

NEWPORT NEWS PUBLIC SCHOOLS PURCHASING DEPARTMENT

12465 Warwick Boulevard
Newport News, VA 23606-3041

Telephone: (757) 591-4525
Fax: (757) 591-4593

NOTICE OF AWARD

IFB #009-0-2021GS

May 17, 2021

Successful Bidder: **ZBZ & Associates, Inc.**

Address: 557 Central Drive, Suite 102, Virginia Beach, VA 23454

Your Bid Dated: 05/10/2021

In Response To: **IFB 009-0-2021GS**

Description of Work/Products to be furnished: Kiln Creek Elementary School HVAC Replacement
Substantial Completion by: August 19, 2021.

Your offer is hereby accepted at the prices, and terms stated in your bid and subject to all conditions and requirements of the IFB, including addenda, project specifications, drawings, and warranties.

Glenn B. Schofield

Glenn B. Schofield, C.P.M.
Director of Procurement

RECORDS OF THIS SOLICITATION ARE NOW AVAILABLE FOR PUBLIC INSPECTION



INVITATION FOR BIDS

DATE: April 9, 2021

Newport News Public Schools
ISSUING OFFICE:

PURCHASING DEPARTMENT
12465 WARWICK BOULEVARD
NEWPORT NEWS, VA 23606-3041
TELEPHONE: (757) 591-4525
FAX: (757) 591-4593

Attention of Bidder is Directed To Section
2.2-4367 to 2.2-4377 Code of Virginia
(Ethics In Public Contracting)

BID ITEM NO. 009-0-2021/GS
PROCUREMENT OFFICER Glenn Schofield, C.P.M.
OPENING DATE May 10, 2021
OPENING TIME 2:00 P.M. EST
PREBID CONFERENCE NON-MANDATORY DATE: April 16, 2021 TIME: 10:00 A.M. EST

SEALED BIDS will be received in the issuing office above until Opening Date and Opening Time as specified in this solicitation to include any addendums issued by this office. Newport News Public Schools is not responsible for late delivery by U. S. Postal mail or other couriers. Instructions for direct delivery/drop-off to the Issuing Office from the Bidder are detailed on Page 9 of this Invitation for Bid.

All inquiries for information regarding this Invitation for Bid should be directed to the Buyer listed in this IFB or 757-591-4525

COMMODITY: HVAC Replacement NIGP CODE: 91036, 91450

PLEASE FILL IN BIDDER'S NAME & ADDRESS IN THE SPACES PROVIDED BELOW:

THIS IS NOT AN ORDER

THE NEWPORT NEWS SCHOOL BOARD, HEREAFTER REFERRED TO AS NEWPORT NEWS PUBLIC SCHOOLS (NNPS) ALSO REFERRED TO AS "OWNER", RESERVES THE RIGHT TO ACCEPT OR REJECT ANY OR ALL BIDS IN WHOLE OR IN PART AND TO WAIVE ANY INFORMALITIES IN THE BID PROCESS AND RESERVES THE RIGHT TO ENTER INTO ANY CONTRACT DEEMED TO BE IN ITS BEST INTEREST. THE SPECIFICATIONS IN THIS BID ARE INTENDED AS A QUALITY INDICATOR AND GUIDE FOR BIDDING AND UNLESS OTHERWISE STATED, NNPS WILL CONSIDER ALTERNATE BIDS OF EQUAL OR BETTER QUALITY, WHICH WILL BE ACCOMPANIED BY DESCRIPTIVE LITERATURE. THE ENTIRE CONTENTS OF THIS INVITATION FOR BID, ANY ADDENDA, AND BIDDER'S RESPONSE SHALL BE INCORPORATED INTO ANY RESULTING CONTRACT.

NNPS DOES NOT DISCRIMINATE AGAINST FAITH-BASED ORGANIZATIONS.
HVAC System Replacement Kiln Creek Elementary School

ACKNOWLEDGE RECEIPT OF ADDENDUM: #1___ #2___ #3___ #4___ (Please Initial)

IN COMPLIANCE WITH THIS BID, AND TO ALL THE CONDITIONS IMPOSED HEREIN, THE UNDERSIGNED AGREES TO EXECUTE ANY CONTRACT AS A RESULT OF THIS BID. THE UNDERSIGNED OFFERS AND AGREES TO FURNISH THE GOODS/SERVICES AT THE PRICE(S) INDICATED ON THE PRICING SCHEDULE. THE FOLLOWING SECTION SHALL BE SIGNED BY AN AGENT AUTHORIZED TO BIND THE BIDDER/COMPANY. FAILURE TO MAKE THIS COMMITMENT MAY RESULT IN BID REJECTION.

PAYMENT TERMS: _____

SHIPPING TERMS: ALL PRICES QUOTED F.O.B. NEWPORT NEWS, VIRGINIA

Authorized Agent

Signature

Type or Print Name

Email Address

Company FEI/FIN#

Phone Number

FAX Number

SPECIFIC LEGAL REQUIREMENTS

ANTI-COLLUSION:

In the preparation and submission of this bid/proposal, said bidder/offeror did not either directly or indirectly enter into any combination or arrangement with any person, firm or corporation, or enter into any agreement, participate in any collusion, or otherwise take any action in violation of the Sherman Act (15 U.S.C. Section 1), Sections 59.1-9.1 through 59.1-9.17 or Sections 59.1-68.6 through 59.1-68.8 of the Code of Virginia. The undersigned bidder/offeror hereby certifies that this agreement, or any claims resulting therefrom, is not the result of, or affected by, any act of collusion with, or any act of, another person or persons, firm or corporation engaged in the same line of business or commerce; and, that no person acting for, or employed by, NNPS has an interest in, or is concerned with, this bid/proposal; and, that no person or persons, firm or corporation other than the undersigned, have, or are, interested in this bid/proposal.

DRUG-FREE WORKPLACE:

During the performance of this contract, the successful bidder/offeror agrees to (i) provide a drug-free workplace for the successful bidder's/offeror's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the successful bidder's/offeror's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the successful bidder/offeror that the successful bidder/offeror maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each successful bidder/offeror or vendor. For the purpose of this section, "drug-free workplace" means a site for the performance or work done in connection with a specific contract awarded to a successful bidder/offeror in accordance with federal law, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

EMPLOYMENT DISCRIMINATION BY THE SUCCESSFUL BIDDER/OFFEROR SHALL BE PROHIBITED:

1. During the performance of this contract, the successful bidder/offeror agrees as follows:
 - a. Bidder/offeror shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the successful bidder/offeror. The successful bidder/offeror agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 - b. Successful bidder/offeror, in all solicitations or advertisements for employees placed by or on behalf of the successful bidder/offeror, shall state that such successful bidder/offeror is an equal opportunity employer.
 - c. Notices, advertisements, and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
2. Successful bidder/offeror shall include the provisions of the foregoing Subsections a, b, and c in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

COMPLIANCE WITH STATE LAW; FOREIGN AND DOMESTIC BUSINESSES AUTHORIZED TO TRANSACT BUSINESS IN THE COMMONWEALTH:

1. A contractor organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 or as otherwise required by law.
2. A bidder/offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 will include in its bid or proposal the identification number issued to it by the State Corporation Commission in the space provided below. Any bidder/offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bid or proposal a statement why the bidder/offeror is not required to be so authorized. Bidder/offeror is to include the VA Code reference authorizing the exemption in said statement.
3. Any bidder/offeror described in the foregoing Subsection 2. that fails to provide the required information shall not receive an award unless a waiver of this requirement is granted by the Superintendent or designee.
4. Any business entity described in the foregoing Subsection 1. that enters into a contract with NNPS shall not allow its existence to lapse or its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the contract.

Name and Address of BIDDER/OFFEROR:

Date: _____ Authorized Signature: _____

Printed Name: _____ Title: _____

Phone Number: _____ Fax Number: _____

Email Address: _____

Federal Tax Identification Number/Social Security Number: _____

State Corporation Commission Identification Number: _____

Is bidder/offeror a "minority" business? Yes No If yes, please indicate the "minority" classification below:
 African American Hispanic American Native American Asian American Other; Please Explain:

- Service Disabled Veteran? Yes No
 Service Disabled Veteran Business? Yes No
 Woman Owned? Yes No
 Small Business? Yes No
 Faith-Based Organization? Yes No

I.	SCOPE OF WORK	5
A.	GENERAL REQUIREMENTS:	5
B.	SPECIFIC REQUIREMENTS:.....	5
C.	DETAILED SCOPE OF WORK:.....	5
II.	SPECIAL INSTRUCTIONS TO THE BIDDER.....	6
A.	Issuing Office:	6
B.	Owner’s Representative, NNPS Project Manager/Contract Administrator, Engineer:	6
C.	Contact with NNPS Staff, Representatives, and/or Agents:	7
D.	Pre-Bid Conference:	7
E.	Site Visit:	7
F.	Bidders of Record:	7
G.	Examination of Contract Documents and Project Site:	7
H.	Questions:	8
I.	Changes or Modifications:	8
J.	Bid Submittal Requirements:.....	8
K.	Proprietary Information/Disclosure:	10
L.	Notice of Award:.....	10
M.	Award:	10
N.	IFB Opening:.....	10
O.	Withdrawal of Bids:	11
P.	Disposition of Bids:.....	11
Q.	Cost of Responding:	11
III.	GENERAL TERMS AND CONDITIONS	11
A.	Definitions:.....	11
B.	Administration of the Contract:.....	12
C.	Contract Document:.....	13
D.	Contract Modification(s):.....	13
E.	Bidder Obligation:.....	13
F.	Conditions Of Work:	13
G.	Bid Binding For Ninety (90) Days:	13
H.	Prime Contractor:	13
I.	Subcontractors:	14
J.	Non-Assignment:	14
K.	Antitrust:	14
L.	Anticollusion/Nondiscrimination Requirements Form:	14
M.	Compliance with Federal, State, and Local Laws and Federal Immigration Law:	14
N.	Compliance with state law; foreign and domestic businesses authorized to transact business in the Commonwealth:	14
O.	Hold Harmless/Indemnification:	14
P.	Notices:	15
Q.	Non-Responsive Performance:	15
R.	Termination Without Cause:.....	15
S.	Termination With Cause/Breach:	16
T.	Breach of Contract:	16
U.	Applicable Law:.....	16
V.	Compliance With All Laws:	16
W.	Venue:.....	16
X.	Severability:	16
Y.	Non-Appropriation of Funds:	17
Z.	Tax Exemption:.....	17
AA.	Vendor’s Invoices:	17
BB.	Contractual Disputes:.....	17
CC.	Warranty/Guarantee:	17
DD.	Payment Terms:	18
EE.	Prompt Payment:	18
FF.	Payment by Electronic Funds Transfer (EFT):	19
GG.	Audits:	21
IV.	SPECIAL TERMS AND CONDITIONS	21
A.	Contract Term:.....	21
B.	Drawings and Project Manuals:	21

C.	Drawing and Specifications; Use and Ownership:	21
D.	Construction Schedule:	22
E.	Schedule of Values:	22
F.	Time is of the Essence:	22
G.	Insurance:	22
H.	Bonds:	23
I.	Unauthorized Disclosure of Information:	23
J.	Copyright/Patent Indemnity:	24
K.	Title to Equipment:	24
L.	Liquidated Damages:	24
M.	Time Extensions:	24
N.	Responsibility for Work:	24
O.	Changes in the Work:	24
P.	Extension of Time:	25
Q.	Different Site Conditions:	25
R.	Site Investigations and Conditions Affecting Work:	25
S.	Correction of Work:	26
T.	Suspension of Work:	26
U.	Material and Workmanship:	26
V.	Permits and Responsibilities:	26
W.	Material and Appliances:	27
X.	Superintendence by Contractor:	27
Y.	Owner's Representative's Status:	27
Z.	Employees:	28
AA.	Certification for Contractors in Direct Contact with Students:	28
BB.	Other Contracts:	28
CC.	Protection of the Public and of Work and of Property:	28
DD.	Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements:	29
EE.	Environmental Consideration:	29
FF.	Hazardous Materials:	29
GG.	Copyright/Patent Indemnity:	29
HH.	Partial Occupancy or Use:	29
II.	Payments withheld prior to prior to Final Acceptance of Work:	30
JJ.	Correction of Work before Final Payment:	30
KK.	Cleaning Up:	30
LL.	Acceptance and Final Payment:	30
MM.	Claims for Extra Compensation:	31

ATTACHMENT "A" - Bid Response Form

ATTACHMENT "B" - Certification of Compliance with Code of Virginia, §22.1-296.1

ATTACHMENT "C" - Contractor Questionnaire Form

I. SCOPE OF WORK

A. GENERAL REQUIREMENTS:

1. Remove and replace existing HVAC systems at Kiln Creek Elementary School located at 1501 Kiln Creek Parkway, Newport News, Virginia 23602 hereafter referred to as the "Project".

B. SPECIFIC REQUIREMENTS:

1. Contractor shall remove and replace existing HVAC systems in accordance with the MJT Project No. 20-126, Project Manual dated March 26, 2021 and Drawings dated March 26, 2021 and any revisions thereto.
2. In accordance with Commonwealth of Virginia §54.1-1115, A1 and A6; Contractor shall possess a valid Commonwealth of Virginia Contractor's license as well ensure any subcontractors scheduled for the Project possess a valid Commonwealth of Virginia Contractor's license.
3. In accordance with Commonwealth of Virginia §22.1-296.1; Contractor shall ensure all employees, subcontractors, representatives, (i) have not been convicted of a felony or any offense involving the sexual molestation of a child or physical abuse or sexual abuse or rape of a child; and (ii) has not been convicted of a crime of moral turpitude.
4. To ensure reasonable emergency response, Contractor for this Project shall have an operational office not more than 250 miles driving distance from the Project site.
5. References about the Bidder's past performances must be ascertained prior to any bid being eligible for award. Therefore, Bidder must provide at least six (6) references with its bid, as specified in Attachment "C", Contractor's Qualification Statement. Negative references or references that cannot verify whether the Contractor can meet the criteria specified in Section I. of this IFB, may be grounds for a bid being rejected.

C. DETAILED SCOPE OF WORK:

The "Work" generally includes but is not limited to the following:

1. Convert the dual temperature unit ventilators and fan coil units to water source heat pumps. Existing air handling units in mechanical rooms and mezzanines shall be replaced with water source heat pumps.
2. Utilize existing ductwork below roof. Exposed ductwork shall be internally cleaned.
3. Remove all dual temperature water piping and dual temperature water pumps.
4. Remove hot water piping to gym units and associated hot water pump.
5. Provide cooling tower, condenser water pumps and plate frame heat exchanger to serve condenser water loop. Cooling tower to be located at grade adjacent to mechanical room where existing chiller was located.
6. Provide new condenser water pumps to serve the building's condenser water loop to all water source heat pumps.
7. Provide packaged water source air conditioning unit with hot water heat/reheat to serve the Cafeteria.
8. Provide 2 packaged rooftop air conditioning units with hot water coils located in new ductwork below the roof line to serve the Gymnasium.
9. Provide 1 packaged rooftop air conditioning unit with hot water coil located below the roof line to serve the main Lobby area.
10. Replace the split system serving the Administration Area with a split system air conditioning unit with hot water coils.
11. Provide 2 dedicated outside air systems (DOAS') with energy wheels, and duct heating coils below the roof line to provide ventilation to the classroom wing (Areas C and D on drawings). Provide new supply and exhaust ductwork for DOAS units.
12. Provide water source heat pumps to condition the corridors.
13. Replace exhaust fans as identified on the drawings.

14. Replace the Kitchen Hood supply fan and exhaust fan in-kind and reconnect to kitchen hood control panel.
15. Add a ductless split system air conditioning unit to serve the IT room connected to the library.
16. Replace ductless split system air conditioning unit to serve the elevator equipment room.
17. Replace existing INVENSYS building automation system with HONEYWELL controls be provided by a Honeywell Authorized Controls Integrator. This includes the NIAGRA/JACE web server platform. The Controls price will be included in the bid documents as part of the Base Bid.
18. Provide hail guards on condenser coils for packaged rooftop air condition units to curtail vandalism to condenser coil fins.
19. Provide on-site and in classroom training for NNPS on all major equipment.
20. Provide unit manufacturer's diagnostic tools required to service HVAC equipment.
21. The light fixtures will be removed, stored and reinstalled. No new light fixtures are included in the scope of work.
22. Provide Commissioning for all new RTU's, boilers, pumps, terminal equipment and controls.
23. All required electrical work to support the mechanical scope.

