIRECTIONS.
- NOTE 5: THE SERVICE SWITCH SHALL HAVE A STATUS INDICATING LED, EITHER INCORPORATED INTO THE SWITCH OR OTHERWISE ADDED. THE SERVICE SWITCH LED SHALL ILLUMINATE ONLY IF THE UV-C FIXTURE(S) ARE ON AND ILLUMINATED. IF THERE ARE FACTORY-MOUNTED STATUS LEDS ON THE UV-C FIXTURES AND THEY ARE VISIBLE FROM THE OUTSIDE OF THE FIXTURE, THE SWITCH STATUS LED MAY BE OMITTED.
- NOTE 6: UV-C LIGHTING AND ALL APPURTENANCES MUST BE POSITIONED TO BE ACCESSIBLE WITHIN REASON TO ALLOW FOR CLEANING, MAINTENANCE, AND REPLACEMENT OF BULB(S). VERIFY PLACEMENT BASED ON FIELD CONDITIONS. PROVIDE PAINTED ACCESS PANELS AS NEEDED. NOTE 7: TIE INTO SPECIFIED HVAC EQUIPMENT CONTROLS. REFER TO THE UV-C ACTIVATION CONDITIONS DETAIL REGARDING WHEN THE UV-C FIXTURE(S) SHALL BE ACTIVATED.
- NOTE 8: CONNECT TO BMS CONTROLS AND INTEGRATE TO TRIP TROUBLE CODES FOR MALFUNCTIONS, SUCH AS A NON-FUNCTIONAL BALLAST OR BULB. PROVIDE UV-C FIXTURE WITH OPTIONS AND EQUIPMENT TO COMMUNICATE WITH EXISTING BMS. VERIFY IN FIELD. NOTE 9: AFFIX 1" PLASTIC OR VINYL LABELS TO EACH UV-C LIGHT FIXTURE AND SERVICE SWITCH WITH THE CORRESPONDING UV-C FIXTURE TO BE MARKED WITH AN APPROPRIATE WARNING LABEL. PROVIDE PLASTIC OR VINYL PURPLE MARKERS TO
 - APPROXIMATELY MARK LOCATIONS OF UV-C FIXTURES ABOVE CEILINGS. AFFIX TO T-BAR FOR DROP CEILINGS. AFFIX A LABEL READING "UV-C ON" NEAR ALL STATUS INDICATING LEDS, WHETHER FACTORY-MOUNTED OR OTHERWISE. FOR CIRCUITS THAT REQUIRE POWER TO COME FROM A NEARBY AVAILABLE POWER PANEL, AFFIX LABEL TO CIRCUIT SWITCH INDICATING PANEL'S ROOM NUMBER, PANEL NAME, AND BREAKER NUMBER.
- NOTE 10: CONTROLS TO BE COORDINATED WITH DISTRICT CONTROLS VENDER.
- NOTE 11: ALL LOCATIONS, ORIENTATIONS, AND TYPES OF UV-C LIGHT FIXTURES ARE APPROXIMATE. DETERMINE FINAL LOCATION/ORIENTATION BASED ON MANUFACTURER'S RECOMMENDATIONS AND FIELD CONDITIONS.
- NOTE 12: FOR UNITS WITH FIXTURES INDICATED TO BE MOUNTED "IN CABINET", PROVIDE AT LEAST ONE (1) SNAP-ACTION TYPE SWITCH TO EACH OF THE SCHEDULED HVAC UNITS' (UV, AHU, RTU, ETC.) ACCESS DOORS/PANELS AND/OR ADJACENT DUCTWORK ACCESS DOORS/PANELS. HARDWIRE POWER TO SWITCHES TO AUTOMATICALLY TURN OFF ALL UV-C LIGHTS ON THE APPLICABLE UV-C CIRCUIT IF ANY PANELS ARE OPENED. PROVIDE ALL WIRING AND APPURTENANCES. SEE SCHEDULE FOR UNIT TYPES. VERIFY ACCESS DOORS/PANELS IN FIELD.

NOTE 13: "IN CABINET" INSTALLATIONS SHALL MAKE USE OF LIGHT SHIELDING AND REQUIRE PROPER AIMING DURING INSTALLATION. REFER TO MANUFACTURER'S RECOMMENDATIONS.

HVAC UNIT LEGEND

RTU - ROOF TOP UNIT

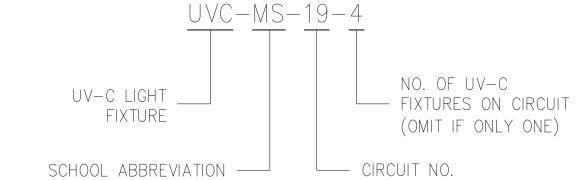
AHU - AIR HANDLING UNIT

UV - VERTICAL UNIT VENTILATOR - FLOOR MOUNTED HORIZ. UV - HORIZONTAL UNIT VENTILATOR - CEILING HUNG FCU - VERTICAL FAN COIL UNIT - FLOOR MOUNTED

HORIZ. FCU - HORIZONTAL FAN COIL UNIT - CEILING HUNG VRF - VARIABLE REFRIGERANT FLOW SYSTEM HRU - HEAT RECOVERY UNIT

mau – make-up air unit

CIRCUIT NAMING CONVENTION



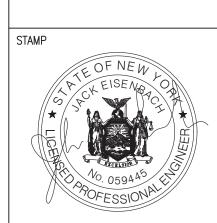
SEE NOTES AND SCHEDULES REGARDING LABELING EQUIPMENT WITH INDICATED CIRCUIT MARK

Eisenbach & Ruhnke Engineering CONSULTANT(S):

ENGINEER:

FULLER D'ANGELO ARCHITECTS PLA**NNE**RS

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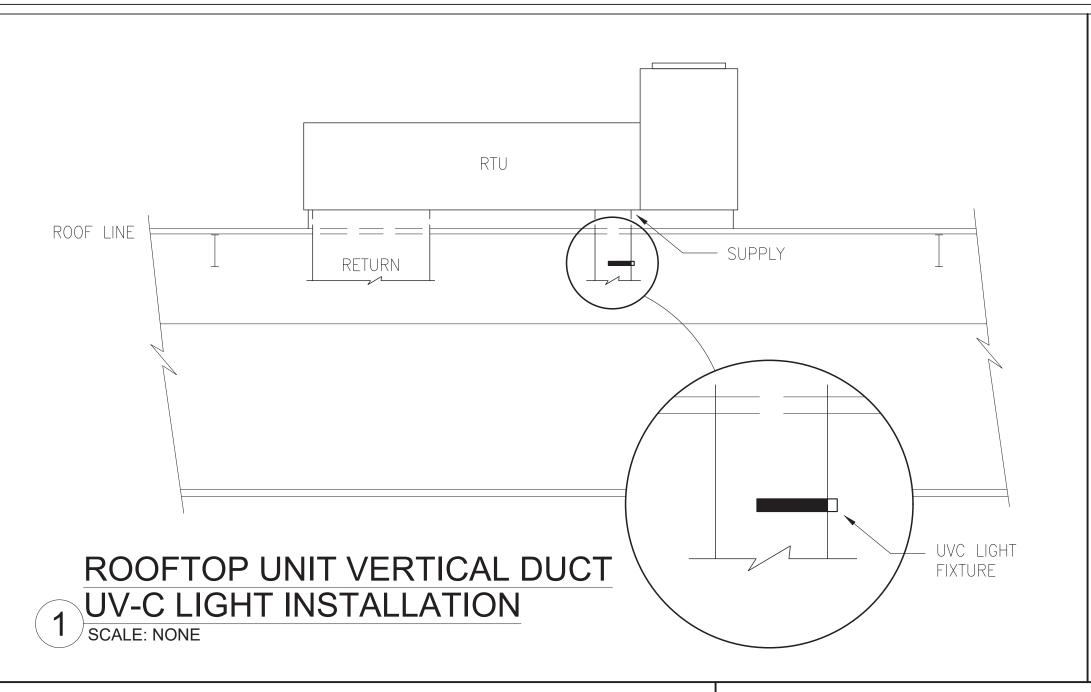
BID ADDENDUM 11.23.2022 ISSUED FOR BID 11.09.2022 10.19.2022

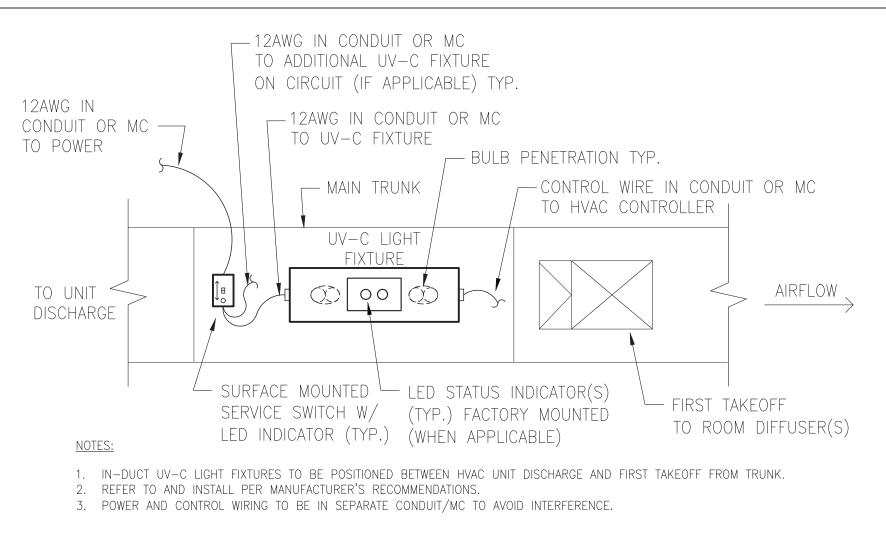
REVISION DRAWN BY CHECKED BY 30" X 42" SHEET SIZE

AS NOTED SHEET TITLE

HIGH SCHOOL UV-C LIGHT FIXTURE SCHEDULE

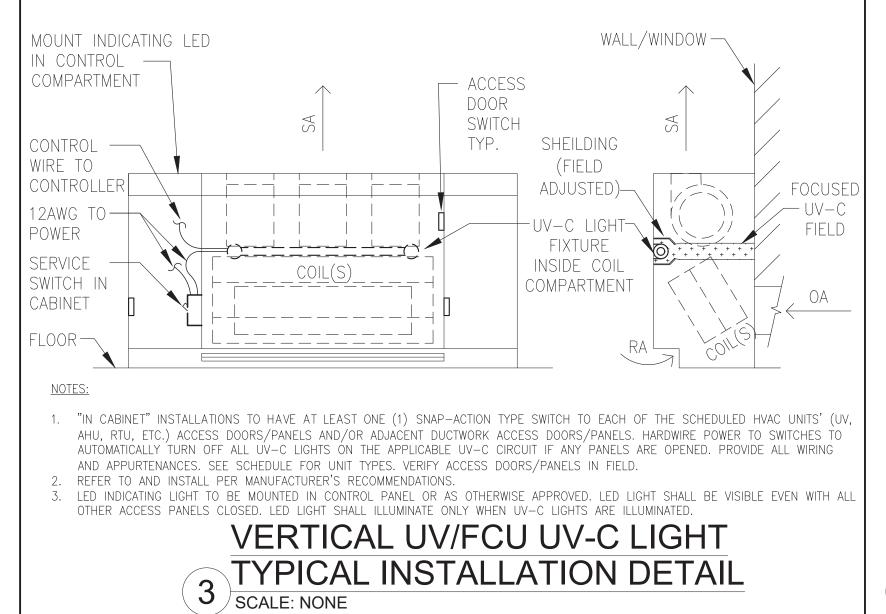
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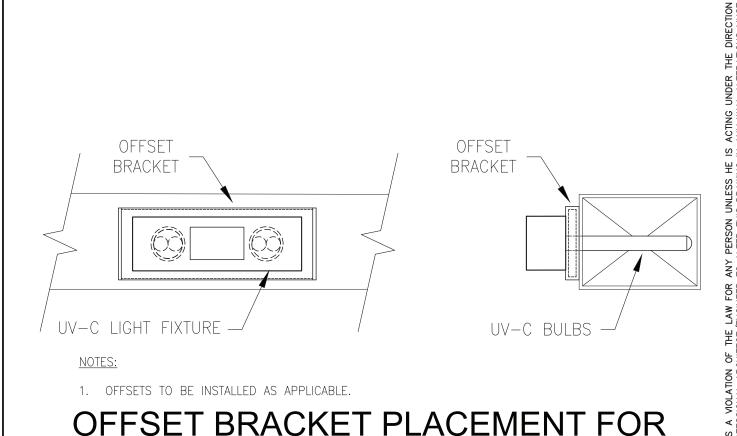




