



November 23, 2022

BID ADDENDUM 1

Project: Warwick Valley CSD
High School
Unit Ventilator Replacement & Air Conditioning Upgrade

Owner: Warwick Valley CSD
225 West Street Ext
Warwick, NY 10990

Engineer: Eisenbach & Ruhnke Engineering, P.C.
291 Genesee Street
Utica, NY 13501
E&R Project #: 05-21-04

THE FOLLOWING CHANGES, DELETIONS AND ADDITIONS TO THE SPECIFICATIONS AND DRAWINGS SHALL BECOME AND ARE HEREBY MADE PART OF THE CONTRACT DOCUMENTS DATED NOVEMBER 9, 2022. THEY CHANGE THE ORIGINAL DOCUMENTS ONLY IN THE MANNER AND TO THE EXTENT STATED.

THE FOLLOWING ARE MODIFICATIONS, CLARIFICATIONS, DELETIONS OR ADDITIONS TO THE SPECIFICATIONS:

ITEM #1 – Section 00 4100.1 BID FORM CONTRACT #1 – HVAC +

- Delete Section 00 4100.1 in its entirety and replace with attached Section 00 4100.1.

ITEM #2 – Section 01 2100 ALLOWANCES

- Delete Section 01 2100 in its entirety and replace with attached Section 01 2100.

ITEM #3 – Section 01 2300 ALTERNATES

- Delete Section 01 2300 in its entirety and replace with attached Section 01 2300.

THE FOLLOWING ARE MODIFICATIONS, CLARIFICATIONS, DELETIONS OR ADDITIONS TO THE DRAWINGS:

ITEM #1 – Delete the following Drawings in their entirety and replace the attached revised Drawings

- CP – COVER PAGE
- E-001 – ABBREVIATIONS AND SYMBOLS
- E-100 – PARTIAL BASEMENT AND FIRST FLOOR PLANS – NEW WORK
- E-101 – PARTIAL FIRST FLOOR PLAN – DEMO & NEW WORK
- E-102 – PARTIAL SECOND FLOOR PLAN – DEMO & NEW WORK
- E-103 – PARTIAL SECOND FLOOR PLAN – DEMO & NEW WORK
- E-500 - SCHEDULES
- M-104 – WRESTLING ROOM – DEMOLITION AND NEW WORK
- M-502 – HVAC SCHEDULES AND CALCULATIONS
- M-503 – HIGH SCHOOL UV-C LIGHT FIXTURE SCHEDULES
- M-504 – UV-C LIGHT FIXTURE DETAILS
- A-100 – PARTIAL ROOF PLANS – NEW WORK
- A-101 – STRUCTURAL PLANS AND MISCELLANEOUS DETAILS

ITEM #2 – Add the following Drawings to the Contract Documents

- Drawing E-400 RISER DIAGRAM – EXISTING & NEW WORK
- Drawing E-401 ONE-LINE DIAGRAM

GENERAL

- Pre-Bid Meeting Minutes and Sign in Sheet are Attached

CONTRACTOR QUESTIONS/RFI'S

RFI #1 – Bertussi Dated 11/21/2022

RFI #2 – Bertussi Dated 11/22/2022

END OF ADDENDUM

SECTION 00 4100.1
BID FORM
CONTRACT #1 - HVAC

THE PROJECT AND THE PARTIES

TO:

Warwick Valley Central School District
225 West Street Ext.
Warwick, NY 10990

FOR:

HIGH SCHOOL – UNIT VENTILATOR REPLACEMENT & AIR CONDITIONING UPGRADE

ENGINEER'S PROJECT NUMBER: 05-21-04

DATE: _____ (BIDDER TO ENTER DATE)

SUBMITTED BY:

Bidder's Full Name _____
Address _____
City, State, Zip _____
Contact Name _____ Phone _____
Employer Identification Number (EIN) _____

1.01 OFFER

- A. Having examined the Place of The Work and all matters referred to in the Bidding Requirements and the Contract Documents prepared by Eisenbach and Ruhnke Engineerig, P.C. for the above-mentioned project, we, the undersigned, hereby offer to enter into a Contract to perform Contract #1 HVAC Construction for the Sum of:

B. BASE BID

1. The Base Bid of this proposal for all work required by the Contract Documents for Contract #1 HVAC is as follows:

(\$ _____) DOLLARS

C. ALLOWANCE(S)

1. The Total Allowance as indicated in Section 01 2100 - Allowances is as follows:

(\$ _____) DOLLARS

D. TOTAL BASE BID

1. The Total Base Bid of this Proposal for all work required by the Contract Documents for Contract #1 HVAC is as follows:

(\$ _____) DOLLARS

(The Total Base Bid is sum of 1.01.B1 and 1.01.C.1)

E. ALTERNATE H-1

1. The Alternate(s) for this Proposal required by the Contract Documents are listed in Section 01 2300.
 - a. The base bid includes the replacement of unit ventilators as indicated on the Drawings and related work.
 - b. The alternate is for the contractor to replace the units indicated on the Drawings as an alternate.

_____ (\$ _____) DOLLARS

F. ALTERNATE H-2

1. The Alternate(s) for this Proposal required by the Contract Documents are listed in Section 01 2300.
 - a. The base bid includes the replacement of unit ventilators as indicated on the Drawings and related work.
 - b. The alternate is for the contractor to replace the units indicated on Drawing M-104 as an alternate.

_____ (\$ _____) DOLLARS

- G. The undersigned further understands and agrees that he is to furnish and provide all necessary material, machinery, plant, implements, tools, labor, services, skill and other items of whatever nature required, and to do and perform all the work necessary under the Contract, to complete the work in accordance with the drawings and specifications and any addenda thereto, and to accept in full compensation therefore the amount of the Total Base Bid stated, modified by such additive or deductive alternatives, if any are accepted by the Owner.

- H. All Allowances described in Section 01 2100 are included in Bid Sum.

- I. We have included the required security deposit as required by the Instruction to Bidders.

- J. All applicable federal taxes are included, and State of New York taxes are included in the Bid Sum.

1.02 ACCEPTANCE

- A. This offer shall be open to acceptance and is irrevocable for forty-five (45) days from the bid closing date.
- B. If this bid is accepted by Warwick Valley CSD within the time period stated above, the Contractor will:
 1. Execute the Agreement within seven days of receipt of Notice of Award.
 2. Furnish the required bonds within seven days of receipt of Notice of Award.
- C. If this bid is accepted within the time stated, and the Contractor fails to commence the Work or we fail to provide the required Bond(s), the security deposit shall be forfeited as damages to Warwick Valley CSD by reason of the Contractor's failure, limited in amount to the lesser of the face value of the security deposit or the difference between this bid and the bid upon which a Contract is signed.

1.03 REJECTION OF BIDS

- A. The undersigned agrees that the Owner shall have the right to accept or reject any or all bids.

1.04 CONTRACT TIME

- A. If this Bid is accepted, the Contractor will:
 1. Complete all the work covered by this Proposal with a commencement date of NO EARLIER THAN Award of Contract by Owner. Work shall be phased as indicated in Section 01 1000 Summary of Contract. Failure to complete each phase of work by dates indicated will result in damages being assessed as stated in the Bidding Requirements.

1.05 CHANGES TO THE WORK

- A. Refer to General Conditions.

1.06 ADDENDA

- A. The following Addenda have been received. The modifications to the Bid Documents noted below have been considered and all costs are included in the Bid Sum.

1. Addendum # _____ Dated _____.
2. Addendum # _____ Dated _____.
3. Addendum # _____ Dated _____.

1.07 BID FORM SUPPLEMENTS

- A. The following information is included with Bid submission:

1. Document 00 4101 - Statement of Surety's Intent.
2. Document 00 4336 - List of Subcontractors
3. Document 00 4430 - Hold Harmless Agreement.
4. Document 00 4546 - Certification Regarding the Iran Disinvestment Act
5. Document 00 4476 - Insurance Certification.
6. Section 00 6000 - Project Forms Bid Bond.

1.08 NON-COLLUSIVE BIDDING CERTIFICATION

- A. By submission of this bid or proposal:

1. The undersigned bidder and the person or persons signing on behalf of the bidder, and should this bid be a joint bid, each party thereto, certifies as to its own organization, under penalty of perjury, that to the best of his/her knowledge and belief:
 - a. The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.
 - b. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor.
 - c. No attempt has been made or will be made by the bidder to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

1.09 BIDDER'S FURTHER AFFIRMATION AND DECLARATION

- A. The above name bidder and should this bid be a joint bid each party thereto, further affirm and declares:

1. That said bidder is of lawful age and the only one interested in this bid; and that no other person, firm or corporation, except those herein above named, has any interest in this bid or in the contract proposed to be entered into.
2. That this bid is made without any understanding, agreement or connection with any other person, firm, or corporation making a bid for the same work, and is in all respects fair and without collusion or fraud.
3. That said bidder is not in arrears to the Warwick Valley CSD upon debt or contract, and is not a defaulter, as surety or otherwise upon any obligation to the said Warwick Valley CSD
4. That no member of the Warwick Valley CSD or any officer or employee of the Warwick Valley CSD or person whose salary is payable in whole or in part from the Warwick Valley CSD treasury, or the spouse of any foregoing is or shall be or become interested, directly or indirectly, as a contracting party, partner, stockholder, surety or otherwise, in this bid, or in the performance of the Contract, or in the supplies, materials or equipment and work or labor to which it relates, or in any portion of the profits thereof.
5. That he/she has carefully examined the site of the work and that, from his/her own investigations, he/she has satisfied him/herself as to the nature and location of the work, and character, quality and quantity of materials, and all difficulties likely to be encountered, the kind and extent of equipment and other facilities needed for the performance of the work, the general and local conditions, and all other items which may, in any way, affect the work or its performance.

6. That if a corporation, this bid or proposal containing the Non-Collusive Binding Certification and the foregoing Affirmation and Declaration has been authorized by the Board of Directors of such Corporation, which authorization includes the signing and submission of this bid or proposal and the inclusion therein of the said Certificate of Non-Collusion and Affirmation and Declaration as the Act and Deed of the Corporation.

1.10 BID FORM SIGNATURE(S)

The Corporate Seal of

(Bidder - print the full name of your firm)

was hereunto affixed in the presence of:

(Authorized signing officer, Title)

(Seal)

(Authorized signing officer, Title)

If the Bid is a joint venture or partnership, add additional forms of execution for each member of the joint venture in the appropriate form or forms as above.

Subscribed and sworn before me this day of ____ 20____

Notary Public: _____

My Commission Expire: _____

SECTION 01 2100
ALLOWANCES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Contingency allowance.
- B. Payment and modification procedures relating to allowances.

1.02 RELATED REQUIREMENTS

- A. Section 01 2000 - Price and Payment Procedures: Additional payment and modification procedures.

1.03 CONTINGENCY ALLOWANCE

- A. Contractor's costs for products, delivery, installation, labor, insurance, payroll, taxes, bonding, equipment rental, overhead and profit will be included in Change Orders authorizing expenditure of funds from this Contingency Allowance.
- B. Funds will be drawn from the Contingency Allowance only by Change Order.
- C. At closeout of Contract, funds remaining in Contingency Allowance will be credited to Owner by Change Order.

1.04 ALLOWANCES SCHEDULE

- A. CONTRACT #1 HVAC
 - 1. ALLOWANCE
 - a. Include an allowance for use according to the Owner' instructions
Twenty Thousand (\$20,000) DOLLARS
- B. CONTRACT #2 ROOFING
 - 1. ALLOWANCE
 - a. Include an allowance for use according to the Owner' instructions
Five Thousand (\$5,000) DOLLARS

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 2300
ALTERNATES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Description of Alternates.

1.02 RELATED REQUIREMENTS

- A. Document 00 2113 - Instructions to Bidders: Instructions for preparation of pricing for Alternates.

1.03 ACCEPTANCE OF ALTERNATES

- A. Alternates quoted on Bid Forms will be reviewed and accepted or rejected at Owner's option. Accepted Alternates will be identified in the Owner-Contractor Agreement.
- B. Coordinate related work and modify surrounding work to integrate the Work of each Alternate.

1.04 SCHEDULE OF ALTERNATES

A. CONTRACT #1 – HVAC

1. ALTERNATE H-1

- a. The base bid includes the replacement of unit ventilators as indicated and related work.
- b. The alternate is for the contractor to replace the units indicated as an alternate

B. CONTRACT #1 – HVAC

1. ALTERNATE H-2

- a. The base bid includes the replacement of unit ventilators as indicated and related work.
- b. The alternate is for the contractor to replace the units indicated on Drawing M-104 as an alternate.

C. CONTRACT #2 – Roofing

1. ALTERNATE R-1

- a. The base bid includes the roofing related to providing the new VRF condensers on the roof.
- b. The alternate is for the roofing related to the alternate VRF Condensers.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

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

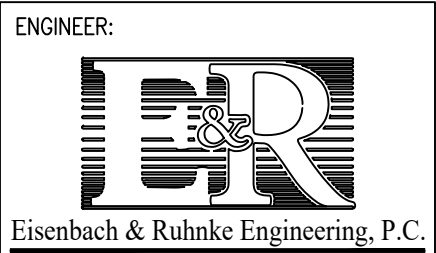


LOCATION PLAN

LIST OF DRAWINGS:

CP	COVER PAGE
ARCHITECTURAL	
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-102	PARTIAL SECOND FLOOR PLAN - NEW WORK
M-103	PARTIAL ROOF PLAN - NEW WORK
M-104	WRESTLING ROOM - DEMOLITION AND NEW WORK
M-111	VRF SYSTEM TREES
M-500	DETAILS
M-501	DETAILS
M-502	HVAC SCHEDULES AND CALCULATIONS
M-503	HIGH SCHOOL UV-C LIGHT FIXTURE SCHEDULES
M-504	UV-C LIGHT FIXTURE DETAILS
M-505	CONTROL SCHEMATICS
ELECTRICAL	
E-001	ABBREVIATIONS AND SYMBOLS
E-100	PARTIAL BASEMENT AND FIRST FLOOR PLANS - NEW WORK
E-101	PARTIAL FIRST FLOOR PLAN - DEMO & NEW WORK
E-102	PARTIAL SECOND FLOOR PLAN - DEMO & NEW WORK
E-103	PARTIAL SECOND FLOOR PLAN - DEMO & NEW WORK
E-400	RISER DIAGRAM - EXISTING & NEW WORK
E-401	ONE-LINE DIAGRAM
E-500	SCHEDULES
PLUMBING	
P-001	ABBREVIATIONS AND SYMBOLS
P-100	PARTIAL BASEMENT AND FIRST FLOOR PLANS - NEW WORK
P-101	PARTIAL FIRST FLOOR PLAN - NEW WORK
P-102	PARTIAL SECOND FLOOR PLAN - NEW WORK
P-500	SCHEDULE AND DETAILS

ENGINEER:



Eisenbach & Ruhke Engineering, P.C.
291 Corporate Street - Union, NY 10987
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CONSULTANT(S):



FULLER
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PLANNERS

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STAMP



WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
AIR CONDITIONING UPGRADE
225 WEST STREET EXT, WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
SED NO. 44-21-01-06-0-001-042

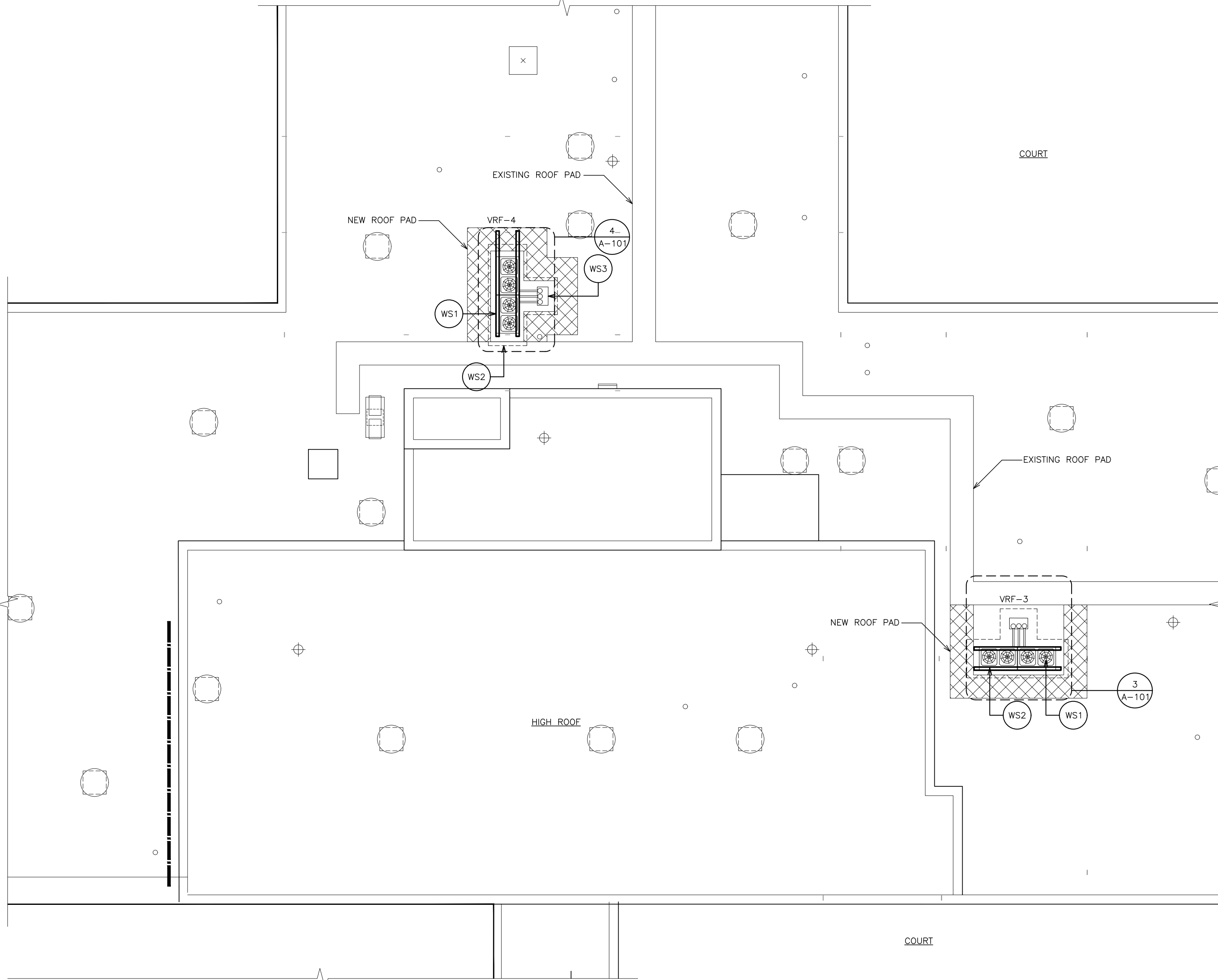
PROJECT NO.	05-21-04 05-20-06
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SED SET	10.19.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" X 42"
SCALE	AS NOTED
SHEET TITLE	COVER PAGE

SHEET NO.