II. SPECIAL INSTRUCTIONS TO THE BIDDER

A. Issuing Office:

Wherever used in this Invitation for Bid, Issuing Office will be:

Glenn Schofield, C.P.M., Director of Procurement
Newport News Public Schools Purchasing Department
12465 Warwick Boulevard
Newport News, VA 23606-3041
Phone: (757) 591-4525
Fax: (757) 591-4593
Email: glenn.schofield@nn.k12.va.us

B. Owner's Representative:

Wherever used in this Invitation for Bid and for purposes of any notices under this contract, the Owner's Representative will be:

Attn: Mr. Wade Beverly
Executive Director, Plant Services
12580 Patrick Henry Drive
Newport News, Virginia 23602
Phone: (757) 881-5024

NNPS Project Manager/Contract Administrator:

Wherever used in this Invitation for Bid and for purposes of any notices under this contract, the NNPS /Project Manager/Contract Administrator will be:

Stephen Smith
Facilities Project Manager, Plant Services
761 Hogan Drive
Newport News, VA 23435
Phone: (757) 881-5024
Email: stephen.smith@nn.k12.va.us

Engineer:

Thompson Consulting Engineers
Attn: Kevin D. Allen, P. E.
22 Enterprise Parkway, Suite 200
Hampton, Virginia 23666
Phone: (757) 599-4415

Joey Allen, P.E,
22 Enterprise Parkway, Suite 200
Hampton, Virginia 23666
Phone: (757) 599-4415
Email: jallen@mjtengineers.com

Note: The Project Manager, and the Engineer when assigned to the Project, will provide administration of the Contract and will be the Owner's Representatives (1) during construction and (2) until final payment is made. The Owner's Representative will advise and consult with the Owner and will have the authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with other provisions of the Contract.

C. Contact with NNPS Staff, Representatives, and/or Agents:

Direct contact with NNPS staff, representatives, and/or agents other than Purchasing Department staff on the subject of this IFB or any subject related to this IFB is expressly prohibited except with the prior knowledge and permission of the Purchasing Director

D. Pre-Bid Conference:

Non-Mandatory pre-bid conference will be held at Kiln Creek Elementary School located at 1501 Kiln Creek Parkway, Newport News, Virginia 23602 on **April 16, 2021 at 10:00 A.M., Eastern Standard Time** to answer any questions regarding this IFB. Any changes determined necessary as a result of this conference or any other source that may affect the responses to the bid will be formally addressed by the Issuing Office via addenda. Attending this conference is not mandatory but highly recommended.

E. Site Visit:

Immediately following the pre-bid conference, NNPS will conduct a site visit.

F. Bidders of Record:

Bidders receiving a copy of this IFB from a source other than the Issuing Office via the www.eVA.virginia.gov web site must contact the Issuing Office and provide Bidder's name, address, contact person, telephone and fax number, and the IFB Item Number. Bidder will be added to the eVA planholders' list and will receive notification of any addenda to the IFB.

G. Examination of Contract Documents and Project Site:

It is the responsibility of each Bidder before submitting a Bid:

- a. To examine thoroughly the Bid Documents;
- b. To visit the site to become familiar with and satisfy the Bidder as to the general, local and site conditions that may affect cost, progress, performance, or furnishing of the Work; **BIDDER IS REQUIRED TO COORDINATE ALL SITE VISITS THROUGH THE OWNER PRIOR TO COMING ON NNPS PROPERTY.**
- c. To study and carefully correlate the Bidder's knowledge and observations with the Bid Documents and such other related data; and;
- d. To promptly notify the Owner of all conflicts, errors, ambiguities, or discrepancies which the Bidder has discovered in or between the Bid Documents and such other related documents or field/site conditions.

e. Complete printed sets of the Project Manual and Drawings may be obtained directly from the Issuing Office for a fee of \$60.00 for each set – only money orders or certified checks (made out to NNPS) will be accepted. ***NOTE* - To obtain a set of the Project Manual and Drawings, the Bidder must e-mail the Issuing Office, attention to Glenn Schofield, C.P.M. at glenn.schofield@nn.k12.va.us with a request for the Project Manual and Drawings. The Bidder will then be replied to, this to coordinate a date and time for pickup at the Issuing Office.** A set includes the project manual and a set of drawings. Partial sets will not be provided. Upon return of the project manuals and drawings, a refund may be provided to vendors who were not selected for award. However, the original receipt must be presented and the materials being returned must be in the same condition in which they were purchased (no internal markings). Bidders have up to ten (10) days after the Bid Opening to return manuals and drawings for a refund. Partial sets will not be refunded.

H. Questions:

Submit questions regarding the Invitation for Bid in writing to the Issuing Office at glenn.schofield@nn.k12.va.us no later than **April 23, 2021 at 2:00 P.M. Eastern Standard Time**. Necessary replies will be issued to all Bidders of record as addenda that shall become part of the contract documents. Oral instructions do not form a part of the bid documents.

Bidder is responsible for checking the www.eVA.virginia.gov web site or contacting the Issuing Office within 48 hours prior to bid closing to secure any addenda affecting this IFB.

I. Changes or Modifications:

Changes or modifications to this Invitation for Bids made prior to the date and time of closing will be addressed by addenda from the Issuing Office. Acknowledge receipt of addenda in the space provided on the cover page of this Invitation for Bid. Oral modifications shall not form a part of the Bid documents. This IFB and any addenda shall be incorporated, by reference, into any resulting contract.

J. Bid Submittal Requirements:

1. Each Bid submission shall be submitted to the Issuing Office and will include the following documents:
 - a. The cover page of this Invitation to Bid, which will contain:
 - (1) Original signature of an agent authorized to bind the company;
 - (2) Payment terms;
 - (3) Acknowledgment of any addenda on page one (1); and
 - (4) Registered Virginia Contractor No. and Class;
 - b. Bid Form (**Attachment A**);
 - c. Completed and signed anticollusion/nondiscrimination clauses on page 2 of this IFB;
 - d. Signed Certification of Compliance with Code of Virginia, §22.1-296.1 (**Attachment “B”**);
 - e. Completed Contractor’s Qualification Statement (**Attachment “C”**);
 - f. Copies of Contractor and Subcontractor(s) valid Commonwealth of Virginia Contractor license;
 - g. To ensure reasonable emergency response time (4 hours or less), Contractor shall submit addresses of General Contractor’s offices that list an operational office that is no more than **250 miles** driving distance from the Project site.

Note: Each Bidder shall submit with its bid that is \$100,000.00 or more, a bid bond from a surety company selected by the Bidder that is authorized to do business in Virginia, or cashier's check, payable to Newport News Public Schools equal to five percent (5%) of the total bid price. The Bid Bond is a guarantee that if the contract is awarded to the Bidder, he will enter into the contract for the work mentioned in the bid.

2. Bidder shall submit one original and one (1) copy of its Bid. This original of the Bid shall contain the original signature of the contracting authority.

3. Submit Bids in a sealed envelope or package. Clearly label the shipping/ mailing packaging as well as the outside of your sealed envelope or package with the Bid Item No., Closing Date and Time, and your firm's name and address. **Bids received by telephone, telegraph, facsimile, or any other means of electronic transfer shall not be accepted.** Bids will be received on or before the date and the hour and at the place stipulated in the Invitation to Bids as may be modified by subsequent Addenda. Purchasing Department operating hours are on the NNPS website at <http://sbo.nn.k12.va.us/index.html>. **Bids delivered in person shall be delivered to the front desk/reception area of the Issuing Office, and upon delivery the Purchasing Department will be immediately contacted to receive/date stamp the bid package. On May 10, 2021, the bid opening date, a Purchasing Department member will be present in the front desk/reception area from 1:30 P.M. EST until the bid opening time, this to receive bids and then to escort any bidder who wishes to observe the actual bid opening, to the bid opening area.**

The official time used for the receipt of responses is determined by reference to the clock designated by the Procurement Officer. The Procurement Officer shall determine when the Bid Receipt Deadline has arrived and shall announce that the Deadline has arrived and that no further bids or bid modifications will be accepted.

4. Bidders are encouraged to submit their bids on recycled paper and to use double-sided copying.

5. Bidder Qualification:

To demonstrate its qualifications to perform the Work, each Bidder shall be prepared to submit further written satisfactory evidence that the Bidder has sufficient experience, necessary capital, materials, machinery and skilled workers to complete the Work. If financial statements are required they shall be of such date as the Owner shall determine and shall be prepared on forms acceptable to the Owner. The Owner may make any such investigations as deemed necessary to determine the ability of the Bidder to perform the Work. The Owner's decision or judgment on these matters shall be final, conclusive and binding.

6. Subcontractor Qualification:

Each Bidder shall submit to the Owner a list of all Subcontractors who will be performing work on the Project. Such list shall be accompanied by an experience statement with pertinent information as to similar projects and other evidence of experience and qualifications of each such Subcontractor, person and organization. If the Owner, after due investigation, has reasonable objection to any proposed Subcontractor, other person and organization, the Owner may, before giving the Notice of Award, request the apparent low Bidder to submit an acceptable substitute without an increase in Bid price. If the apparent low Bidder declines to make any such substitution, the contract shall not be awarded to such Bidder. For any Subcontractors, other persons, or organization so listed and to whom Owner does not make written objection prior to giving the Notice of Award, it will be deemed the Owner has no objection.

7. Responsibility of the Bidder:

By submitting their Bid, Bidders certify that:

They are not now debarred by the Federal Government or by the Commonwealth of Virginia or by any other state, or by any town, city, or county, from submitting Bids on contracts for construction covered by this solicitation, nor are they an agent of any person or entity that is now so debarred;

Bidder has sufficient financial ability to perform the Contract and Contractor can acquire a surety bond from a corporation included on the United States Treasury list of acceptable surety corporations in the amount and type required by the Owner;

Bidder (including any officer, director or owner thereof) has not had judgments entered against Bidder within the past ten years for the breach of contracts for governmental or nongovernmental construction, including, but not limited to, design-build or construction management;

Bidder has not been in substantial noncompliance with the terms and conditions of prior construction contracts with a public body without good cause. For the purpose of this paragraph, substantial noncompliance must be documented in writing in the construction project file and any such information relating thereto given to the contractor at that time, with the opportunity to respond.

K. Proprietary Information/Disclosure:

Bidder is advised that the Virginia Public Procurement Act (Section 2.2-4342, Code of Virginia, 1950 as amended) shall govern public inspection of all records submitted by Bidder. Specifically, if Bidder seeks to protect any proprietary data or materials, pursuant to Section 2.2-4342.

Bidder shall:

- (i) invoke the protections of this section prior to or upon submission of the data or other materials,
- (ii) identify the data or other materials to be protected,
- (iii) state the reasons why protection is needed.

Furthermore, the Bidder shall submit proprietary information under separate cover, and the Owner reserves the right to submit such information to the Owner's attorney for concurrence of the Bidder's claim that it is in fact proprietary. References may be made within the body of the bid to proprietary information; however, all information contained within the body of the bid not labeled proprietary or otherwise not meeting all three of the requirements of Section 2.2-4342 shall be public information in accordance with State statutes. Trade secrets or proprietary information submitted by an Bidder in conjunction with this IFB are not subject to public disclosure under the Virginia Freedom of Information Act (VFOIA). However, Bidder must invoke the protection of the VFOIA prior to or upon submission of the data or other materials. Information submitted that does not meet the above requirements will be considered public information in accordance with the VFOIA.

An all-inclusive statement that the entire bid is proprietary is unacceptable. A statement that Bidder's costs and/or bid pricing are to be protected is unacceptable. Bidder will be requested to remove any such statement(s) in order to be eligible for further evaluation and award.

L. Notice of Award:

Any contract resulting from this IFB will be publicly posted for inspection on the eVA.virginia.gov website as well as in the NNPS Purchasing Department, 12465 Warwick Boulevard, Newport News, Virginia.

M. Award:

Owner may elect to award a contract to more than one vendor.

The award of contracts shall be at the sole discretion of the Owner. Unless cancelled or rejected, a responsive bid from the lowest responsible bidder shall be accepted as submitted, except that if the bid from the lowest responsible bidder exceeds available funds, Owner may negotiate with the apparent low bidder to obtain a contract price within available funds. The Owner reserves the right to accept or reject any or all bids in whole or in part and to waive any informalities in the process. Furthermore, the Owner reserves the right to enter into any contract deemed to be in the Owner's best interest.

N. IFB Opening:

Bidder shall ensure their bid is time stamped by the Issuing Office no later than the Opening Date and Time shown on the cover page of this Invitation for Bid. Bids received after the specified date and time (time stamped 2:01 P.M. or later) shall not be considered and will be returned unopened to Bidder.

O. Withdrawal of Bids:

A bidder for a contract may request withdrawal of his or her bid under the following circumstances:

1. A bidder may withdraw his bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake in the bid, provided the bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.
2. If a bid contains both clerical and judgment mistakes, a bidder may withdraw his bid from consideration if the price bid would have been substantially lower than the other bids due solely to the clerical mistake, that was an unintentional arithmetic error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.
3. Requests for withdrawal of bids prior to opening of such bids shall be transmitted to the NNPS Purchasing Agent in writing.
4. Requests for withdrawal of bids after opening of such bids but prior to award shall be transmitted to the NNPS Purchasing Agent, in writing, accompanied by full documentation supporting the request. The bidder shall give notice in writing of his claim of right to withdraw his bid within two (2) business days after the conclusion of the bid opening procedure and shall submit original work papers with such notice. If bid bonds were tendered with the bid, NNPS reserves its right to exercise collection.

No bid may be withdrawn under this section when the result would be the awarding of the contract on another bid of the same bidder or of another bidder in which the ownership of the withdrawing bidder is more than five percent. If a bid is withdrawn under the authority of this paragraph, the lowest remaining bid shall be deemed to be the low bid. No bidder who is permitted to withdraw a bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted.”

P. Disposition of Bids:

All materials submitted in response to this IFB shall become the property of the Owner. One (1) copy of each bid will be retained for official files. Said copy will become public record after award of the contract and will be open to public inspection subject to the Proprietary Information/Disclosure section of this IFB.

Q. Cost of Responding:

This solicitation does not commit the Owner to pay any costs incurred by the Bidder or any other party in the preparation and/or submission of bids or in making necessary studies or designs for the preparation thereof, nor is the Owner obligated to procure or contract for such services.

III. GENERAL TERMS AND CONDITIONS

A. Definitions:

The Contract Documents consist of the solicitation for bids, the Bid Pricing Form, the Project Manual entitled “KILN CREEK ELEMENTARY SCHOOL NEWPORT NEWS PUBLIC SCHOOLS Newport News Virginia IFB #009-0-2021GS MJT Project No. 20-126” dated March 26, 2021, including Drawings and Specifications, Addenda issued prior to the execution of the Contract, and Modifications issued after execution of the Contract.

The Contract is formed by and consists of the Contract Documents.

The Owner is the Newport News School Board also sometimes referred to as the Newport News Public Schools or NNPS.

The Work means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or part of a Project.

The Extra Work means approved construction and services added to the Project.

The Project is the total construction of which the work performed under the Contract Documents may be the whole or part and which may include construction by the Owner and by separate contractors.

The Drawings are graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

The Specifications are that portion of the Contract Documents consisting of written requirements for materials, equipment, systems, standards, and workmanship for the Work, and performance of related services.

The Owner Representative is the person or entity identified by the Owner to make decisions with respect to the matters requiring the Owner's approval or authorization.

The Architect is the person lawfully licensed to practice architecture or an entity lawfully practicing architecture identified as such in the Contract and is referred to throughout the Contract Documents as if singular in number. The term "Architect" means the Architect or the Architect's authorized representative.

The Engineer is the person lawfully licensed to practice engineering or an entity lawfully practicing engineering identified as such in the Contract and is referred to throughout the Contract Documents as if singular in number. The term "Engineer" means the Engineer or the Engineer's authorized representative.

The Project Manager is the person or entity identified as such in the Contract and is referred to throughout the Contract Documents as if singular in number. The term Project Manager means the Project Manager or the Project Manager's authorized representative.

The Written Notice to Proceed is a document issued by the Owner Representative requiring the Contractor to begin Work within a time specified in the Notice to Proceed.

The Change Order is a written instrument prepared by the Project Manager or Architect/Engineer and signed by the Owner, Architect/Engineer, and Contractor, stating their agreement upon all of the following:

1. a change in the Work;
2. the amount of the adjustment in the Contract Sum, if any; and
3. the extent of the adjustment in the Contract Time, if any.

The Construction Change Directive is a written order prepared by the Project Manager or Architect/Engineer and signed by the Owner, Project Manager (if different from Owner), and Architect/Engineer, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both.

The Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so the Owner can occupy or utilize the Work for its intended use.

The Contract Sum is stated in the Contract and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

B. Administration of the Contract:

The Project Manager and Architect /Engineer will provide administration of the Contract and will be the Owner's Representatives (1) during construction and (2) until final payment is made. The Owner's Representative will advise and consult with the Owner and will have the authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with other provisions of the Contract.

C. Contract Document:

The Contract represents the entire and integrated agreement between the parties and supersedes prior negotiations, representations or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect /Engineer or the Architect's/Engineer's consultants, (2) between the Owner and a Subcontractor or Sub-subcontractor, (3) between the Owner and the Architect/Engineer or Architect's/Engineer's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Contract Documents are complementary and what is called for by one shall be as binding as if called for by all.