DUCTWORK UV-C LIGHT

TYPICAL INSTALLATION DETAIL





OFFSET BRACKET PLACEMENT FOR HIGH WATTAGE BULB IN SMALL DUCT 4 SCALE: NONE

. FOR IN-DUCTWORK APPLICATIONS, MOUNT DISCONNECT SWITCH AT OR NEAR THE UV-C LIGHT INSTALLATION. FOR

IN-CABINET APPLICATIONS FOR EXPOSED UVS OR FCUS, MOUNT DISCONNECT SWITCH INSIDE THE SIDE CABINET

CEILINGS OR ARE OTHERWISE CONCEALED, DISCONNECT SWITCH TO BE MOUNTED DIRECTLY TO THE OUTSIDE OF

OR CONTROL AREA OF THE CABINET. FOR IN-CABINET APPLICATIONS FOR UNITS THAT ARE LOCATED ABOVE

ALL WORK ON THIS SHEET IS NOT IN CONTACT

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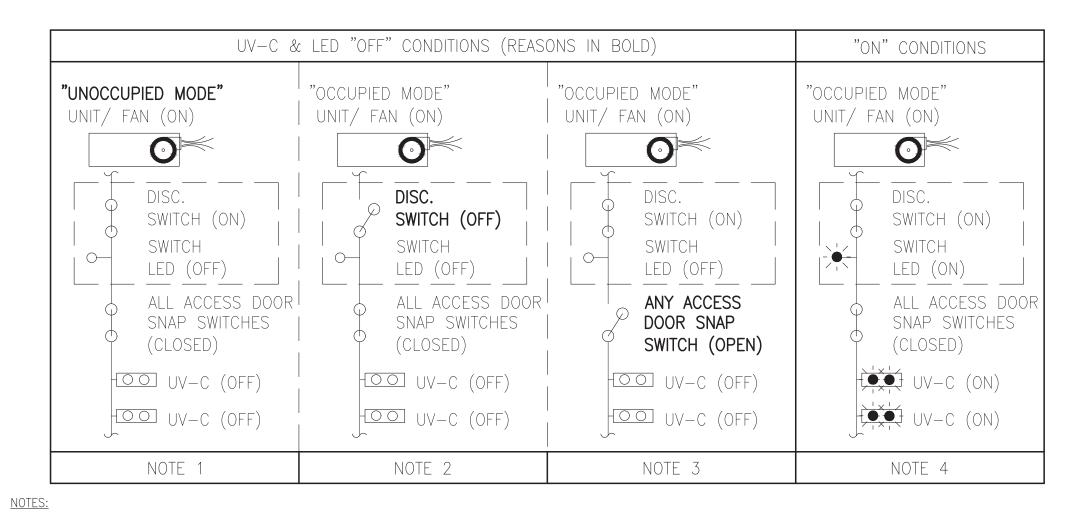
CONSULTANT(S):

P.C.

EQUIPMENT: LABELS REQUIRED: • UV-C CIRCUIT MARK "UV-C ON" AT INDICATING LEDS WARNING LABEL (BY MANUFACTURER) UV-C LIGHT FIXTURES BLANK LABEL ON CEILINGS FOR QUICK LOCATION (WHEN APPLICABLE) • UV-C CIRCUIT MARK • "UV-C ON" AT INDICATING LEDS (WHEN APPLICABLE) SERVICE SWITCH PANEL LOCATION, NAME, BREAKER # (WHEN APPLICABLE)

NOTE: LABEL COLOR TO BE PURPLE, OR AS SELECTED BY DISTRICT

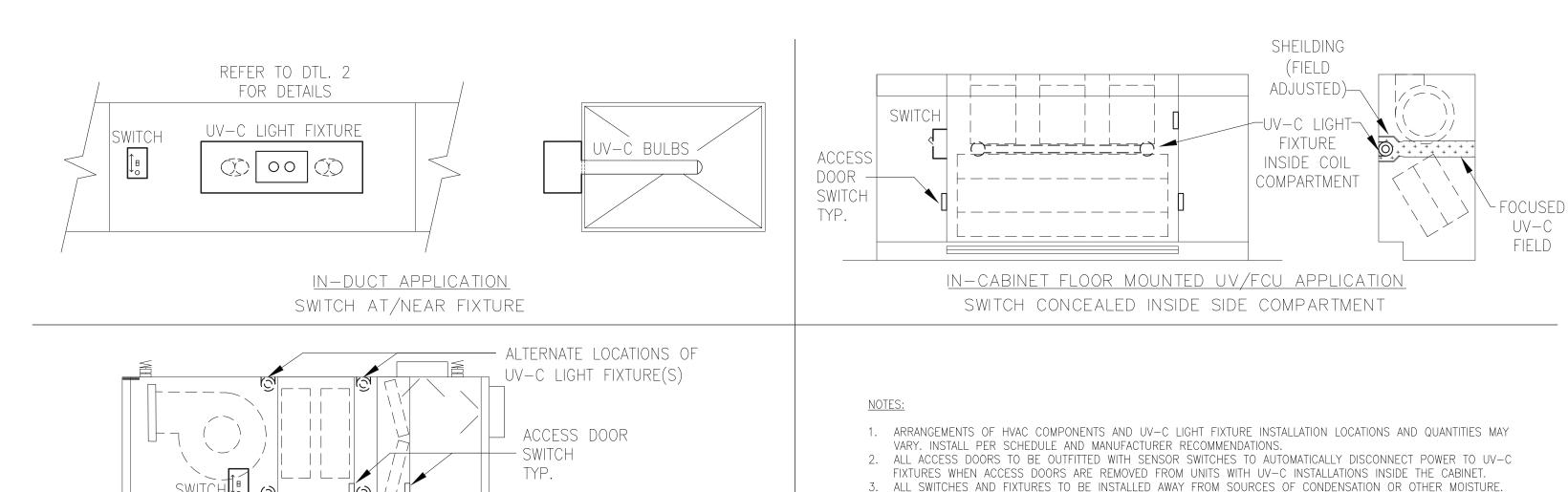
LABELING REQUIREMENTS AND LOCATIONS SCALE-NONE



SCALE: NONE

1. UV-C FIXTURES SHALL NOT ENGAGE DURING "UNOCCUPIED" MODE. "OCCUPIED MODE" TO BE ACTIVE WITHIN THE TIME FRAME FROM ONE HOUR BEFORE SCHOOL UNTIL ONE HOUR AFTER SCHOOL "UNOCCUPIED MODE" TO BE ACTIVE OUTSIDE OF THAT TIME FRAME (COORDINATE TIME-FRAME SETTING WITH DISTRICT REPRESENTATIVE), OR AS DEFINED BY THE HVAC EQUIPMENT 2. THE DISCONNECTING SWITCH IN THE "OFF" POSITION SHALL NOT ILLUMINATE THE LED AND SHALL DISCONNECT ALL UV-C LIGHTS ON THE CIRCUIT. UV-C FIXTURES SHALL NOT ENGAGE IF 3. HVAC UNITS WITH UV-C LIGHT FIXTURES INSTALLED INSIDE OF THE UNIT'S CABINET (WHEN APPLICABLE) SHALL HAVE SNAP SWITCH SENSORS INSTALLED TO ALL ACCESS DOORS. IF ANY ACCESS DOOR SNAP SWITCH SENSORS ARE OPEN THE UV-C FIXTURES SHALL NOT ENGAGE. 4. THE UV-C LIGHT FIXTURES AND DISCONNECTING SWITCH LED SHALL ENGAGE AND ILLUMINATE ONLY WHEN: DURING "OCCUPIED MODE", WHEN THE HVAC UNIT IS "ON", ALL SNAP SWITCH SENSORS ARE CLOSED, AND DISCONNECTING SWITCH IS "ON".

6 UV-C LIGHT FIXTURE ACTIVATION CONDITIONS



ALTERNATE LOCATIONS OF

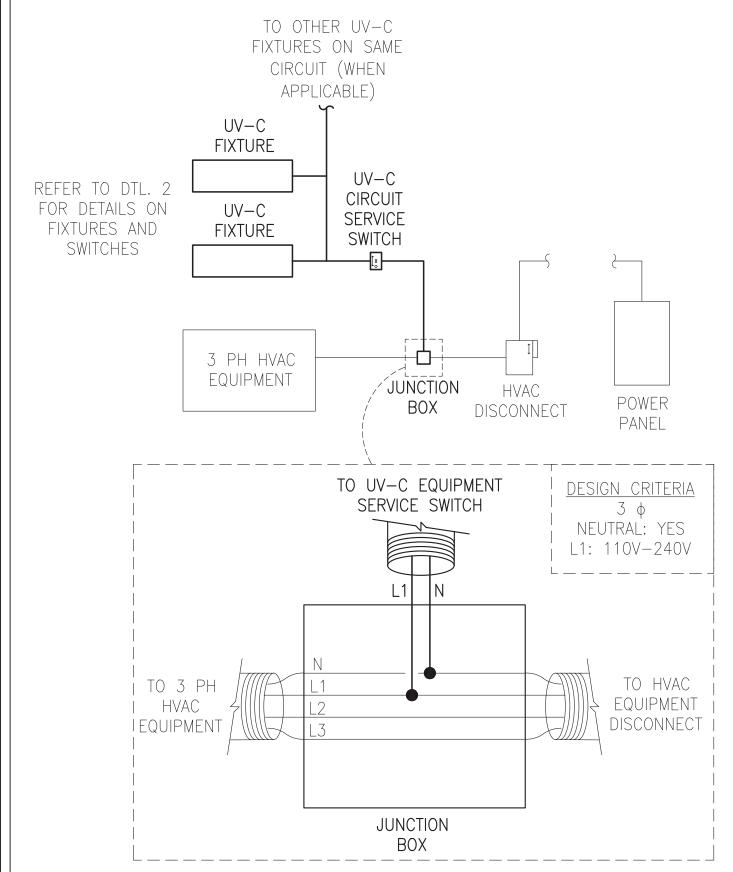
UV-C LIGHT FIXTURE(S)

IN-CABINET HORIZONTAL AHU/UV/FCU APPLICATION

SWITCH ON EXTERIOR OF HVAC UNIT

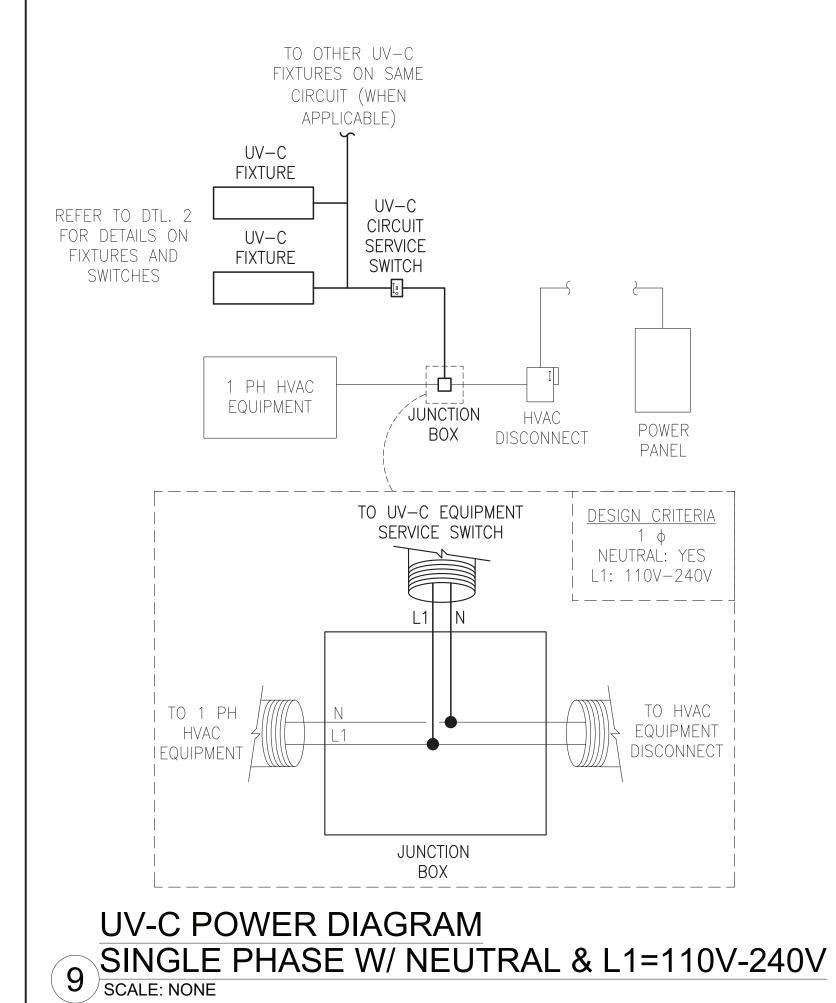
UV-C LIGHT FIXTURE & DISCONNECT 7 SWITCH INSTALLATION LOCATIONS SCALE: NONE

BIDDING NOTE



UV-C POWER DIAGRAM THREE PHASE W/ NEUTRAL & L1=110V-240V

NOTES: CIRCUIT MAY BE POWERED FROM HVAC EQUIPMENT'S POWER CIRCUIT WHEN A NEUTRAL WIRE IS PRESENT. BEFORE TAPPING, ONE LEG'S CIRCUIT VOLTAGE MUST TEST TO THE SPECIFIED VOLTAGE RANGE ABOVE. INSTALL 4"x4"x2" JUNCTION BOX BETWEEN HVAC DISCONNECT AND HVAC EQUIPMENT AS SHOWN.