CP



1 PARTIAL ROOF PLAN
SCALE: 1/8" = 1'-0"
ALL WORK THIS AREA PART OF ALTERNATE (ALT. R-1)



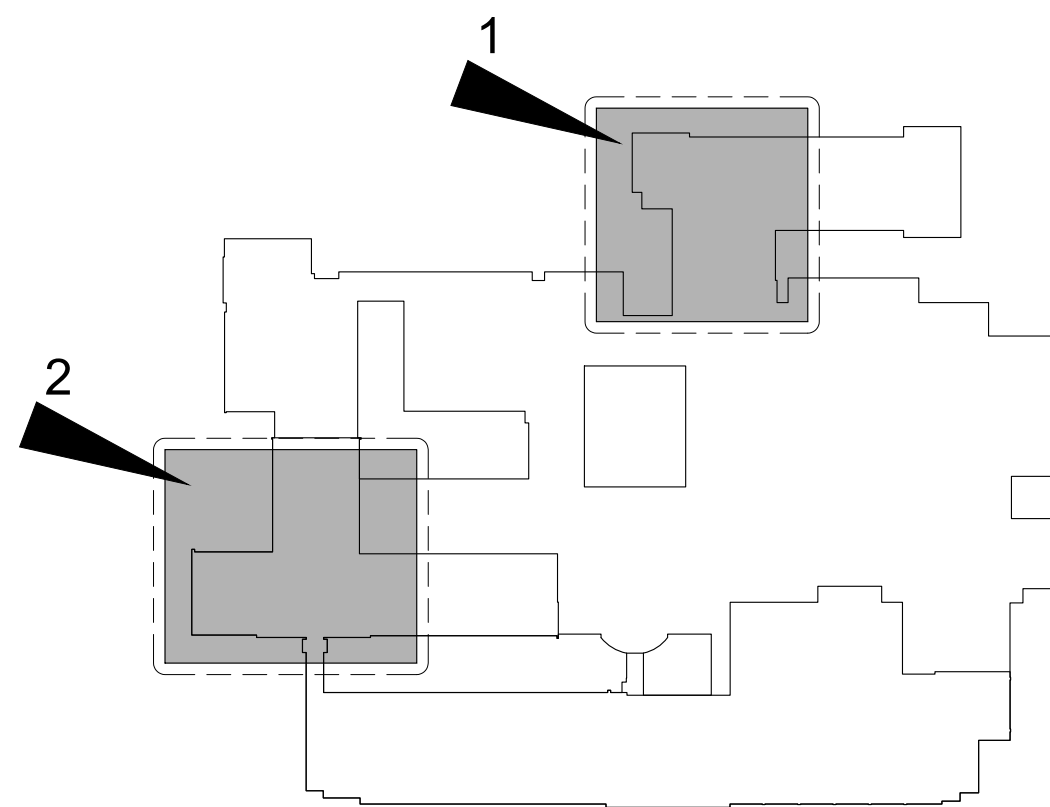
2 PARTIAL ROOF PLAN
SCALE: 1/8" = 1'-0"

- 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.

- LEGEND:**
- EXISTING ROOF DRAIN
 - EXISTING VENT PIPE
 - EXISTING EXHAUST FAN.
 - PITCH POCKE
 - EXISTING ROOF LADDER
 - EXISTING SKYLIGHT
 - WALKWAY PADS. SEE SPECIFICATIONS
 - EXISTING ROOF HATCH.

NOTE:
BASF SPRAY POLYURETHANE
FOAM ROOF WARRANTED
THROUGH AUGUST 2026.