D. Contract Modification(s):

A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Architect/Engineer. After award, any and all modification to the Contract shall be made by a Modification. The Owner's standard to modify the Contract is the acceptance of standard AIA documents G701 in its latest edition, properly executed by the Owner, Architect/Engineer, and Contractor with subsequent issuance of a change order (purchase order).

E. Bidder Obligation:

Bidder shall carefully examine the contents of this Invitation for Bid and any subsequent addenda. Failure to do so shall not relieve the Successful Bidder of its obligation to note any exceptions (see Exceptions/Alternatives section) and to fulfill the requirements of this contract

F. Conditions Of Work:

Bidders shall inform themselves fully of the conditions relating to services required herein. Failure to do so will not relieve a Successful Bidder of the obligation to furnish all goods and/or services necessary to carry out the provisions of this contract

G. Bid Binding For Ninety (90) Days:

Bidder agrees that this bid shall be binding and may not be withdrawn for a period of ninety (90) calendar days after the scheduled closing date of this Invitation For Bid

H. Prime Contractor:

If in its performance of this contract, Successful Bidder supplies goods or services by or through another party or subcontractor, Successful Bidder agrees that:

1. Successful Bidder shall act as the prime contractor for the goods and services to be provided under contract and shall be the sole point of contact with regard to all obligations under this contract.
2. Successful Bidder represents and warrants that Successful Bidder has made third parties or subcontractors aware of the proposed use and disposition of the other party's products or services, and that such other party has agreed in writing that it has no objection and that OWNER is not liable to such third parties or subcontractors for any work performed under this contract.

The use of subcontractors and the work they perform must receive the prior written approval of Owner. The Owner will designate a Contract Administrator to approve such work.

3. Successful Bidder shall be solely responsible for all work performed and materials provided by subcontractors.

4. Successful Bidder shall be responsible for the liability of subcontractors for the types and limits required of the Successful Bidder under this contract.

I. Subcontractors:

Successful Bidder's use of subcontractors and the work they are to perform must receive written approval from the Owner. Successful Bidder shall be solely responsible for all work performed and materials provided by subcontractors. Successful Bidder shall be responsible for the liability of subcontractors for the types and limits required of the Successful Bidder.

J. Non-Assignment:

Successful Bidder shall not assign its rights and duties under this Agreement without the prior written consent of the NNPS Contract Administrator.

K. Antitrust:

Any perceived anti-trust violation shall be reported to the State Attorney General for possible enforcement of anti-trust laws.

L. Anticollusion/Nondiscrimination Requirements Form:

The attached "Anticollusion/Nondiscrimination Requirements" form, on page 2 of this IFB, shall be executed by Bidder and is to be submitted with Bidder's bid. The requirements set forth on said form shall be considered to be binding terms and conditions in any contract resulting from this IFB. A contract will not be awarded to an Bidder who has not signed the anticollusion/nondiscrimination statement.

M. Compliance with Federal, State, and Local Laws and Federal Immigration Law:

Contractor does not, and shall not during the performance of the contract for goods and services in the Commonwealth, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

N. Compliance with state law; foreign and domestic businesses authorized to transact business in the Commonwealth:

Contractor organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 or as otherwise required by law. Contractor shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the contract. NNPS may void any contract with the Contractor if the Contractor fails to remain in compliance with the provisions of this section.

O. Hold Harmless/Indemnification:

It is understood and agreed that Successful Bidder hereby assumes the entire responsibility and liability for any and all material damages to persons or property caused by or resulting from or arising out of any act or omission on the part of Successful Bidder, its subcontractors, agents or employees under or in connection with this Contract or the performance or failure to perform any work required by this Contract. Successful Bidder agrees to indemnify and hold harmless Owner and its agents, volunteers, servants, employees and officials from and against any and all claims, losses, or expenses, including reasonable attorney's fees and litigation expenses suffered by any indemnified party or entity as the result of claims or suits due to, arising out of or in connection with (a) any and all such damages, real or alleged, (b) the violation of any law applicable to this Contract, and (c) the performance of the work by Successful Bidder or those for whom Successful Bidder is legally liable. Upon written demand by the Owner, Successful Bidder shall assume and

defend at Successful Bidder's sole expense any and all such suits or defense of claims made against the Owner, its agents, volunteers, servants, employees or officials.

P. Notices:

All notices, requests, demands, and elections under this contract, other than routine operational communications, shall be in writing and shall be deemed to have been duly given on the date when hand-delivered, or on the date of the confirmed facsimile transmission, or on the date received when delivered by courier that has a reliable system for tracking delivery, or six (6) NNPS business days after the date of mailing when mailed by United States mail, registered or certified mail, return receipt requested, postage prepaid. All notices shall be addressed to the following individuals:

To Owner: NNPS Contract Administrator as designated in this IFB.

To Successful Bidder: Successful Bidder's Contract Administrator as defined in Successful Bidder's bid.

Either party may from time to time change the individual(s) to receive notices and/or its address for notification purposes by giving the other party written notice as provided above.

Q. Non-Responsive Performance:

Delivery Delays: Owner reserves the right to procure goods and/or services to be provided under this contract from other sources in the event Successful Bidder fails to deliver such goods and/or service deliverables in accordance with delivery dates and time frames set forth in this contract.

Unacceptable Deliveries (Rejections): Upon notification by the Owner that goods and/or service deliverables provided by the Successful Bidder under this contract are damaged and/or not of the quality specified by the Owner, such goods and/or service deliverables will be rejected. Successful Bidder shall replace such rejected goods and/or service deliverables immediately or within a reasonable time as determined by Owner.

Successful Bidder shall remove all rejected materials, equipment or supplies from the premises of Owner within ten (10) days of notification. Rejected goods and/or service deliverables not removed from Owner's premises within ten (10) days will be regarded as abandoned, shall become the property of Owner, and Owner shall have the right to dispose of such items.

Owner Purchase From Alternate Sources: Owner reserves the right to authorize immediate purchase from other sources against delayed deliveries and/or rejections.

The Successful Bidder shall reimburse Owner promptly for excess costs incurred by Owner for such purchases. Any such purchases will be deducted from the contract amount. In the event Owner's cost of obtaining goods and/or service deliverables from other sources be less, Successful Bidder shall have no claim to the difference.

Liability: Successful Bidder shall be liable to Owner for all costs incurred by Owner as a result of Successful Bidder's failure to perform in accordance with the contract. Successful Bidder's liability shall include, but not be limited to:

Damages and other delay costs, to include costs to procure goods/services from alternate suppliers.

Increased costs of performance, such as extended overhead and increased performance costs resulting from performance delays caused by Successful Bidder and/or rejections of Successful Bidder's goods and/or service deliverables.

Warranty and rework costs, liability to third party, excess costs, attorney's fees and related costs incurred by Owner due to non-responsive performance of Successful Bidder.

R. Termination Without Cause:

Owner may at any time, and for any reason, terminate this Contract by written notice to Successful Bidder specifying the termination date, which shall be not less than thirty (30) days from the date such notice is mailed. Notice shall be given to Successful Bidder by certified mail/return receipt requested, addressed to the Successful Bidder's Contract Administrator. In the event of such termination, Successful Bidder shall be paid such amount as shall compensate Successful Bidder for the work satisfactorily completed, and accepted by Owner, at the time of termination. In the event Owner terminates this Contract, Successful Bidder shall withdraw its personnel and equipment, cease performance of any further work under this Contract, and turn over to Owner any work completed or in process for which payment has been made.

S. Termination With Cause/Breach:

In the event that Successful Bidder shall for any reason or through any cause be in default of the terms of this Contract, Owner may give Successful Bidder written notice of such default by certified mail/return receipt requested, addressed to the Successful Bidder's Contract Administrator. Unless otherwise provided, Successful Bidder shall have ten (10) days from the date such notice is mailed in which to cure the default. Upon failure of the Successful Bidder to cure the default, Owner may immediately cancel and terminate this Contract as of the mailing date of the default notice. Upon termination, Successful Bidder shall withdraw its personnel and equipment, cease performance of any further work under the Contract, and turn over to Owner any work in process for which payment has been made. In the event of violations of law, safety or health standards and regulations, this Contract may be immediately cancelled and terminated by Owner and provisions herein with respect to opportunity to cure default shall not be applicable.

T. Breach of Contract:

Successful Bidder shall be deemed in breach of this contract if the Successful Bidder: Fails to comply with any terms of this contract; Fails to cure such noncompliance within ten (10) calendar days from the date of the Owner written notice or such other time frame, greater than ten (10) calendar days, specified by the NNPS Contract Administrator in the notice. Fails to submit a written response to the Owner notification of noncompliance within ten (10) calendar days after the date of the Owner notice. All notices under this contract shall be submitted, either by fax or certified mail, return-receipt requested, to the respective contract administrator. Successful Bidder shall not be in breach of this contract as long as its default was due to causes beyond the reasonable control of and occurred without any fault or negligence on the part of both the Successful Bidder and its subcontractors. Such causes may include, but are not restricted to, acts of God or of the public enemy, acts of Owner in its sovereign capacity, fires, floods, epidemics, strikes, freight embargoes, and unusually severe catastrophic weather such as hurricanes.

U. Applicable Law:

This Contract shall be deemed to be a Virginia contract and shall be governed as to all matters whether of validity, interpretations, obligations, performance or otherwise exclusively by the laws of the Commonwealth of Virginia, and all questions arising with respect thereto shall be determined in accordance with such laws. Regardless of where actually delivered and accepted, this Contract shall be deemed to have been delivered and accepted by the parties in the Commonwealth of Virginia.

V. Compliance With All Laws:

Successful Bidder shall comply with all federal, state and local statutes, ordinances, and regulations now in effect or hereafter adopted, in the performance of this contract. Successful Bidder represents that it possesses all necessary licenses and permits required to conduct its business and/or will acquire any additional licenses and permits necessary for performance of this contract prior to the initiation of work. If the Successful Bidder is a corporation, Successful Bidder further expressly represents that it is a corporation of good standing in the Commonwealth of Virginia and will remain in good standing throughout the term of the contract and any extensions. All City of Newport News business license, personal property, real estate and other applicable tax requirements shall be met by Successful Bidder.

W. Venue:

Venue shall be in the Circuit Court of the City of Newport News, Virginia, and the United States District Court for the Eastern District of Virginia, Norfolk Division, compliant with applicable laws and regulations, as deemed appropriate by the Owner.

X. Severability:

If any provision of this contract is found by any court of competent jurisdiction to be invalid or unenforceable, the invalidity of such provision shall not affect the other provisions of this contract, and all other provisions of this contract shall remain in full force and effect.

Y. Non-Appropriation of Funds:

It is understood and agreed between the parties herein that the Owner shall be bound hereunder only to the extent that the funds shall have been appropriated. In the event no funds or insufficient funds are appropriated, Owner shall immediately notify the Successful Bidder of such occurrence and this Contract shall terminate on the last day funds are available without penalty or expense to the Owner of any kind whatsoever.

Z. Tax Exemption:

The Owner is exempt from federal excise tax and from all State and local taxes. Successful Bidder shall not include such taxes in any invoices under this agreement. Upon request, the Owner will furnish the Successful Bidder with tax exemption certificates or the Owner tax exempt number.

AA. Vendor's Invoices:

Successful Bidder shall submit to the Owner all invoices promptly upon completion of the requirements for installation, delivery, and acceptance of the Products and Services required under this contract. Invoices shall not include any costs other than those identified in the executed Owner purchase order awarding this contract or any subsequent change orders issued by the NNPS Purchasing Division. All shipping costs are the Successful Bidder's responsibility, except to the extent such charges are identified in the executed NNPS purchase order or change orders. Successful Bidder's invoices shall provide at a minimum:

- Type and description of the Product or Service installed, delivered and accepted;
- Serial numbers, if any;
- Quantity delivered;
- Charge for each item;
- Extended total (unit costs x quantity);
- This IFB number and the NNPS Purchase Order Number.

BB. Contractual Disputes:

Any dispute concerning a question of fact as a result of a contract with the Owner which is not disposed of by agreement shall be decided by the NNPS Purchasing Agent, who shall reduce his decision to writing and mail or otherwise forward a copy thereof to the contractor within thirty (30) days. The decision of the NNPS Purchasing Agent shall be final and conclusive unless the contractor appeals within six (6) months of the date of the final written decision by instituting legal action as provided in the Code of Virginia. A contractor may not institute legal action, prior to receipt of the public body's decision on the claim, unless the public body fails to render such decision within the time specified. Contractual claims, whether for money or other relief, shall be submitted in writing no later than sixty days after final payment; however, written notice of the contractor's intention to file such claim shall have been given at the time of the occurrence or beginning of the work upon which the claim is based. Nothing herein shall preclude a contract from requiring submission of an invoice for final payment within a certain time after completion and acceptance of the work or acceptance of the goods. Pendency of claims shall not delay payment of amounts agreed due in the final payment.

CC. Warranty/Guarantee:

The Successful Bidder guarantees against defective or faulty material or workmanship for at least one (1) year or for the manufacturer's standard warranty period, whichever is greater, from the date of Final Completion as specified by Owner. To furnish adequate protection from damage for all work and to repair damages of any kind for which Successful Bidder or Successful Bidder's workmen are responsible, to the building or equipment, to Successful Bidder's own work, or to the work of others. Any merchandise or service provided under the contract which is or becomes defective during the warranty period shall be replaced by the Successful Bidder free of charge with the specific understanding that all replacements shall carry the same guarantee as the original equipment or service (one year or manufacturer's standard warranty period, whichever is greater, from the date of acceptance of the replacement). The Successful Bidder shall make any such replacement immediately upon receiving notice from the Owner.

The Contractor agrees to assign to the Owner at the time of final completion of the Work any and all manufacturer's warranties relating to materials and labor used in the Work. All warranties and guarantees of the Contractor noted in the Specifications or contained herein shall survive the expiration of the Contract or the early termination of the Contractor.

In addition to the foregoing stipulations, the Contractor shall comply with all other guarantees and warranties referred to in any portion of the Contract Documents, the more stringent requirement governing. If, for any reason the Contractor cannot guarantee any part of his Work using the material or construction methods which have been specified or shown, it shall notify the Architect/Engineer in writing before the Notice to Proceed is given, giving reasons together with the name of the product and data on substitutions he can guarantee. Should the Contractor fail to so notify the Architect prior to receiving the Notice to Proceed, the Contractor will be held to have agreed to guarantee all Work specified or shown.

DD. Payment Terms:

To be eligible for payment, all labor, equipment and materials covered under Successful Bidder's invoice must be completed and accepted by the Owner. Owner agrees to make payments under this contract within thirty (30) days after receipt of a correct invoice for such payment. Where payment is made by mail, the date of postmark shall be deemed to be the date of payment. Any amounts due the Owner under the terms of this or any other agreement may be applied against Successful Bidder's invoices with documentation for the basis of the adjustment attached. In no event shall any interest penalty or late fee accrue when payment is delayed because of disagreement between the Owner and Successful Bidder regarding the quantity, quality, time of delivery, or other noncompliance with the contract requirements for any Product or Service or the accuracy or correctness of any invoice. Payment terms offering a "prompt payment discount" of 20 days or greater will be considered in the evaluation of bids. All other payment terms shall be net thirty (30) calendar days or greater. Payment terms not specified by Bidder shall be Net 45 days.

NOTE: Special Educational or Promotional Discounts:

The contractor shall extend any special educational or promotional sale prices or discounts immediately to Newport News Public Schools during the term of the contract. Such notice shall also advise the duration of the specific sale or discount price.

EE. Prompt Payment:

The Owner will promptly pay for completed, delivered goods or services accepted under this Contract by the payment date established. The required payment date will be either: (i) the date on which payment is due under the terms of this Contract for the provision of the goods or services; or (ii) if a date is not established by this Contract, not more than forty-five (45) days after goods or services are received or not more than forty-five (45) days after the invoice is rendered, whichever is later.

Within twenty (20) days after the receipt of the invoice or goods or services, the Owner shall notify the supplier of any defect or impropriety that would prevent payment by the payment date. Should Owner fail to pay the Contractor by the pay date, finance charges may be assessed by the Contractor. Unless otherwise provided under the terms of this Contract, interest will accrue at the rate of one percent (1%) per month. This will not apply to late payment provisions in any public utility tariffs or public utility negotiated Contracts. Contractor shall include in each of its subcontracts a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor.

In cases where payment to Contractor is made by mail, the date of postmark shall be deemed to be the date payment is made for purposes of this Contract.

Individual Contractors shall provide to the Owner their social security numbers and proprietorships, partnerships, and corporations to provide their federal employer identification numbers.