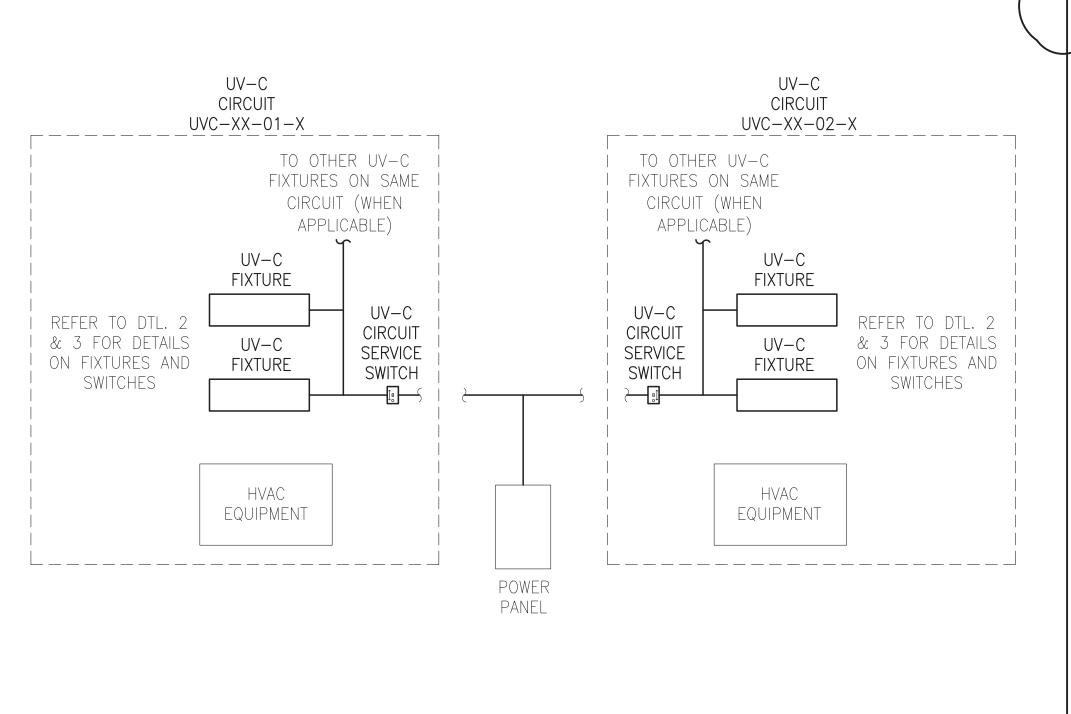


CIRCUIT MAY BE POWERED FROM HVAC EQUIPMENT'S POWER CIRCUIT WHEN A NEUTRAL WIRE IS PRESENT.

JUNCTION BOX BETWEEN HVAC DISCONNECT AND HVAC EQUIPMENT AS SHOWN.

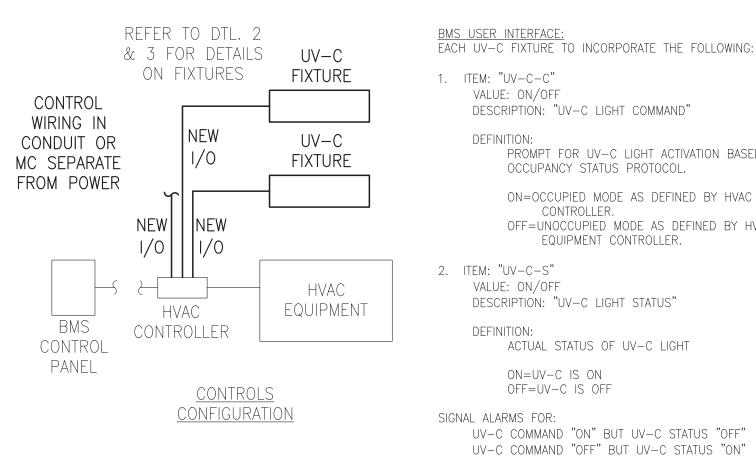
BEFORE TAPPING, CIRCUIT VOLTAGE MUST TEST TO THE SPECIFIED VOLTAGE RANGE ABOVE. INSTALL 4"x4"x2"

NOTES:



UV-C POWER DIAGRAM THREE PHASE W/O NEUTRAL AND/OR 240V-480V 10 SCALE: NONE

1. UV-C CIRCUIT MUST BE POWERED FROM AN AVAILABLE NEARBY PANEL IF NEUTRAL IS NOT PRESENT IN HVAC EQUIPMENT POWER CIRCUIT, OR EXCEEDS THE VOLTAGE RANGE NOTED ABOVE. SEE UV-C SCHEDULES FOR PROPOSED POWER SOURCES. DO NOT TAP INTO OTHER UNSPECIFIED EXISTING CIRCUITS. UV-C CIRCUITS TO BE GROUPED TOGETHER WHENEVER FEASIBLE. PROVIDE NEW BREAKER. CLEARLY IDENTIFY ROOM NUMBER, PANEL NAME, AND BREAKER NUMBER AT UV-C FIXTURE SERVICE SWITCH. IDENTIFY NEW CIRCUIT AT PANEL.

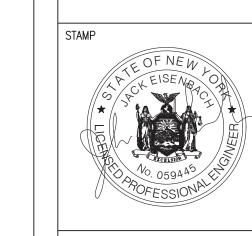


PROMPT FOR UV-C LIGHT ACTIVATION BASED ON HVAC OCCUPANCY STATUS PROTOCOL. ON=OCCUPIED MODE AS DEFINED BY HVAC EQUIPMENT OFF=UNOCCUPIED MODE AS DEFINED BY HVAC EQUIPMENT CONTROLLER. DESCRIPTION: "UV-C LIGHT STATUS" ACTUAL STATUS OF UV-C LIGHT

UV-C COMMAND "OFF" BUT UV-C STATUS "ON" MONITOR AND ALARM FOR EQUIPMENT FAILURE AND/OR BULB FAILURE.

UV-C CONTROLS DIAGRAM

1. UV-C EQUIPMENT SHALL BE INTEGRATED INTO THE EXISTING BMS AS SHOWN. ACTIVATION PROTOCAL SHALL BE BASED UPON THE "UV-C FIXTURE ACTIVATION CONDITIONS" DETAIL.



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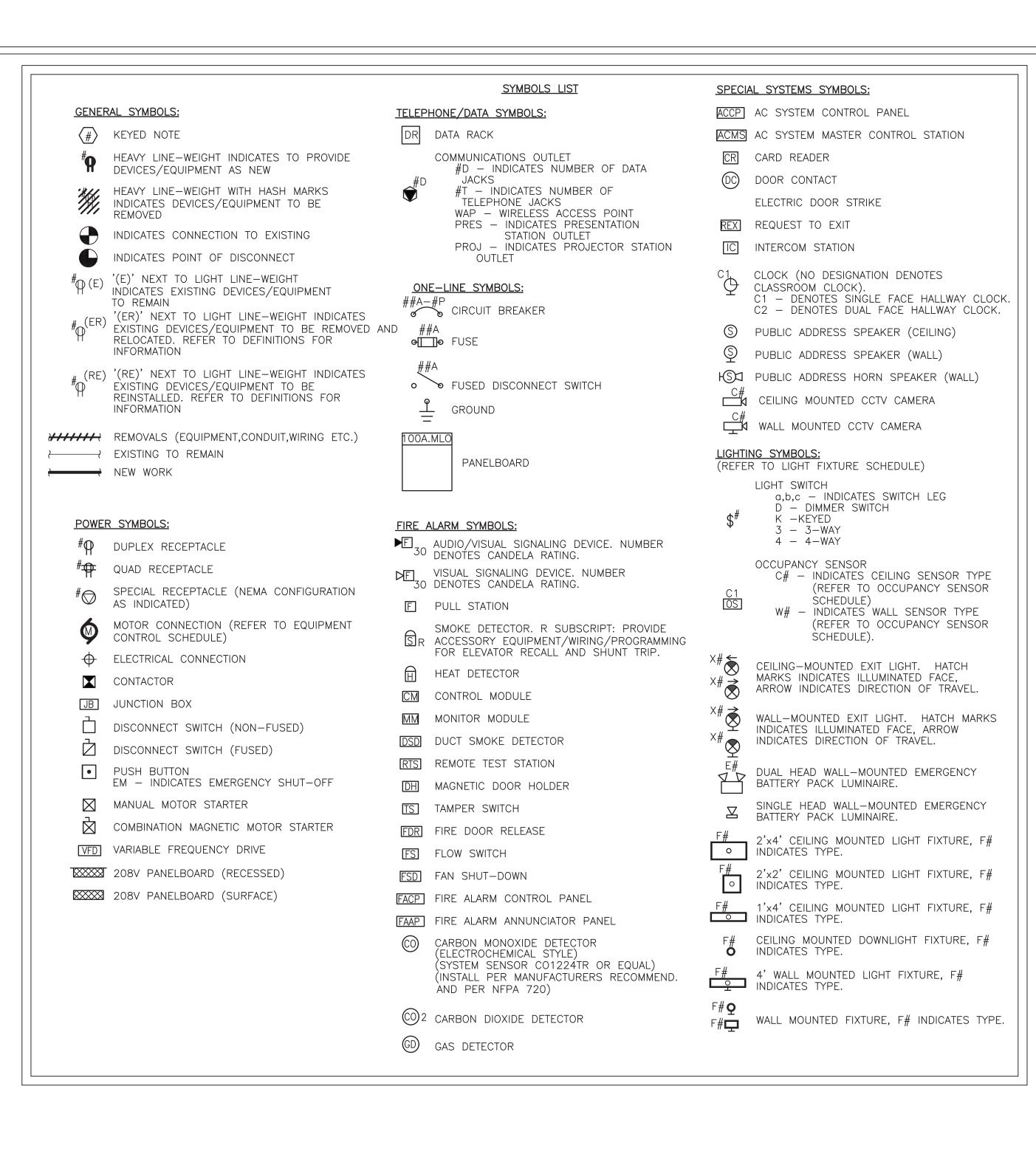
BID ADDENDUM 11.23.2022 ISSUED FOR BID 11.09.2022 10.19.2022 SED SET REVISION DATE DRAWN BY CHECKED BY 30" X 42" SHEET SIZE SCALE AS NOTED SHEET TITLE

UV-C LIGHT FIXTURE

DETAILS

SHEET NO.

M-504



BIDDING NOTE

ALTERNATE NOTE

(ALT. E-1:)

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS

ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR

REFERENCE ONLY, UNLESS OTHERWISE NOTED.

EQUIPMENT AND ASSOCIATED WORK WITH THIS

PROVIDED AS PART OF BASE BID.

MARK TO BE PROVIDED AS PART OF ALTERNATE

E-1 ONLY. ALL OTHER UNMARKED WORK TO BE

- DEMOLITION DRAWINGS ARE BASED ON FIELD OBSERVATION. REPORT ANY CONFLICTS TO THE ENGINEER BEFORE DISTURBING EXISTING EQUIPMENT.
- 2. BEGINNING OF DEMOLITION MEANS THE CONTRACTOR ACCEPTS ALL EXISTING CONDITIONS

GENERAL DEMOLITION NOTES

- VERIFY SCOPE OF WORK: CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO SUBMITTING A BID TO DETERMINE THE SCOPE OF THE WORK, AND TO BECOME FAMILIAR WITH THE EXISTING CONDITIONS THAT WILL AFFECT THEIR WORK AND, THEREFORE, THEIR BID.
- 4. UNLESS NOTED OTHERWISE, EXISTING ELECTRICAL EQUIPMENT SHOWN ON THESE PLANS ARE A PART OF CONTRACT. TO MAINTAIN DRAWING CLARITY NOT ALL EXISTING ELECTRICAL EQUIPMENT HAS BEEN SHOWN. FIELD VERIFY EXISTING CONDITIONS AND NOTIFY ARCHITECT/ ENGINEER OF ANY CONFLICTS.
- 5. UNLESS NOTED OTHERWISE, REMOVE ALL ELECTRICAL ITEMS SHOWN ON THESE PLANS AS INDICATED BY CROSS HATCHED LINES AND/OR KEYED NOTES.
- 6. UNLESS NOTED OTHERWISE, DEMOLITION OF ELECTRICAL EQUIPMENT/DEVICES INCLUDES REMOVAL OF CIRCUITRY BACK TO ASSOCIATED SOURCE/PANEL. THIS INCLUDES REMOVAL OF THE DEVICE, WIRING, CONDUIT, BOXES, CONTROL DEVICES, ETC.
- 7. WHERE POSSIBLE, EXISTING CONDUITS/RACEWAYS (ASSOCIATED WITH REMOVED EQUIPMENT AND WIRING) MAY BE RE-USED FOR NEW CIRCUITING. EXISTING CONDUITS/RACEWAYS MUST BE IN GOOD CONDITION, AND IN COMPLIANCE
- WITH NEC/SPECIFICATION REQUIREMENTS. NOTIFY ENGINEER PRIOR TO REUSING.