LOCAL MAINTENANCE BY:
A to Z COATINGS
(570) 558-0932



**HIGH SCHOOL
KEY PLAN**
SCALE N.T.S.

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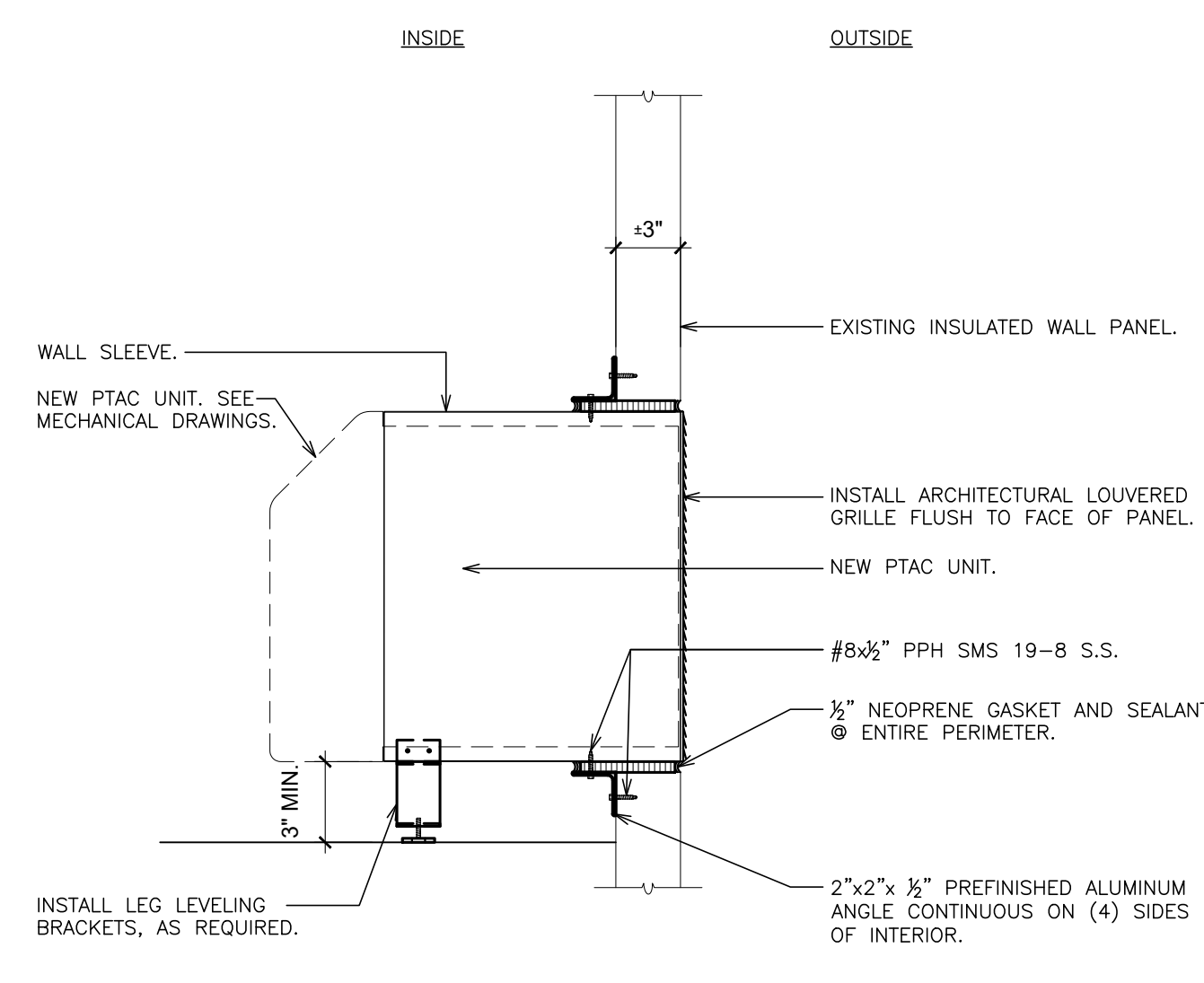
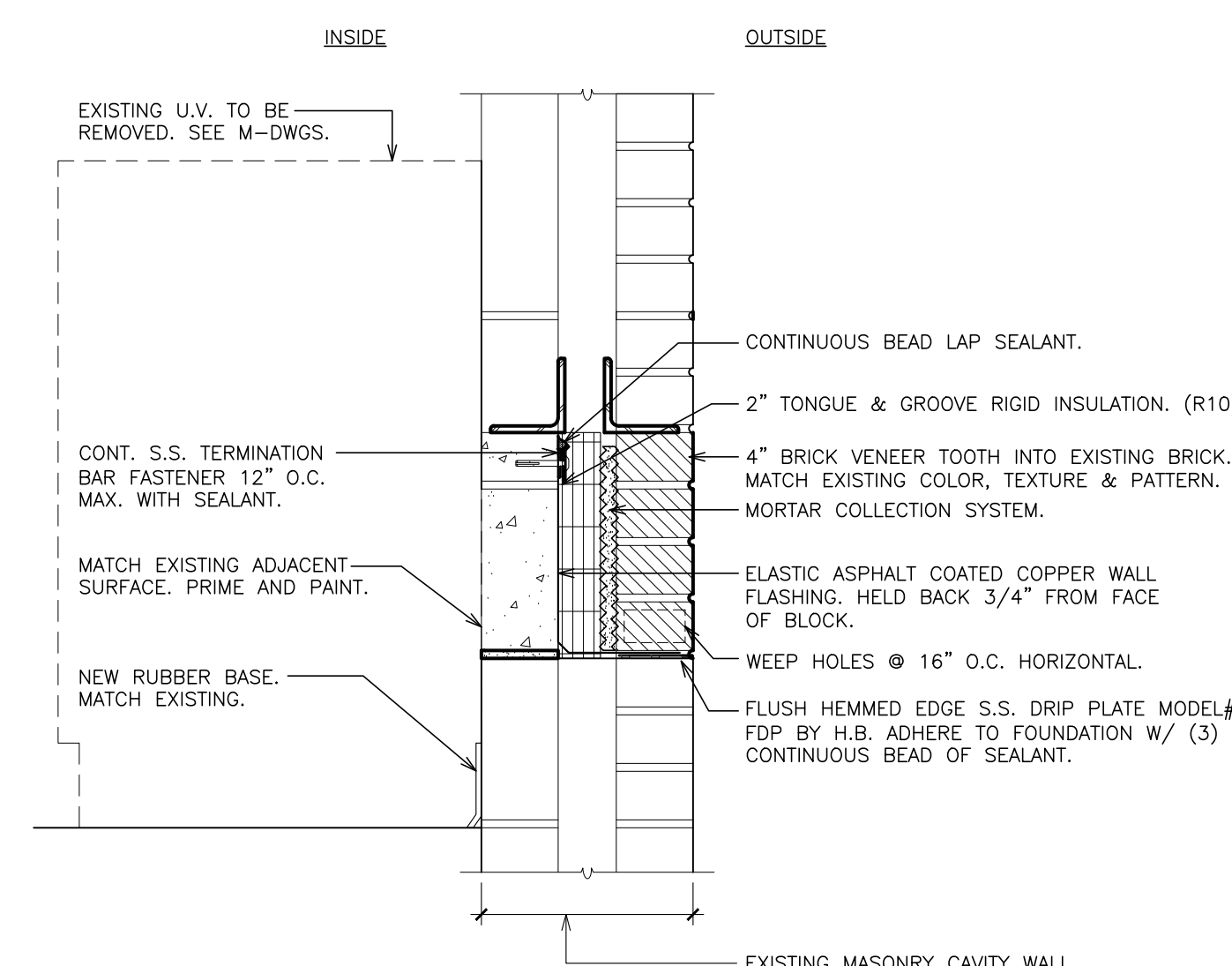
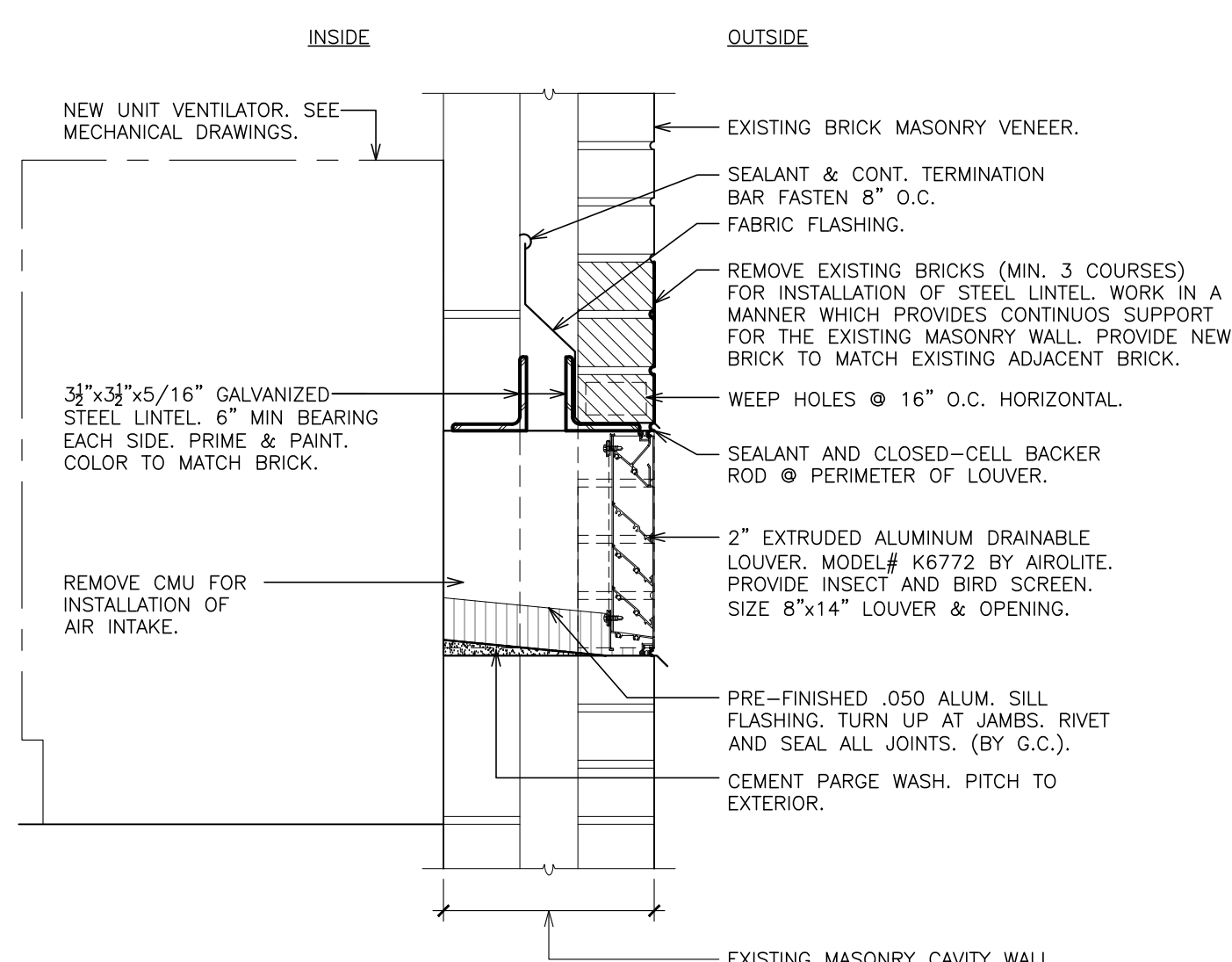
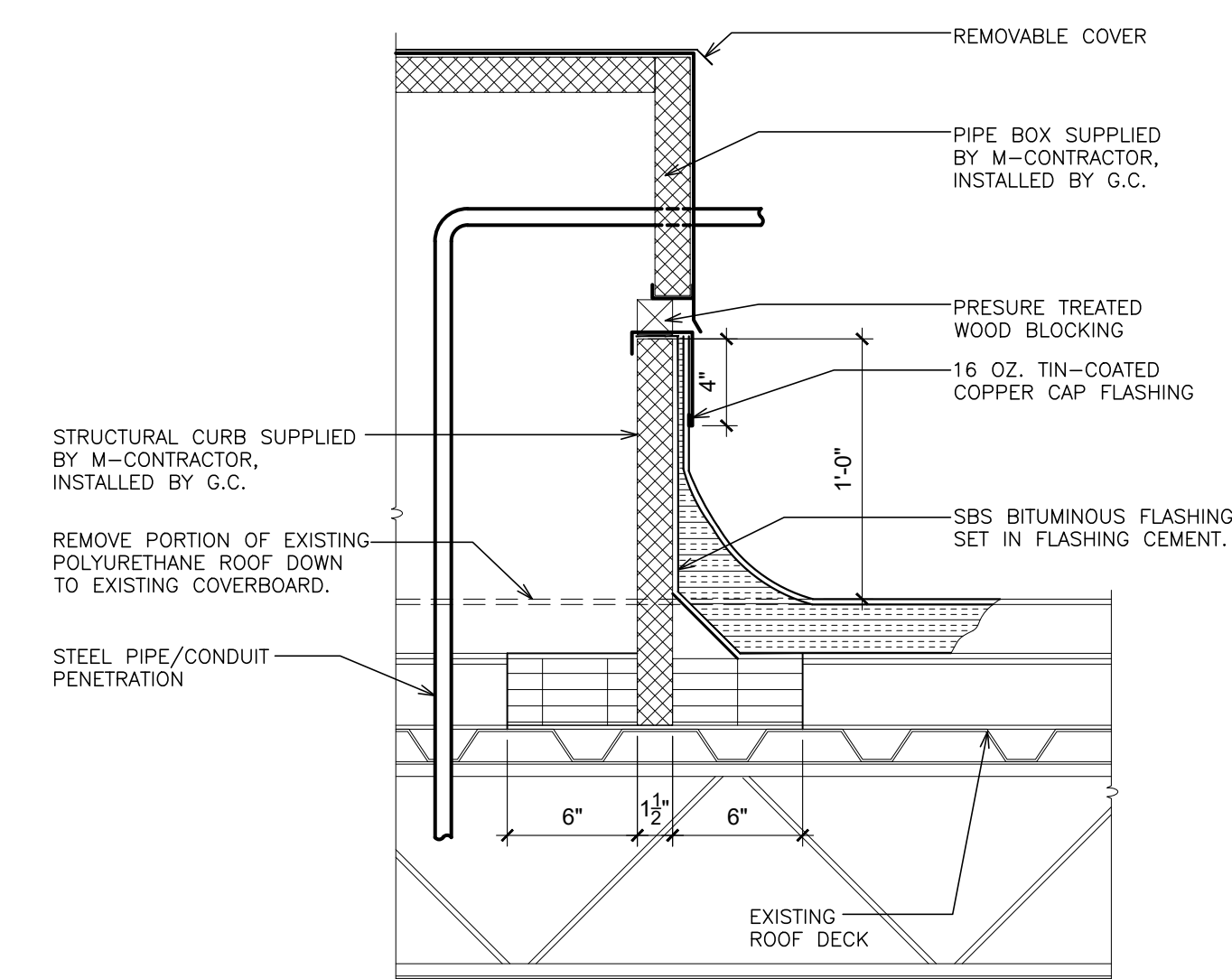
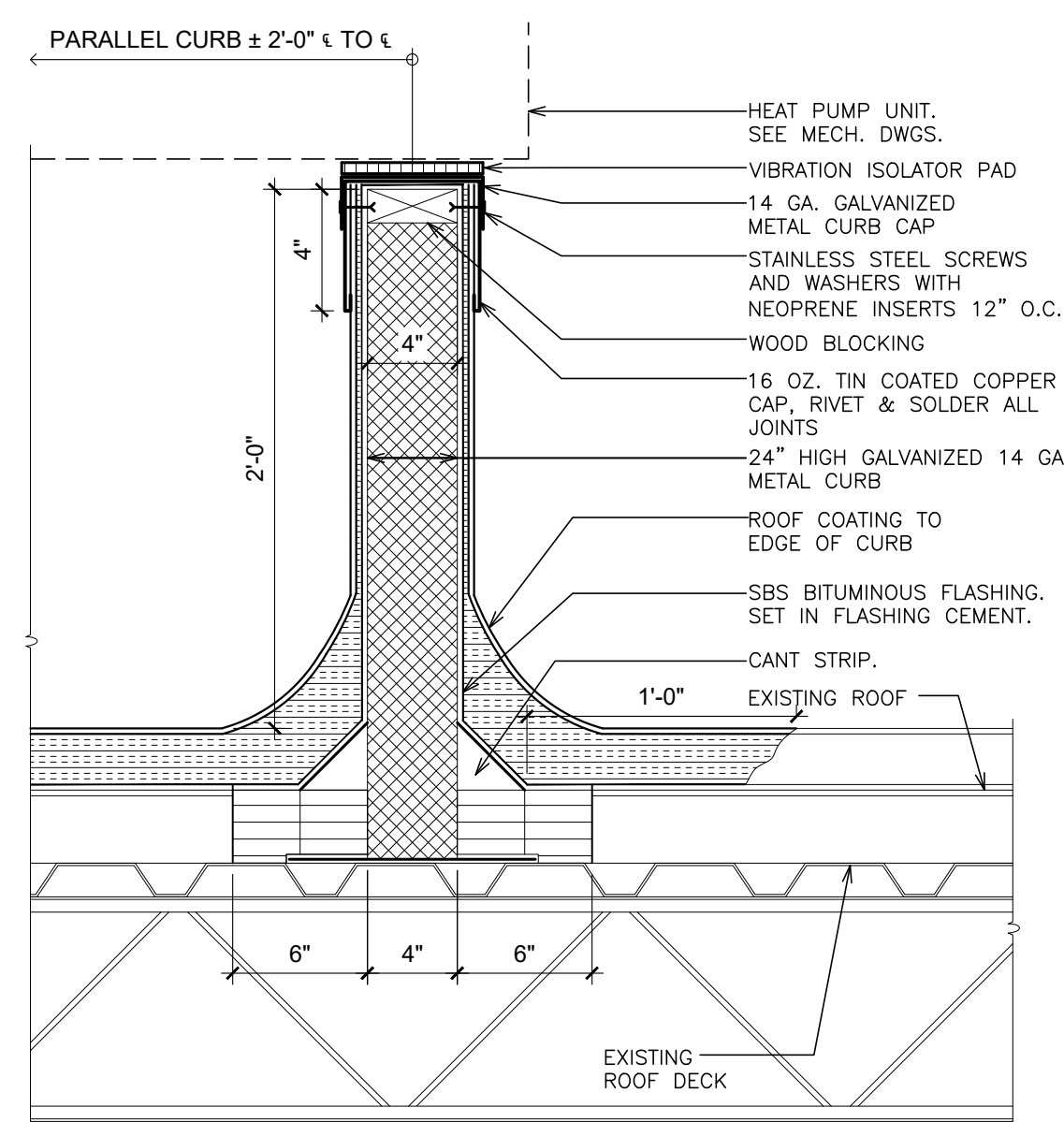
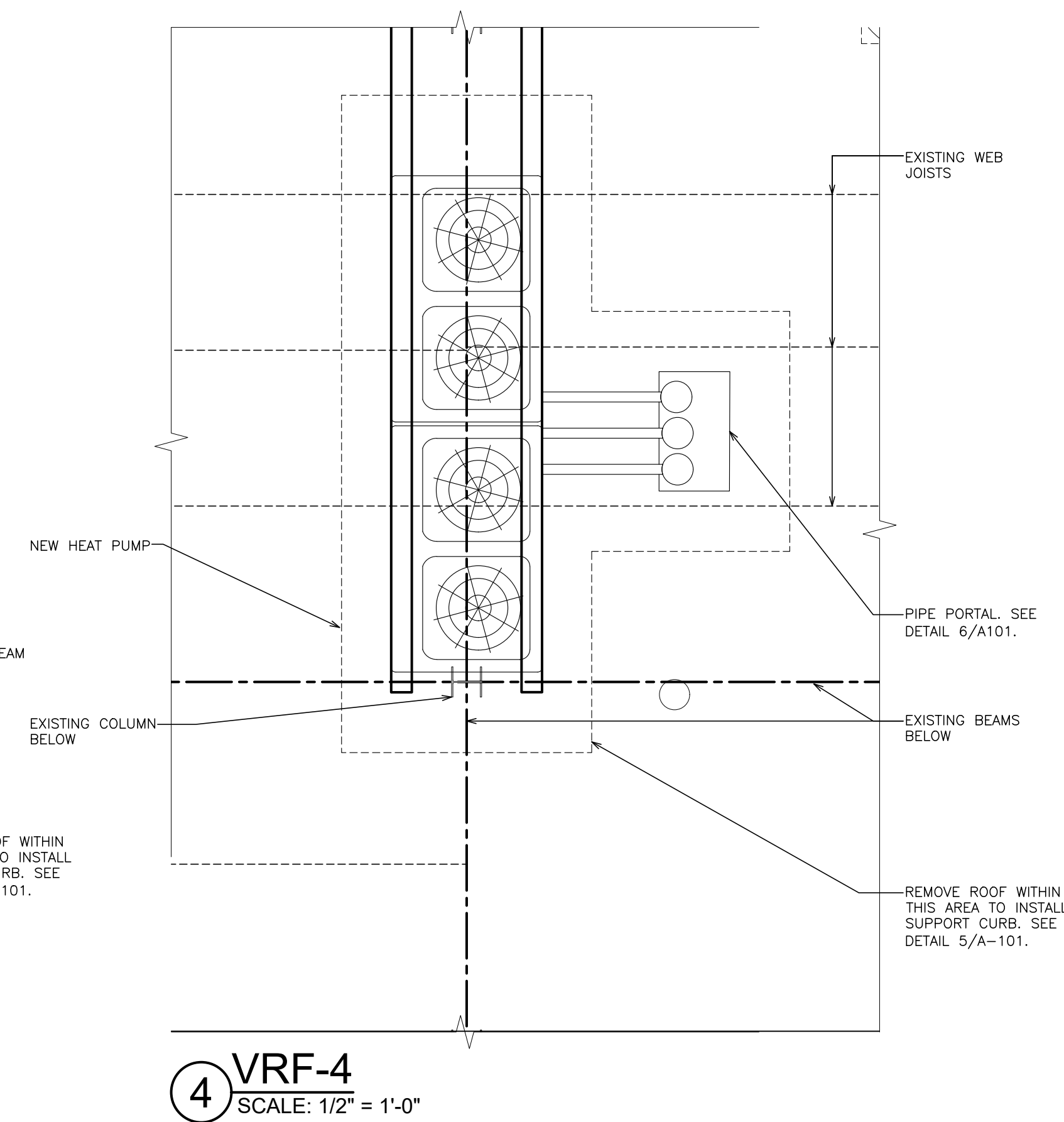
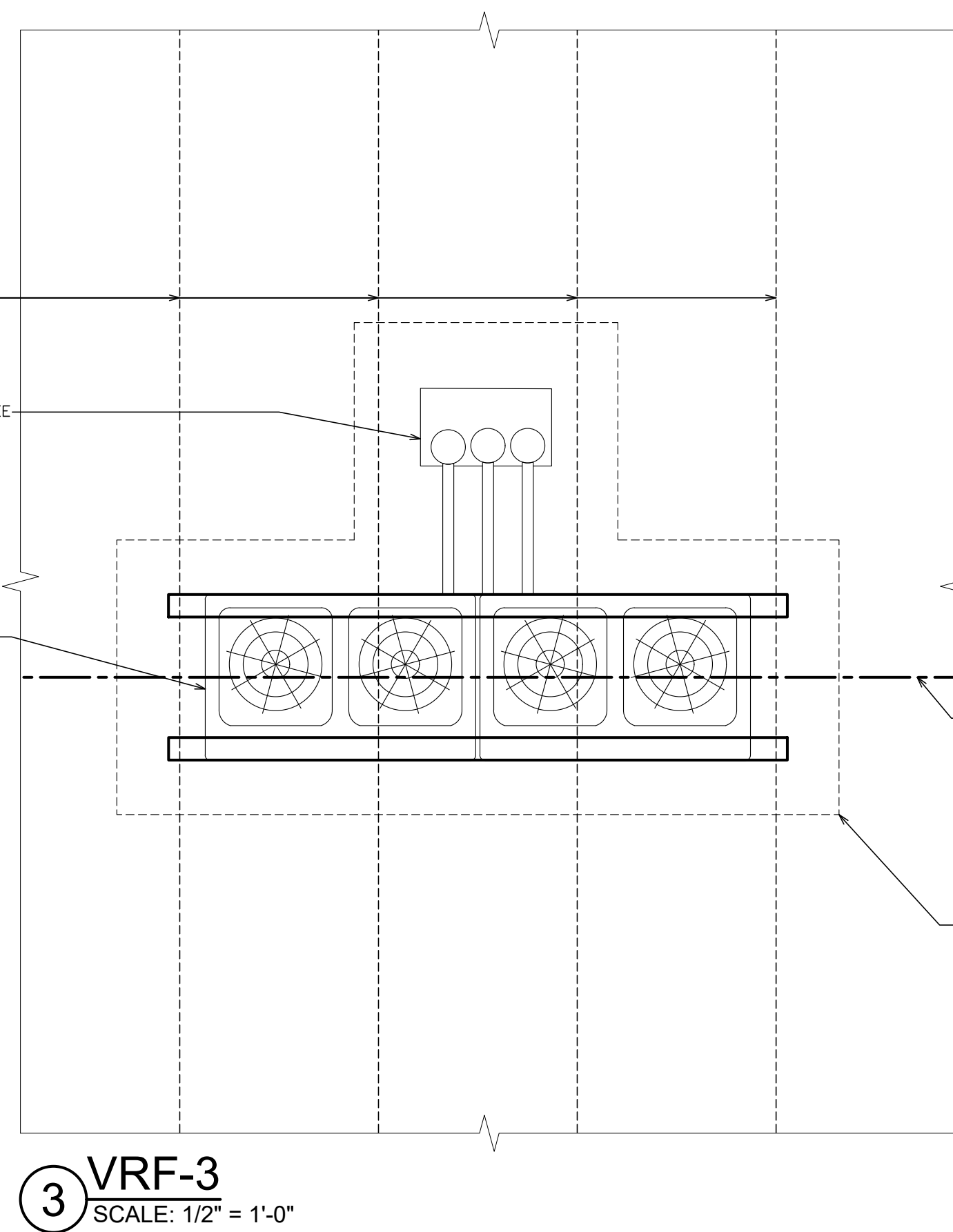
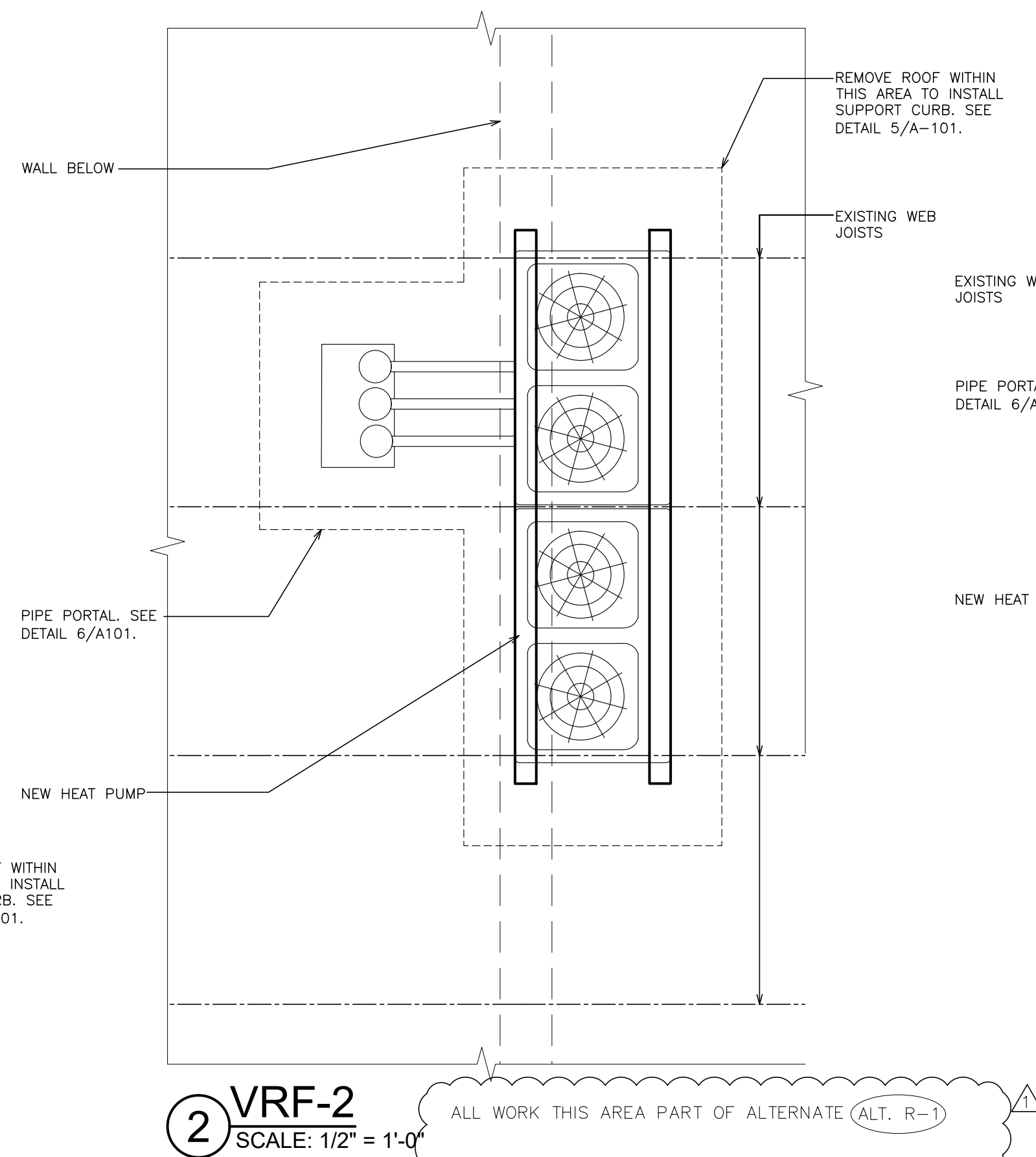
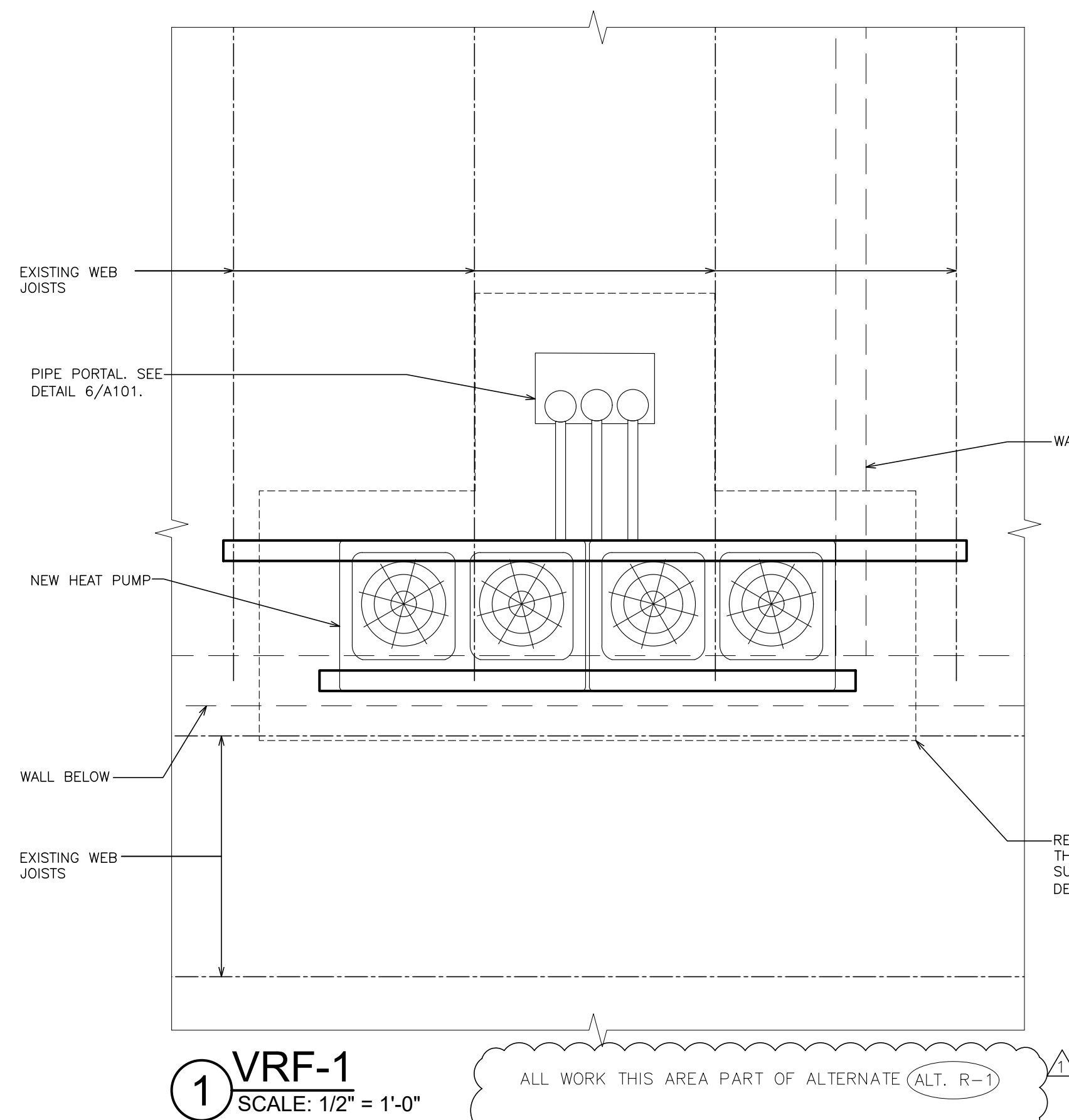
CONSULTANT(S):
**FULLER
D'ANGELO
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PLANNERS**
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**WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
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A-100



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.
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	EXISTING ROOF HATCH.

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ENGINEER:

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281 Gateway Street - Union, NY 10987
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CONSULTANT(S):

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STAMP

STATE OF NEW YORK
JACK D'ANGELO
No. 05944
Professional Engineer

**WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
AIR CONDITIONING UPGRADE**
225 WEST STREET EXT. WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
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SHEET TITLE	STRUCTURAL PLANS AND MISCELLANEOUS DETAILS
SHEET NO.	HS A-101

PATH - N:\1 - PROJEC

SHEET NO.

HS

M-104

ROOFTOP UNIT SCHEDULE																																				
MARK	SERVICE	MODEL NO.	CFM	O/A MIN	FAN MOTOR (HP) (SUPPLY)/(EXHAUST)	COOLING														HEATING																
						TYPE	TEMPERATURE (°F)					CAPACITY				ENT. WATER (°F)	LVG. WATER (°F)	EER	TYPE	TEMPERATURE (°F)			CAPACITY													
							ENT. AIR DB	WB	DB	WB	OD AMB DB/WB	TONS NOM.	MBH TOTAL	SENS.	GPM					ENT. AIR DB	LVG. AIR DB	SENS.														
(HS)	RTU-7	WRESTLING ROOM	AON-RN-008	2400	517	(1.7)/(1.2)	PKG. DX – R410A REFRIG.	80	66	56	53	95/75	8	90	68	—	—	—	12.5	HOT WATER	56	94	102	20	180	170	208/3/60	50	MCA (A) 50	MOP (A) 70	FACTORY DISC. YES	VFD YES	GFCI OUTLET YES	ECONOMIZER YES	1279	SEE NOTES 1-7
NOTE 1: PROVIDE DAMPERS SHOWN ON THE DRAWINGS AND ADDITIONAL DAMPERS AS NECESSARY FOR AIR BALANCING OR AS NEEDED TO COMPLY WITH ECOCNYS 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 VENTILATOR SCHEDULE (30)																								
MARK	SERVICE	MFR / MODEL	TYPE	TOTAL CFM	O/A MIN	DX COOLING COIL			HEATING COIL			MOTOR (ECM)		ELECTRICAL				LOUVER SIZE	REMARKS					
						TOT. MBH	SENS. MBH	ROWS	MBH	ROWS	FLUID	EWT	LWT	QTY	HP	VOLTAGE	FLA			MCA	MOP			
BASEMENT																								
UV-70-A	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. H-1		
UV-70-B		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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
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. H-1		
SECOND FLOOR																								
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-PAAD223	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 1,2,3,6,8,9			
UV-238	SCI. LAB 238	MAUHF3-PAAD223	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 1,2,3,6,8,9			
UV-239	SCI. LAB 239	MAUHF4-PAAD223	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-PAAD223	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 1,2,3,6,8,9			
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-PAAD223	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 1,2,3,6,8,9			
UV-245	SCI. LAB 245	MAUHF3-PAAD223	HORIZONTAL	1000	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 1,2,3,6,8,9			
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 RECOMMENDATIONS. 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 7: NOT USED NOTE 8: PROVIDE VRF COMPATIBLE UNITS, WHICH INCLUDE VRF ELECTRONIC EXPANSION VALVE KITS, VRF COMMUNICATION BOXES, ETC. PROVIDE 12" MINIMUM EXTENDED UTILITY CABINET FROM SAME MANUFACTURER TO MATCH NEW UV 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.																								