Within seven (7) days after Contractor receives payment from the Owner, Contractor shall take one or more of the following actions:

1. Pay all subcontractors for the proportionate share of the total payment received from Owner attributable to the work performed by the subcontractors under this Contract;
2. Notify Owner and all affected subcontractors, in writing, of Contractor's intention to withhold all or a part of each affected subcontractor's payment including the reason for nonpayment.
3. Pay interest to the subcontractor on all amounts owed by the Contractor that remain unpaid after (7) seven days following receipt by the Contractor of payment from Owner for work performed by the subcontractor under that Contract, except for amounts withheld, as allowed in #2 above.

A Contractor's obligation to pay an interest charge to a subcontractor pursuant to the payment clause in this section shall not be construed to be an obligation of Owner. A Contract modification will not be made for the purpose of providing reimbursement by Owner for interest charges owed by Contractor. A cost reimbursement claim to the Owner shall not include any amounts for reimbursement of interest charges owed by Contractor.

FF. Payment by Electronic Funds Transfer (EFT):

(a) Method of payment.

(1) All payments by Newport News Public Schools (NNPS) under this contract shall be made by electronic funds transfer (EFT) except as provided in paragraph (a)(2) of this clause. As used in this clause, the term "EFT" refers to the funds transfer and may also include the payment information transfer.

(2) In the event NNPS is unable to release one or more payments by EFT, the Contractor agrees to either—

- (i) Accept payment by check or some other mutually agreeable method of payment; or
- (ii) Request NNPS to extend payment due dates until such time NNPS makes payment by EFT (but see paragraph (d) of this clause).

(b) Mandatory submission of Contractor's EFT information.

(1) The Contractor is required to provide NNPS with the information required to make payment by EFT (see paragraph (j) of this clause). The Contractor shall provide this information directly to the NNPS Accounting Department (hereafter referred to as "Accounting") no later than 15 days prior to submission of the first request for payment. In the event that the EFT information changes, the Contractor shall be responsible for providing the updated information to the Accounting.

(2) If the Contractor provides EFT information applicable to multiple contracts, the Contractor shall specifically state the applicability of this EFT information in terms acceptable to Accounting.

(c) Mechanisms for EFT payment. NNPS may make payment by EFT through the Automated Clearing House (ACH) network, subject to the rules of the National Automated Clearing House Association

(d) Suspension of payment.

(1) The NNPS is not required to make any payment under this contract until after receipt, by Accounting, of the correct EFT payment information from the Contractor. Until receipt of the correct EFT information, any invoice or contract financing request shall be deemed not to be a proper invoice for the purpose of prompt payment under this contract.

(2) If the EFT information changes after submission of correct EFT information, NNPS shall begin using the changed EFT information no later than 30 days after its receipt by Accounting to the extent payment is made by EFT. However, the Contractor may request that no further payments be made until the updated EFT information is implemented by Accounting. If such suspension would result in a late payment under the prompt payment terms of this contract, the Contractor's request for suspension shall extend the due date for payment by the number of days of the suspension.

(e) Liability for uncompleted or erroneous transfers.

(1) If an uncompleted or erroneous transfer occurs because NNPS used the Contractor's EFT information incorrectly, NNPS remains responsible for—

- (i) Making a correct payment;
- (ii) Paying any prompt payment penalty due; and
- (iii) Recovering any erroneously directed funds.

(2) If an uncompleted or erroneous transfer occurs because the Contractor's EFT information was incorrect, or was revised within 30 days of NNPS' release of the EFT payment transaction, and—

- (i) If the funds are no longer under the control of Accounting, NNPS is deemed to have made payment and the Contractor is responsible for recovery of any erroneously directed funds; or
- (ii) If the funds remain under the control of Accounting, NNPS shall not make payment and the provisions of paragraph (d) shall apply.
- (f) EFT and prompt payment. A payment shall be deemed to have been made in a timely manner in accordance with the prompt payment terms of this contract if, in the EFT payment transaction instruction released to the Federal Reserve System, the date specified for settlement of the payment is on or before the prompt payment due date, provided the specified payment date is a valid date under the rules of the Federal Reserve System.
- (g) EFT and assignment of claims. If the Contractor assigns the proceeds of this contract as provided for in the assignment of claims terms of this contract, the Contractor shall require as a condition of any such assignment, that the assignee shall provide the EFT information required by paragraph (j) of this clause to Accounting, and shall be paid by EFT in accordance with the terms of this clause. In all respects, the requirements of this clause shall apply to the assignee as if it were the Contractor. EFT information that shows the ultimate recipient of the transfer to be other than the Contractor, in the absence of a proper assignment of claims acceptable to NNPS, is incorrect EFT information within the meaning of paragraph (d) of this clause.
- (h) Liability for change of EFT information by financial agent. NNPS is not liable for errors resulting from changes to EFT information provided by the Contractor's financial agent.
- (i) Payment information. Accounting shall forward to the Contractor available payment information that is suitable for transmission as of the date of release of the EFT instruction to the Federal Reserve System. NNPS may request the Contractor to designate a desired format and method(s) for delivery of payment information from a list of formats and methods Accounting is capable of executing. However, NNPS does not guarantee that any particular format or method of delivery is available and retains the latitude to use the format and delivery method most convenient to NNPS. If NNPS makes payment by check in accordance with paragraph (a) of this clause, NNPS shall mail the payment information to the remittance address in the contract.
- (j) EFT information. The Contractor shall provide the following information to Accounting. The Contractor may supply this data for this or multiple contracts (see paragraph (b) of this clause). The Contractor shall designate a single financial agent per contract capable of receiving and processing the EFT information using the EFT methods described in paragraph (c) of this clause.
- (1) The contract number (or other procurement identification number).
 - (2) The Contractor's name and remittance address, as stated in the contract(s).
 - (3) The signature (manual or electronic, as appropriate), title, and telephone number of the Contractor official authorized to provide this information.
 - (4) The name, address, and 9-digit Routing Transit Number of the Contractor's financial agent.
 - (5) The Contractor's account number and the type of account (checking, saving, or lockbox).
 - (6) If applicable, the Fedwire Transfer System telegraphic abbreviation of the Contractor's financial agent.
 - (7) If applicable, the Contractor shall also provide the name, address, telegraphic abbreviation, and 9-digit Routing Transit Number of the correspondent financial institution receiving the wire transfer payment if the Contractor's financial agent is not directly on-line to the Fedwire Transfer System; and, therefore, not the receiver of the wire transfer payment.

NNPS Accounting Department Designated Contact:

Accounting Department
NNPS Administration Building
12465 Warwick Blvd.
Newport News, Virginia 23606
Tel: (757) 283-7850, X10724
Ray Reyes, Accounting Supervisor
ray.reyes@nn.k12.va.us

GG. Audits:

The Owner shall have the right to audit all books and records (in whatever form they may be kept, whether written, electronic or other) relating or pertaining to this Contract (including any and all documents and other materials, in whatever form they may be kept, which support or underlie those books and records), kept by or under the control of Successful Bidder, including, but not limited to those kept by Successful Bidder, its employees, agents, assigns, successors and subcontractors. Successful Bidder shall maintain such books and records, together with such supporting or underlying documents and materials, for the duration of this Contract and for at least three years following the completion of this Contract, including any and all renewals thereof. The books and records, together with the supporting or underlying documents and materials shall be made available, upon request, to the Owner, through its employees, agents, representatives, contractors or other designees, during normal business hours at Successful Bidder's office or place of business in Newport News, Virginia. In the event that no such location is available, then the books and records, together with the supporting or underlying documents and records, shall be made available for audit at a time and location in Newport News, Virginia, which is convenient for the Owner. This paragraph shall not be construed to limit, revoke, or abridge any other rights, powers, or obligations relating to audit which the Owner may have by state, city, or federal statute, ordinance, regulation, or agreement, whether those rights, powers, or obligations are express or implied.

IV. SPECIAL TERMS AND CONDITIONS

A. Contract Term:

Project construction date is June 21, 2021. A certificate of substantial completion for the work at Kiln Creek Elementary School, under this Contract, must be provided to the Owner by Contractor no later than August 19, 2021. The date of Substantial Completion is the date certified by the Architect/Engineer. Final completion date is September 24, 2021.

B. Drawings and Project Manuals:

In addition to the documents described herein, the Bid Pricing form, the Project Manual entitled "Kiln Creek Elementary School", Newport News Public Schools Newport News Virginia IFB #009-0-2021GS MJT Project No. 20-126 dated March 26, 2021, and the associated Plans/Drawings are hereby incorporated into this contract, by reference, as if written herein verbatim and are all considered contract documents.

C. Drawing and Specifications; Use and Ownership:

Upon award, the Owner will furnish to the Contractor, free of charge, copies of Drawings and/or Specifications reasonably necessary for the execution of the Work.

When the Work involved is common to a trade or industry, which can be judged as acceptable, or not by commonly accepted standards for a specific trade, the Contractor shall not use the inadequacy or omission of drawing detail or specification language to excuse his failure to perform to the highest industry standards. All Drawings and/or Specifications shall remain the property of the Owner, and shall not be reused on other Work by the Contractor.

D. Construction Schedule:

The Contractor shall submit within ten (10) days, or upon a timeframe mutually agreeable between the Owner and Contractor, after award of Contract a schedule which shall show the order (and value of) in which the Contractor proposes to carry on the Work. The Construction Schedule shall not exceed time limits current under the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practical execution of the Work.

Note: For this Project, Work scheduled during the School Year as defined for the applicable school year on the Newport News Public School website <http://sbo.nn.k12.va.us/overview/> must be scheduled after operating hours as defined for the applicable school year on the Newport News Public Schools website <http://sbo.nn.k12.va.us/ophours.pdf> and as coordinated and approved by the Project Manager defined in the bid document herein.

E. Schedule of Values:

Within seven (7) calendar days after receipt of the Notice to Proceed, or upon a timeframe mutually agreeable between the Owner and Contractor but prior to submitting the first pay application, there will be a mandatory Project meeting to review the Construction Schedule and Schedule of Values. The Schedule of Values, once approved by Owner, shall be the basis for submittal and approval of monthly progress payments. The Contractor shall provide the Owner Representative with sufficient information on its plan for completing all Work under this Contract. Contractor will be prepared to present the suppliers and delivery dates for their respective critical materials. Contractor will also be prepared to present the number of workers scheduled to be onsite throughout the Project. NOTE: NO APPLICATIONS FOR PROGRESS PAYMENTS WILL BE CERTIFIED FOR PAYMENT UNLESS THE CONTRATOR HAS SUBMITTED THE ABOVE SCHEDULING INFORMATION.

F. Time is of the Essence:

Time is of the essence in this Contract. Contractor expressly acknowledges that in the performance of its obligations, Owner is relying on timely performance and will schedule operations and incur obligations to third parties in reliance upon timely performance by Contractor and may sustain substantial losses by reason of untimely performance.

G. Insurance:

Contractor shall submit to the NNPS Contract Administrator certificates of insurance, prior to beginning work under the contract and no later than ten (10) days after award of the contract.

All policies of insurance required herein shall be written by insurance companies licensed to conduct the business of insurance in Virginia, and acceptable to Owner, and shall carry the provision that the insurance will not be cancelled or materially modified without thirty days (30) prior written notice to the Owner or to the extent permitted by Virginia law. The certificates of insurance shall list NNPS, 12465 Warwick Boulevard, Newport News, Virginia, 23606-0130, as the additional insured for the specified project as outlined in this IFB. Copies of actual endorsements to the policy shall be required to confirm any special request, such as, additional insured status. A COI shall not be issued or delivered that gives the impression there are coverage terms the referenced policy does not specifically provide.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO IMMEDIATELY NOTIFY THE OWNER SHOULD ANY POLICY BE CANCELLED. FAILURE TO NOTIFY THE OWNER SHALL CONSTITUTE A MATERIAL BREACH OF THE CONTRACT.

Insurance shall be maintained during the entire term of the contract and shall be of the following forms and limits:

Forms	Limits
Workers' Compensation	Statutory
Automobile Liability	\$1,000,000 Combined Single Limit

Commercial General Liability, including Contractual Liability and Products and Completed Operations Coverage	\$1,000,000 Combined Single Limit
Miscellaneous Errors and Omissions with Intellectual Property Rights Coverage, Including Copyright Infringement	\$1,000,000
Umbrella/Excess Liability	\$5,000,000

The establishment of minimum limits of insurance by Owner does not reduce or limit the liability or responsibilities of the Contractor.

H. Bonds:

Unless otherwise noted, all surety documents required herein shall be received and approved by the NNPS Contract Administrator prior to beginning work under the contract and no later than five (5) days after issuance of the “Notice of Award” for this IFB. Each of the required bonds shall be payable to the Owner. Bonds shall be executed by one or more surety companies selected by Bidder which are legally authorized to issue bond and do business in the Commonwealth of Virginia. With the exception of any required Bid Bond, each of the above bonds shall be maintained through the term of the contract and any extensions. ***Note in accordance with §2.2-4338, alternative forms of security in lieu of a bid, performance, or payment bond, a bidder may furnish a certified check, cashier’s check, or cash escrow in the face amount required for the bond. If approved by the School Board attorney in advance and prior to submitting a bid, a bidder may furnish a personal bond, property bond, or bank or savings institution’s letter of credit on certain designated funds in the face amount required for the bid, payment, or performance bond. Approval shall be granted only upon a determination that the alternative form of security proffered affords protection to the public body equivalent to a corporate surety’s bond.**

Bid Bond

Each Bidder shall submit with its bid that is \$100,000.00 or more, a bid bond from a surety company selected by the Bidder that is authorized to do business in Virginia, or cashier's check, payable to Newport News Public Schools equal to five percent (5%) of the total bid price. The Bid Bond is a guarantee that if the contract is awarded to the Bidder, he will enter into the contract for the work mentioned in the bid.

Performance and Payment Bonds

Successful Bidder shall furnish to Owner a payment bond and a performance bond each equal to one hundred percent (100%) of the Contract price and each payable to Newport News Public Schools before any agreement is approved and issued if the Project assigned to the Successful Bidder is \$100,000.00 or more. The performance bond shall be conditioned upon the faithful performance of the Contract in strict conformity with the terms and conditions of the Contract, and the payment bond shall be conditioned upon the prompt payment for all such material furnished or labor supplied or performed in the prosecution of the work.

I. Unauthorized Disclosure of Information:

The Contractor shall assume the entire responsibility and liability for any and all damages caused by or resulting from or arising out of the negligent or willful unauthorized disclosure of confidential information on the part of the Contractor, its subcontractors, agents or employees under or in connection with this contract. The Contractor shall save harmless and indemnify Owner and its agents, volunteers, servants, employees and officers from and against any and all claims, losses or expenses, including but not limited to attorney’s fees, which either or both of them may suffer, pay or incur as the result of claims or suits due to, arising out of or in connection with, any and all such unauthorized disclosures, real or alleged. The Contractor shall, upon written demand by Owner, assume and defend, at the Contractor’s sole expense, any and all such suits or defense of claims alleging unauthorized disclosures of confidential information.

Any negligent or willful unauthorized disclosure of confidential information on the part of the Contractor, its subcontractors, agents or employees under or in connection with this contract shall constitute a breach of the terms of this contract. Owner may proceed by appropriate court action, including seeking injunctive relief, to prevent continuing unauthorized disclosures, and Contractor shall save harmless and indemnify Owner for court costs, litigation expenses and attorney's fees that it may pay or incur as the result of seeking to prevent or stop any and all unauthorized disclosures of confidential information.

J. Copyright/Patent Indemnity:

The Successful Bidder shall pay all royalty and license fees relating to the items covered by this contract. In the event any third party shall claim that the manufacture, use and sales of the goods supplied under this contract constitute an infringement of any copyright, trademark, or patent, the Successful Bidder shall indemnify Owner and hold Owner harmless from any cost, expense, damage or loss incurred in any manner by Owner on account of any such alleged or actual infringement.

K. Title to Equipment:

Successful Bidder shall pass to Owner clear and unrestricted title to all equipment purchased, delivered, and accepted under this contract upon payment of the purchase price.

L. Liquidated Damages:

The Contractor will be subject to Liquidated Damages per the following terms and conditions:

1. Step 1 - Liquidated Damages, \$1,000 per day, if the Contractor fails to deliver specified HVAC equipment from the manufacturer to the jobsite by July 14, 2021.
2. Step 2 - Liquidated Damages, \$1,000 per day, if the Contractor fails to achieve Substantial Completion as certified by the Engineer-of-Record for the project by August 19, 2021.
3. Step 3 - Liquidated Damages, \$1,000 per day, if the Contractor fails to achieve Final Completion as certified by the Engineer-of-Record for the project by September 24, 2021.

Liquidated Damages shall be enforced for each calendar day until step 1, step 2, or step 3 work task are satisfied as determined by the Engineer-of-Record and the Owner. If the Owner terminates the Contractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination for Cause clause.

M. Time Extensions:

Time extensions for contract changes will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The change order granting the time extension may provide that the contract completion date will be extended only for those specific elements related to the changed work and that the remaining contract completion dates for all other portions of the work will not be altered. The change order also may provide an equitable readjustment of liquidated damages under the new completion schedule.