 8. EXISTING CIRCUIT BREAKERS ASSOCIATED WITH ELECTRICAL EQUIPMENT SCHEDULED FOR DEMOLITION SHALL REMAIN FOR SPARES UNLESS REMOVAL IS REQUIRED TO MAKE ADDITIONAL SPACE (IN EXISTING PANELBOARDS) FOR NEW
- OIRCUIT BREAKERS.

 9. MAINTAIN THE ELECTRICAL INTEGRITY OF ALL EXISTING BRANCH CIRCUITS INTERRUPTED BY REMOVAL WORK. PROVIDE ALL WIRING, CONDUIT, AND HARDWARE REQUIRED TO MAINTAIN CONTINUITY OF ELECTRICAL EQUIPMENT REMAINING ON

WALLS SCHEDULED FOR REMOVAL. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION COORDINATION.

- EXISTING BRANCH CIRCUITS NOT BEING COMPLETELY REMOVED OR OUTSIDE WORK THE WORK AREA.

 10. UNLESS NOTED OTHERWISE, REMOVE EXISTING ELECTRICAL DEVICES, AND ASSOCIATED CIRCUITRY, LOCATED ON OR IN
- 11. UNLESS NOTED OTHERWISE, REMOVE EXISTING ELECTRICAL DEVICES, AND ASSOCIATED CIRCUITRY, LOCATED ON OR IN CEILINGS SCHEDULED FOR REMOVAL. TO MAINTAIN DRAWING CLARITY, EXISTING CEILINGS SCHEDULED FOR DEMOLITION HAVE NOT BEEN IDENTIFIED ON THIS DRAWING. REFER TO ARCHITECTURAL DRAWINGS FOR DEMOLITION COORDINATION.
- 12. WHERE REMOVALS OCCUR ON SERVICES THAT ARE TO REMAIN IN OPERATION, CAP OR OTHERWISE TERMINATE THE REMAINING SERVICES BENEATH FINISHED SURFACES.
- 13. ALL CONDUITS STUBBED THRU FLOOR SERVING ITEMS TO BE REMOVED, AND NOT SHOWN OR REQUIRED TO BE REUSED, SHALL BE CUT OFF FLUSH, SLAB LEVEL WITH CONCRETE.
- 14. PORTIONS OF FEEDERS RISERS WHICH REQUIRE REMOVAL DUE TO DEMOLITION WORK, BUT WHICH ARE REQUIRED TO REMAIN ENERGIZED, SHALL BE CUT AT ACCESSIBLE LOCATIONS, REROUTED AND RECONNECTED. EXTEND EXISTING FEEDERS AS REQUIRED. MATCH EXISTING FEEDERS IN CONDUCTOR SIZE (AMPACITY RATING), RACEWAY SIZE, ETC.
- 15. CAREFULLY REMOVE, PROTECT AND STORE ALL EQUIPMENT TO BE REUSED IN A SAFE PLACE UNTIL READY FOR REINSTALLATION. CLEAN MATERIALS BEFORE REINSTALLATION AND ENSURE EQUIPMENT IS STILL FULLY OPERATIONAL.
- 16. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OR RELOCATION OF ITEMS, NOT SHOWN ON THESE DRAWINGS TO ACCOMMODATE THE RENOVATIONS. CONTRACTOR SHALL INCLUDE, IN BASE BID, AN ALLOWANCE FOR UNFORESEEN CONDITIONS WHEN CONCEALED WORK IS EXPOSED. CLAIMS FOR ADDITIONAL DEMOLITION WORK WILL NOT BE ACCEPTED EXCEPT FOR CERTAIN CASES CONSIDERED JUSTIFIABLE BY THE ARCHITECT/ENGINEER.

FIRE ALARM NOTES:

- . CONTRACTOR SHALL VERIFY AND COORDINATE WITH THE BUILDING FIRE ALARM MAINTENANCE VENDOR FOR TYPE OF FIRE ALARM DEVICES TO BE USED.
- 2. CONTRACTOR SHALL BE RESPONSIBLE TO RETAIN AND COORDINATE THE BUILDING FIRE ALARM MAINTENANCE VENDOR FOR PROGRAMMING AND FINAL CONNECTIONS. CONTRACTOR SHALL INCLUDE PROGRAMMING AND FINAL CONNECTION COSTS IN THEIR BID.
- 3. FIRE ALARM WIRING DIAGRAMS SHOWN ARE GENERAL ARRANGEMENTS ONLY. OBTAINED PRIOR TO THE COMMENCEMENT OF THE WORK.
 ALL PERMIT COSTS AND INSPECTION FEES SHALL BE INCLUDED AS PART OF THIS CONTRACT.
- PERMITS AND APPROVALS NECESSARY FOR INSTALLATION OF WORK SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF THE WORK. ALL PERMIT COSTS AND INSPECTION FEES SHALL BE INCLUDED AS PART OF THIS CONTRACT.
- FIRE ALARM SAFETY DEVICES IN OPERATION AT ALL TIMES. IF ANY PORTION OF FIRE ALARM SYSTEM IS DISABLED, NOTIFY BUILDING CUSTODIAN IMMEDIATELY.

 IN AREAS WHERE DUST AND DIRT WILL BE AIR BOURNE DURING DEMOLITION AND CONSTRUCTION THE CONTRACTOR SHALL PROVIDE
- IN AREAS WHERE DUST AND DIRT WILL BE AIR BOURNE DURING DEMOLITION AND CONSTRUCTION THE CONTRACTOR SHALL PROVIDE PLASTIC WRAP OVER SMOKE DETECTORS AND THEN REMOVE ONCE SPACE IS CLEAN.IF A FIRE ALARM DEVICE IS LOCATED ON A WALL OR CEILING TO BE REMOVED, UNLESS OTHERWISE INDICATED THE DEVICE SHALL BE REMOVED AND STORED. ONCE CONSTRUCTION IS COMPLETE THE DEVICE SHALL BE REINSTALLED IN IT'S ORIGINAL LOCATION OR AS CLOSE TO IT'S ORIGINAL LOCATION AS FEASIBLE. REUSE EXISTING WIRING IF POSSIBLE, PROVIDE NEW WIRING IF NECESSARY.

CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN AND PROTECT FIRE ALARM NOTIFICATION DEVICES. SMOKE DETECTORS AND OTHER

- 7. UNLESS DIRECTED OTHERWISE BY FIRE ALARM SYSTEM MANUFACTURER FIRE ALARM DEVICE WIRING SHALL BE AS FOLLOWS (FOR BIDDING PURPOSES ONLY):
 - SIGNAL WIRING #14 AWG TWISTED/SHIELDED
 BELL WIRING #14 AWG TWISTED CABLE
 STROBE WIRING #14 TWISTED CABLE
 - THE WIRING SHALL HAVE THE FOLLOWING CHARACTERISTICS:

 A. A MINIMUM TEMPERATURE RATING 150° C
 - B. A MINIMUM AVERAGE INSULATION THICKNESS OF 15 MILS
 - C. A MINIMUM AVERAGE JACKET THICKNESS OF 25 MILS D. THE COLOR OF THE CABLE SHALL BE RED
 - E. THE CABLE SHALL BE A TYPE FPLP (PLENUM TYPE) WHEN CONDUIT IS USED. F. THE CABLE SHALL BE VISIBLY MARKED EXTERNALLY THAT IT MEETS THE ABOVE
 - F. THE CABLE SHALL BE VISIBLY MARKED EXTERNALLY THAT IT MEETS THE ABOVE REQUIREMENTS AND IS LISTED BY U.L.CONFIRM WIRING TYPE AND QUANTITY WITH FIRE ALARM SYSTEM MANUFACTURER PRIOR.
- PROVIDE MC FIRE ALARM CABLE WITH RED STRIPE AS MANUFACTURED BY AFC SERIES 1800 WHEN CABLE IS CONCEALED OR ABOVE HUNG CEILING. WHEN FIRE ALARM CABLE IS RUN EXPOSED IN FINISHED AREAS, CABLE SHALL RUN IN WIREMOLD V-700. WHEN FIRE ALARM CABLE IS RUN EXPOSED IN UNFINISHED AREAS, PROVIDE PLENUM RATED CABLE IN MIN. 37 CONDUIT.
- 9. STROBES SHALL HAVE A MINIMUM LIGHT OUTPUT OF 75 CANDELA AND A FLASH RATE OF 1-3 HZ.
- 10. SHUTDOWN OF HVAC SYSTEM EQUIPMENT (NOT LIMITED TO, ROOF TOP, EXHAUST FANS, ETC.) OF 1000 CFM OR GREATER, SHALL BE PERFORMED VIA A RELAY INTERFACE SYSTEM. SEND SIGNAL TO BUILDING AUTOMATED TEMPERATURE CONTROL (ATC) SYSTEM INDICATING SHUTDOWN HAS OCCURRED. EQUIPMENT RESTART SHALL BE BY BUILDING 'ATC' SYSTEM UPON FIRE ALARM RESET TO NORMAL MODE. RESTART OF EQUIPMENT SHALL BE SEQUENTIAL.
- 11. AFTER THE SYSTEM MODIFICATIONS ARE COMPLETE TEST ALL COMPONENTS IN ACCORDANCE WITH SEQUENCE OF OPERATION PRIOR TO FIRE DEPARTMENT INSPECTION.
- 12. A CARBON MONOXIDE DETECTORS SHALL BE PROVIDED IN ALL BOILER ROOMS. ACTIVATION INITIATE A SUPERVISORY SIGNAL AT THE FIRE ALARM CONTROL PANEL AND ENUNCIATOR PANEL WHEN 70 PPM ARE REACHED WITHIN 60-240 MINUTES OR 150 PPM ARE REACHED WITHIN 10-50 PER UL 2034.

GENERAL NEW WORK NOTES:

METHODS.

EACH LOCATION.

- 1. UNLESS NOTED AS EXISTING OR PROVIDED BY OTHERS, CONTRACTOR SHALL PROVIDE ALL MATERIALS SHOWN ON DRAWINGS. ALL MATERIALS PROVIDED SHALL BE NEW, UNUSED CONDITION.
- 2. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL BE PROVIDED WITH MINIMUM DISRUPTION TO THE BUILDING SYSTEMS AND STAFF. CONTINUOUS OPERATION OF THE BUILDING SYSTEMS, OUTSIDE OF WORK AREA, SHALL BE MAINTAINED THROUGHOUT THE ENTIRE PROJECT. TEMPORARY SHUTDOWN OF SYSTEMS SHALL ONLY BE ALLOWED WITH WRITTEN CONSENT OF THE OWNER. EXISTING ALARM AND EMERGENCY SYSTEMS SHALL NOT BE DISRUPTED AT ANY TIME DURING THE PROJECT.
- 3. REMOVE & REINSTALL EXISTING CONSTRUCTION (CEILINGS, LIGHTING, ELECTRICAL EQUIPMENT, FIRE ALARM DEVICES, FURNISHINGS, ETC.) AS NECESSARY TO COMPLETE THE REMOVALS & RENOVATION WORK REQUIRED BY THE DRAWINGS & SPECIFICATIONS. REPLACE ANY ITEMS DAMAGED BY OR DUE TO THIS REMOVAL & REINSTALLATION WITH NEW ITEMS TO MATCH EXISTING. (APPLIES TO AREAS WITHIN & OUTSIDE OF THE PROJECT AREA).
- 4. IN AREAS WHERE CEILING IS BEING REMOVED, EXISTING CONDUITS AND CABLING WHICH ARE NOT INDEPENDENTLY SUPPORTED ABOVE THE CEILING SHALL BE INDEPENDENTLY SUPPORTED FROM THE STRUCTURE ABOVE USING SPECIFIC
- . SURFACE MOUNT ALL WIRING DEVICES, LIGHTING CONTROLS, TELECOMMUNICATION DEVICES, FIRE ALARM DEVICES, ETC. LOCATED ON EXISTING MASONRY WALLS. PROVIDE SURFACE MOUNTED BOXES, RACEWAYS, WIREMOLD, ETC. PER SPECIFICATIONS.
- 6. COVERS ASSOCIATED WITH JUNCTION AND PULL BOXES SHALL BE READILY ACCESSIBLE.
- 7. PROVIDE PULL BOXES WHERE REQUIRED BY CODE AND WHERE NECESSARY FOR CONDUCTOR INSTALLATION. PROVIDE PULL BOXES EVERY 100' FOR ALL EMPTY RACEWAY RUNS. PRIOR TO INSTALLATION OF PULL BOXES, COORDINATE WITH OTHER TRADES.
- 8. PROVIDE SEPARATE RACEWAYS AND BOXES FOR CONDUCTORS OF NORMAL AND EMERGENCY CIRCUITS.
- 9. DO NOT COMBINE MORE THAN THREE PHASE CONDUCTORS, THREE NEUTRAL CONDUCTORS PLUS THREE GROUND CONDUCTORS, IN ANY ONE BRANCH CIRCUIT CONDUIT, UNLESS OTHERWISE INDICATED ON DRAWINGS.
- 10. THE USE OF NON-METTALLIC SURFACE RACEWAY OR EXPOSED NON-METTALLIC RACEWAY IN ASSEMBLY SPACES AND MEANS OF EGRESS AREAS IS PROHIBITED.
- 11. THE USE OF SHARED NEUTRALS IN LIGHTING AND RECEPTACLE BRANCH CIRCUITS IS PROHIBITED. PROVIDE SEPARATE NEUTRAL AND GROUND FOR EVERY CIRCUIT.
- 12. PROTECT EXISTING SURFACES.