PTAC SCHEDULE																						
MARK	SERVICE	BRAND/MODEL NO.	TYPE	MAX CFM	MIN OA CFM	MAX OA CFM	COOLING COIL				HEATING COIL				ELECTRICAL				UNIT WEIGHT (LB)	LOUVER SIZE	REMARKS	
							EAT		OUTPUT (MBH)	EER	EAT DB (°F)	OUTPUT (MBH)	GPM	EWT	V/PH/HZ	MCA (A)	MOP (A)	FACTORY DISC.				
							DB	WB														
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	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	15	YES	102	16"x42"	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	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 (AGK01). 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.																						

HIGH SCHOOL UV-C LIGHTING 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
(*) 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.								

HIGH SCHOOL UV-C LIGHTING SCHEDULE								
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-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
SECOND 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.								

HIGH SCHOOL UV-C LIGHTING 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
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		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	1	
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.

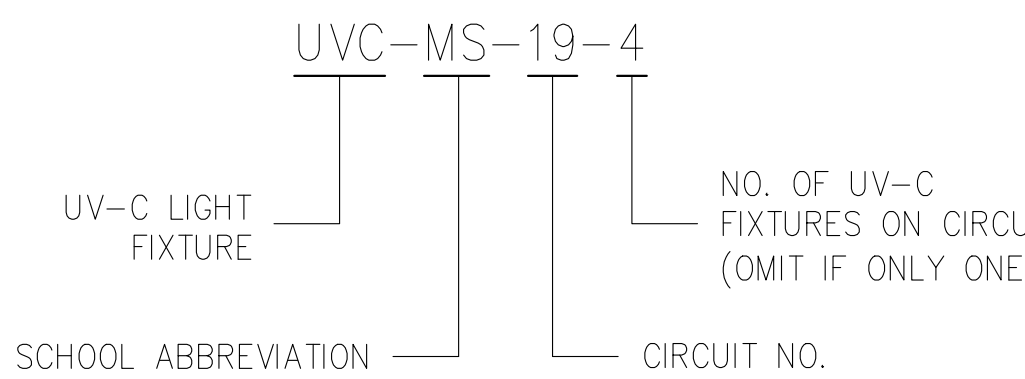
UV-C LIGHT FIXTURE SPECIFICATION AND INSTALLATION NOTES

- 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 INTERFERENCE.
- NOTE 3: UV-C CONTRACTOR TO PROVIDE AND COORDINATE CUTTING, PATCHING, SEALING, AND REINSULATING OF DISTURBED DUCTWORK. REINFORCE 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 FROM ALL UV-C FIXTURES ON THE CIRCUIT. THIS SERVICE SWITCH SHALL NOT 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 CIRCUIT MARK NOTED ABOVE. EACH 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

ENGINEER:

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CONSULTANT(S):

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ARCHITECTS PLANNERS

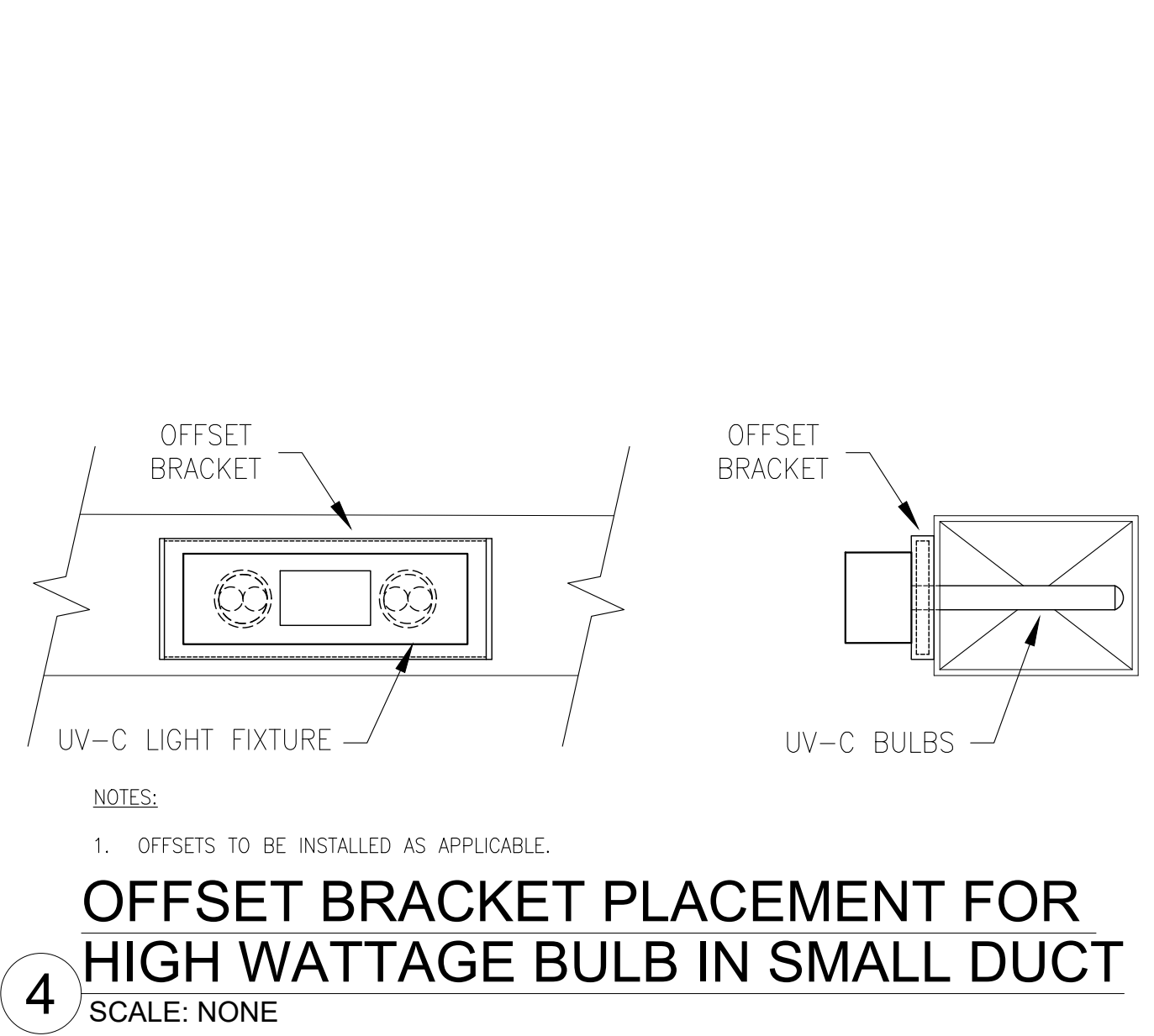
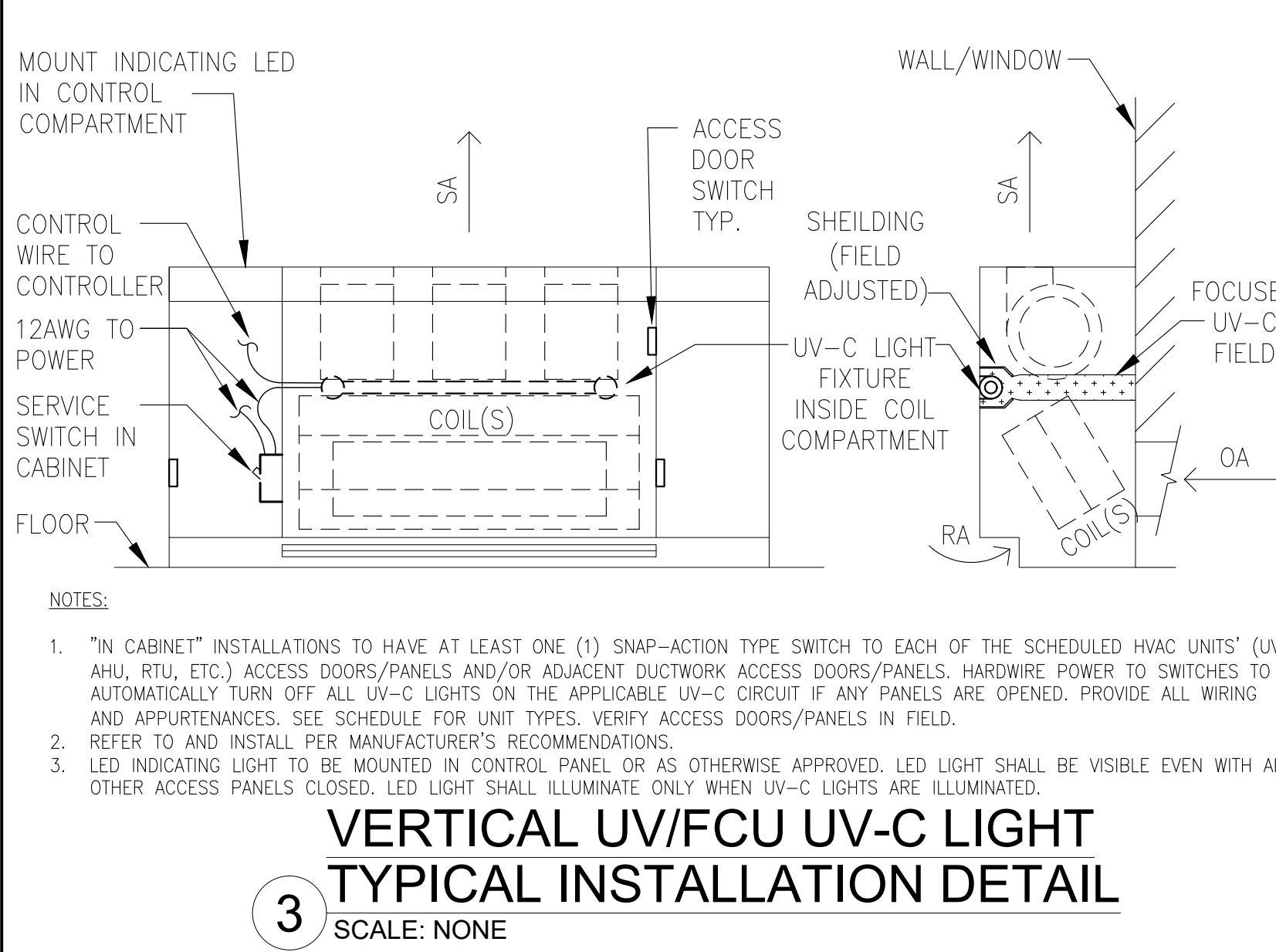
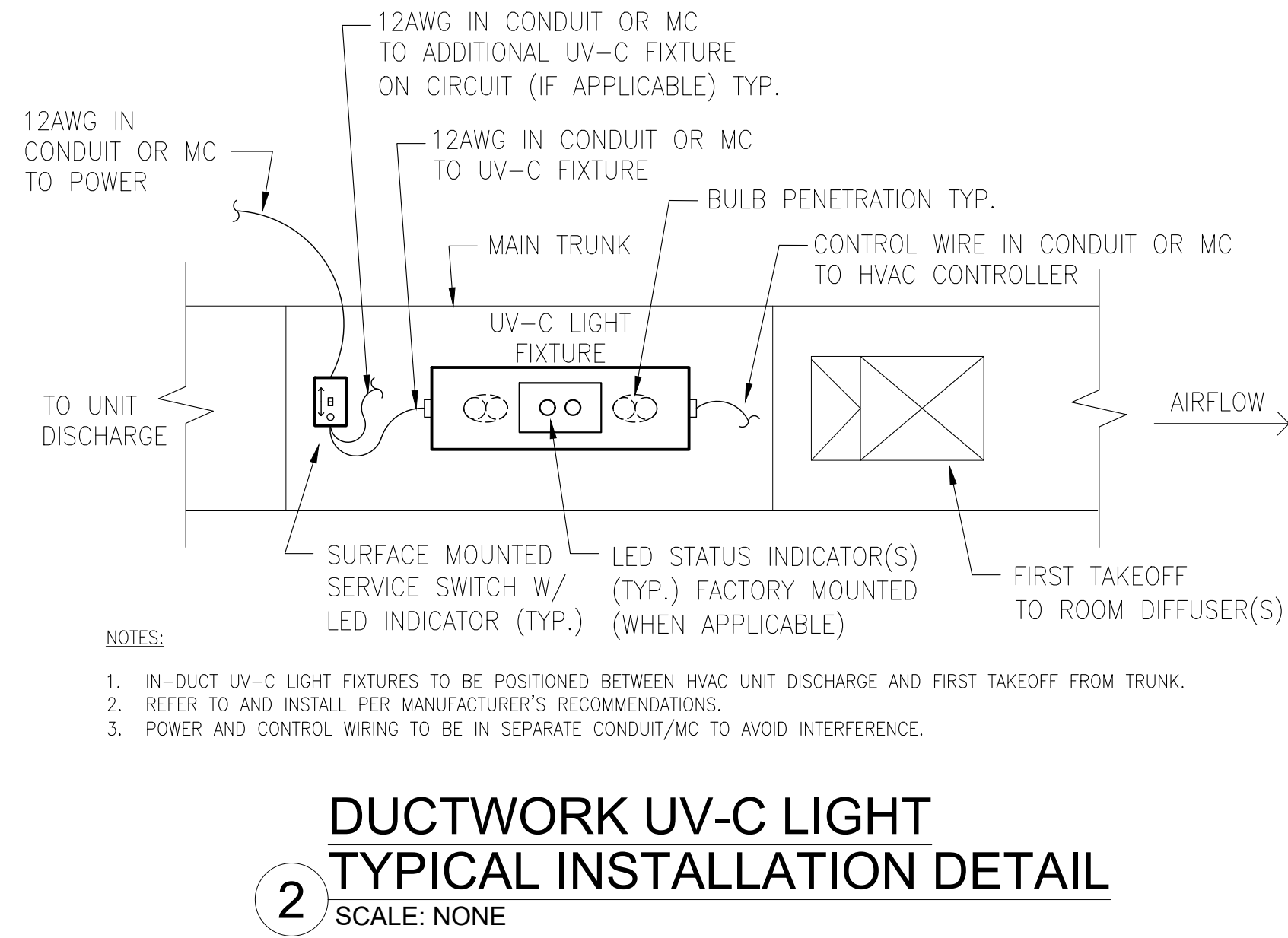
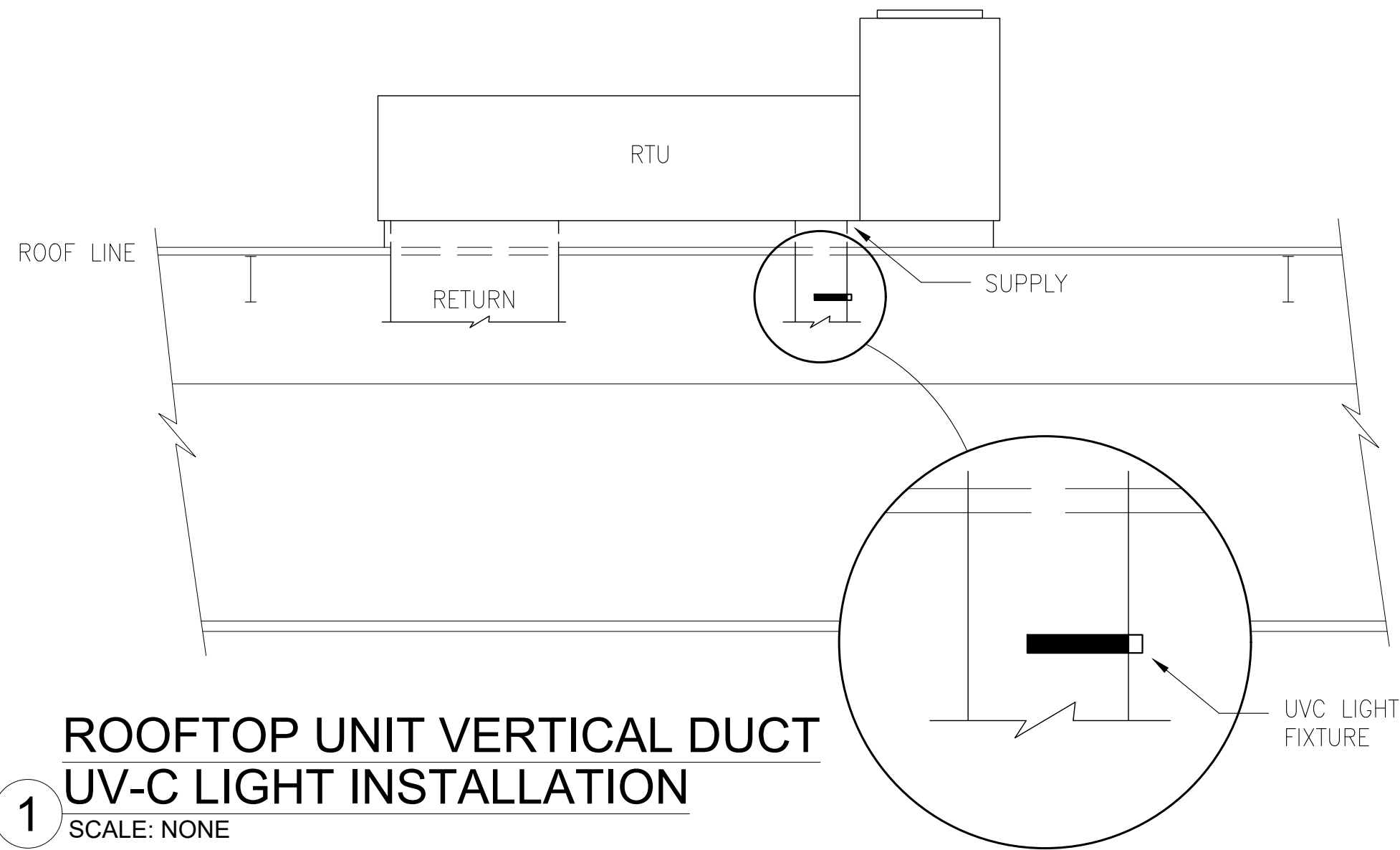
48 KNOLLWOOD ROAD
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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
AIR CONDITIONING UPGRADE
225 WEST STREET EXT, WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
SED NO. 44-21-01-06-0-001-042

PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.19.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	
HIGH SCHOOL UV-C LIGHT FIXTURE SCHEDULE	
SHEET NO.	
M-503	

FILE PATH: N:\1 - PROJECT DIRECTORIES\1- E & R Projects\05 - Warwick Valley CSD\05-21-04\Package3\Hdva\wv1\05-21-04-m503-m05.dwg