N. Responsibility for Work:

The Contractor shall be responsible for the protection of their Work until final acceptance. The Contractor shall be responsible for damage to or destruction of the Work caused by the negligence of the Contractor, or any other party under the control and supervision of the Contractor. Contractor agrees to make no claims against the Owner for damages for the Work from any cause except negligence or willful acts of the Owner, improper or faulty design, acts of any Enemy, or acts of war. Contractor shall obtain and maintain in force until Owner's final acceptance of Project, Builders' Risk Insurance that fully covers any loss or damage to Project.

O. Changes in the Work:

The Owner may make changes in the drawings and specifications or scheduling of the Contract within the general scope at any time. If such changes add to or deduct from the Contractor's cost of the Work, the Contract price shall be adjusted accordingly. All such Work shall be executed under the conditions of the original Contract except that any claim for extension of time caused thereby shall be included as part of the negotiated change order.

The Contractor shall be prepared to justify any price for Extra Work by providing detailed breakdown and supporting documents when requested by the Owner.

1. If sub-contractor does the actual Work, the mark-up shall be limited to a maximum of 15%. If the subcontractor does not enter into the Work he shall not be added into the cost. General Contractor mark-up shall be limited to a maximum of 10%.
2. If the General Contractor is solely responsible for the Work the maximum mark-up shall be limited to 10%.”

P. Extension of Time:

(a) Extension of time stipulated in the Contract for completion of the Work will be made when formally approved Change Orders, fully executed by the Owner, Architect, and Contractor, when such changes in the Work increase the overall scope; when the Work is suspended; or when the Work of the Contractor is delayed on account of physical conditions or acts of others which could not have been foreseen by, or which were beyond the control of the Contractor, his subcontractors or suppliers, and which were not the result of their fault or negligence.

(b) NO TIME EXTENSION WILL BE GRANTED BY THE OWNER UNLESS THE FOLLOWING PROCESS IS FOLLOWED. If, during any month the Contractor is unable to Work for reasons beyond the Contractor’s control and believes the Contractor is due an extension; the Contractor shall submit in writing, along with the Contractor’s monthly request for progress payments, a request for the extension which clearly explains the circumstances which the Contractor feels justifies and extension. The request will be reviewed by the Owner and a written response, granted or rejecting the request, will be issued. Any request for days older than the current month will be dismissed without consideration. Time extensions shall constitute a formal change to Contract terms and conditions and a formal Change Order (AIA Form G701 in its latest edition) shall be issued by the Owner accordingly and as specified herein.

Q. Different Site Conditions:

The Contractor shall promptly, and before the conditions are disturbed, give a written notice to the Contract Administrator of-

- Subsurface or latent physical conditions at the site which differ materially from those indicated in this contract; or
- Unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inhering in work of the character provided for in the contract.

The Owner’s Representative(s) shall investigate the site conditions promptly after receiving the notice. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the work under this contract, whether or not changed as a result of the conditions, an equitable adjustment shall be made under this clause and the contract modified in writing, accordingly. No request by the Contractor for an equitable adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required; *provided*, that the time prescribed in this paragraph for giving written notice may be extended by the Issuing Office. No request by the Contractor for an equitable adjustment to the contract for differing site conditions shall be allowed if made after final payment under this contract.

R. Site Investigations and Conditions Affecting Work:

The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and location of the work, and that it has investigated and satisfied itself as to the general and local conditions which can affect the work or its cost, including but not limited to (1) conditions bearing upon transportation, disposal, handling, and storage of materials; (2) the availability of labor, water, electric power, and roads; (3) uncertainties of weather, river stages, tides, or similar physical conditions at the site; (4) the conformation and conditions of the ground; and (5) the character of equipment and facilities needed preliminary to and during work performance. The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be

encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the Owner, as well as from the drawings and specifications made a part of this contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the work, or for proceeding to successfully perform the work without additional expense to the Owner. The Owner assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the Owner. Nor does the Owner assume responsibility for any understanding reached or representation made concerning conditions, which can affect the work by any of its officers or agents before the execution of this contract, unless that understanding or representation is expressly stated in this contract.

S. Correction of Work:

The Contractor shall promptly correct Work rejected by the Owner or Architect/Engineer or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear costs of correcting such rejected Work, including additional testing and inspections and compensation for the Owner's and Architect's/Engineer's services and expense made necessary thereby.

Within two (2) years after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established by Section III. BB., or by terms of an applicable special warranty required by the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. The period of two (2) years shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the Work. This obligation under this section IV. S. shall survive acceptance of the Work under the Contract and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

T. Suspension of Work:

The Owner may at any time suspend the Work, or any part thereof, by giving a ten (10) day notice to the Contractor in writing or in the case of an emergency, immediately. The Work shall be resumed by the Contractor within ten (10) days after the date fixed in the written notice from the Owner to the Contractor to do so. The Owner shall reimburse the Contractor for expenses incurred as a result of such suspension.

U. Material and Workmanship:

All equipment, material, and articles incorporated into the work covered by this contract shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in this contract. Any references in the specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

All work under this contract shall be performed in a skillful and workmanlike manner. Owner may require, in writing, that the Contractor remove from the work any employee the Contract Administrator deems incompetent, careless, or otherwise objectionable.

V. Permits and Responsibilities:

The Contractor shall, without additional expense to Owner, be responsible for obtaining any necessary licenses and permits required to complete work under this contract, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occurs as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work, which may have been accepted under the contract.

W. Material and Appliances:

Unless otherwise stipulated, the Contractor shall provide and pay for all materials, labor, water, tools, equipment, light, power, transportation and other facilities of a quantity and quality necessary for the execution and completion of the Work. The Contractor shall, if required, furnish satisfactory evidence as to the kind and quality of materials. The Contractor shall promptly notify in writing the Owner representative if any change in materials as specified is contemplated or proposed. Any such proposed change shall be promptly investigated, and if found to be necessary and/or acceptable, the Contract shall be formally modified. Any change in materials shall be made at the Contractors own risk unless approved as prescribed above.

X. Superintendence by Contractor:

At all times during performance of this contract and until the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent, who is satisfactory to the Owner, and has authority to act for the Contractor.

Y. Owner's Representative's Status:

The Owner Representative shall at all times have access to the Work whenever it is in preparation or progress, and the Contractor shall provide proper facilities for such access and for inspection.

The Owner Representative shall perform technical inspection of the Work. Owner Representative has authority to stop the Work whenever such stoppage may be necessary to insure the proper execution of the Contract. Owner Representative shall also have authority to reject all Work and materials which do not conform to the Contract and to decide questions which arise in the execution of the Work.

Notwithstanding such inspection, the Contractor will be held responsible for the acceptability of the finished Work. If the specifications, the Owner Representative's instructions, laws, ordinances, or any public authority require any Work to be specially tested or approved, the Contractor shall give the Owner timely notice of its readiness for inspection, and if the inspection is by an authority other than the Owner, of the date fixed for such inspection. If any Work required to be inspected should be covered without proper approval or consent it must, if required, be uncovered for examination and properly restored at the Contractor's expense.

Reexamination of any Work may be ordered, and if so ordered, the Work must be uncovered by the Contractor. If such Work is found to be in accordance with the Contract, the Owner shall pay the cost of reexamination and replacement. If such Work is not in accordance with the Contract, the Contractor shall pay such cost.

The Owner Representative's presence and actions do not replace the legal requirements of the State and/or local building codes. Notwithstanding the Owner Representative's actions or instructions, the Contractor shall adhere to all building code requirements regarding inspection and approvals.

Whenever work being done by the Owner's forces, utility companies, or by other contractors' forces is contiguous to Work covered by this Contract, the respective rights of the various interests involved shall be established by the Owner Representative to secure the completion of the various portions of the Work in general harmony.

The Owner Representative shall, within a reasonable time after presentation to him, make decisions in writing on all matters relating to the execution and progress of the Work or the interpretation of the specifications and/or drawings.

In making these decisions, the Owner Representative, shall have authority to make interpretations and minor changes as to the scope of Work not involving extra cost, and not inconsistent with the purpose of the Work. If the Contractor claims that any such instructions involve extra cost, he shall give written notice thereof within ten (10) days, after the receipt of such instruction. Except in an emergency endangering life and/or property, no extra cost shall be accepted by the Owner unless pursuant to a formal modification to the Contract.

Z. Employees:

The Contractor shall at all times enforce proper discipline and order among his employees, and shall seek to avoid employing on the Work any unfit person or anyone not skilled in the Work assigned to him. The Owner reserves the right to require the Contractor to remove from the Project any employee whose actions are detrimental and disruptive to the Project. Proper discipline and order includes the wearing of appropriate clothing; inappropriate messages such as drug, sex, tobacco or alcohol messages depicted on clothing will not be tolerated and will result in immediate removal of the employee from the job site. All NNPS properties are tobacco free; smoking is banned from all school property. Adequate sanitary facilities shall be provided by the Contractor. The Contractor shall be responsible for complying with all OSHA, Virginia OSHA, NFPA, NEC, etc. requirements. Contractor shall provide to the Owner's Representative, its Employee Worker Safety Program prior to receiving the Notice to Proceed.

AA. Certification for Contractors in Direct Contact with Students:

In accordance with the Code of Virginia, prior to making an award for services that require direct contact with students, the Contractor and any employee who will have direct contact with students must certify (i) that he has not been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child; and (ii) whether he has been convicted of a crime of moral turpitude. "Direct contact with students" is defined as "being in the presence of students during regular school hours or during school-sponsored activities". **A signed certification to this effect must be completed prior to Contractor entering the Owner's premises. Contractor is responsible to obtain signed certifications for any subcontractors performing Work under this Contract.**

BB. Other Contracts:

Owner may undertake or award other contracts for additional work at or near the site of the Work under this contract. The Contractor shall afford other contractors reasonable opportunity for the introduction and storage of materials and the execution of Work, and shall properly connect and coordinate his Work with theirs. If the proper execution or results of any part of the Contractor's Work depends upon the Work of any other contractors, the Contractor shall inspect and promptly report to the Owner Representative any defects in such Work that render it unsuitable for such proper execution and results. The Contractor shall fully cooperate with the other contractors and with Owner employees and shall carefully adapt scheduling and performing the work under this contract to accommodate the additional work, heeding any direction that may be provided by the Contract Administrator. The Contractor shall not commit or permit any act that will interfere with the performance of work by any other Contractor or by Owner employees.

CC. Protection of the Public and of Work and of Property:

The Contractor shall provide and maintain all necessary watchmen, flagmen, barricades, and signage in accordance with requirements of the law and of the Owner Representative and take all reasonable precautions for the protection and safety of the public. Contractor shall continuously maintain reasonable protection of all Work from damage, and shall take all reasonable precautions to protect property from injury or loss arising in connection with this Contract. The Contractor shall take reasonable precautions to protect private property adjacent to the project from such nuisances as debris and excessive noise. Contractor shall make good any damage, injury or loss to his Work and to the property Owner resulting from lack of reasonable protective precautions, except such as may be caused by agents or employees of the Owner.

Emergency Work:

In a situation which affects the safety of life, or of the Work, or of adjoining property, the Contractor is, without special instructions or authorization from the Owner Representative, permitted to act at his discretion to prevent such threatening loss or injury. Contractor shall also act, without appeal, if so authorized or instructed by the Owner Representative. Any compensation claimed by the Contractor on account of emergency Work, shall be determined by mutual agreement and is subject to the notification requirements. Claims shall be submitted to the Owner no later than the current month's scheduled Project progress meeting.

DD. Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements:

The Contractor shall preserve and protect all structures, equipment, and vegetation (such as trees, shrubs, and grass) on or adjacent to the work site, which is not to be removed and which does not unreasonably interfere with the work required under this contract. The Contractor shall only remove trees when specifically authorized to do so, and shall avoid damaging vegetation that will remain in place. If any limbs or branches of trees are broken during contract performance, or by the careless operation of equipment, or by workmen, the Contractor shall trim those limbs or branches with a clean cut and paint the cut with a tree-pruning compound as directed by the Contract Administrator.

The Contractor shall protect from damage all existing improvements and utilities (1) at or near the work site, and (2) on adjacent property of a third party, the locations of which are made known to or should be known by the Contractor. The Contractor shall repair any damage to those facilities, including those that are the property of a third party, resulting from failure to comply with the requirements of this contract or failure to exercise reasonable care in performing the work. If the Contractor fails or refuses to repair the damage promptly, the Contract Administrator may have the necessary work performed and charge the cost to the Contractor.

EE. Environmental Consideration:

Any costs or expenses associated with environmentally related violations of the law, the creation or maintenance of a nuisance, or releases of hazardous substances, including, but not limited to, the costs of any cleanup activities, removals, remediation, responses, damages, fines, administrative or civil penalties or charges imposed on Owner, whether because of actions or suits by any governmental or regulatory agency or by any private party, as a result of the storage, accumulation, or release of any hazardous substances, or any noncompliance with or failure to meet any federal, state or local standards, requirements, laws, statutes, regulations or the law of nuisance by Contractor (or by its agents, officers, employees, subcontractors, consultants, sub-consultants, or any other persons, corporations or legal entities employed, utilized, or retained by Contractor) in the performance of this Contract or related activities, shall be paid by Contractor. This paragraph shall survive the termination, cancellation or expiration of this Contract.

FF. Hazardous Materials:

By acceptance of this Contract, the Contractor certifies that it has provided a list of any hazardous material to be delivered under this Contract. The hazardous material shall be properly identified and include any applicable identification number, such as National Stock Number or Special Item Number. Additionally, the Contractor agrees to update this list during performance of the Contract, whenever the Contractor determines that any other material to be delivered under this Contract is hazardous. Failure of the Contractor to disclose this information is grounds for termination.

GG. Copyright/Patent Indemnity:

The Contractor shall pay all royalty and license fees relating to the items covered by this contract. In the event any third party shall claim that the manufacture, use and sales of the goods supplied under this contract constitute an infringement of any copyright, trademark, or patent, the Contractor shall indemnify Owner and hold Owner harmless from any cost, expense, damage or loss incurred in any manner by Owner on account of any such alleged or actual infringement.

HH. Partial Occupancy or Use:

The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented by the insurer and authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. Immediately prior to such partial occupancy or use,

the Owner, Contractor, and Architect/Engineer shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

II. Payments withheld prior to prior to Final Acceptance of Work:

As a result of discovered evidence, the Owner may withhold or nullify the whole or part of any certificate of payment to such extent as may be necessary to protect himself from loss caused by:

- (a) Defective Work not remedied.
- (b) Claims filed or reasonable evidence indicating probable filing of claims by other parties against the Contractor.
- (c) Failure of the Contractor of making payments properly to subcontractors or for material or labor.
- (d) Damage to another Contractor.

JJ. Correction of Work before Final Payment:

The Contractor shall promptly remove from the premises all materials and work rejected by the Owner's Representative as failing to meet Contract requirements, whether incorporated in the Work or not, and the Contractor shall promptly replace materials and/or re-execute Work in accordance with the Contract and without expense to the Owner and shall bear the expense of making good all Work of other Contractors destroyed or damaged by such removal or replacement.

All removal and replacement Work shall be done at the Contractor's expense. If the Contractor does not take action to remove such condemned Work and materials within ten (10) days after written notice, the Owner may remove them and store the material at the expense of the Contractor. If the Contractor does not pay the expense of such removal and storage within ten (10) after written notice, the Owner may, upon ten (10) days written notice, sell such materials at auction or at private sale and shall pay to the Contractor any net proceeds thereof, after deducting all the costs and expenses that should have been borne by the Contractor.

KK. Cleaning Up:

The Contractor shall remove at its own expense from the Work site and from all public and private property all temporary storage structures, rubbish, and waste materials resulting from his operations. This requirement shall not apply to property used for permanent disposal of rubbish or waste materials in accordance with permission for such disposal granted to the Contractor by the Owner Representative where such disposal is in accordance with local ordinances.

LL. Acceptance and Final Payment:

(a) Upon receipt of written notice that the Work is substantially completed or ready for final inspection and acceptance, the Owner's Representative [the Project Manager and the Architect/Engineer (when assigned to the Project)] will promptly make such inspection, and when the Owner Representative finds the Work acceptable under the Contract and the Contract fully performed or substantially completed, The Owner and Architect/Engineer (when assigned to the Project) shall promptly issue a certificate signed by both the Owner and Architect/Engineer (when assigned to the Project), stating that the Work required by this Contract has been completed or substantially completed and is accepted by him under the terms and conditions thereof, and the entire balance found to be due the Contractor, including the retained percentage, less a retention based on the estimate of the fair value of the claims against the Contractor and the cost of completing the incomplete or unsatisfactory items of Work with specified amounts for each incomplete or defective item or Work, is due and payable. The date of substantial completion of a project or specified area of a project is the date when the construction is sufficiently completed in accordance with the Contract as modified by any change orders agreed to by the parties so that the Owner can occupy the Project or specified area of the Project for the use for which it is intended.