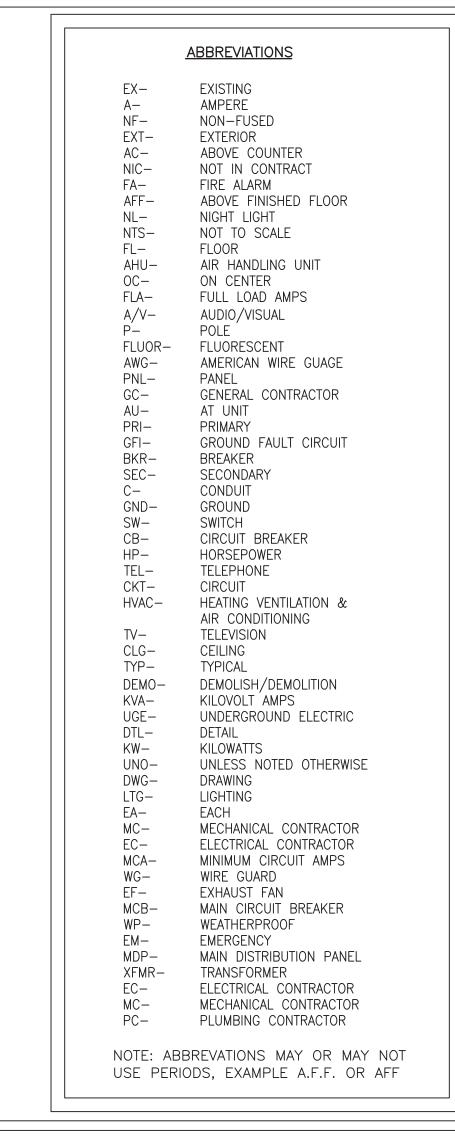
RESULTING FROM FAILURE TO DO SO WITHOUT COST TO OWNER.

- 13. WALK-THRU WITH OWNER REPRESENTATIVE AND VERIFY ALL ELECTRICAL DEVICE LOCATIONS PRIOR TO INSTALLATION.

 14. INSTALL ALL CIRCUITRY PARALLEL OR PERPENDICULAR TO WALLS, FLOOR, AND CEILING.
- 15. REFER TO ELECTRICAL EQUIPMENT AND CONTROL SCHEDULE FOR HVAC/PLUMBING EQUIPMENT CIRCUITRY, CONTROLS
- & ADDITIONAL INFORMATION.

 16. TO MAINTAIN DRAWING CLARITY, MOTOR CONTROL DEVICES, FOR HVAC/PLUMBING EQUIPMENT, HAVE NOT BEEN SHOWN. REFER TO ELECTRICAL EQUIPMENT & CONTROL SCHEDULE FOR TYPES OF MOTOR CONTROL DEVICES REQUIRED,
- LOCATIONS WHERE CONTROL DEVICES ARE SCHEDULED FOR INSTALLATION, AND ADDITIONAL INFORMATION.

 17. COORDINATE LOCATIONS AND MOUNTING HEIGHTS OF ELECTRICAL EQUIPMENT/DEVICES WITH ARCHITECTURAL PLANS, ELEVATIONS, FURNITURE LAYOUTS, AND WITH OTHER DIVISIONS PRIOR TO INSTALLATION. CORRECT ANY INACCURACY
- 18. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL SUPPORT HARDWARE FOR SECURELY FASTENING THE ELECTRICAL CONTROL DEVICES AND ENCLOSURES TO THE BUILDING STRUCTURE. THE REQUIRED HARDWARE INCLUDES, BUT IS NOT LIMITED TO, INTERMEDIATE STEEL ANGLE, UNISTRUCT, FASTENERS, JOISTS CLAMPS, ETC. MOUNT STARTERS, VFD'S, DISCONNECTS, RELAYS, AND OTHER ELECTRICAL CONTROL DEVICES AND ENCLOSURES AT LOCATION(S) INDICATED IN ELECTRIC EQUIPMENT & CONTROL SCHEDULE(S). ALLOW MAINTENANCE ACCESS AND SERVICE SPACE AT
- 19. WHERE NEW CIRCUIT BREAKERS ARE REQUIRED FOR INSTALLATION IN EXISTING ELECTRICAL PANELS, CONTRACTOR SHALL PROVIDE CIRCUIT BREAKERS WHICH ARE COMPATIBLE WITH EXISTING ELECTRICAL PANELS. MATCH FRAME SIZES, KIAC RATINGS, ETC.
- 20. UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL PROVIDE COMPLETE, TYPE—WRITTEN, AND UP—TO—DATE PANELBOARD DIRECTORIES FOR ALL PANELBOARDS (NEW AND EXISTING) AFFECTED BY THIS PROJECT. PROVIDE OWNER WITH TWO COPIES OF UPDATED PANELBOARD CIRCUIT BREAKER DIRECTORIES.
- 21. EACH RECEPTACLE, SWITCH AND JUNCTION BOX, PROVIDED, OR ALTERED, UNDER THIS CONTRACT, SHALL BE LABELED WITH THE CORRESPONDING POWER PANEL NAME AND CIRCUIT BREAKER NUMBER. ALL LABELING SHALL BE TYPEWRITTEN USING A LABEL MAKER AND SHALL BE PERMANENTLY AFFIXED TO EACH FACEPLATE. HANDWRITTEN LABELS WILL NOT BE ACCEPTED. PRIOR TO START OF LABELING, MEET WITH OWNER TO DETERMINE LABELING SCHEME TO BE UTILIZED. PROVIDE LABELING TO MEET OWNER REQUIREMENTS.
- 22. ALL ITEMS THAT REQUIRE ACCESS, SUCH AS FOR OPERATING, CLEANING, SERVICING, MAINTENANCE, AND CALIBRATION, SHALL BE EASILY AND SAFELY ACCESSIBLE BY PERSONS STANDING AT FLOOR LEVEL, OR STANDING ON PERMANENT PLATFORMS, WITHOUT THE USE OF PORTABLE LADDERS. EXAMPLES OF THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO: ALL TYPES OF SWITCHES, PANELBOARDS, OCCUPANCY SENSORS, CONTROL DEVICES, ETC.. PRIOR TO COMMENCING INSTALLATION WORK, REFER CONFLICTS BETWEEN THIS REQUIREMENT AND CONTRACT DRAWINGS TO OWNER FOR RESOLUTION.
- 23. CLEANING DURING ELECTRICAL WORK: THE MECHANICAL ROOM AND ROOMS WHERE WORK WILL BE DONE TO MINIMIZE DISTURBANCE IN THE BUILDINGS. WORKERS ARE TO USE PATHWAYS AND FACILITIES AGREED UPON WITH THE DISTRICT DESIGNEE IN WRITING. THE AREA OUTSIDE THE BUILDING WHERE CUTTING WELDING OR STORAGE IS ALLOWED IS TO BE FENCED AT ALL TIMES. THE CONTRACTOR WILL ON A DAILY BASIS CLEAN THE GROUNDS AND THE BUILDING OF ANY DEBRIS OR GARBAGE GENERATED BY THEIR WORK.
- 24. EACH CONTRACTOR RESPONSIBLE FOR RETURNING WALLS, CEILINGS AND SURFACES THEY DISTURB THAT ARE NOT SCHEDULED FOR REPLACEMENT BACK TO ORIGINAL CONDITIONS.



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CONSULTANT(S):

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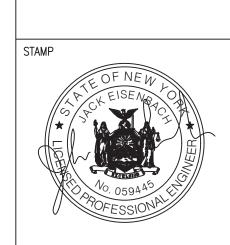
P.C.

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WARWICK VALLEY CENTRAL SCHO
HIGH SCHOOL UNIT VENTILATOR REPL
AIR CONDITIONING UPGRADE

225 WEST STREET EXT, WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD. WARWICK, NY 10990

BID ADDENDUM 11.23.2022
ISSUED FOR BID 11.09.2022

SED SET 10.19.2022

REVISION DATE

DRAWN BY

CHECKED BY

SHEET SIZE 30" X 42"

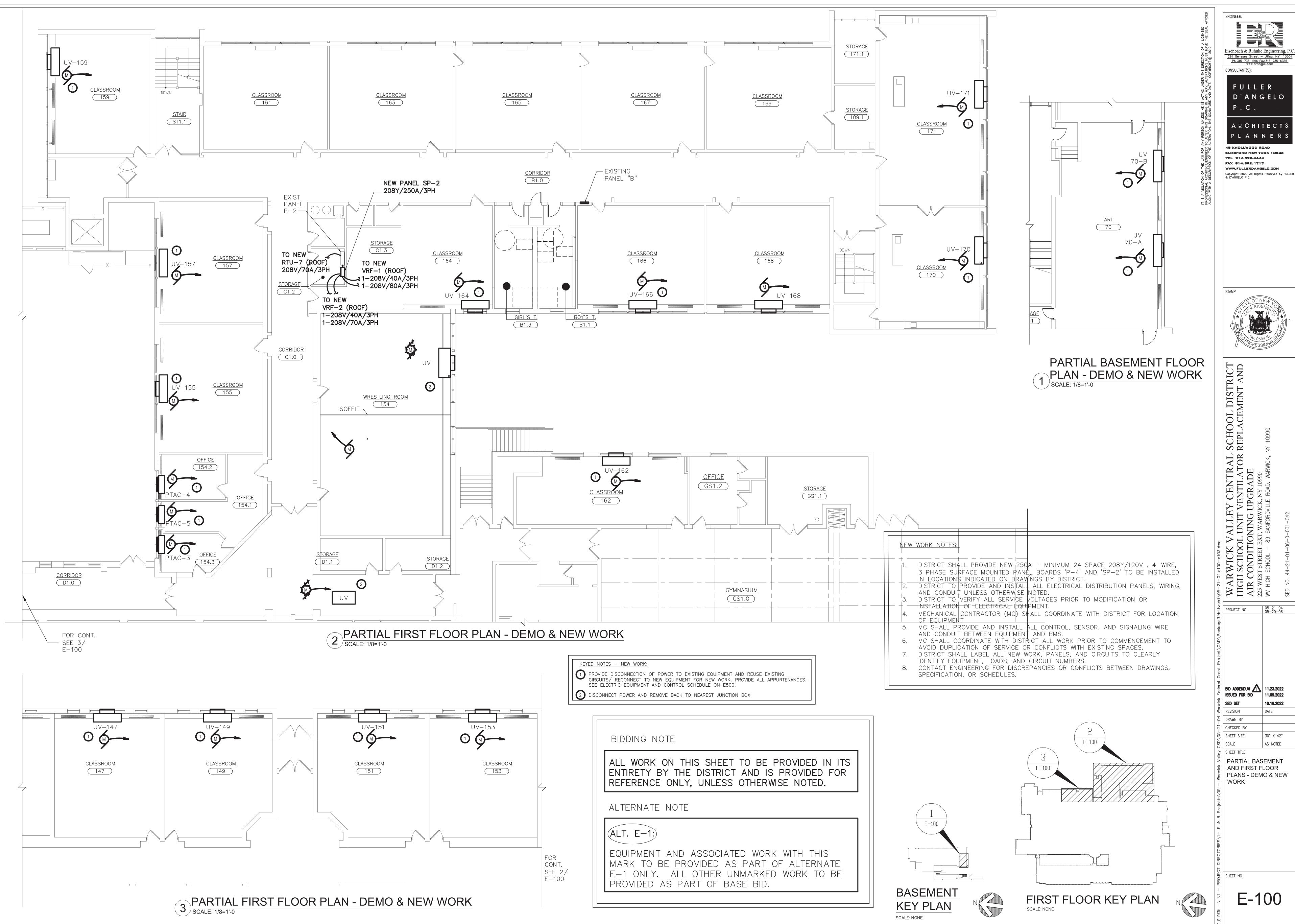
SCALE AS NOTED

SHEET TITLE

ABBREVIATIONS
AND SYMBOLS

E-001

SHEET NO.