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

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

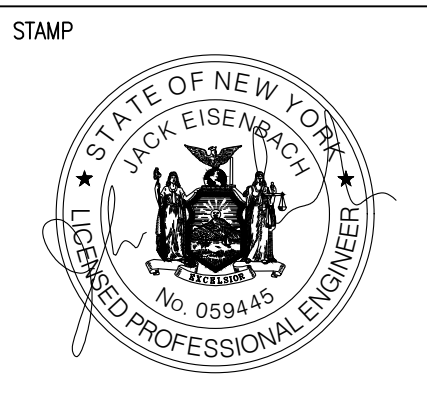
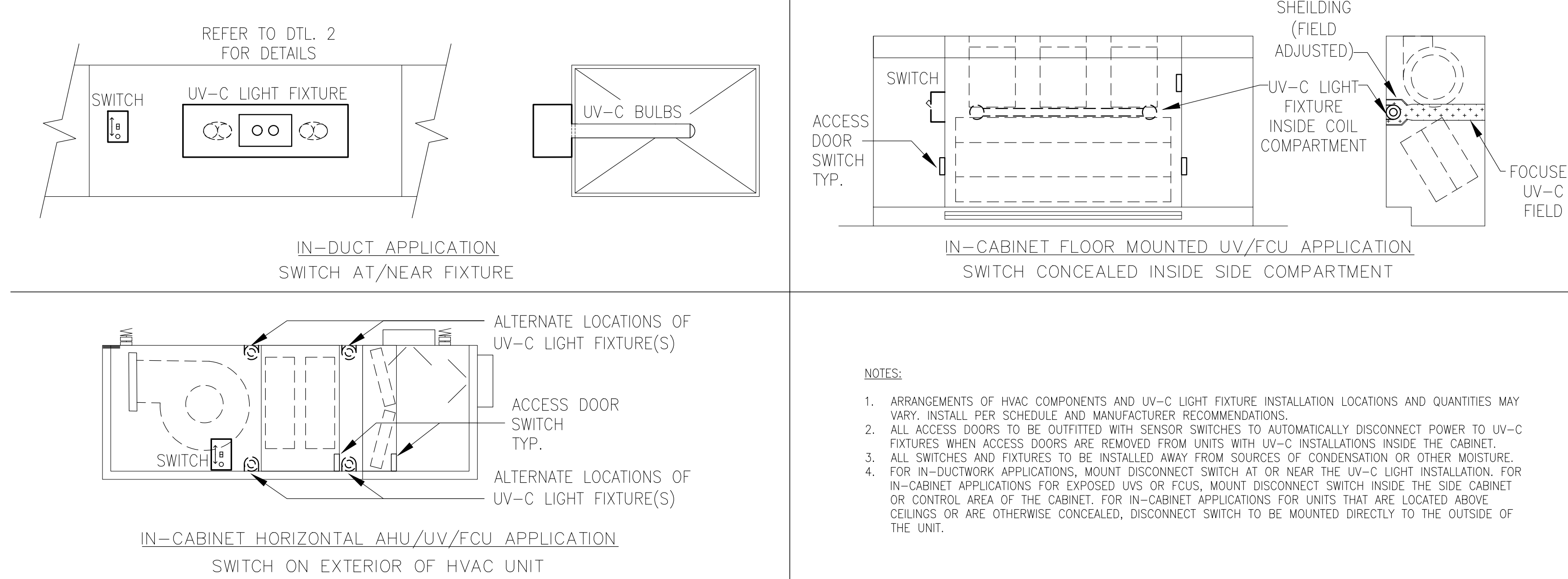
5 LABELING REQUIREMENTS AND LOCATIONS
SCALE: NONE

UV-C & LED "OFF" CONDITIONS (REASONS IN BOLD)			
"UNOCCUPIED MODE" UNIT/ FAN (ON)	"OCCUPIED MODE" UNIT/ FAN (ON)	"OCCUPIED MODE" UNIT/ FAN (ON)	"OCCUPIED MODE" UNIT/ FAN (ON)
DISC. SWITCH (ON) SWITCH LED (OFF) ALL ACCESS DOOR SNAP SWITCHES (CLOSED) UV-C (OFF) UV-C (OFF) NOTE 1	DISC. SWITCH (OFF) SWITCH LED (OFF) ALL ACCESS DOOR SNAP SWITCHES (CLOSED) UV-C (OFF) UV-C (OFF) NOTE 2	DISC. SWITCH (ON) SWITCH LED (OFF) ANY ACCESS DOOR SNAP SWITCH (OPEN) UV-C (OFF) UV-C (OFF) NOTE 3	DISC. SWITCH (ON) SWITCH LED (ON) ALL ACCESS DOOR SNAP SWITCHES (CLOSED) UV-C (ON) UV-C (ON) NOTE 4

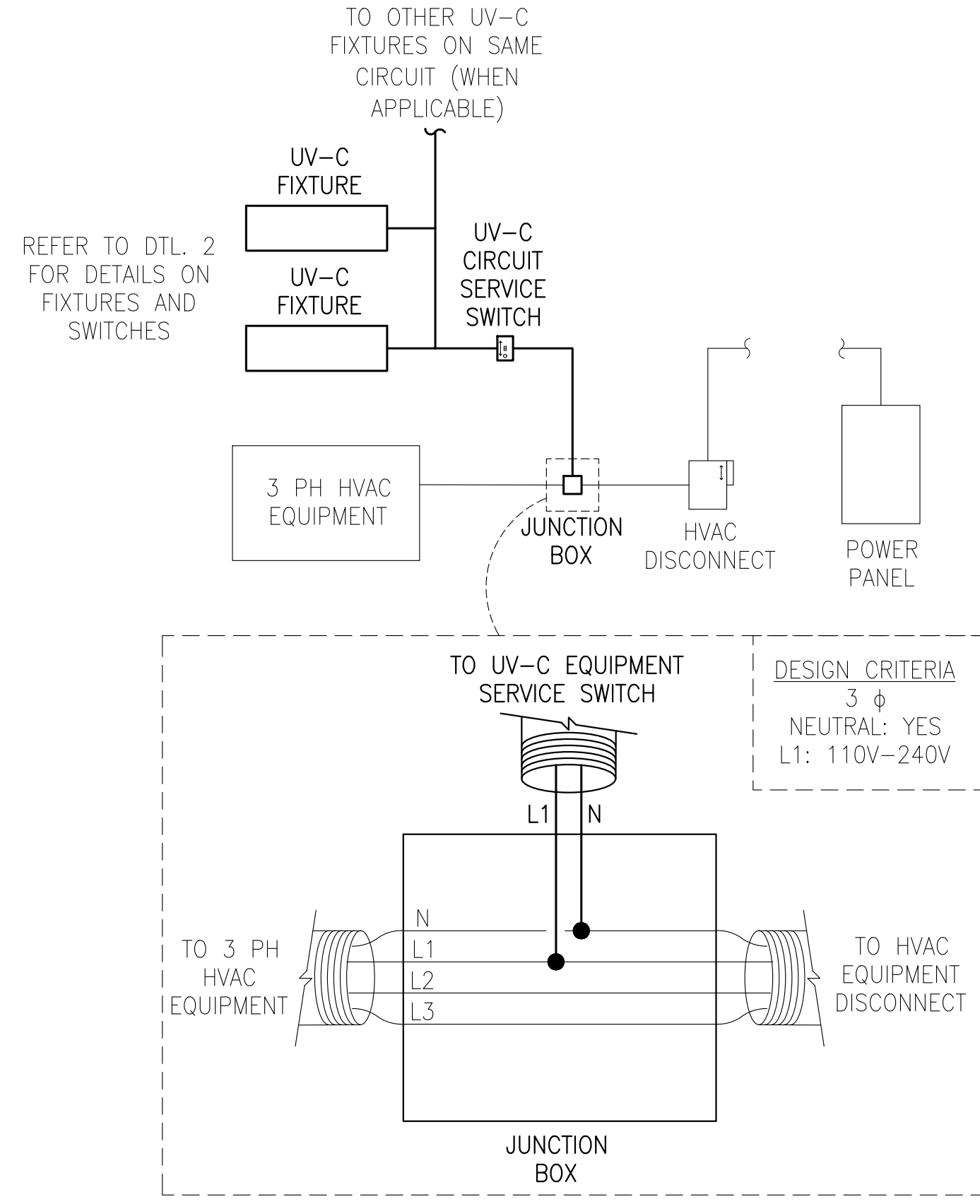
NOTES:

- 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.
- 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 THE DISCONNECTING SWITCH IS "OFF".
- 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.
- 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
SCALE: NONE

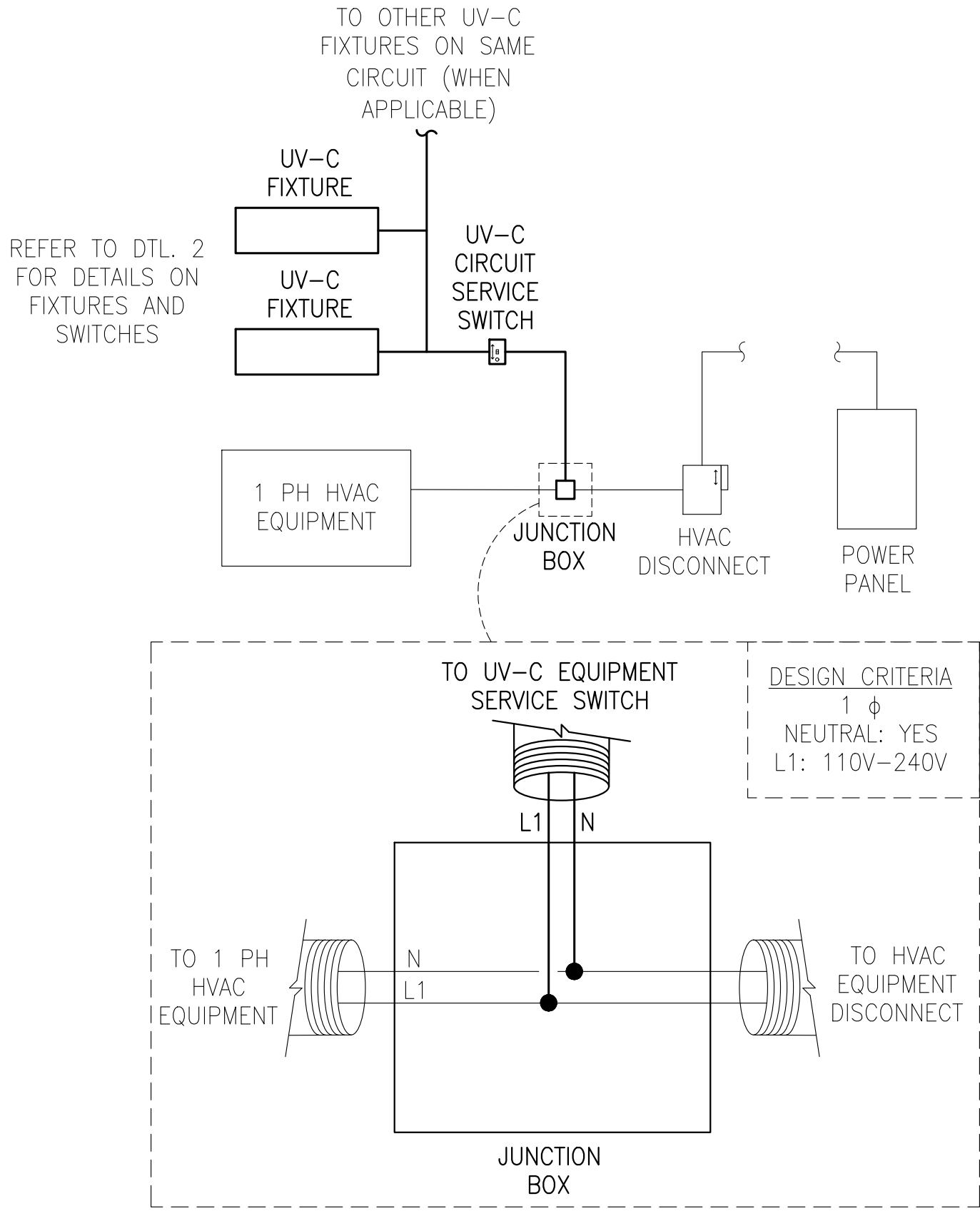


WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
AIR CONDITIONING UPGRADE
225 WEST STREET EXT. WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
PROJECT NO. 44-21-01-06-0-001-042



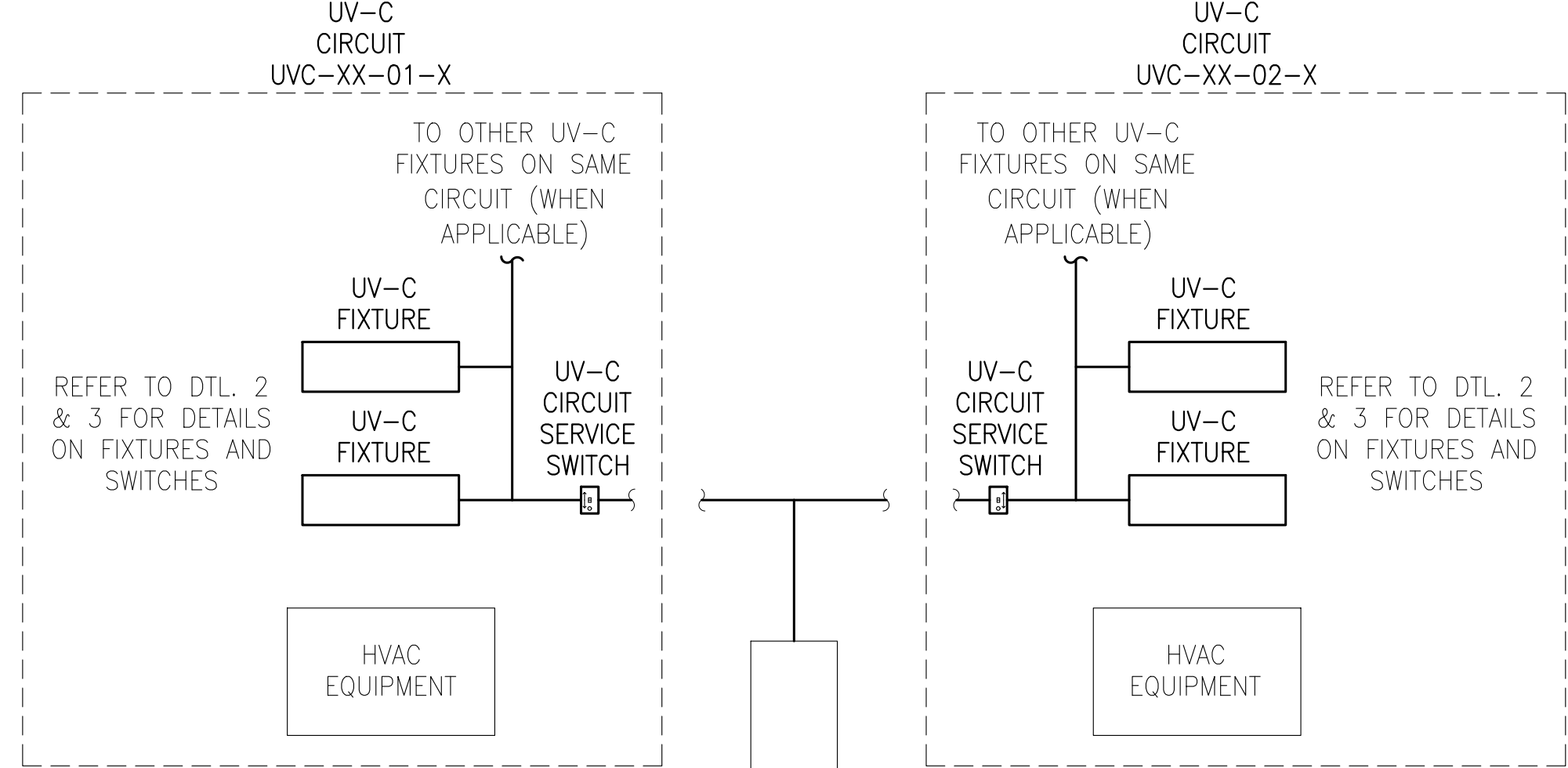
NOTES:

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



NOTES:

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

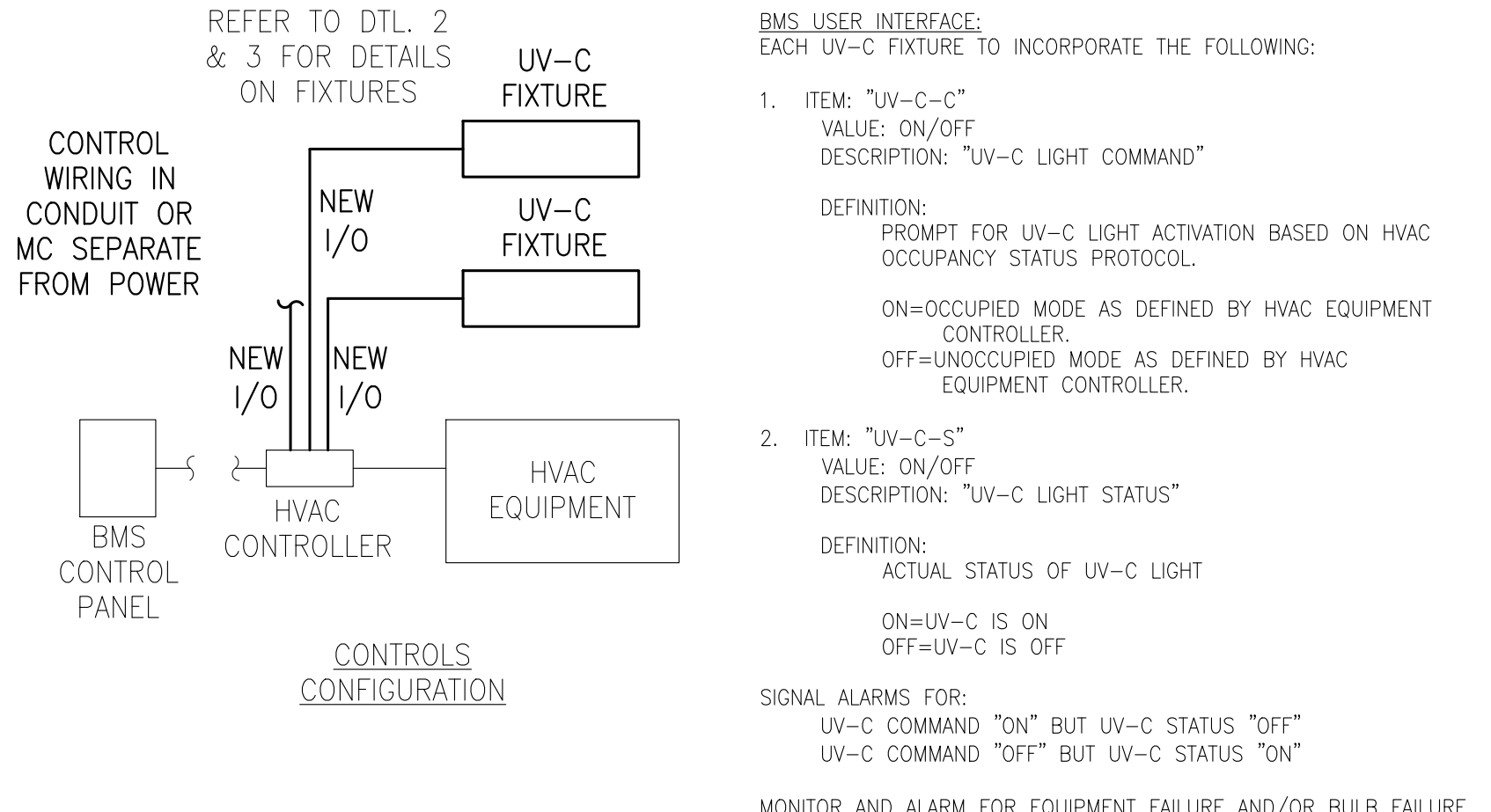


NOTES:

- 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.