(b) The making and acceptance of the final payment shall constitute a waiver of all claims by the Owner, other than those arising from unsettled claims or from faulty Work appearing within the guarantee period provided in the Special Conditions, from the requirements of the Drawings and Specifications, or from manufacturer's guarantees. It shall also constitute a waiver of all claims by the Contractor, except those previously made and still unsettled.

MM. Claims for Extra Compensation:

If Contractor encounters work and services not included in this Contract or any supplement thereto but which in the opinion of Contractor is necessary for the successful completion of the Contract and requires extra compensation, Contractor shall, before it begins the work on which it bases its claim, promptly notify the Project Manager and Architect/Engineer (if assigned to the Project) in writing of its intention to perform the work and to make claim for extra compensation. Notification by Contractor under the terms of this paragraph shall not be construed as proving the validity of the claim. No claim for extra compensation will be filed or considered unless notification is given as herein set forth.

Upon written notification to the Owner; the Project Manager and Architect /Engineer (if assigned to the Project) shall promptly review any claim for extra compensation. If a claim is accepted by Owner it shall be paid as extra work in accordance with the terms of a formal Change Order executed by all parties before such work is begun.

The amounts claimed as extra compensation by Contractor shall be separately itemized, become a part of the claim, and serve as documentation thereto. The amounts itemized shall be in sufficient detail to enable the Owner to analyze the need for the extra work and the costs claimed for the work.

Attachment "A" for IFB #009-0-2021GS - HVAC System Replacement Kiln Creek

BID RESPONSE FORM

In compliance with solicitation dated April 9, 2021, the undersigned proposes to furnish all labor equipment and materials and perform all work in strict accordance with all requirements for:

HVAC Replacement for Kiln Creek Elementary School

The above scope of work to be performed at the dollar amount(s) stated herein.

The undersigned agrees and assures that:

- . All prices stated herein shall be firm for a period of _____ calendar days.
(90 days minimum)
- . If bidder's response is accepted and a purchase order issued, bidder will accept same and fulfill requirements in strict compliance with all terms and conditions.
- . If in acceptance of bidder's response, bidder is required to furnish a payment bond and a performance bond; and/or a certificate of insurance, bidder will execute and furnish same within five (5) calendar days of such notice, and that failure to do so will mean forfeiture of any surety bidder may have been required to post as part of bidder's response.
- . Bidder's business is organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership and is authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the code of Virginia, as amended, or as otherwise required by law.
- . If a Contractor, Bidder is registered with the Commonwealth of Virginia as a
Class _____; Registration No. _____;
- . Bidder meets all licensing and permit requirements to conduct business in the City of Newport News, Virginia

PLEASE MAKE NOTE THAT THE CONTRACTOR SHALL SUBMIT COORDINATED EQUIPMENT SHOP DRAWINGS WITH THEIR BID PACKAGE FOR THE FOLLOWING EQUIPMENT:

1. Rooftop Air-Cooled Dedicated Outside Air Units with Energy Recovery (DOAS-1 and 2)
2. Water Source Heat Pump Units (AHU-4, 6, 7, and 8)

3. Split system Air Conditioning unit with Hot water Heat (AHU-3)
4. Packaged Rooftop Single Zone VAV Air Conditioning Units (AHU-1, 2 and RACU-1)
5. Water Source Air Conditioning unit with Hot Water Heat (AHU-5)
6. Cooling Tower (CT-1)
7. Classroom Vertical Water Source Heat Pump (WSHP-A)
8. Horizontal Concealed Water Source Heat Pump (WSHP-1 thru 12)
9. Boiler (B-1 and 2)

OTHER BIDDER REQUIREMENTS:

- All equipment noted above shall be delivered to site on or before July 14, 2021.
- The successful Bidder shall pay as liquidated damages the sum of \$1,000.00 per day for each consecutive calendar day thereafter for which the equipment is not onsite.
- The successful Bidder shall begin work on or before a date to be specified on the Owner's written "Notice to Proceed" and shall substantially complete the project before August 19, 2021.
- The successful Bidder shall pay as liquidated damages the sum of \$1,000.00 per day for each consecutive calendar day thereafter for which the project is not substantially complete.
- The successful Bidder shall achieve final completion the project before September 24, 2021.
- The successful Bidder shall pay as liquidated damages the sum of \$1,000.00 per day for each consecutive calendar day thereafter for which the project has not achieved final completion.

IFB Project No. 009-0-2021GS

Submitted By:

Company Name _____

Street Address _____

City/State/Zip _____

Phone _____ FAX _____

Date: _____

Federal ID # _____ SCC Registration # _____

DUNS # _____

The BIDDER, in compliance with the Invitation For Bids (IFB 009-0-2021GS) for HVAC System Replacement, Kiln Creek ES and having carefully examined the Conditions of the Contract, Specifications, Drawings, and Addenda numbers (s) _____(Bidder to insert Addenda number(s); if none, so state) and having carefully examined the site and all conditions affecting the Work, HEREBY PROPOSE to furnish all labor, materials and equipment, and to complete the project in accordance with the Contract Documents, within the time set forth therein, and for the Bid price stated herein. Said price shall cover all expenses incurred in performing the work required by the Contract Documents, of which this proposal is a part.

All labor and equipment necessary for HVAC System Replacement Kiln Creek Elementary School:

1. LUMP SUM BASE BID FOR HVAC REPLACEMENT KILN CREEK ELEMENTARY SCHOOL

LUMP SUM BASE BID AMOUNT

_____ DOLLARS
(Written)

(\$ _____ USD)
(Figure)

Discrepancies between multiplication of units of work and unit prices will be resolved in favor of unit prices, discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in the favor of the correct sum. Discrepancies between words and figures will be resolved in favor of words. When the project bids are received and opened, the

low bidder shall be determined based on the lowest bid that the Owner in its sole discretion decides to accept/award.

The undersigned agrees that if awarded a Contract, bidder will commence work within **10** calendar days after the date of notice to proceed letter, and that bidder will complete all work, as specified (to include codes inspection and Owner acceptance) shall be completed by September 24, 2021 acknowledging the Owner's right per Section IV L., of the Contract Documents, to assess Liquidated Damages of One Thousand Dollars **\$1,000.00 USD** per day.

(For individual trading
in his individual name) _____
(Print)

(Signature)

(For use by an individual
trading under trade name) _____
(Print)

(Signature)

Trading as _____
(Print)

(Signature)

(For use by partnership) _____
(Partnership Name Printed)

(Partner/Signature)

(For use by a corporation) _____
(Corporate Name Printed)

By _____
(Corporate Officer Signature)

(Name Printed)

Indicate Official Position

Attest: _____
Corporate Secretary

(Name Printed)

CERTIFICATION REGARDING DEBARMENT

This is to certify that this person/firm/corporation is not now debarred by the Federal Government or by the Commonwealth of Virginia or by any other state, or by any town, city, or county, from submitting Bids on contracts for construction covered by this solicitation, nor are they an agent of any person or entity that is now so debarred.

Name of Official

Title

Firm or Corporation

Date

Attachment "B" for IFB #009-0-2021GS - HVAC System Replacement Kiln Creek

CERTIFICATION OF COMPLIANCE WITH CODE OF VIRGINIA, §22.1-296.1

I, _____, a duly authorized representative and officer of
_____ (Contractor's name), in accordance with the Code
of

Virginia, §22.1-296.1, do certify that _____ (Contractor's
name)

hereby certify that the employees, subcontractors, partners, and representatives who will be in direct contact with students (i) have not been convicted of a felony or any offense involving the sexual molestation or physical or sexual abuse or rape of a child; and (ii) has not been convicted of a crime of moral turpitude. "Direct contact with students" is defined as "being in the presence of students during regular school hours or during school-sponsored activities."

Any person making a materially false statement regarding any such offense shall be guilty of a Class 1 misdemeanor and, upon conviction, the fact of such conviction shall be grounds for the revocation of the contract to provide such services and, when relevant, the revocation of any license required to provide such services. NNPS shall not be liable for materially false statements regarding the certifications required by the state code.

Contractor is responsible for ensuring that each of its employees, subcontractors, partners, and representatives who will be in direct contact with students have certified the above and shall maintain such certifications on file for the duration of the contract period.

I do understand the above information and certify that the above statements are true.

(Contractor's Authorized Office – Signature)

(Contractor's Authorized Officer – Printed Name)

(Title)

(Date)

Attachment "C" for IFB #009-0-2021GS - HVAC System Replacement Kiln Creek

Contractor Questionnaire Form

The following questions shall be answered in full by the Bidder:

1. Name of Company: _____

Trade Name (if different from Company Name) _____

Principal Office Address: _____

Telephone No (s). _____

Fax No(s). _____

Email Address(es) _____

a. If a Corporation, answer the following:

When Incorporated: _____

What State: _____

Virginia State Corporation Commission # _____

b. If an Unincorporated Organization, answer the following:

Date of Organization: _____

Names and addresses of Owners or

Members: _____

Type and State of Organization: _____

c. If a Partnership, state whether the Partnership is General or Limited:

Names and Addresses of Owners or Partners:

Attachment “C” for IFB #009-0-2021GS - HVAC System Replacement Kiln Creek

2. Experience:
- a. How many years has this Bidder been in business as a Contractor under its present business name? _____

b. What prior names of this Bidder, if any?

3. How many years experience in this type of construction work has this Bidder have?

a. As a Contractor? _____

b. As a Subcontractor? _____

4. Provide a list of uncompleted Contracts/Projects at present held by this Bidder? (attach supplemental sheet if necessary)

Contract/Project	Type of Work	Amount	% Complete

5. List the Bidder’s crew foremen and supervisors proposed for this Project and their years of related experience:

Name	Years of Experience	Dates of Employment with Bidder

6. What construction equipment does this Bidder own that is available for the proposed work? (attach supplemental sheet if necessary)

Attachment “C” for IFB #009-0-2021GS - HVAC System Replacement Kiln Creek

7. Does this Bidder plan to subcontract any part of this work? If so, list name, address, years experience, and type and amount of work to be performed by each subcontractor.

8. Provide a list of projects similar in character and scope to the Work specified under this Contract which have been successfully completed by this Bidder during the past three years. (attach supplemental sheet if necessary)

(The term “completed” means accepted and final payment received from the Owner or authorized representative)

Location & Type of Work	Owner’s Name and Address	Contact person (name and telephone)	Date Completed	Contract Price

9. Have you ever performed work for a municipal corporation, local governing body, or similar agency previously? (If all such bodies are listed under 8, this question need not be completed.)

10. Bidder Responsibility:

- a. Has this Bidder ever failed to complete any work awarded to it? If yes, give name of Owner, name of Bonding Company and circumstances:

Attachment "C" for IFB #009-0-2021GS - HVAC System Replacement Kiln Creek

b. Is this Bidder debarred by the Federal Government or by the Commonwealth of Virginia or by any other state, or by any town, city, or county?

Yes _____ No _____ If yes, please provide details:

c. Has this Bidder ever had any judgements entered against it for breach of contract for construction? _____ if yes, please provide details:

d. Give a summary of your financial statement. (List assets and liabilities, use an insert sheet if necessary)

11. State approximate largest dollar volume of work performed by this Bidder in one year:

12. Give two (2) Banking Institution References:

a. Name: _____

Address: _____

Credit Available: _____

b. Name: _____

Address: _____

Credit Available: _____

13. List three (3) material suppliers and amount of credit available:

a. Name: _____

Address: _____

Credit Available: _____

Attachment "C" for IFB #009-0-2021GS - HVAC System Replacement Kiln Creek

b. Name: _____

Address: _____

Credit Available: _____

c. Name: _____

Address: _____

Credit Available: _____

14. List insurance coverage (attach certificate of insurance in required Project amount)

15. Bonding reference: List surety company and highest coverage:

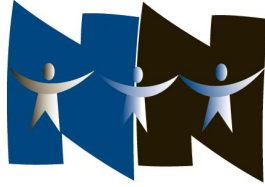
16. Have you or your authorized representative, personally inspected the location of the proposed Work, and do you have a clear understanding of the requirements of the Bid Documents?

The undersigned hereby authorizes and consents to any person, firm or corporation to furnish any information requested by the Owner in verification of this statement of contractor's qualifications. Also, if it is the apparent low Bidder, the undersigned hereby agrees to furnish the Owner upon request, a complete and current financial statement:

Contractor: _____

By: _____ (Sign and Print Name)

Title: _____ Date: _____



April 16, 2021

Addendum #1

FOR IMMEDIATE ATTENTION

TO: ALL BIDDERS

RE: **IFB #009-0-2021GS – Kiln Creek HVAC Replacement**

1. The above referenced IFB is hereby amended and clarified as follows:

The Project Manual and Drawings for this project may be obtained from the following electronic link,

<http://70.165.69.206:8080/share.cgi?ssid=0opt06i>

2. All other provisions of the IFB shall remain unchanged. This provision shall become part of the IFB package, and Bidder shall acknowledge receipt of the Addendum by signing in the space provided below and returning it with the Bid.

Signature: _____

(Bidder)

Sincerely,

Glenn Schofield, C.P.M.
Director of Procurement



April 21, 2021

Addendum #2

FOR IMMEDIATE ATTENTION

TO: ALL BIDDERS

RE: **IFB #009-0-2021GS – Kiln Creek HVAC Replacement**

1. The above referenced IFB is hereby amended and clarified as follows:

The Environmental Report for the Kiln Creek Project is attached herein.

2. All other provisions of the IFB shall remain unchanged. This provision shall become part of the IFB package, and Bidder shall acknowledge receipt of the Addendum by signing in the space provided below and returning it with the Bid.

Signature: _____

(Bidder)

Sincerely,

Glenn Schofield, C.P.M.
Director of Procurement



April 29, 2021

Addendum #3

FOR IMMEDIATE ATTENTION

TO: ALL BIDDERS

RE: IFB #009-0-2021GS – Kiln Creek HVAC Replacement

1. Responses to Offerors questions are as follows:

Question: Should this renovation project incorporate the HVAC controls of Area E and Area F into the overall BAS platform to make the entire school manageable & accessible to the facility maintenance team along with the benefits of access and control by the school district's Energy Manager?

Answer: It is understood that Area F currently operates with a standalone control system independent from the main BAS, and that the existing controllers in Area E are interfaced with the AX version JACE through a 3rd party communication driver (Invensys legacy ASD protocol). The intent of this project is to keep the Area F controllers remaining as-is (standalone operation), while reusing the existing legacy controllers in Area E by providing a new ASD communications trunk line from the new JACE to the first controller in Area E and providing a new N4 version ASD driver and license with the JACE.

Question: Is AISC certification required for this project as indicated in Specification Section 051200, paragraphs 1.6.A and 1.6.B?

Answer: No, please refer to the revised 051200 "Structural Steel Framing" specification published with this Addendum. AISC certification requirements listed as part of paragraphs 1.6.A and 1.6.B have been removed.

Question: Drawing M3.3 does not include a pipe support detail for the mechanical courtyard piping, as referenced on drawing M2.1 in keynote 63.

Answer: Piping support detail for mechanical courtyard piping has been added to M3.3.

Question: The DOAS schedule notes regarding horizontal and vertical discharge do not match up with the orientations shown on M1.6?

Answer: DOAS schedule notes have been revised for clarity. Design intent is for DOAS-1 to have horizontal discharge and return orientation per schedule note 11 and for DOAS-2 to have vertical discharge and return orientation per schedule note 12.

Question: The basis of design equipment selections for AHU-4, -6, -7 and -8 cannot be factory provided with phase failure monitors and brownout protection. Is this required?

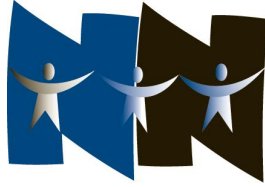
Answer: Phase failure monitor and brownout protection requirements have been removed from AHU schedule on M0.2 due to equipment limitations.

2. All other provisions of the IFB shall remain unchanged. This provision shall become part of the IFB package, and Bidder shall acknowledge receipt of the Addendum by signing in the space provided below and returning it with the Bid.

Signature: _____
(Bidder)

Sincerely,

Glenn Schofield, C.P.M.
Director of Procurement



April 29, 2021

Addendum #4

FOR IMMEDIATE ATTENTION

TO: ALL BIDDERS

RE: IFB #009-0-2021GS – Kiln Creek HVAC Replacement

1. The above referenced IFB is hereby amended and clarified as follows:

Revisions to Specifications and Drawings as follows, and detailed Specifications and Drawings attached herein to this Addendum #4:

SPECIFICATIONS

Section 051200 – STRUCTURAL STEEL FRAMING

- Delete paragraphs 1.6.A and 1.6.B, referring to AISC certification requirements. There is no requirement for AISC certification as it pertains to these paragraphs.