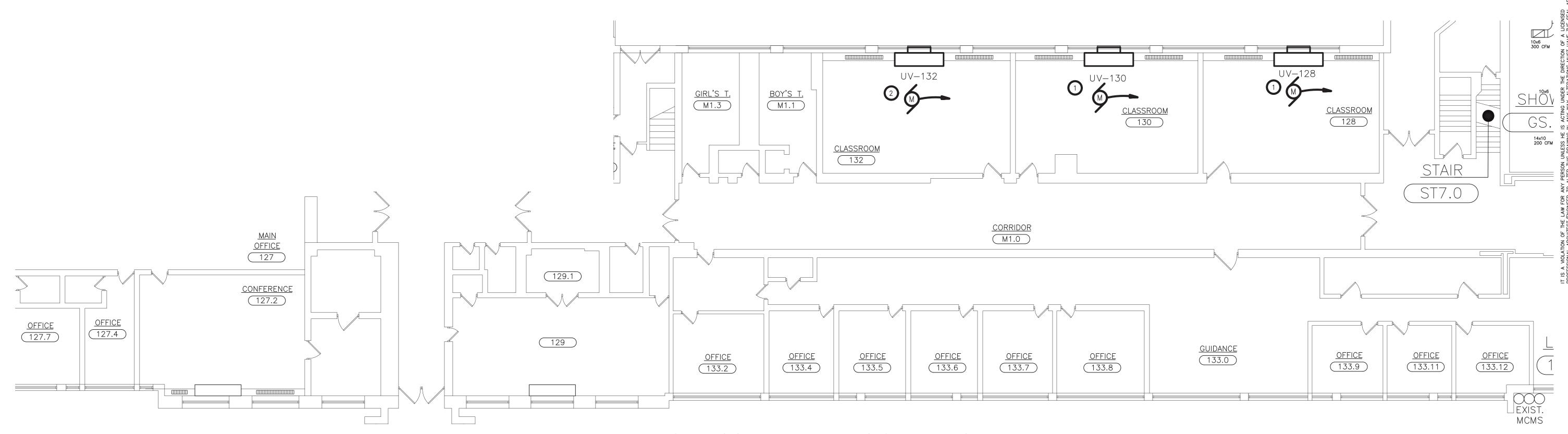
FULLER D'ANGELO ARCHITECTS PLANNER:

45 Knollwood Road ELMSFORD NEW YORK 10523 TEL 914.592.4444 FAX 914.592.1717 www.fullerdangelo.com

10.19.2022

30" X 42" AS NOTED

PARTIAL BASEMENT AND FIRST FLOOR PLANS - DEMO & NEW



PARTIAL FIRST FLOOR PLAN - DEMO & NEW WORK SCALE: 1/8=1'-0

KEYED NOTES - NEW WORK:

PROVIDE DISCONNECTION OF POWER TO EXISTING EQUIPMENT AND REUSE EXISTING CIRCUITS/ RECONNECT TO NEW EQUIPMENT FOR NEW WORK. PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.

PROVIDE POWER TO NEW UNIT VENTILATOR. PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.

NEW WORK NOTES:

- 1. DISTRICT TO VERIFY ALL SERVICE VOLTAGES PRIOR TO MODIFICATION OR
- INSTALLATION OF ELECTRICAL EQUIPMENT. MECHANICAL CONTRACTOR (MC) SHALL COORDINATE WITH DISTRICT FOR
- LOCATION OF EQUIPMENT. 3. MC SHALL PROVIDE AND INSTALL ALL CONTROL, SENSOR, AND SIGNALING WIRE
- AND CONDUIT BETWEEN EQUIPMENT AND BMS. MC SHALL COORDINATE WITH DISTRICT ALL WORK PRIOR TO COMMENCEMENT TO AVOID DUPLICATION OF SERVICE OR CONFLICTS WITH EXISTING SPACES.
- 5. CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

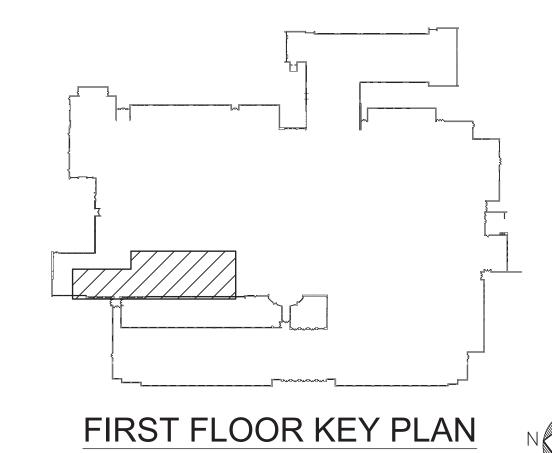
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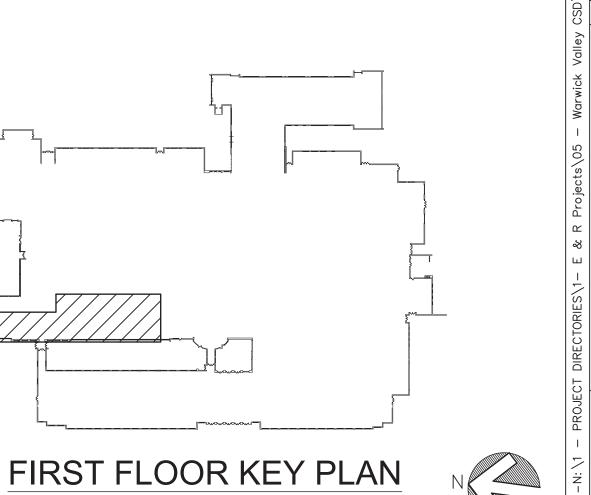
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ALTERNATE NOTE



EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

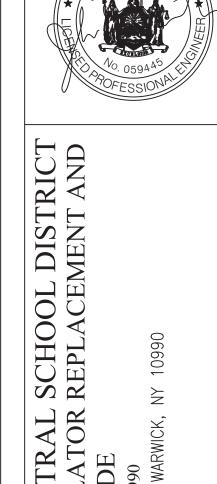




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CONSULTANT(S):

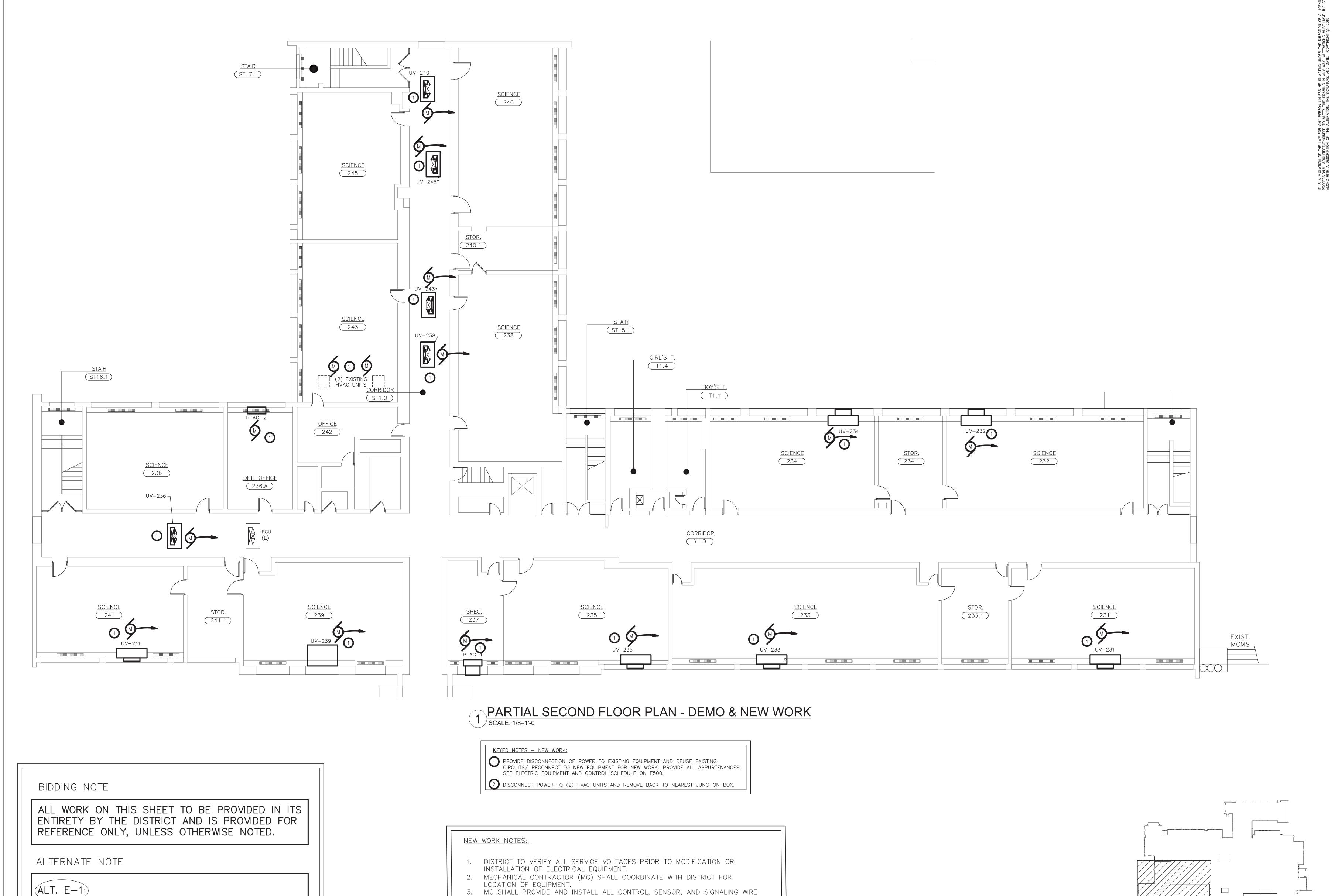
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10.19.2022 REVISION DRAWN BY CHECKED BY 30" X 42"

AS NOTED

PARTIAL FIRST FLOOR PLAN - DEMO & NEW



AND CONDUIT BETWEEN EQUIPMENT AND BMS.

SPECIFICATION, OR SCHEDULES.

EQUIPMENT AND ASSOCIATED WORK WITH THIS

PROVIDED AS PART OF BASE BID.

MARK TO BE PROVIDED AS PART OF ALTERNATE

E-1 ONLY. ALL OTHER UNMARKED WORK TO BE

4. MC SHALL COORDINATE WITH DISTRICT ALL WORK PRIOR TO COMMENCEMENT TO

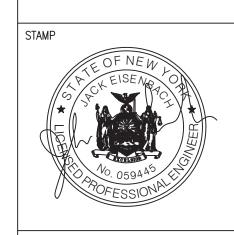
5. CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS,

AVOID DUPLICATION OF SERVICE OR CONFLICTS WITH EXISTING SPACES.