BIDDING NOTE

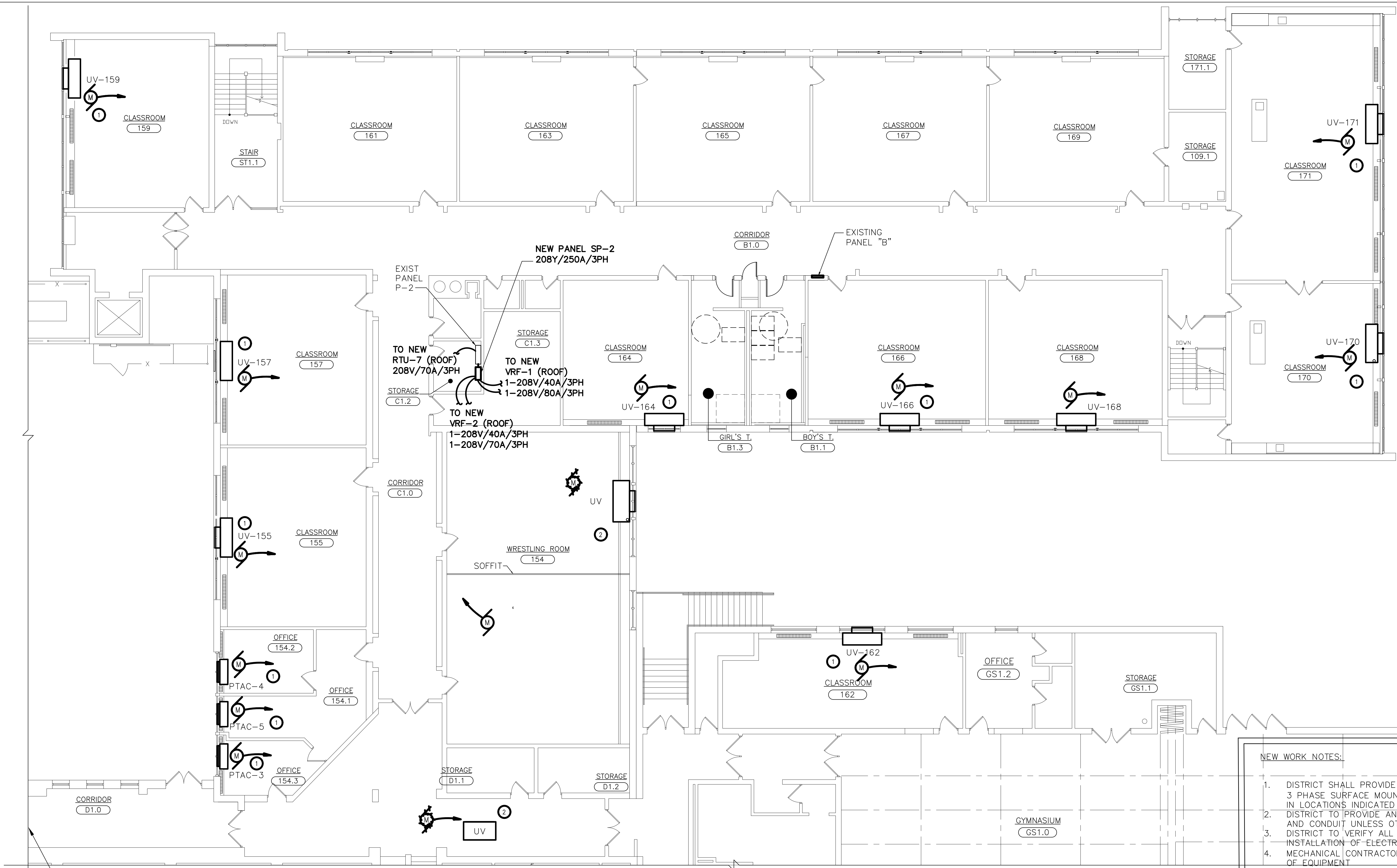
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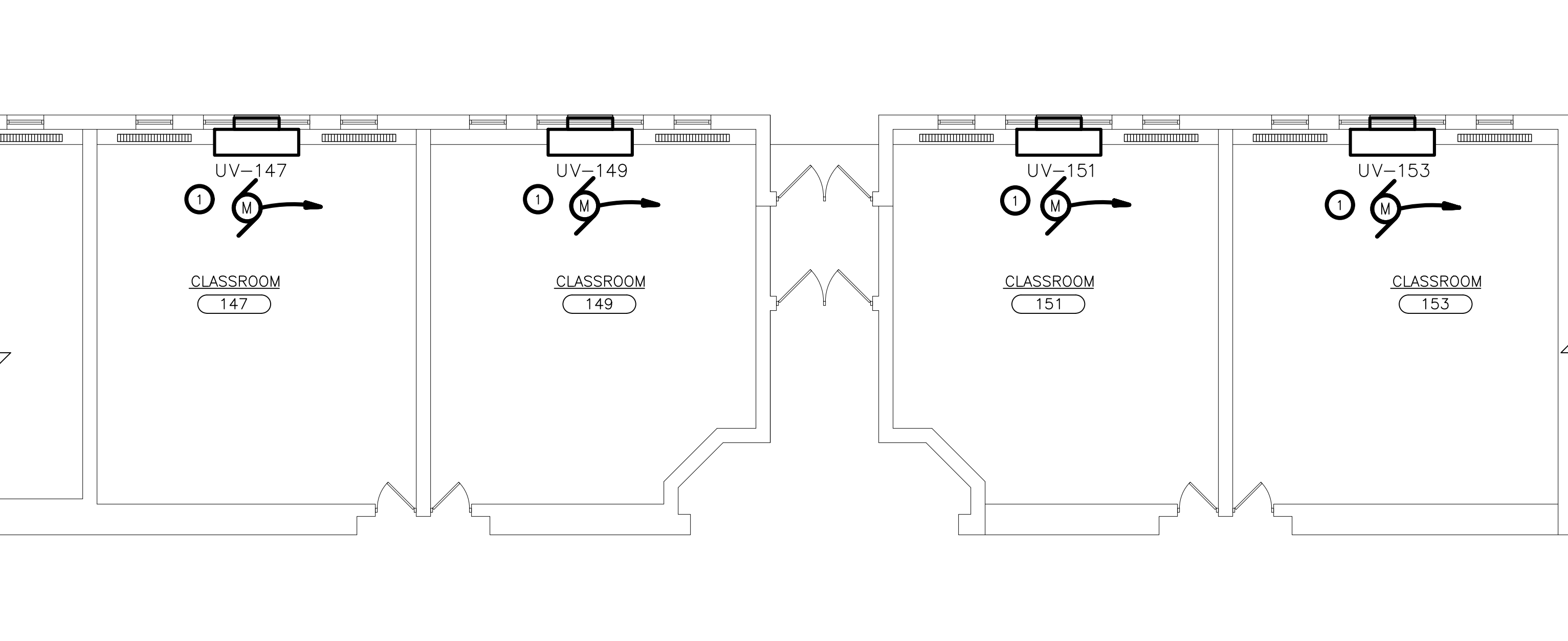
NOTES:

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

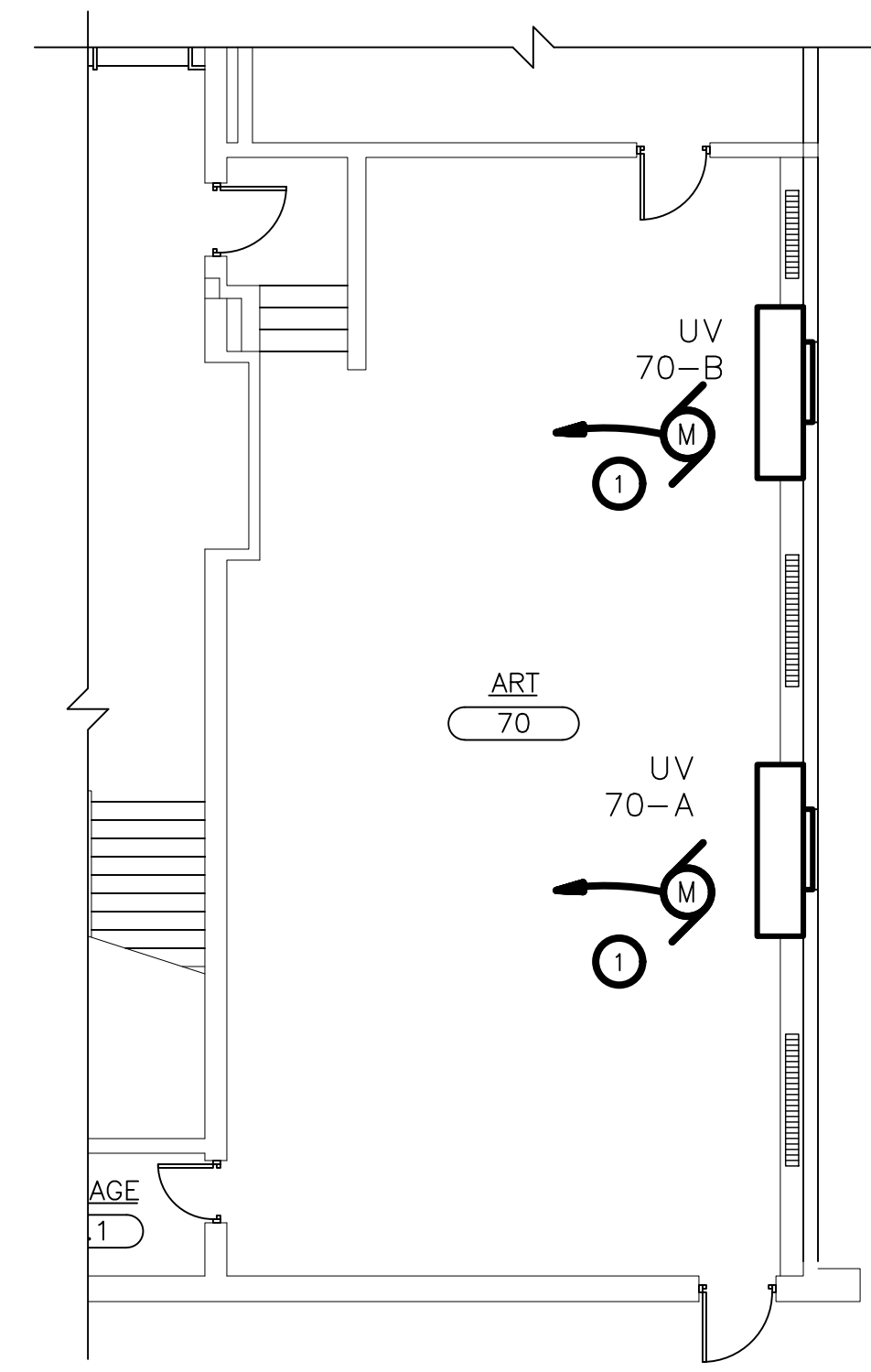
PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM	11.23.2022
ISSUED FOR BID	11.09.2022
SED SET	10.19.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	UV-C LIGHT FIXTURE DETAILS
SHEET NO.	M-504



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



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



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

NEW WORK NOTES:

- DISTRICT SHALL PROVIDE NEW 250A - MINIMUM 24 SPACE 208Y/120V, 4-WIRE, 3 PHASE SURFACE MOUNTED PANEL BOARDS 'P-4' AND 'SP-2' TO BE INSTALLED IN LOCATIONS INDICATED ON DRAWINGS BY DISTRICT.
- DISTRICT TO PROVIDE AND INSTALL ALL ELECTRICAL DISTRIBUTION PANELS, WIRING, AND CONDUIT UNLESS OTHERWISE NOTED.
- 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.
- 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.
- DISTRICT SHALL LABEL ALL NEW WORK, PANELS, AND CIRCUITS TO CLEARLY IDENTIFY EQUIPMENT, LOADS, AND CIRCUIT NUMBERS.
- CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

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.
- DISCONNECT POWER AND REMOVE BACK TO NEAREST JUNCTION BOX

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.

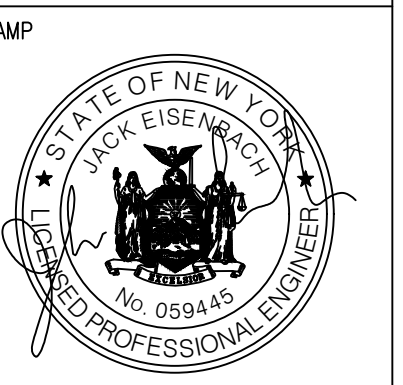
ALTERNATE NOTE

ALT. E-1:

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.

BASEMENT KEY PLAN
SCALE: NONE

FIRST FLOOR KEY PLAN
SCALE: NONE



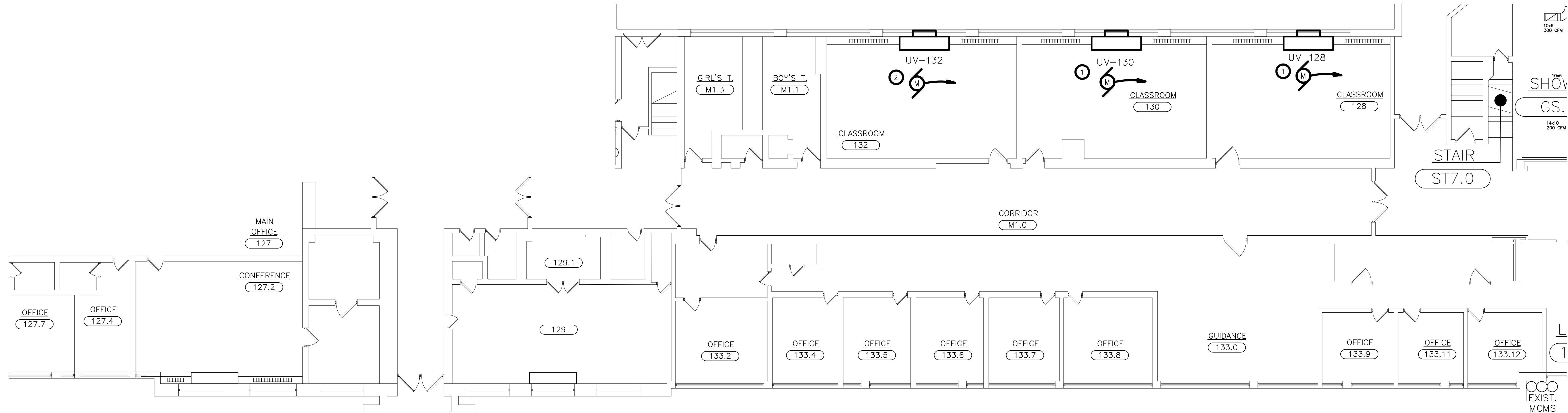
WARWICK VALLEY CENTRAL SCHOOL DISTRICT HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND AIR CONDITIONING UPGRADE
225 WEST STREET EXT. WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
SED NO. 44-21-01-06-0-001-042

PROJECT NO.	05-21-04
ISSUED FOR BID	11.23.2022
SET	11.09.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED

PARTIAL BASEMENT AND FIRST FLOOR PLANS - DEMO & NEW WORK

SHEET NO.

E-100



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

- KEYED NOTES - NEW WORK:
- 1 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.
 - 2 PROVIDE POWER TO NEW UNIT VENTILATOR. PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.

- NEW WORK NOTES:
- 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.
 - 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.
 - CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

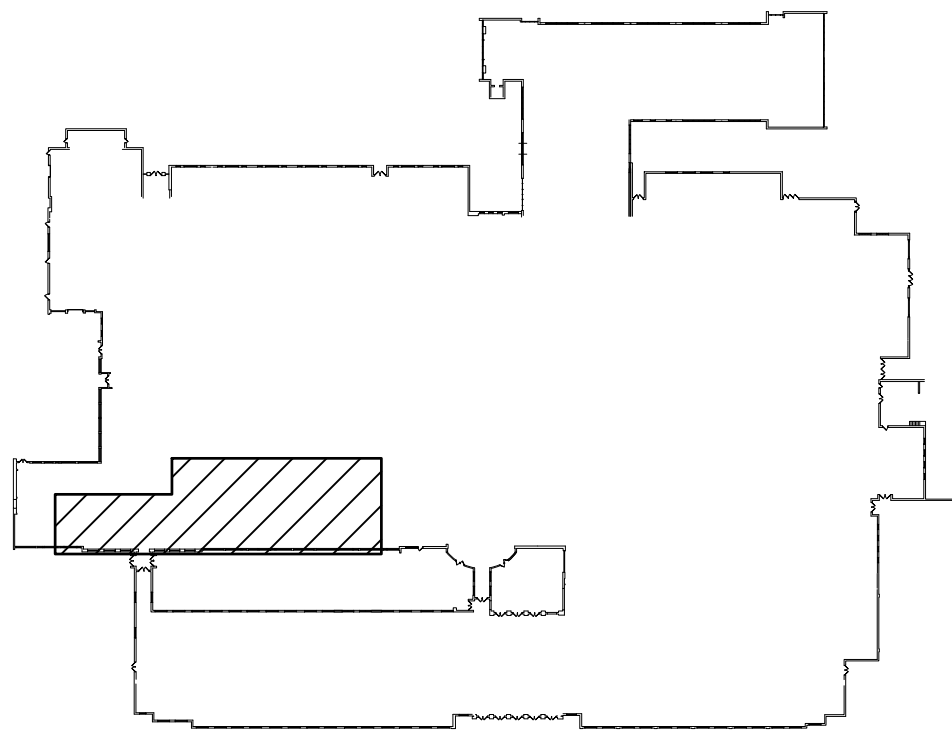
BIDDING NOTE

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ALTERNATE NOTE

ALT. E-1:

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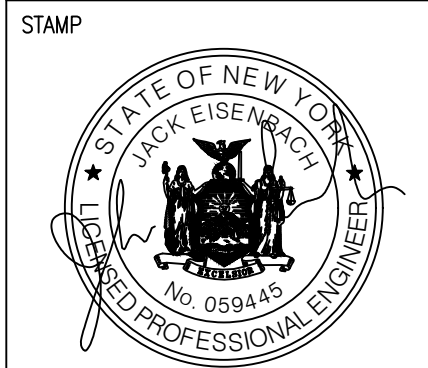


FIRST FLOOR KEY PLAN
SCALE: NONE



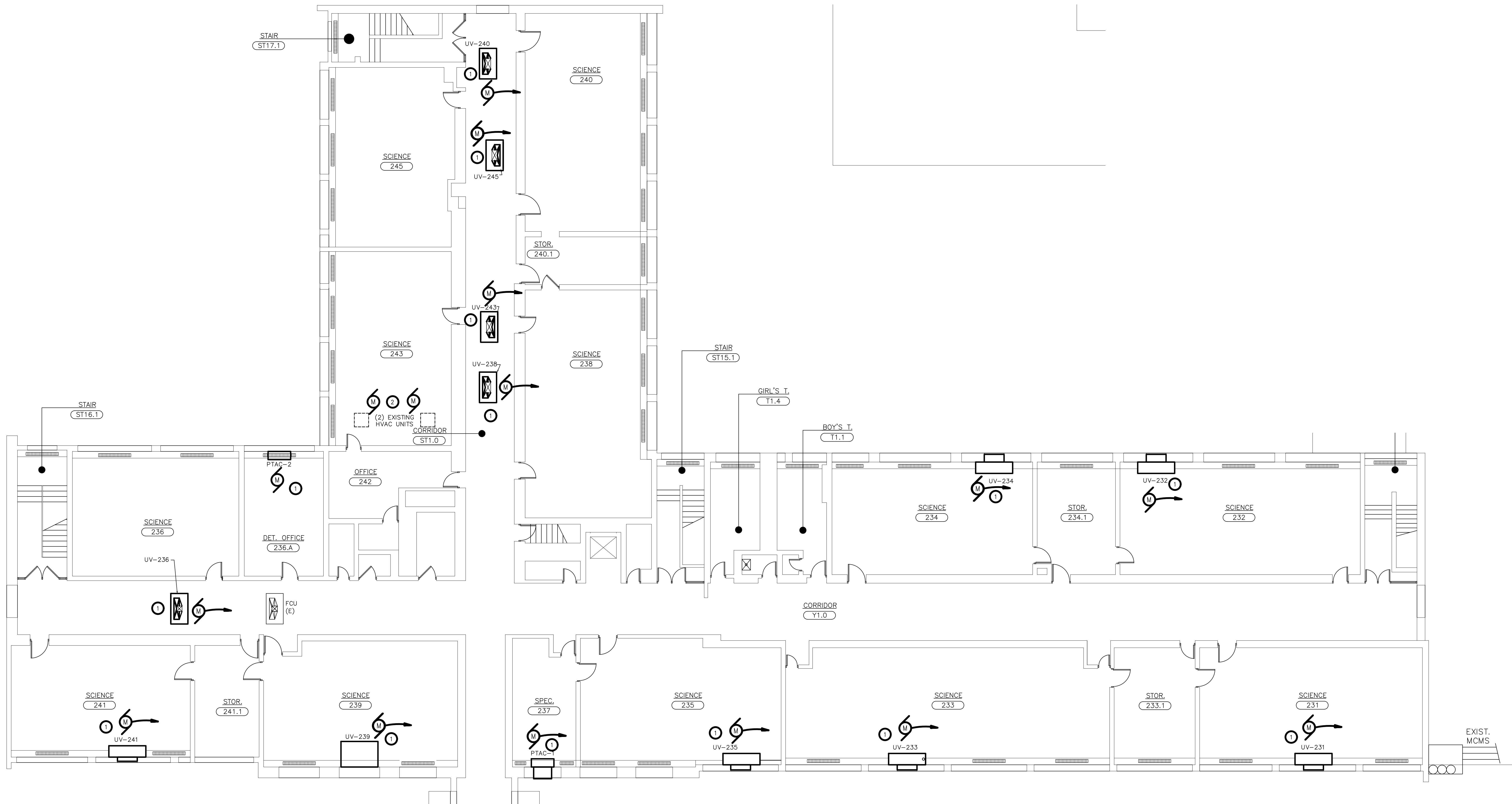
ENGINEER:
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201 Stevens Street - Union, NY 10987
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www.eandropc.com

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
AIR CONDITIONING UPGRADE
225 WEST STREET EXT. WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
SED NO. 44-21-01-06-D-001-042

PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.18.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	PARTIAL FIRST FLOOR PLAN - DEMO & NEW WORK
SHEET NO.	