DRAWINGS

Sheet M0.2:

- Revised DOAS-1/2 remarks to clarify horizontal/vertical discharge requirements.
- Removed requirement for phase failure monitor and brownout protection from AHU-4,-6,-7 and -8. Schedule remarks renumbered accordingly.
- AHU-5 schedule marks revised to remove references to exhaust fan, roof curb, and isolation rail. There is no requirement for exhaust fan, roof curb, or isolation rail with AHU-5. Remarks renumbered accordingly.

Sheet M0.3:

- Cooling tower weight, fan CFM, and model number revised. Original data was based on a previous selection at 500 GPM, not at 530 GPM as required in cooling tower schedule. Cooling tower footprint remains unchanged.
- Plate frame heat exchanger number of plates, effective heat surface, and model number revised. Original data was based on a previous selection at 500 GPM, not at 530 GPM as required in late frame heat exchanger schedule. Heat exchanger footprint remains unchanged.

Sheet M3.3:

- Added pipe support detail for piping in mechanical courtyard (referenced in keynote 63 on M2.1).

Sheet M4.2:

- Reference to current sensing relay for ionization device removed. There is no requirement for ionization devices on the DOAS units and thus no requirement for CSR interlock with the supply fan.
2. All other provisions of the IFB shall remain unchanged. This provision shall become part of the IFB package, and Bidder shall acknowledge receipt of the Addendum by signing in the space provided below and returning it with the Bid.

Signature: _____
(Bidder)

Sincerely,

Glenn Schofield, C.P.M.
Director of Procurement

SECTION 051200 - STRUCTURAL STEEL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Structural steel.
2. Grout.

B. Related Requirements:

1. Section 051213 "Architecturally Exposed Structural Steel Framing" for additional requirements for architecturally exposed structural steel.

1.2 DEFINITIONS

- A. Structural Steel: Elements of the structural frame indicated on Drawings and as described in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show fabrication of structural-steel components.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Welding certificates.
- C. Mill test reports for structural steel, including chemical and physical properties.
- D. Source quality-control reports.
- E. Field quality-control and special inspection reports.

1.6 QUALITY ASSURANCE

- ~~A. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC Certified Plant, Category STD, or is accredited by the IAS Fabricator Inspection Program for Structural Steel (AC-172).~~
- ~~B. Installer Qualifications: A qualified installer who participates in the AISC Quality Certification Program and is designated an AISC Certified Erector, Category CSE.~~
- C. Welding Qualifications: Qualify procedures and personnel according to AWS D1.1/D1.1M, "Structural Welding Code - Steel."
- D. Comply with applicable provisions of the following specifications and documents:
 - 1. AISC 303.
 - 2. AISC 360.
 - 3. RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

PART 2 - PRODUCTS

2.1 STRUCTURAL-STEEL MATERIALS

- A. W-Shapes: ASTM A 992/A 992M.
- B. Channels, Angles Shapes: ASTM A 36/A 36M.
- C. Plate and Bar: ASTM A 36/A 36M.
- D. Cold-Formed Hollow Structural Sections: ASTM A 500/A 500M, Grade B, structural tubing.
- E. Steel Pipe: ASTM A 53/A 53M, Type E or Type S, Grade B.
- F. Welding Electrodes: Comply with AWS requirements.

2.2 BOLTS, CONNECTORS, AND ANCHORS

- A. High-Strength Bolts, Nuts, and Washers: ASTM A 325 (ASTM A 325M), Type 1, heavy-hex steel structural bolts; ASTM A 563, Grade C, (ASTM A 563M, Class 8S) heavy-hex carbon-steel nuts; and ASTM F 436 (ASTM F 436M), Type 1, hardened carbon-steel washers; all with plain finish.
- B. Headed Anchor Rods: ASTM F 1554, Grade 36.
 - 1. Finish: Plain.

2.3 PRIMER

- A. Primer: SSPC-Paint 25, Type I, zinc oxide, alkyd, linseed oil primer.
- B. Primer: Fabricator's standard lead- and chromate-free, nonasphaltic, rust-inhibiting primer complying with MPI#79 and compatible with topcoat.

2.4 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," and to AISC 360.

2.5 SHOP CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Snug tightened.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.

2.6 SHOP PRIMING

- A. Shop prime steel surfaces except the following:
 - 1. Surfaces embedded in concrete or mortar. Extend priming of partially embedded members to a depth of 2 inches (50 mm).
 - 2. Surfaces to be field welded.
 - 3. Surfaces of high-strength bolted, slip-critical connections.
 - 4. Surfaces to receive sprayed fire-resistive materials (applied fireproofing).
 - 5. Galvanized surfaces.
 - 6. Surfaces enclosed in interior construction.
- B. Surface Preparation: Clean surfaces to be painted. Remove loose rust and mill scale and spatter, slag, or flux deposits. Prepare surfaces according to the following specifications and standards:
 - 1. SSPC-SP 2, "Hand Tool Cleaning."
 - 2. SSPC-SP 3, "Power Tool Cleaning."
 - 3. SSPC-SP 7/NACE No. 4, "Brush-off Blast Cleaning."
- C. Priming: Immediately after surface preparation, apply primer according to manufacturer's written instructions and at rate recommended by SSPC to provide a minimum dry film thickness of 1.5 mils (0.038 mm). Use priming methods that result in full coverage of joints, corners, edges, and exposed surfaces.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify, with certified steel erector present, elevations of concrete- and masonry-bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 ERECTION

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.
- B. Baseplates Bearing Plates and Leveling Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.
 - 1. Set plates for structural members on wedges, shims, or setting nuts as required.
 - 2. Weld plate washers to top of baseplate.
 - 3. Snug-tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
 - 4. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.
- C. Maintain erection tolerances of structural steel within AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

3.3 FIELD CONNECTIONS

- A. High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Snug tightened.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 - 1. Comply with AISC 303 and AISC 360 for bearing, alignment, adequacy of temporary connections, and removal of paint on surfaces adjacent to field welds.
 - 2. Remove backing bars or runoff tabs, back gouge, and grind steel smooth.

3. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," for mill material.

3.4 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
 1. Verify structural-steel materials and inspect steel frame joint details.
 2. Verify weld materials and inspect welds.
 3. Verify connection materials and inspect high-strength bolted connections.
- B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- C. Bolted Connections: Inspect bolted connections according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
- D. Welded Connections: Visually inspect field welds according to AWS D1.1/D1.1M.
 1. In addition to visual inspection, test and inspect field welds according to AWS D1.1/D1.1M.

END OF SECTION 051200

ROOFTOP AIR-COOLED DEDICATED OUTSIDE AIR UNIT WITH ENERGY RECOVERY SCHEDULE

UNIT NO.	ENERGY RECOVERY PERFORMANCE DATA														FAN PERFORMANCE DATA								NO. OF COMP.	HOT GAS REHEAT COIL	ELECTRICAL REQUIREMENTS				UNIT WEIGHT (LBS.)	REFRIGERANT TYPE	SELECTION BASED ON "DAIKIN"	REMARKS													
	SUPPLY AIR DATA							EXHAUST AIR DATA							SUPPLY				EXHAUST						DX COOLING COIL DATA																				
	OA CFM	COOLING		HEATING			EA CFM	COOLING		HEATING			CFM	ESP (IN)	HP	RPM	CFM	ESP (IN)	HP	RPM	TOTAL MBH	SENSIBLE MBH			EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB					APD (IN)	EER	MBH TOTAL	LAT (°F)DB	MCA	MOCP	V	PH					
DOAS-1	7441	95.0	78.0	86.0	72.6	15.0		14.0	40.0	35.4	3641	77.0											66.0	86.4					72.9	68.0	54.0	38.6									34.3	7100	2.0	7.5	1116
DOAS-2	7827	95.0	78.0	84.8	71.8	15.0	14.0	43.4	38.0	4627	77.0	66.0	85.2	72.1	68.0	54.0	42.3	37.1	7480	2.0	7.5	1133	4260	1.25	4	1574	476.5	269.1	85.2	72.1	54.4	53.7	0.25	10.2	4	185.5	74.0	100.9	110	460	3	6751	R-410A	MPS040F	①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭

REMARKS: ① PROVIDE WITH SINGLE POINT POWER CONNECTION. ② UNIT WEIGHT DOES NOT INCLUDE ROOF CURB, VIBRATION RAIL OR ACOUSTICAL SYSTEM. ③ PROVIDE WITH ENERGY RECOVERY WHEEL. ④ OA AND EA CFM INCLUDES PURGE CFM. ⑤ PROVIDE WITH 14" HIGH ROOF CURB. ⑥ PROVIDE ISOLATION RAIL SYSTEM IN ACCORDANCE WITH SPECIFICATION 230500 2.08A AND DETAIL ON DRAWING M6.02. ⑦ PROVIDE WITH CONDENSATE OVERFLOW PROTECTION SWITCH. ⑧ PROVIDE WITH PHASE FAILURE MONITOR AND BROWN OUT PROTECTION. ⑨ PROVIDE WITH DOOR HOLD OPEN LATCHES ON ALL ACCESS DOORS. ⑩ THIS EQUIPMENT SHALL BE INSTALLED IN "PHASE 1" OF CONSTRUCTION. ⑪ PROVIDE WITH HORIZONTAL DISCHARGE AND RETURN. ⑫ PROVIDE WITH DOWN DISCHARGE AND RETURN. ⑬ PROVIDE WITH MODULATING HOT GAS REHEAT. ⑭ PROVIDE WITH 65 KA SCCR.

WATER SOURCE HEAT PUMP UNIT SCHEDULE

UNIT NO.	AREA SERVED	WATER SOURCE HEAT PUMP PERFORMANCE DATA														NO. OF COMPRESSORS	HOT GAS REHEAT COIL	ELECTRICAL REQUIREMENTS				UNIT WEIGHT (LBS.)	REFRIGERANT TYPE	SELECTION BASED ON "DAIKIN"	REMARKS											
		SUPPLY				COOLING DATA							HEATING DATA							MCA	MOCP					V	PH									
		CFM	OA CFM	ESP (IN)	HP	GPM	TOTAL MBH	SENSIBLE MBH	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB	EWT (°F)	LWT (°F)	HEAT REJECTION (MBH)			EER	WPD (FT)									CAPACITY (MBH)	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB	EWT (°F)	LWT (°F)	HEAT ABSORPTION (MBH)	COP
AHU-4	KITCHEN	4500	300	0.75	3	40	172.3	114.3	80.0	67.0	56.1	54.1	85.0	95.0	210.0	15.6	21.7	197.8	70.0	110.8	68.0	60.0	158.5	5.0	21.7	2	69.4	72.0	31.3	40	460	3	1029	R-410A	WLVC1180	①②③④⑤⑥
AHU-6	LIBRARY	3200	700	0.75	3	40	120.0	72.5	80.9	68.6	59.8	56.6	85.0	92.4	147.5	14.9	32.1	141.9	70.0	110.6	68.0	60.0	110.9	4.6	32.1	2	42.4	72.0	21.4	25	460	3	704	R-410A	WCCH2120	①②③④⑤⑥
AHU-7	ART	1200	530	0.75	1.5	18	76.7	44.6	85.0	71.0	56.6	54.4	85.0	95.6	95.1	14.3	7.1	81.4	70.0	120.6	68.0	60.0	62.3	4.3	7.1	2	20.1	72.0	15.9	20	460	3	642	R-410A	WCCH2072	①②③④⑤⑥
AHU-8	SPECIALIST	1600	315	0.5	1.5	23	74.9	42.2	80.5	68.4	55.6	52.6	85.0	93.1	93.2	13.9	11.3	106.4	70.0	120.6	68.0	60.0	68.2	4.9	11.3	2	28.5	72.0	15.9	20	460	3	642	R-410A	WCCH2072	①②③④⑤⑥

REMARKS: ① REFER TO SPECIFICATION SECTION 230500 FOR ADDITIONAL REQUIREMENTS. ② PROVIDE WITH STAINLESS STEEL DRAIN PAN AND CONDENSATE OVERFLOW PROTECTION SWITCH. ③ PROVIDE WITH FULLY MODULATING HOT GAS REHEAT. ④ PROVIDE WITH BIPOLAR IONIZATION AIR PURIFICATION SYSTEM. REFER TO SPECIFICATION 230500 2.9.B FOR REQUIREMENTS. A 24-VOLT STEP DOWN TRANSFORMER SHALL BE PROVIDED BY THE UNIT MANUFACTURER. THE ENGINEERED VENTILATION SYSTEM WILL PREVENT THE MAXIMUM CONCENTRATION OF CONTAMINANTS FROM EXCEEDING THAT OBTAINABLE BY THE RATE OF OUTDOOR AIR VENTILATION DETERMINED IN ACCORDANCE WITH SECTION 403.3 OF ASHRAE STANDARD 62.1 - 2015. THE MECHANICAL CONTRACTOR SHALL WIRE FROM THE UNIT MANUFACTURER-PROVIDED TRANSFORMER TO THE BIPOLAR IONIZATION POWER SUPPLY. ⑤ PROVIDE WITH SINGLE POINT POWER CONNECTION. ⑥ THIS EQUIPMENT SHALL BE INSTALLED IN "PHASE 1" OF CONSTRUCTION.

SPLIT SYSTEM AIR CONDITIONING UNIT WITH HOT WATER HEAT SCHEDULE

UNIT NO.	AREA SERVED	INDOOR UNIT														NO. OF COMPRESSORS	HOT GAS REHEAT COIL	ELECTRICAL REQUIREMENTS				UNIT WEIGHT (LBS.)	REFRIGERANT TYPE	SELECTION BASED ON "ABOVEAIR"	REMARKS													
		SUPPLY FAN DATA				DX COOLING COIL PERFORMANCE				HOT WATER HEATING COIL PERFORMANCE								MCA	MOCP	V	PH																	
		CFM	OA CFM	ESP (IN)	HP	TOTAL MBH	SENSIBLE MBH	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB	CAPACITY (MBH)	EAT (°F)DB	EAT (°F)WB	LWT (°F)											WPD (FT)	GPM											
AHU-3	ADMIN	1515	325	0.75	3/4	78.0	50.5	80.9	67.3, 9.0	50.2	49.7	63.4	56.6	95.1	180.0	153.8	0.5	5.0	1	32.6	70.0	15.5	25	460	3	CU-3	98.4	6000	2	1/3	2.5	15	460	1	885	R-410A	HKE0782S-4-HGHW01/XP2-072S-9-00-00	①②③④⑤⑥⑦⑧⑨

REMARKS: ① REFER TO SPECIFICATION SECTION 230500 FOR ADDITIONAL REQUIREMENTS. ② PROVIDE WITH STAINLESS STEEL DRAIN PAN AND CONDENSATE OVERFLOW PROTECTION SWITCH. ③ PROVIDE WITH PHASE FAILURE MONITOR AND BROWNOUT PROTECTION. ④ PROVIDE WITH SUCTION LINE ACCUMULATOR. ⑤ HOT GAS REHEAT SHALL BE FULLY MODULATING. ⑥ PROVIDE WITH NON-FUSED DISCONNECT ON INDOOR AND OUTDOOR UNIT. ⑦ PROVIDE WITH HIGH EFFICIENCY DIGITAL SCROLL COMPRESSOR. ⑧ THIS EQUIPMENT SHALL BE INSTALLED IN "PHASE 2" OF CONSTRUCTION PERIOD. ⑨ PROVIDE WITH BIPOLAR IONIZATION AIR PURIFICATION SYSTEM. REFER TO SPECIFICATION 230500 2.9.B FOR REQUIREMENTS. A 24-VOLT STEP DOWN TRANSFORMER SHALL BE PROVIDED BY THE UNIT MANUFACTURER. THE ENGINEERED VENTILATION SYSTEM WILL PREVENT THE MAXIMUM CONCENTRATION OF CONTAMINANTS FROM EXCEEDING THAT OBTAINABLE BY THE RATE OF OUTDOOR AIR VENTILATION DETERMINED IN ACCORDANCE WITH SECTION 403.3 OF ASHRAE STANDARD 62.1 - 2015. THE MECHANICAL CONTRACTOR SHALL WIRE FROM THE UNIT MANUFACTURER-PROVIDED TRANSFORMER TO THE BIPOLAR IONIZATION POWER SUPPLY.