D'ANGELO ARCHITECTS PLANNERS

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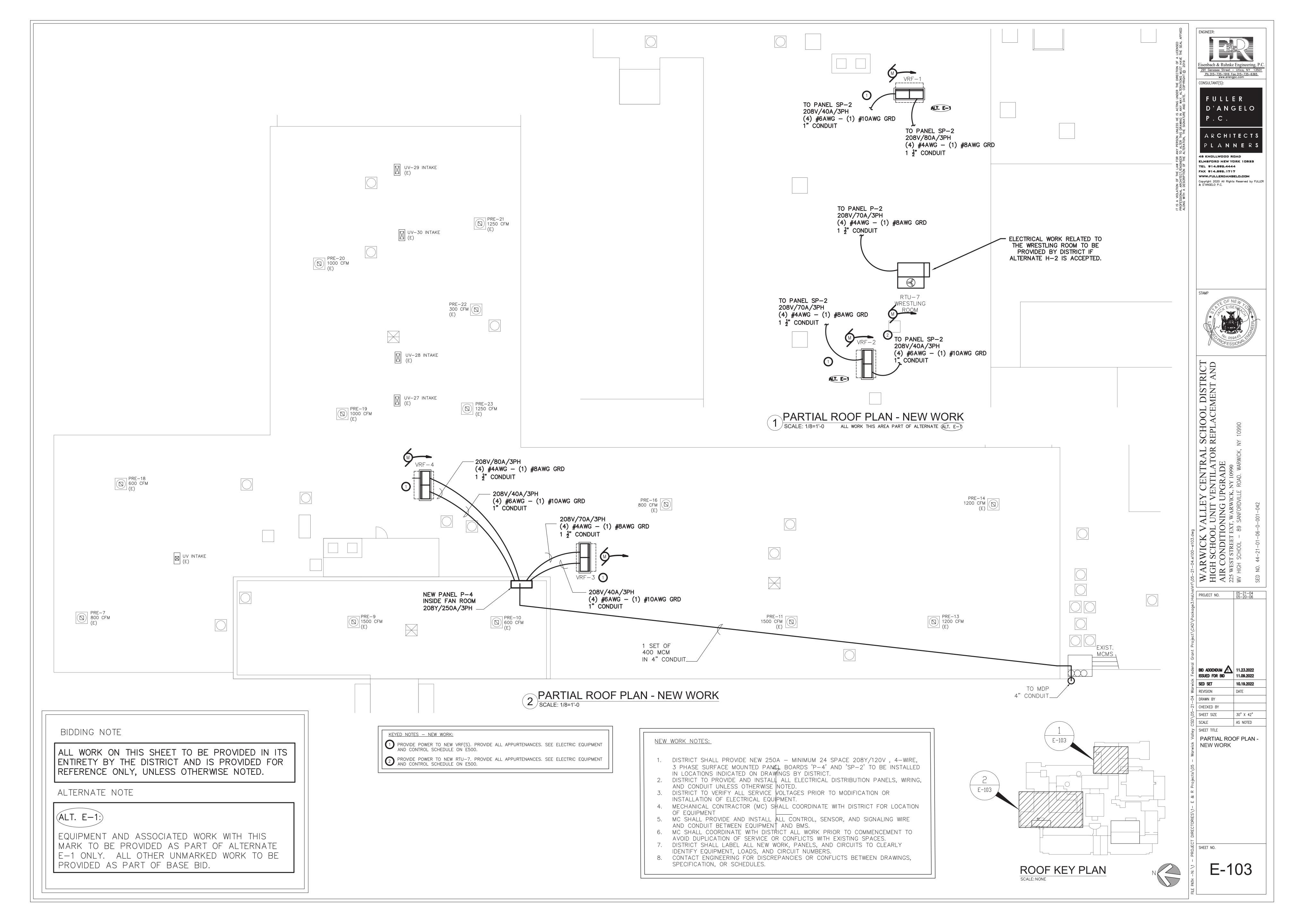
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101	SED SET	10.19.2022
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CHECKED BY 30" X 42"

AS NOTED

PARTIAL SECOND FLOOR PLAN - DEMO & NEW WORK

SECOND FLOOR KEY PLAN N



1 RISER DIAGRAM - EXISTING & NEW WORK SCALE: NOT TO SCALE

BIDDING NOTE

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR REFERENCE ONLY, UNLESS OTHERWISE NOTED.

ALTERNATE NOTE



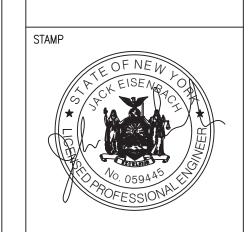
EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

ELECTRICAL RISER NOTES:

- 1. DISTRICT TO PROVIDE AND INSTALL NEW SURFACE MOUNTED POWER PANELS. LOCATION TO BE DETERMINED WITHIN SPACE NOTED.
- 2. CONTROL WIRING AND CONDUIT TO BE PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR(MC) OR SUB-CONTRACTOR. WORK TO BE COORDINATED WITH DISTRICT.
- 3. FIELD VERIFY LOCATION OF VRF 1 THROUGH 4, AND RTU-7. MC SHALL COORDINATE WITH DISTRICT
- FOR POWER SUPPLY TO UNITS.
- 4. DISTRICT TO VERIFY DISTANCE FROM MDP TO PANEL P-4.
- 5. CONTACT ENGINEERING FOR ANY DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS OR SCHEDULES.

CONSULTANT(S): FULLER D'ANGELO ARCHITECTS PLA**NNE**R:

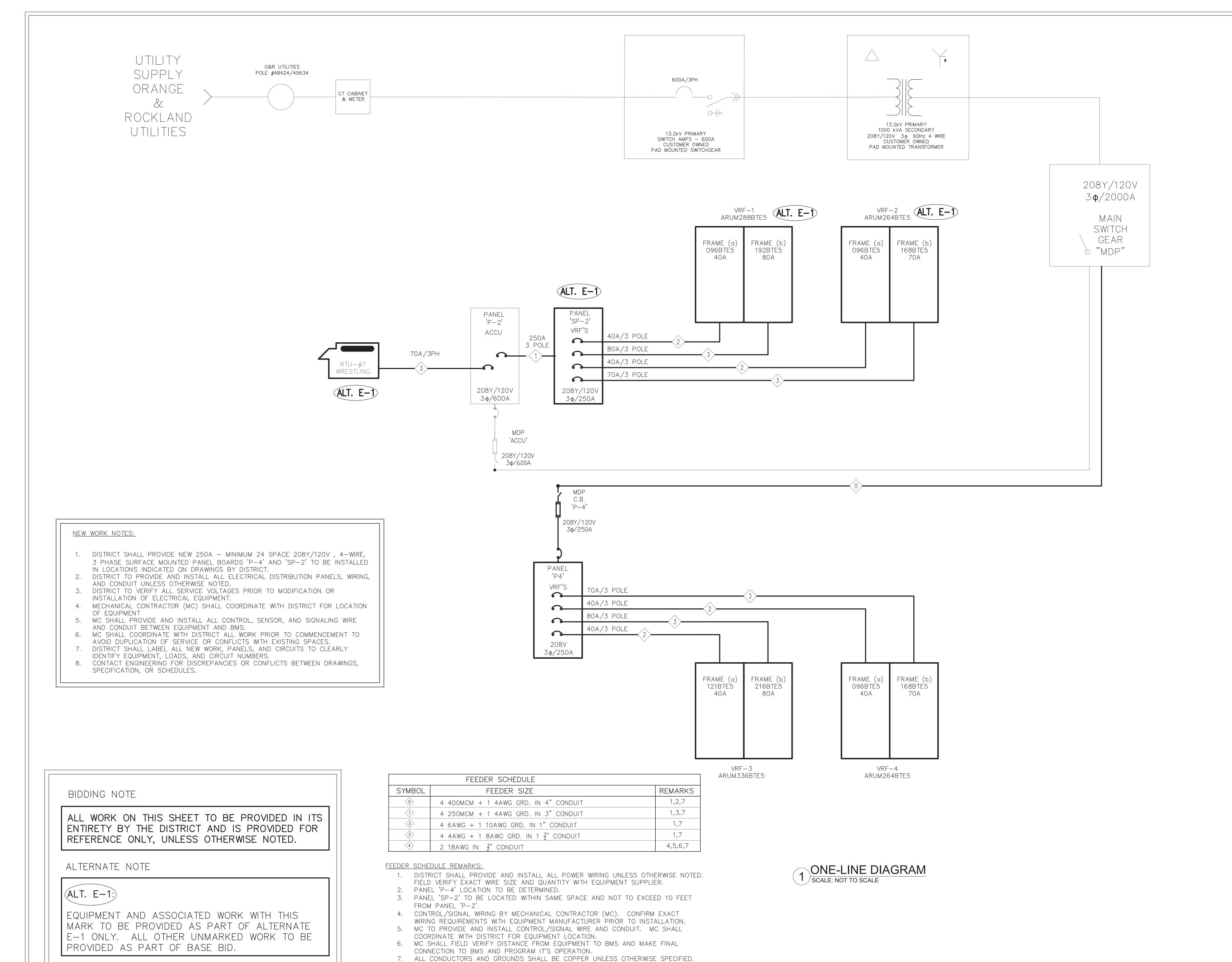
45 Knollwood Road ELMSFORD NEW YORK 10523 TEL 914.592.4444 FAX 914.592.1717 www.fullerdangelo.com Copyright 2020 All Rights Reserved by FULLER & D'ANGELO P.C.



TRICT T AND

1sC	PROJECT NO.	05-20-06	
CSD\05—21—04 Warwick Federal Grant Project\CAD\Package3.HsU	BID ADDENDUM ASSUED FOR BID	11.23.2022 11.09.2022	
wick	SED SET	10.19.2022	
W	REVISION	DATE	
-04 Wc	REVISION DRAWN BY	DATE	
-21-04 Wc		DATE	
\05-21-04 Wc	DRAWN BY	DATE 30" X 42"	
CSD\05-21-04 Wa	DRAWN BY CHECKED BY		

RISER DIAGRAM -EXISTING & NEW WORK



Eisenbach & Ruhnke Engineering, P.C.

291 Genesee Street – Utica, NY 13501
Ph: 315-735-1916 Fax: 315-735-6365
www.erengpc.com

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PLANNERS

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STAMP

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OF NEW

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TRICT T AND

WARWICK VALLEY CENTRAL SCHOOL DIS
HIGH SCHOOL UNIT VENTILATOR REPLACEMEN
AIR CONDITIONING UPGRADE

SS WEST STREET EXT, WARWICK, NY 10990

W HIGH SCHOOL - 89 SANFORDVILLE ROAD. WARWICK, NY 10990

BID ADDENDUM 1	11.23.2022 11.09.2022
SED SET	10.19.2022
REVISION	DATE
DRAWN BY	

EET SIZE 30" X 42"

ALE AS NOTED

EET TITLE

SHEET TITLE

ONE-LINE DIAGRAM

ONE-LINE DIAGRAM

SHEET NO.