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

KEYED NOTES - NEW WORK:

- 1 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.
- 2 DISCONNECT POWER TO (2) HVAC UNITS AND REMOVE BACK TO NEAREST JUNCTION BOX.

NEW WORK NOTES:

- 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.
- 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.
- CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

BIDDING NOTE

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ALTERNATE NOTE

ALT. E-1:

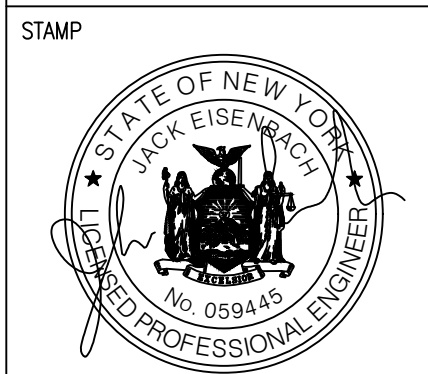
EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

SECOND FLOOR KEY PLAN
SCALE: NONE

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Eisenbach & Rohrer Engineering, P.C.
201 Stevens Street - Union, NY 10987
Ph: 845-738-1818 Fax: 845-738-6365
www.eer-engine.com

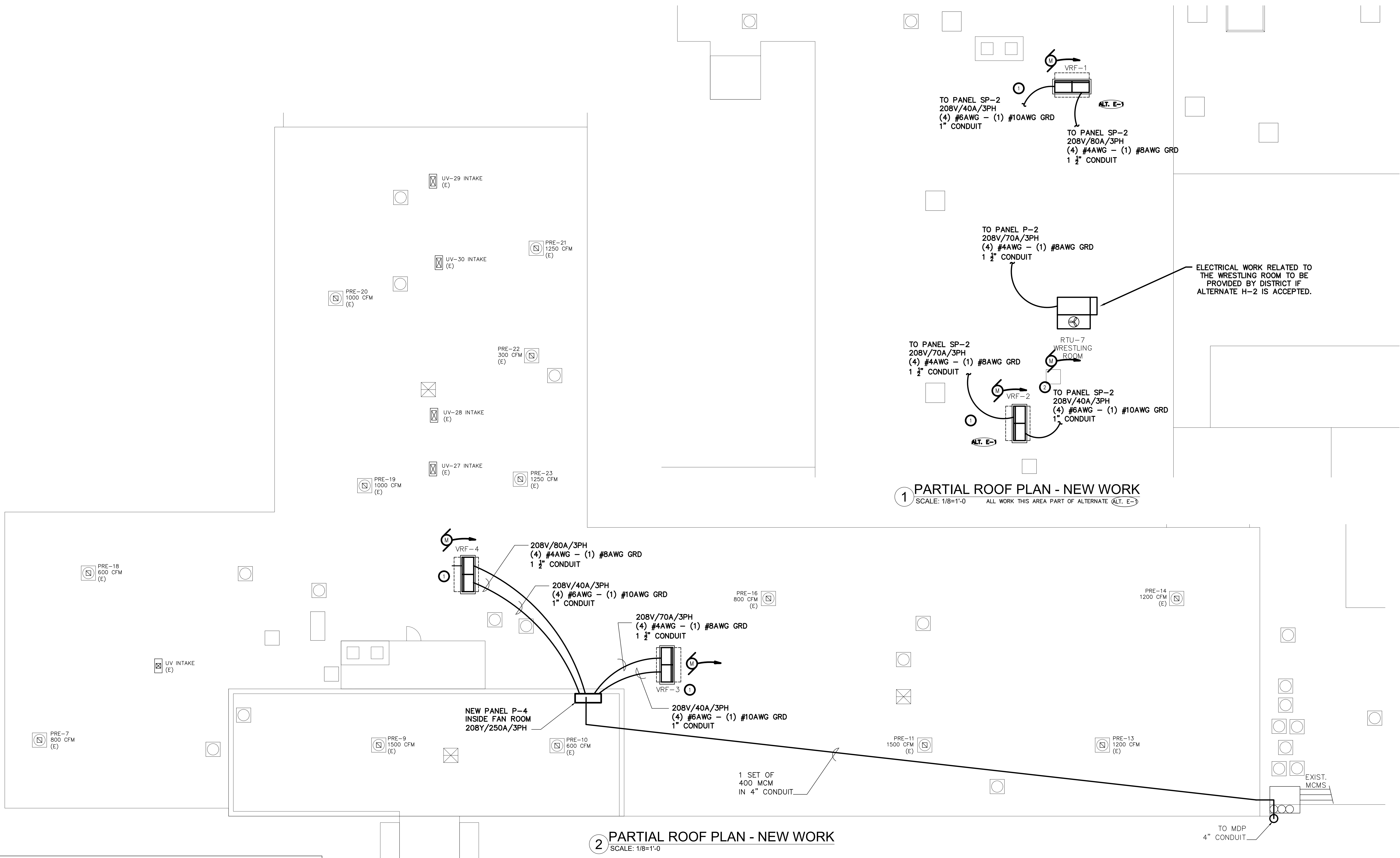
CONSULTANT(S):
FULLER D'ANGELO P.C.
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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
AIR CONDITIONING UPGRADE
225 WEST STREET EXT. WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
SED NO. 44-21-01-06-D-001-042

PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.18.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	PARTIAL SECOND FLOOR PLAN - DEMO & NEW WORK
SHEET NO.	

E-102



BIDDING NOTE

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ALTERNATE NOTE

ALT. E-1:

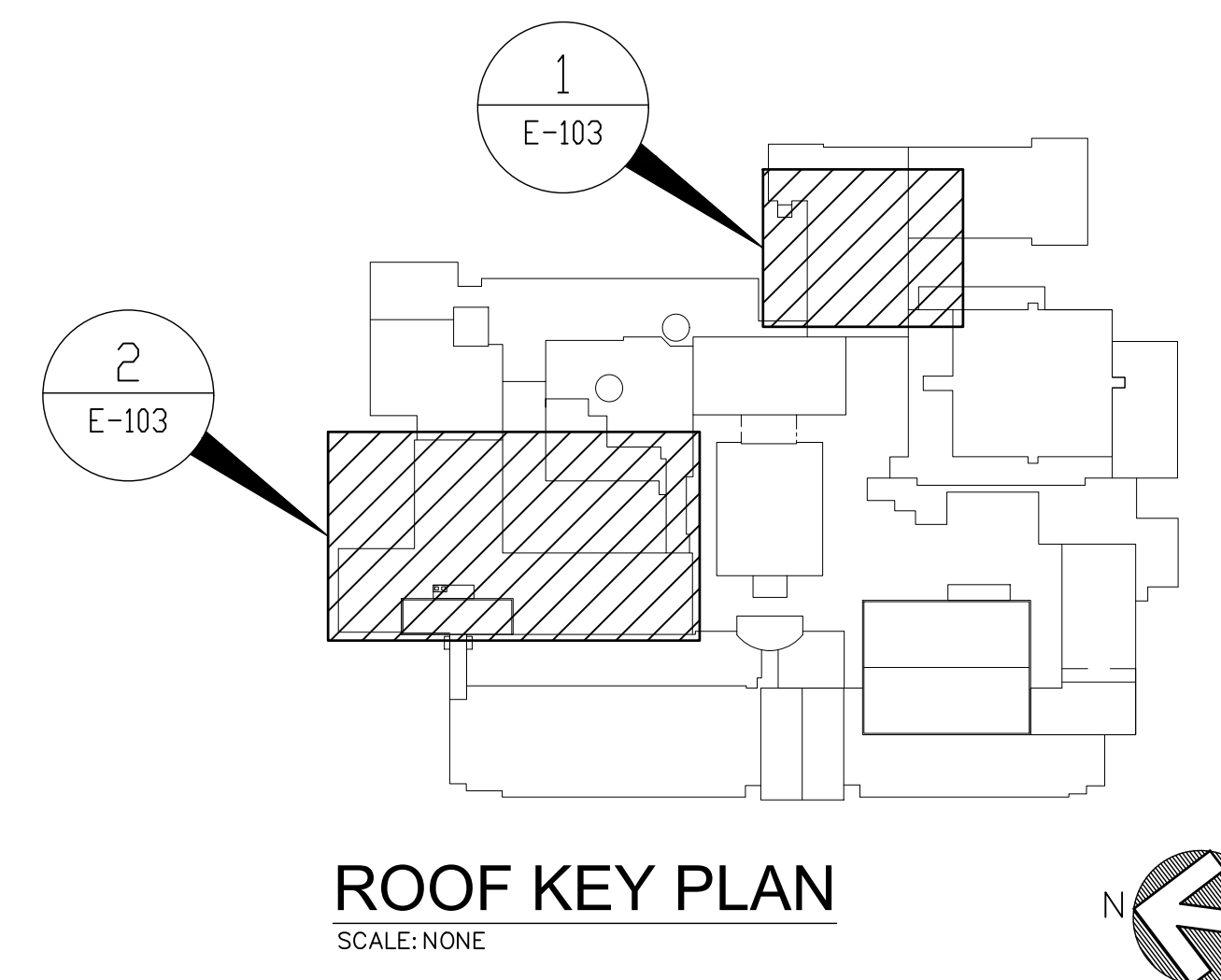
EQUIPMENT AND ASSOCIATED WORK WITH THIS MARK TO BE PROVIDED AS PART OF ALTERNATE E-1 ONLY. ALL OTHER UNMARKED WORK TO BE PROVIDED AS PART OF BASE BID.

KEYED NOTES - NEW WORK:

- 1 PROVIDE POWER TO NEW VRF(S). PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.
- 2 PROVIDE POWER TO NEW RTU-7. PROVIDE ALL APPURTENANCES. SEE ELECTRIC EQUIPMENT AND CONTROL SCHEDULE ON E500.

NEW WORK NOTES:

1. DISTRICT SHALL PROVIDE NEW 250A - MINIMUM 24 SPACE 208Y/120V, 4-WIRE, 3 PHASE SURFACE MOUNTED PANEL BOARDS 'P-4' AND 'SP-2' TO BE INSTALLED IN LOCATIONS INDICATED ON DRAWINGS BY DISTRICT.
2. DISTRICT TO PROVIDE AND INSTALL ALL ELECTRICAL DISTRIBUTION PANELS, WIRING, AND CONDUIT UNLESS OTHERWISE NOTED.
3. DISTRICT TO VERIFY ALL SERVICE VOLTAGES PRIOR TO MODIFICATION OR INSTALLATION OF ELECTRICAL EQUIPMENT.
4. MECHANICAL CONTRACTOR (MC) SHALL COORDINATE WITH DISTRICT FOR LOCATION OF EQUIPMENT.
5. MC SHALL PROVIDE AND INSTALL ALL CONTROL, SENSOR, AND SIGNALING WIRE AND CONDUIT BETWEEN EQUIPMENT AND BMS.
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7. DISTRICT SHALL LABEL ALL NEW WORK, PANELS, AND CIRCUITS TO CLEARLY IDENTIFY EQUIPMENT, LOADS, AND CIRCUIT NUMBERS.
8. CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.



ROOF KEY PLAN
SCALE: NONE

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ENGINEER:

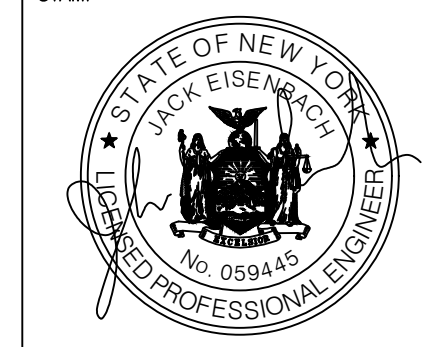
Fuller D'Angelo P.C.
48 KNOLLWOOD ROAD
ELMSFORD NEW YORK 10523
TEL: 914.892.4444
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CONSULTANT(S):

Fuller D'Angelo P.C.
ARCHITECTS
PLANNERS

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STAMP



WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
AIR CONDITIONING UPGRADE

225 WEST STREET EXT. WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
SED NO. 44-21-01-06-D-001-042

PROJECT NO. 05-21-04

ISSUED FOR BID 11.23.2022

SED SET 10.18.2022

REVISION DATE

DRAWN BY

CHECKED BY

SHEET SIZE 30" x 42"

SCALE AS NOTED

SHEET TITLE

PARTIAL ROOF PLAN - NEW WORK

SHEET NO.

E-103

FILE PATH: N:\1 - PROJECT DIRECTORIES\1 - E & R Projects\05 - Warwick Valley CSD\05-21-04\05-21-04-01-06-D-001-042.dwg

UTILITY
SUPPLY
ORANGE
&
ROCKLAND
UTILITIES

O&R UTILITIES
POLE #48424/45634

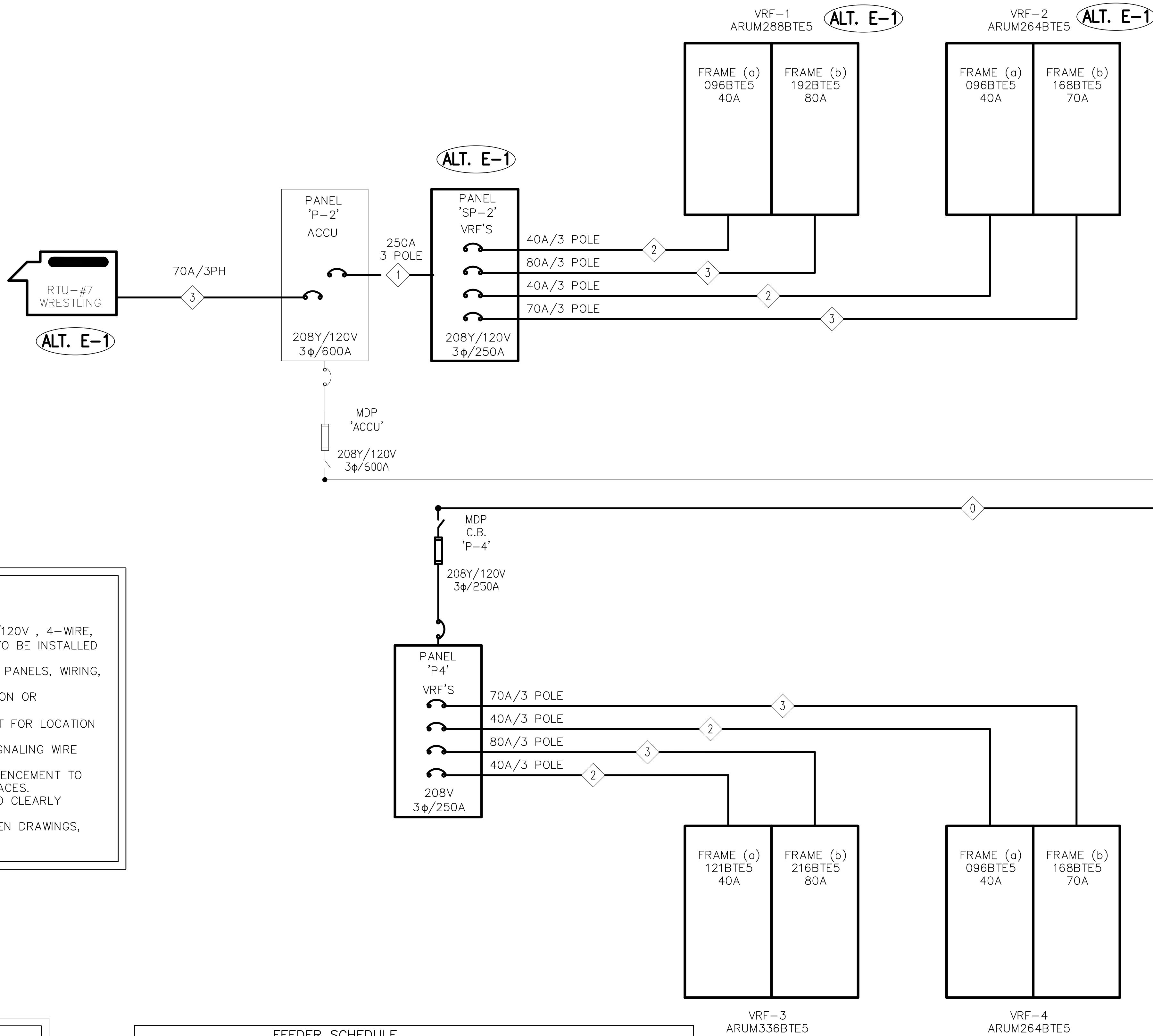
CT CABINET
& METER

600A/3PH
13.2kV PRIMARY
SWITCH AMPS = 600A
CUSTOMER OWNED
PAD MOUNTED SWITCHGEAR

13.2kV PRIMARY
1000 kVA SECONDARY
208Y/120V 3 ϕ 60Hz 4 WIRE
CUSTOMER OWNED
PAD MOUNTED TRANSFORMER

208Y/120V
3 ϕ /2000A

MAIN
SWITCH
GEAR
"MDP"



NEW WORK NOTES:

- DISTRICT SHALL PROVIDE NEW 250A - MINIMUM 24 SPACE 208Y/120V , 4-WIRE, 3 PHASE SURFACE MOUNTED PANEL BOARDS 'P-4' AND 'SP-2' TO BE INSTALLED IN LOCATIONS INDICATED ON DRAWINGS BY DISTRICT.
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- 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.
- DISTRICT SHALL LABEL ALL NEW WORK, PANELS, AND CIRCUITS TO CLEARLY IDENTIFY EQUIPMENT, LOADS, AND CIRCUIT NUMBERS.
- CONTACT ENGINEERING FOR DISCREPANCIES OR CONFLICTS BETWEEN DRAWINGS, SPECIFICATION, OR SCHEDULES.

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

ALT. E-1:

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.

FEEDER SCHEDULE

SYMBOL	FEEDER SIZE	REMARKS
①	4 400MCM + 1 4AWG GRD. IN 4" CONDUIT	1,2,7
②	4 250MCM + 1 4AWG GRD. IN 3" CONDUIT	1,3,7
③	4 6AWG + 1 10AWG GRD. IN 1" CONDUIT	1,7
④	4 4AWG + 1 8AWG GRD. IN 1 1/2" CONDUIT	1,7
⑤	2 18AWG IN 1/2" CONDUIT	4,5,6,7

FEEDER SCHEDULE REMARKS:

- DISTRICT SHALL PROVIDE AND INSTALL ALL POWER WIRING UNLESS OTHERWISE NOTED. FIELD VERIFY EXACT WIRE SIZE AND QUANTITY WITH EQUIPMENT SUPPLIER.
- PANEL 'P-4' LOCATION TO BE DETERMINED.
- PANEL 'SP-2' TO BE LOCATED WITHIN SAME SPACE AND NOT TO EXCEED 10 FEET FROM PANEL 'P-2'.
- CONTROL/SIGNAL WIRING BY MECHANICAL CONTRACTOR (MC). CONFIRM EXACT WIRING REQUIREMENTS WITH EQUIPMENT MANUFACTURER PRIOR TO INSTALLATION.
- MC TO PROVIDE AND INSTALL CONTROL/SIGNAL WIRE AND CONDUIT. MC SHALL COORDINATE WITH DISTRICT FOR EQUIPMENT LOCATION.
- MC SHALL FIELD VERIFY DISTANCE FROM EQUIPMENT TO BMS AND MAKE FINAL CONNECTION TO BMS AND PROGRAM IT'S OPERATION.
- ALL CONDUCTORS AND GROUNDS SHALL BE COPPER UNLESS OTHERWISE SPECIFIED.

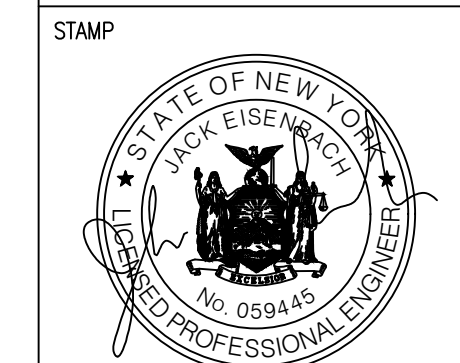
ONE-LINE DIAGRAM

SCALE: NOT TO SCALE

ENGINEER:
Eisenbach & Rohrer Engineering P.C.
200 Geneva Street - Wallingford, CT 06495
TEL 203-738-7818 Fax 203-738-7865
www.eisenbach.com

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

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WARWICK VALLEY CENTRAL SCHOOL DISTRICT
HIGH SCHOOL UNIT VENTILATOR REPLACEMENT AND
AIR CONDITIONING UPGRADE
225 WEST STREET EXT. WARWICK, NY 10990
WV HIGH SCHOOL - 89 SANFORDVILLE ROAD, WARWICK, NY 10990
SED NO. 44-21-01-06-0-001-042

PROJECT NO.	05-21-04 05-20-06
BID ADDENDUM ISSUED FOR BID	11.23.2022 11.09.2022
SED SET	10.18.2022
REVISION	DATE
DRAWN BY	
CHECKED BY	
SHEET SIZE	30" x 42"
SCALE	AS NOTED
SHEET TITLE	ONE-LINE DIAGRAM
SHEET NO.	

E-401

ELECTRIC EQUIPMENT AND CONTROL SCHEDULE																										
EQUIPMENT										CONTROLLER DEVICE TYPE & ACCESSORIES (UNO, PROVIDED BY ELECTRICAL CONTRACTOR)																
DESIGNATION	DESCRIPTION	LOCATION	SIZE			VOLTAGE / PHASE/ HZ	PANEL / CONTROL CENTER	CIRCUIT NUMBER	BREAKER SIZE (A)	POWER WIRING FROM PANEL TO CONTROL UNIT		POWER WIRING FROM CONTROL UNIT TO EQUIPMENT *	GROUND WIRE (SIZED PER NEC)	PACKAGED CONTROL UNIT (BY OTHERS)	VARIABLE FREQUENCY DRIVE (VFD)	CONTROL STARTER	NON-FUSED DISCONNECT SWITCH	CONTROL DEVICE INSTALL LOCATION	DUCT SMOKE DETECTOR (SUPPLY)	DUCT SMOKE DETECTOR (RETURN)	FIRE ALARM FAN SHUTDOWN	DISCONNECT SWITCH			REF. NOTES	REMARKS
			HP	MOP	MCA					WIRE	COND.											FRAME	FUSE	LOCATION		
VRF-1	VRF OUTDOOR UNIT	ROOF	3.6 (x2)	60	55.1	208V/3ø/60HZ	PANEL "SP-2"	CB #2,4,6	80	4 AWG	1 ½"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
VRF-2	VRF OUTDOOR UNIT	ROOF	3.6 (x2)	60	55.1	208V/3ø/60HZ	PANEL "SP-2"	CB #1,3,5	40	6 AWG	1"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
	VRF OUTDOOR UNIT	ROOF	3.6 (x2)	60	55.1	208V/3ø/60HZ	PANEL "SP-2"	CB #7,9,11	70	4 AWG	1 ½"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
VRF-3	VRF OUTDOOR UNIT	ROOF	3.6 (x2)	60	55.1	208V/3ø/60HZ	PANEL "SP-2"	CB #8,10,12	40	6 AWG	1"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
	VRF OUTDOOR UNIT	ROOF	3.6 (x2)	60	55.1	208V/3ø/60HZ	PANEL "P-4"	CB #2,4,6	80	4 AWG	1 ½"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
VRF-4	VRF OUTDOOR UNIT	ROOF	3.6 (x2)	60	55.1	208V/3ø/60HZ	PANEL "P-4"	CB #1,3,5	40	6 AWG	1"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
	VRF OUTDOOR UNIT	ROOF	3.6 (x2)	60	55.1	208V/3ø/60HZ	PANEL "P-4"	CB #7,9,11	70	4 AWG	1 ½"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
PTAC-5	PACKAGE AC W/ HEAT	OFFICE 154.1	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
	PACKAGE AC W/ HEAT	OFFICE 154.2	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
PTAC-3	PACKAGE AC W/ HEAT	OFFICE 154.3	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
PTAC-1	PACKAGE AC W/ HEAT	CLASS 237	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
PTAC-2	PACKAGE AC W/ HEAT	CLASS 236A	FRAC	15	6.3	115V/1ø/60HZ	LOCAL PANEL		20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-70-A	UNIT VENTILATOR	CLASS. 70	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-70-B	UNIT VENTILATOR		FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-128	UNIT VENTILATOR	CLASS. 128	FRAC	15	6.3	115V/1ø/60HZ	LOCAL PANEL		20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-130	UNIT VENTILATOR	CLASS. 130	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-132	UNIT VENTILATOR	CLASS. 132	FRAC	15	6.3	115V/1ø/60HZ	LOCAL PANEL		20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-147	UNIT VENTILATOR	CLASS. 147	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-149	UNIT VENTILATOR	CLASS. 149	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-151	UNIT VENTILATOR	CLASS. 151	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-153	UNIT VENTILATOR	CLASS. 153	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
RTU-7	ROOFTOP AIR HANDLER	WRES RM 154	1.7	70	50	208V/3ø/60HZ	PANEL "P-2"	CB #38,40,42	70	4 AWG	1 ½"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-155	UNIT VENTILATOR	CLASS. 155	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-157	UNIT VENTILATOR	CLASS. 157	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-159	UNIT VENTILATOR	CLASS. 159	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-162	UNIT VENTILATOR	CLASS. 162	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-164	UNIT VENTILATOR	CLASS. 164	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-166	UNIT VENTILATOR	CLASS. 166	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-168	UNIT VENTILATOR	CLASS. 168	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-170	UNIT VENTILATOR	CLASS. 170	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-171	UNIT VENTILATOR	CLASS. 171	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		(ALT. E-1)
UV-231	UNIT VENTILATOR	CLASS. 231	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-232	UNIT VENTILATOR	CLASS. 232	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-233	UNIT VENTILATOR	CLASS. 233	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-234	UNIT VENTILATOR	CLASS. 234	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-235	UNIT VENTILATOR	CLASS. 235	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-236	UNIT VENTILATOR	CLASS. 236	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-238	UNIT VENTILATOR	CLASS. 238	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-239	UNIT VENTILATOR	CLASS. 239	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-240	UNIT VENTILATOR	CLASS. 240	FRAC	15	12	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-241	UNIT VENTILATOR	CLASS. 241	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-243	UNIT VENTILATOR	CLASS. 243	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		
UV-245	UNIT VENTILATOR	CLASS. 245	FRAC	15	6.3	115V/1ø/60HZ	REUSE EXIST.	REUSE EXIST.	20	12 AWG	3/4"	FACTORY WIRE	----	----	----	FACTORY WIRE	BY BMS	FACTORY WIRE	OU		YES	----	----	----		

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

AU - AT UNIT

OU - ON UNIT

N/A - NOT APPLICABLE

FRAC. - FRACTIONAL

- FOLLOW NEC 2020 (NFPA 70) REQUIREMENTS.
- PROVIDE GFCI OUTLETS AT VRF-3&4 WIRED WITH 2-#12 AND 1-#12 GND IN ¾" CONDUIT FROM EXISTING NEARBY PANEL. PROVIDE NEW 20A CIRCUIT BREAKER AND ALL APPURTENANCES.
- PROVIDE GFCI OUTLET AT RTU-7 WIRED WITH 2-#12 AND 1-#12 GND IN ¾" 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 ¾" CONDUIT FROM EXISTING PANEL P-2 AND SHARE CIRCUIT WITH RTU-7'S GFCI. PROVIDE NEW 20A CIRCUIT BREAKER AND ALL APPURTENANCES.
- PROVIDE NEW TYPED PANEL BOARD LEGENDS IN NEW AND EXISTING PANELS. FOR EXISTING PANELS, REPLACE EXISTING PANEL BOARD LEGEND TO REFLECT ALL CHANGES MADE.

(ALT. E-1)

NEW PANEL SCHEDULE

PANEL ID: PANEL "P-4" 120-208Y/3 PHASE/4 WIRE										NEW PANEL										LOCATION: PENTHOUSE									
NOTES		CIR. No.		CIRCUIT DESCRIPTION		BKR.		Ø		BKR.		CIRCUIT DESCRIPTION		CIR. No.		NOTES													
		1						A						2															
2		3		(NEW) VRF-3		40A		B		80A		(NEW) VRF-3		4		2													
		5						C						6															
		7						A						8															
2		9		(NEW) VRF-4		70A		B		40A		(NEW) VRF-4		10		2													
		11						C						12															
		13		OPEN SPACE								OPEN SPACE		14															
		15		OPEN SPACE				B				OPEN SPACE		16															
		17		OPEN SPACE				C				OPEN SPACE		18															
		19		OPEN SPACE				A				OPEN SPACE		20															
		21		OPEN SPACE				B				OPEN SPACE		22															
		23		OPEN SPACE				C				OPEN SPACE		24															



Project: Warwick Valley CSD - High School Unit Ventilator Replacement & Air Conditioning Upgrade

Pre-Bid Meeting Minutes: November 16, 2022

Date: November 16, 2022 @ 3:30 AM	Next Meeting Scheduled: TBD	E&R # 05-21-04	Meeting Location: District Office - Conference Room	Attachments: Sign-In Sheet
--	---------------------------------------	------------------------------	--	--------------------------------------

Attendance:

Than Harrington (WVCSD), Jack Eisenbach (E&R), Mark Byrne (WVCSD), Matt Gallmann (Lombardo), Keith Clasen (Ashley Mechanical), Eric DeRise (S&O Construction), Ernie (Custodian for WVCSD)

Page 1 of 1

<u>Item</u>	<u>Description</u>	<u>Action</u>
1.	Jack reviewed the scope of the project and indicated there is an alternate. This will be divided so there are 2 alternates for HVAC and the wrestling room will be a separate alternate.	
2.	The work in the wrestling room is indicated on drawing M104.	
3.	There are 2 prime contractors; HVAC and Roofing.	
4.	The electric work is by the District.	
5.	Controls and the UV-C lights are under contract already.	
6.	The work is planned with Magic Air (basis of design) equipment as the representative indicated turn around is 12-14-weeks, optimally.	
7.	The work is planned for summer 2023. Some of the piping and the work on the roof could be done before summer.	
8.	After a brief question and answer time, the contractors were taken to several of the rooms in the project base bid.	
9.	There being no other questions, the meeting was adjourned.	

End of Meeting Minutes

SIGN IN SHEET



Eisenbach & Ruhne
ENGINEERING, P. C.

291 Genesee St., Utica, NY 13501
315-735-1916 Fax 315-735-6365
www.erengpc.com

Project Name: Warwick Valley CSD
High School

Project #: 05-21-04

Date: November 16, 2022

Unit Ventilator Replacement & Air Conditioning Upgrade

Time: 3:30 PM

Location: Administration Building

Project Manager: Jack Eisenbach

Meeting Type: Pre-Bid

Page ____ / ____

Contact Name (print legibly)	Company / Address	Phone/Fax/Email
Heath CLASEN	Ashley Mechanical	Ph: 845 331 1652 Fax: _____ Email: KCLASEN@ashleymechanical.com
Matt Gallmann MARK BYRNE	Joseph Lombardo PTH WVED	Ph: 845-357-6537 Fax: _____ Email: mgallmann@josephlombardo.com
THAN, J.E		Ph: _____ Fax: _____ Email: _____
Eric DeRose	STO Construction	Ph: 845-635-2916 Fax: _____ Email: edertse@stocnstr.com

Ernie

SECTION 00 2114

RFI FORM

CONTRACTOR'S REQUEST FOR INFORMATION NO. 1

E&R RFI NO: _____

NAME OF PROJECT:

**WARWICK VALLEY CSD HIGH SCHOOL UNIT VENTILATOR REPLACEMENT & AIR
CONDITIONING UPGRADE**

NAME OF OWNER: Warwick Valley Central School District

A/E PROJECT NO: 05-21-04

- A. ENGINEER: Eisenbach and Ruhnke Engineering, P.C.
291 Genesee Street
Utica, New York 13501

Phone: 315.735.1916 Fax: 315.735.6365 Email: jeisenbach@erengpc.com jjouben@erengpc.com
acorrell@erengpc.com

- B. FROM (CO. NAME): Bertussi Contracting Inc

DATE: 11/21/2022

EMAIL/FAX NO. sweber@bertussis.com

CONTACT NAME: Stephanie Weber

SUBJECT: Project Schedule / Completion

DISCIPLINE/TRADE: HVAC

DWG./SPEC. REFERENCE: _____

QUESTION:

Is there an actual date for completion other than October 2023? Please advise.

RESPONSE:

Completion Date is October 31, 2023

ENGINEER'S SIGNATURE: *J. Ruhnke*

DATE: 11/23/2022

Note: review and any responses to this request for information by the architect/engineer is strictly for design intent only and does not constitute acknowledgement or acceptance of any cost or schedule implications unless specifically presented by the contractor. By submission of this request for information, the contractor assumes all responsibility in the absence of an approved change order or work directive.

END OF SECTION

SECTION 00 2114

RFI FORM

CONTRACTOR'S REQUEST FOR INFORMATION NO. 2

E&R RFI NO: _____

NAME OF PROJECT:

**WARWICK VALLEY CSD HIGH SCHOOL UNIT VENTILATOR REPLACEMENT & AIR
CONDITIONING UPGRADE**

NAME OF OWNER: Warwick Valley Central School District

A/E PROJECT NO: 05-21-04

- A. ENGINEER: Eisenbach and Ruhnke Engineering, P.C.
291 Genesee Street
Utica, New York 13501

Phone: 315.735.1916 Fax: 315.735.6365 Email: jeisenbach@erengpc.com jjouben@erengpc.com
acorrell@erengpc.com

- B. FROM (CO. NAME): Bertussi Contracting Inc

DATE: 11/22/2022

EMAIL/FAX NO. sweber@bertussis.com

CONTACT NAME: Stephanie Weber

SUBJECT: _____

DISCIPLINE/TRADE: HVAC

DWG./SPEC. REFERENCE: _____

QUESTION:

See attached

RESPONSE:

PLEASE SEE RESPONSES BELOW IN RED.

ENGINEER'S SIGNATURE: 

DATE: 11/23/22

Note: review and any responses to this request for information by the architect/engineer is strictly for design intent only and does not constitute acknowledgement or acceptance of any cost or schedule implications unless specifically presented by the contractor. By submission of this request for information, the contractor assumes all responsibility in the absence of an approved change order or work directive.

END OF SECTION

1. Is the masonry on drawing A101 by the MC or the Roofer? Please advise **MASONRY WORK IS BY MC.**
2. Is the flashing on drawing A101 by the Roofer or MC? **ROOF CURB FLASHING IS BY ROOFER.**
3. On detail 6 on drawing A101 the word GC is mentioned. Is this the roofer or the MC as there is no GC bid? Please advise. **IN THIS CASE - GC SHALL MEAN ROOFER.**
4. On the electrical drawings it says the electrician is responsible for all EC drawings. Does this include chop and path? **SEE ATTACHED E-DRAWINGS. ALL WORK ON E-DRAWINGS IS PROVIDED BY DISTRICT.**
5. The drawings say for the MC to seal, patch and maintain the roof warranty. Is this by the MC or the roofer? **SEE ANS. 5 BELOW.**
6. On drawing M-503 clearly on the lower table, it says the lower table is Alt-H1. On the upper table it says only Alternate. Is the entire drawing M503 Alternate H1? Please advise. **SEE ANS. 6 BELOW.**
7. Is the metal enclosures for the condensate piping to be field painted? Please advise. **SEE ANS. 7 BELOW.**

ANS. 5: MC RESPONSIBLE FOR ROOF PATCH AND SEAL FOR ROOF PENETRATIONS/REMOVALS AND SHALL MAINTAIN ROOF WARRANTY. ROOF WORK RELATED TO THE NEW VRF CONDENSER CURBS IS BY ROOFER.

ANS. 6: SEE ATTACHED UV-C DRAWINGS FOR CLARIFICATION AND REFERENCE, BUT NOTE THAT UV-C IS NO LONGER IN THIS CONTRACT.

ANS. 7: PAINTED FROM FACTORY PREFERRED. HOWEVER, IF THIS WILL GREATLY INCREASE LEAD TIME, THEY ARE TO BE FIELD PAINTED. TOUCH UP PAINT IS STILL REQUIRED AT OTHER LOCATIONS PER DRAWINGS. NOTE THAT THESE ENCLOSURES ARE TO HOUSE CONDENSATE PIPING AS WELL AS REFRIGERANT PIPING WHEN APPLICABLE - SEE DRAWINGS.