										<u> </u>	ECTRIC EQUI	PMENT	AND CONTR	ROL SCHE	DULE										
EQUIPMENT						SUPPLY								CONTROLLE	R DEVICE TYPE &	ACCESSORIES (UNO, PROVIDED B	BY ELECTRICAL	CONTRACTOR)						
DESIGNATIO	N DESCRIPTION	LOCATION	SIZE		VOLTAGE/ PHASE/HZ	PANEL/ CONTROL CENTER	CIRCUIT NUMBER	BREAKER SIZE (A)	POWER WIRI PANEL TO C UNIT	NG FROM ONTROL	POWER WIRING CONTROL UNIT EQUIPMENT *		GROUND WIRE (SIZED PER NEC)	PACKAGED CONTROL UNIT (BY	VARIABLE FREQUENCY DRIVE	CONTROL STARTER	NON-FUSED DISCONNECT SWITCH	CONTROL DEVICE INSTALL	DUCT SMOKE DETECTOR	DUCT SMOKE DETECTOR	FIRE ALARM FAN	DISCONNECT	SWITCH		REF. REMARKS NOTES
			HP MO						WIRE	COND.	WIRE	COND.		OTHERS)	(VFD)			LOCATION	(SUPPLY)	(RETURN)	SHUTDOWN	FRAME	FUSE	LOCATION	
VRF-1	VRF OUTDOOR UNIT	ROOF			208V/3¢/60HZ		_	80	4 AWG	1 ½"	FACTORY WIRED		8 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	_			YES				ALT. E-
	VRF OUTDOOR UNIT	ROOF			208V/3ø/60HZ			40	6 AWG	1"	FACTORY WIRED		10 AWG		FACTORY WIRED		FACTORY WIRE				YES				ALT. E-
VRF-2	VRF OUTDOOR UNIT	ROOF			208V/3ø/60HZ			70	4 AWG	1 ½"	FACTORY WIRED		8 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE				YES				ALT. E-
	VRF OUTDOOR UNIT	ROOF			208V/3\phi/60HZ			40	6 AWG	1"	FACTORY WIRED		10 AWG		FACTORY WIRED		FACTORY WIRE				YES				ALT. E-
VRF-3	VRF OUTDOOR UNIT	ROOF ROOF	 		208V/3¢/60HZ		CB #2,4,6	80	4 AWG 6 AWG	1 ½"	FACTORY WIRED		8 AWG 10 AWG		FACTORY WIRED	BY BMS BY BMS	FACTORY WIRE				YES				
	VRF OUTDOOR UNIT	ROOF	 ` 		208V/3¢/60HZ	+	CB #1,3,5 CB #7,9,11	70	4 AWG	1 1 7	FACTORY WIRED		8 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE				YES YES				
VRF-4	VRF OUTDOOR UNIT	ROOF	· · ·	_	208V/3\phi/60HZ 208V/3\phi/60HZ	+	CB #8,10,12	40	6 AWG	1"	FACTORY WIRED		10 AWG		FACTORY WIRED		FACTORY WIRE				YES				
PTAC-5	PACKAGE AC W/ HEAT	OFFICE 154.	1		115V/1ø/60HZ		REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED	<u> </u>	12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	_			YES				ALT. E-
PTAC-4	PACKAGE AC W/ HEAT	OFFICE 154.2			115V/1¢/60HZ		REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	+	FACTORY WIRE				YES				ALT. E-
PTAC-3	PACKAGE AC W/ HEAT	OFFICE 154.3		_	115V/1¢/60HZ		+	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE				YES				ALT. E-
PTAC-1	PACKAGE AC W/ HEAT	CLASS 237		_	115V/1¢/60HZ		REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE				YES				
PTAC-2	PACKAGE AC W/ HEAT	CLASS 236.A			115V/1¢/60HZ			20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE				YES				
UV-70-A	UNIT VENTILATOR				115V/1¢/60HZ	1	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE				YES				ALT. E-
UV-70-B	UNIT VENTILATOR	CLASS. 70			115V/1¢/60HZ		REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE				YES				ALT. E-
UV-128	UNIT VENTILATOR	CLASS. 128			115V/1¢/60HZ	+		20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				
UV-130	UNIT VENTILATOR	CLASS. 130		_	115V/1¢/60HZ		REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				
UV-132	UNIT VENTILATOR	CLASS. 132			115V/1¢/60HZ			20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				
UV-147	UNIT VENTILATOR	CLASS. 147	FRAC 1	5 6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
UV-149	UNIT VENTILATOR	CLASS. 149	FRAC 1	5 6.3	115V/1¢/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
UV-151	UNIT VENTILATOR	CLASS. 151			115V/1¢/60HZ		REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
UV-153	UNIT VENTILATOR	CLASS. 153	FRAC 1	5 6.3	115V/1¢/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
RTU-7	ROOFTOP AIR HANDLER	WRES RM 154	1.7 7	70 50	208V/3ø/60HZ	PANEL 'P-2'	CB #38,40,42	70	4 AWG	1 ½"	FACTORY WIRED		8 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU		YES	YES				ALT. E-
UV-155	UNIT VENTILATOR	CLASS. 155	FRAC 1	5 6.3	115V/1¢/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
UV-157	UNIT VENTILATOR	CLASS. 157	FRAC 1	5 6.3	115V/1¢/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
UV-159	UNIT VENTILATOR	CLASS. 159	FRAC 1	5 6.3	115V/1¢/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
UV-162	UNIT VENTILATOR	CLASS. 162	FRAC 1	5 6.3	115V/1¢/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
UV-164	UNIT VENTILATOR	CLASS. 164	FRAC 1	5 6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	BY BMS	FACTORY WIRE	D OU			YES				ALT. E-
UV-166	UNIT VENTILATOR		+ + + + + + + + + + + + + + + + + + + +		115V/1¢/60HZ	+	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED	+	12 AWG		FACTORY WIRED	1	FACTORY WIRE	-			YES				ALT. E-
UV-168	UNIT VENTILATOR				115V/1¢/60HZ			20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	1	FACTORY WIRE				YES				ALT. E-
UV-170	UNIT VENTILATOR	CLASS. 170	 		115V/1¢/60HZ	+		20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	+	FACTORY WIRE				YES				ALT. E-
UV-171	UNIT VENTILATOR	CLASS. 171	+ +		115V/1ø/60HZ	+	+	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE				YES				ALT. E-
UV-231	UNIT VENTILATOR	CLASS. 231	+ + + + + + + + + + + + + + + + + + + +		115V/1ø/60HZ	+	+	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE				YES				
JV-232	UNIT VENTILATOR	CLASS. 232	+ + + + + + + + + + + + + + + + + + + +		115V/1ø/60HZ	+	+	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE	_			YES				
JV-233	UNIT VENTILATOR	CLASS. 233			115V/1ø/60HZ		+	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE	_			YES				
UV-234	UNIT VENTILATOR				115V/1ø/60HZ	i		20	12 AWG	3/4"	FACTORY WIRED	+	12 AWG		FACTORY WIRED		FACTORY WIRE				YES				
UV-235	UNIT VENTILATOR	CLASS. 235	+ +		115V/1¢/60HZ		REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	1	FACTORY WIRE	-			YES				
JV-236	UNIT VENTILATOR				115V/1¢/60HZ		<u> </u>	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE				YES				
JV-238	UNIT VENTILATOR	CLASS. 238			115V/1¢/60HZ			20	12 AWG	3/4"	FACTORY WIRED	_	12 AWG		FACTORY WIRED		FACTORY WIRE				YES				
JV-239 IV-240	UNIT VENTILATOR	CLASS. 239		_	115V/1¢/60HZ		_	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE				YES				
JV-240	UNIT VENTILATOR UNIT VENTILATOR	CLASS. 240			115V/1¢/60HZ			20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED	1	FACTORY WIRE				YES				
JV-241 IV-243	UNIT VENTILATOR UNIT VENTILATOR	CLASS. 241			115V/1¢/60HZ	+	1	20	12 AWG	3/4"	FACTORY WIRED		12 AWG		FACTORY WIRED		FACTORY WIRE				YES				
UV-243	UNIT VENTILATOR UNIT VENTILATOR	CLASS. 243			115V/1¢/60HZ	REUSE EXIST.		20	12 AWG	3/4"	FACTORY WIRED		12 AWG 12 AWG		FACTORY WIRED	1	FACTORY WIREL				YES YES				

UV-245 UV-UNIT VENTILATOR - LOCATION IN RM 245 - TYP. AU - AT UNIT

OU - ON UNIT

N/A — NOT APPLICABLE FRAC. — FRACTIONAL

1. FOLLOW NEC 2020 (NFPA 70) REQUIREMENTS.

- 2. PROVIDE GFCI OUTLETS AT VRF-3&4 WIRED WITH 2-#12 AND 1-#12 GND IN 3" CONDUIT FROM EXISTING NEARBY PANEL. PROVIDE NEW 20A CIRCUIT
- 3. PROVIDE GFCI OUTLET AT RTU-7 WIRED WITH 2-#12 AND 1-#12 GND IN $\frac{3}{4}$ " CONDUIT FROM EXISTING PANEL P-2. PROVIDE NEW 20A CIRCUIT
- BREAKER AND ALL APPURTENANCES.

AS PART OF ALTERNATE WORK, PROVIDE GFCI OUTLETS AT VRF-1&2 WIRED WITH 2-#12 AND 1-#12 GND IN \(\frac{1}{4}\)" CONDUIT FROM EXISTING PANEL P-2 AND SHARE CIRCUIT WITH RTU-7'S GFCI. PROVIDE NEW 20A CIRCUIT BREAKER AND ALL APPURTENANCES. 5. PROVIDE NEW TYPED PANEL BOARD LEGENDS IN NEW AND EXISTING PANELS. FOR EXISTING PANELS, REPLACE EXISTING PANEL BOARD LEGEND TO REFLECT ALL CHANGES MADE.

NEW PANEL SCHEDULE

PANEL 120-2	. ID: PA 208Y/3	WEL "P-4" PHASE/4 WIRE	NEW	PANEL		LOCATION: PENTHOUSE				
NOTES	CIR. No.	CIRCUIT DESCRIPTION	BKR.	Ø	BKR.	CIRCUIT DESCRIPTION	CIR. No.	NOTES		
	1			А			2			
2	3	(NEW) VRF-3	40A	В	A08	(NEW) VRF-3	4	2		
	5			С			6			
	7			А			8			
2	9	(NEW) VRF-4	70A	В	40A	(NEW) VRF-4	10	2		
	11			С			12			
	13	OPEN SPACE		А		OPEN SPACE	14			
	15	OPEN SPACE		В		OPEN SPACE	16			
	17	OPEN SPACE		С		OPEN SPACE	18			
	19	OPEN SPACE		А		OPEN SPACE	20			
	21	OPEN SPACE		В		OPEN SPACE	22			
	23	OPEN SPACE		С		OPEN SPACE	24			

1. REMOVE EXISTING BREAKER AND TURN OVER TO

2. PROVIDE GROUND FAULT TYPE BREAKER. TYPE AND STYLE TO MATCH PANEL.
3. USE PREVIOUSLY INSTALLED BREAKER, VERIFY

GROUND FAULT TYPE.

<u>GENERAL NOTES:</u>
- PROVIDE 208Y/120V PANELBOARD BUS RATING 250 AMPS THREE PHASE, 4-WIRE SURFACE MOUNTED

- MINIMUM 24 SPACE PANEL

EXISTING PANEL SCHEDULE

		NEL "P-2" PHASE/4 WIRE	EXIST	ING P	ANCL	LOCATION:	JPPER	LEVEL
NOTES	CIR. No.	CIRCUIT DESCRIPTION	BKR.	Ø	BKR.	CIRCUIT DESCRIPTION	CIR. No.	NOTE
	1			А			2	
	3	ACCU-2	35A	В	30A	ACCU-1	4	
	5			С			6	
	7			Α			8	
	9	SPARE	30A	В	250A	(NEW) SUB PANEL (SP-2) (ALT. E-1)	10	1,2
	11			С			12	
	13			А			14	
	15	ACCU-9	30A	В	30A	ACCU-7	16	
	17			С			18	
	19			Α			20	
	21	SPARE	30A	В	30A	ACCU-5	22	
	23			С			24	
	25			Α			26	
	27	ACCU-6	30A	В	30A	ACCU-3	28	
	29			С			30	
	31			А			32	
	33	ACCU-4	30A	В	30A	ACCU-8	34	
	35			С			36	
	37	EXISTING LOAD	20A	Α			38	
2	39	ROOF EQUIP GFCI's	20A	В	70A	(NEW) RTU-7	40	2
	41	SPACE		С			42	

NOTES: 1. REMOVE EXISTING BREAKER AND TURN OVER TO

2. PROVIDE GROUND FAULT TYPE BREAKER. TYPE AND STYLE TO MATCH EXISTING PANEL.

3. USE PREVIOUSLY INSTALLED BREAKER, VERIFY GROUND FAULT TYPE.

<u>GENERAL NOTES:</u>
– PANELBOARD BUS RATING 600 AMPS

- 208Y/120V, 3PH, 4-WIRE 42-SPACE SURFACE MOUNTED

NEW PANEL SCHEDULE (4.7. E-1)

		WEL "SP-2" PHASE/4 WIRE	NEW	SUB	PANEL	LOCATION:	UPPER (LEVEL
NOTES	CIR. No.	CIRCUIT DESCRIPTION	BKR.	Ø	BKR.	CIRCUIT DESCRIPTION	CIR. No.	NOTES
	1			А			2	
2	3	(NEW) VRF-1 (ALT. E-1)	40A	В	A08	(NEW) VRF-1 (ALT. E-1)	4	2
	5			С			6	
	7			А			8	
2	9	(NEW) VRF-2 (ALT. E-1)	70A	В	40A	(NEW) VRF-2 (ALT. E-1)	10	2
	11			С			12	
	13	OPEN SPACE		А		OPEN SPACE	14	
	15	OPEN SPACE		В		OPEN SPACE	16	
	17	OPEN SPACE		С		OPEN SPACE	18	
	19	OPEN SPACE		А		OPEN SPACE	20	
	21	OPEN SPACE		В		OPEN SPACE	22	
	23	OPEN SPACE		С		OPEN SPACE	24	

NOTES:

1. REMOVE EXISTING BREAKER AND TURN OVER TO

2. PROVIDE GROUND FAULT TYPE BREAKER. TYPE AND STYLE TO MATCH PANEL. USE PREVIOUSLY INSTALLED BREAKER, VERIFY GROUND FAULT TYPE.

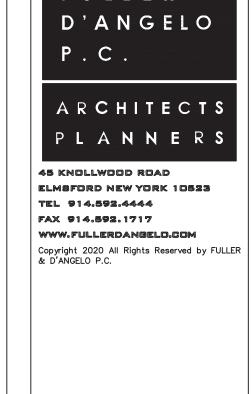
GENERAL NOTES:

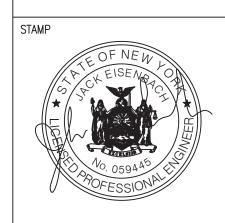
- PROVIDE 208Y/120V PANELBOARD BUS RATING 250 AMPS

- THREE PHASE, 4-WIRE SURFACE MOUNTED

MINIMUM 24 SPACE PANEL

CONSULTANT(S): FULLER





> 1		
180	PROJECT NO.	05-21-04 05-20-06
Wal wick rederal Grant Froject (CAD (Fackages. HSOVS		
rederai	BID ADDENDUM 1SSUED FOR BID	11.23.2022 11.09.2022
· \		
×	SED SET	10.19.2022
	SED SET REVISION	10.19.2022 DATE
	REVISION	
	REVISION DRAWN BY	
CSD \US-21-04 War Wit	REVISION DRAWN BY CHECKED BY	DATE

SHEET TITLE

SCHEDULES

E-500

BIDDING NOTE

ALL WORK ON THIS SHEET TO BE PROVIDED IN ITS ENTIRETY BY THE DISTRICT AND IS PROVIDED FOR REFERENCE ONLY, UNLESS OTHERWISE NOTED.

ALTERNATE NOTE



EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.