PACKAGED ROOFTOP SINGLE ZONE VAV AIR CONDITIONING UNIT SCHEDULE

UNIT NO.	AREA SERVED	SUPPLY FAN DATA								EXHAUST FAN DATA				DX COOLING COIL PERFORMANCE DATA								NO. OF COMPRESSORS	EER	REFRIGERANT TYPE	HOT GAS REHEAT DATA		ELECTRICAL				UNIT WEIGHT (LBS.)	SELECTION BASED ON "DAIKIN"	REMARKS
		CFM	OA CFM	ESP (IN)	HP	WHEEL SIZE (IN.)	RPM	RAD. SOUND POWER (dBA)	CFM	ESP (IN)	HP	RPM	TOTAL (MBH)	SENS (MBH)	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB	NO. OF COMPRESSORS	TOTAL (MBH)	LAT (°F)DB				V	PH	MCA	MOCP					
		CFM	OA CFM	ESP (IN)	HP	WHEEL SIZE (IN.)	RPM	RAD. SOUND POWER (dBA)	CFM	ESP (IN)	HP	RPM	TOTAL (MBH)	SENS (MBH)	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB															
AHU-1	GYMNASIUM	4500	2000	0.75	3	24	847	80	4200	0.5	3	2270	288.7	167.5	85.0	71.3	51.0	50.9	2	10.5	R-410A	102.8	72.0	460	3	58.9	80	3632	DPS025A	①②③④⑤⑥⑦⑧⑨⑩⑪⑫			
AHU-2	GYMNASIUM	4500	2000	0.75	3	24	847	80	4200	0.5	3	2270	288.7	167.5	85.0	71.3	51.0	50.9	2	10.5	R-410A	102.8	72.0	460	3	58.9	80	3632	DPS025A	①②③④⑤⑥⑦⑧⑨⑩⑪⑫			
RACU-1	MAIN LOBBY	5000	500	0.75	3	24	847	80	4500	0.5	4	2270	248.9	149.3	79.6	68.4	52.3	52.3	1	10.6	R-410A	106.9	72.0	460	3	24.8	30	3522	DPS020A	①②③④⑤⑥⑦⑧⑨⑩⑪⑫			

REMARKS: ① ELECTRICAL REQUIREMENTS ARE BASED ON SINGLE POINT POWER CONNECTION. PROVIDE NON-POWERED UNIT MOUNTED GFI RECEPTACLE. ② UNIT WEIGHT DOES NOT INCLUDE ROOF CURB, VIBRATION RAIL OR ACOUSTICAL SYSTEM. ③ EXHAUST FAN CFM CALCULATED TO MAINTAIN 0.1 CFM/SF POSITIVE PRESSURE. ④ PROVIDE UNIT WITH 0-100% ECONOMIZER CAPABILITIES. ⑤ PROVIDE WITH 14" HIGH ROOF CURB. ⑥ PROVIDE ISOLATION RAIL SYSTEM IN ACCORDANCE WITH SPECIFICATION 230900 2.08A AND DETAIL ON DRAWING M6.02. ⑦ PROVIDE WITH CONDENSATE OVERFLOW PROTECTION SWITCH. ⑧ PROVIDE WITH PHASE FAILURE MONITOR AND BROWN OUT PROTECTION. ⑨ PROVIDE WITH DOOR HOLD OPEN LATCHES ON ALL ACCESS DOORS. ⑩ REHEAT CAPABILITY SHALL BE ACHIEVED BY MODULATING HOT WATER VALVE TO MAINTAIN 72°F LAT AS MEASURE BY DOWNSTREAM TEMPERATURE SENSOR. ⑪ PROVIDE WITH BIPOLAR IONIZATION AIR PURIFICATION SYSTEM. REFER TO SPECIFICATION 230500 2.9.B FOR REQUIREMENTS. A 24-VOLT STEP DOWN TRANSFORMER SHALL BE PROVIDED BY THE UNIT MANUFACTURER. THE ENGINEERED VENTILATION SYSTEM WILL PREVENT THE MAXIMUM CONCENTRATION OF CONTAMINANTS FROM EXCEEDING THAT OBTAINABLE BY THE RATE OF OUTDOOR AIR VENTILATION DETERMINED IN ACCORDANCE WITH SECTION 403.3 OF ASHRAE STANDARD 62.1 - 2015. THE MECHANICAL CONTRACTOR SHALL WIRE FROM THE UNIT MANUFACTURER-PROVIDED TRANSFORMER TO THE BIPOLAR IONIZATION POWER SUPPLY. ⑫ THIS EQUIPMENT SHALL BE INSTALLED IN "PHASE 2" OF CONSTRUCTION PERIOD.

WATER SOURCE AIR CONDITIONING UNIT WITH HOT WATER HEATING SCHEDULE

UNIT NO.	AREA SERVED	SUPPLY FAN PERFORMANCE DATA								WATER SOURCE HEAT PUMP DX COOLING COIL PERFORMANCE DATA								HOT WATER HEATING DATA								NO. OF COMPRESSORS	HOT WATER REHEAT COIL	ELECTRICAL REQUIREMENTS				UNIT WEIGHT (LBS.)	REFRIGERANT TYPE	SELECTION BASED ON "DAIKIN"	REMARKS						
		CFM	OA CFM	ESP (IN)	HP	WHEEL SIZE (IN.)	RPM	RAD. SOUND POWER (dBA)	GPM	TOTAL MBH	SENSIBLE MBH	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB	EWT (°F)	LWT (°F)	EER	WPD (FT)	CAPACITY (MBH)	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB	EWT (°F)			LWT (°F)	GPM	WPD (FT)	TOTAL (MBH)					LAT (°F)DB	GPM	MCA	MOCP	V	PH
		CFM	OA CFM	ESP (IN)	HP	WHEEL SIZE (IN.)	RPM	RAD. SOUND POWER (dBA)	GPM	TOTAL MBH	SENSIBLE MBH	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB	EWT (°F)	LWT (°F)	EER	WPD (FT)	CAPACITY (MBH)	EAT (°F)DB	EAT (°F)WB	LAT (°F)DB	LAT (°F)WB	EWT (°F)			LWT (°F)	GPM	WPD (FT)											
AHU-5	CAFETERIA	6600	4700	0.75	10	18	774	68	108	464.4	261.6	89.8	74.6	53.7	53.7	85.0	95.0	14.4	13.5	431.0	30.3	90.0	180.0	166.7	65	17.9	4	145.4	72.0	15	58.3	70.0	460	3	3640	R-410A	SWT028C	①②③④⑤⑥⑦⑧⑨⑩⑪⑫			

REMARKS: ① PROVIDE WITH SINGLE POINT POWER CONNECTION. ② UNIT WEIGHT DOES NOT INCLUDE ROOF CURB, VIBRATION RAIL OR ACOUSTICAL SYSTEM. ③ REFER TO DIAGRAM ON DRAWING M0.5 FOR ADDITIONAL EQUIPMENT DETAILS. ④ PROVIDE WITH CONDENSATE OVERFLOW PROTECTION SWITCH. ⑤ UNIT SHALL BE OF MODULAR CONSTRUCTION. ALL MODULES SHALL BE CAPABLE OF FITTING THROUGH STANDARD 3'-0" x 6'-7" DOORWAY. ⑥ PROVIDE WITH PHASE FAILURE MONITOR AND BROWN OUT PROTECTION. ⑦ PROVIDE WITH DOOR HOLD OPEN LATCHES ON ALL ACCESS DOORS. ⑧ PROVIDE UNIT WITH COAXIAL HEAT EXCHANGER. ⑨ PROVIDE WITH 10 KA SCCR. ⑩ REHEAT CAPABILITY SHALL BE ACHIEVED BY MODULATING HOT WATER VALVE TO MAINTAIN 72°F LAT AS MEASURE BY DOWNSTREAM TEMPERATURE SENSOR. ⑪ PROVIDE WITH BIPOLAR IONIZATION AIR PURIFICATION SYSTEM. REFER TO SPECIFICATION 230500 2.9.B FOR REQUIREMENTS. A 24-VOLT STEP DOWN TRANSFORMER SHALL BE PROVIDED BY THE UNIT MANUFACTURER. THE ENGINEERED VENTILATION SYSTEM WILL PREVENT THE MAXIMUM CONCENTRATION OF CONTAMINANTS FROM EXCEEDING THAT OBTAINABLE BY THE RATE OF OUTDOOR AIR VENTILATION DETERMINED IN ACCORDANCE WITH SECTION 403.3 OF ASHRAE STANDARD 62.1 - 2015. THE MECHANICAL CONTRACTOR SHALL WIRE FROM THE UNIT MANUFACTURER-PROVIDED TRANSFORMER TO THE BIPOLAR IONIZATION POWER SUPPLY. ⑫ THIS EQUIPMENT SHALL BE INSTALLED IN "PHASE 1" OF CONSTRUCTION.



HVAC REPLACEMENT
KILN CREEK ELEMENTARY SCHOOL
 NEWPORT NEWS, VIRGINIA
 MECHANICAL SCHEDULES

MARK	DESCRIPTION	DATE
1	ADDENDUM 3	04-26-21

COMM. NO. 20-126
 DESIGNED BY: BDC
 DRAWN BY: SLS
 CHECKED BY: KDA

M0.2

DATE: 04/07/2021

COOLING TOWER SCHEDULE

Table with columns: UNIT NO., DESCRIPTION, FLOW (GPM), EWT (°F), LWT (°F), EAT (°F), FAN DATA, MOTOR DATA, SUMP HEATERS, ELECTRICAL, WEIGHT (LBS.), SELECTION BASED ON "EVAPCO", REMARKS. Includes unit CT-1 and remarks 1-8.

BOILER SCHEDULE

Table with columns: UNIT NO., DESCRIPTION, INPUT (MBH), OUTPUT (MBH), FUEL TYPE, GPM, NATURAL GAS PRESS. (IN. WC), LWT (°F), INTAKE SIZE (INCHES), EXHAUST SIZE (INCHES), ELECTRICAL, SELECTION BASED ON "LOCHINVAR", REMARKS. Includes units B-1 and B-2 and remarks 1-5.

PLATE FRAME HEAT EXCHANGER SCHEDULE

Table with columns: UNIT NO., COLD SIDE (TOWER), HOT SIDE (BUILDING), SIZE (SF), NUMBER OF PLATES, SELECTION BASED ON "SONDEX", REMARKS. Includes unit HX-1 and remarks 1-2.

HEAT TRACE SCHEDULE

Table with columns: EQUIPMENT SERVED, EMERGENCY POWERED, NO. OF STRIPS, W/LF, V, PH, APPROXIMATE LENGTH OF PIPING SERVED, APPROXIMATE WATTAGE, METHOD OF CONTROL, REMARKS. Includes units CT-1 SUPPLY WATER PIPING, CT-1 RETURN WATER PIPING, CT-1 COLD WATER MAKE UP PIPING and remarks 1-3.

PUMP SCHEDULE

Table with columns: UNIT NO., TYPE, SYSTEM, GPM, HEAD, MOTOR DATA, SELECTION BASED ON "BELL & GOSSETT", REMARKS. Includes units P-1 through P-7 and remarks 1-5.

HOT WATER DUCT HEATING COIL SCHEDULE

Table with columns: UNIT NO., ASSOCIATED AIR HANDLING UNIT, CFM, CAPACITY TOTAL (MBH), EAT DB(°F), LAT DB(°F), GPM, EWT (°F), LWT (°F), WPD (FT.), SIZE H" x W", SELECTION BASED ON "DAIKIN", REMARKS. Includes units DHC-1 through DHC-5 and remarks 1-4.

CLASSROOM VERTICAL WATER SOURCE HEAT PUMP SCHEDULE

Table with columns: MARK, FAN DATA, GPM, PIPE SIZE, WPD (FT. HD), COOLING DATA, HEATING DATA, HOT GAS REHEAT COIL, ELECTRICAL SERVICE, UNIT WEIGHT (LBS), SELECTION BASED ON "BARD", REMARKS. Includes unit WSHP-A and remarks 1-8.

HORIZONTAL CONCEALED WATER SOURCE HEAT PUMP SCHEDULE

Table with columns: UNIT NO., FAN DATA, GPM, PIPE SIZE, WPD (FT. HD), COOLING DATA, HEATING DATA, HOT GAS REHEAT COIL, ELECTRICAL SERVICE, UNIT WEIGHT (LBS), SELECTION BASED ON "DAIKIN", REMARKS. Includes units WSHP-1 through WSHP-12 and remarks 1-11.



Vertical text on the right margin: VIRGINIA, MECHANICAL SCHEDULES, HVAC REPLACEMENT, KILN CREEK ELEMENTARY SCHOOL, NEWPORT NEWS.

REVISIONS table with columns: MARK, DESCRIPTION, DATE. Includes revision 1: ADDENDUM 3, 04-26-21.

COMM. NO.: 20-126
DESIGNED BY: BDC
DRAWN BY: SLS
CHECKED BY: KDA

M0.3

DATE: 04/07/2021

NEW WORK NOTES:

(THIS SHEET ONLY)

1 PROVIDE "GLOBAL PLASMA SOLUTIONS" MODEL "GPS-IMOD" BIPOLAR IONIZATION GENERATOR FOR RTU-XX. IMOD SHALL BE MOUNTED UPSTREAM OF THE COOLING COIL AT THE TOP OF THE FINNED SURFACE AREA OF THE COIL. REFER TO FIGURE 1 FOR EXAMPLE. PROVIDE SUFFICIENT QUANTITY OF 6" IMOD SECTIONS TO MATCH THE WIDTH OF THE COOLING COIL. VERIFY THAT ALL MODULAR SECTIONS OF THE IMOD ARE ATTACHED SNUGLY TOGETHER IN ACCORDANCE WITH FIGURE 2.

2 PROVIDE "GLOBAL PLASMA SOLUTIONS" 15 WATT POWER SUPPLY WITH MULTI-VOLTAGE INPUT FOR EACH ROOFTOP UNIT. WIRE POWER SUPPLY TO IMOD UTILIZING 6'-0" FLEXIBLE POWER CABLE PROVIDED WITH IMOD. MOUNT POWER SUPPLY ON INSIDE OF ROOFTOP UNIT CABINET AND CONNECT TO UNIT POWER.

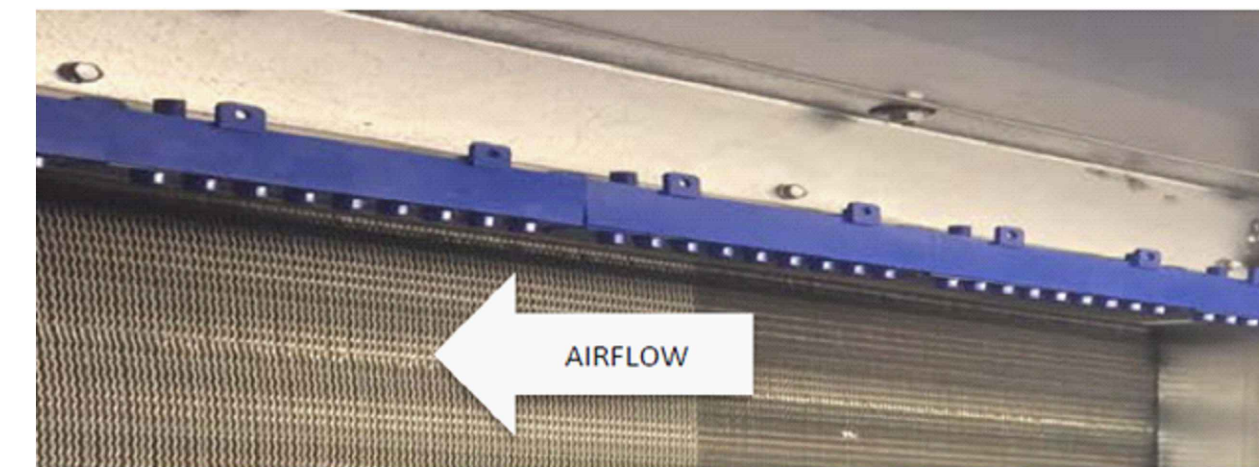


FIGURE 1: BI DEVICE MOUNTING LOCATION

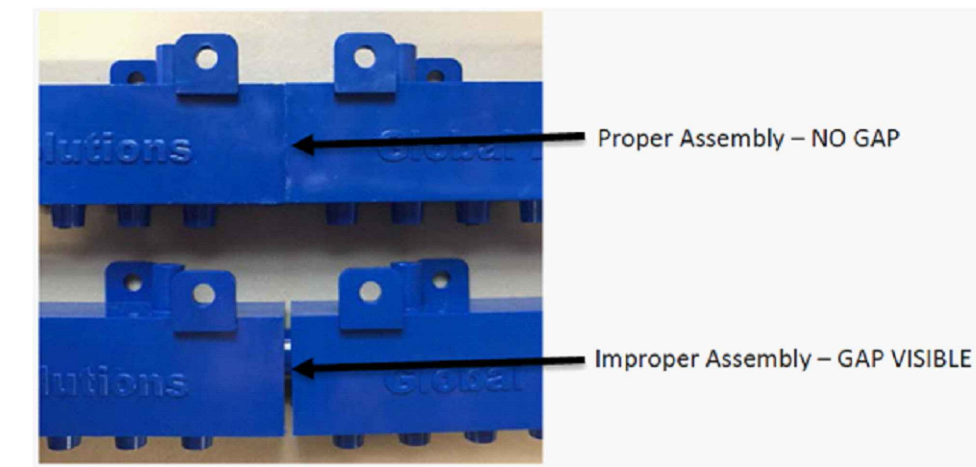
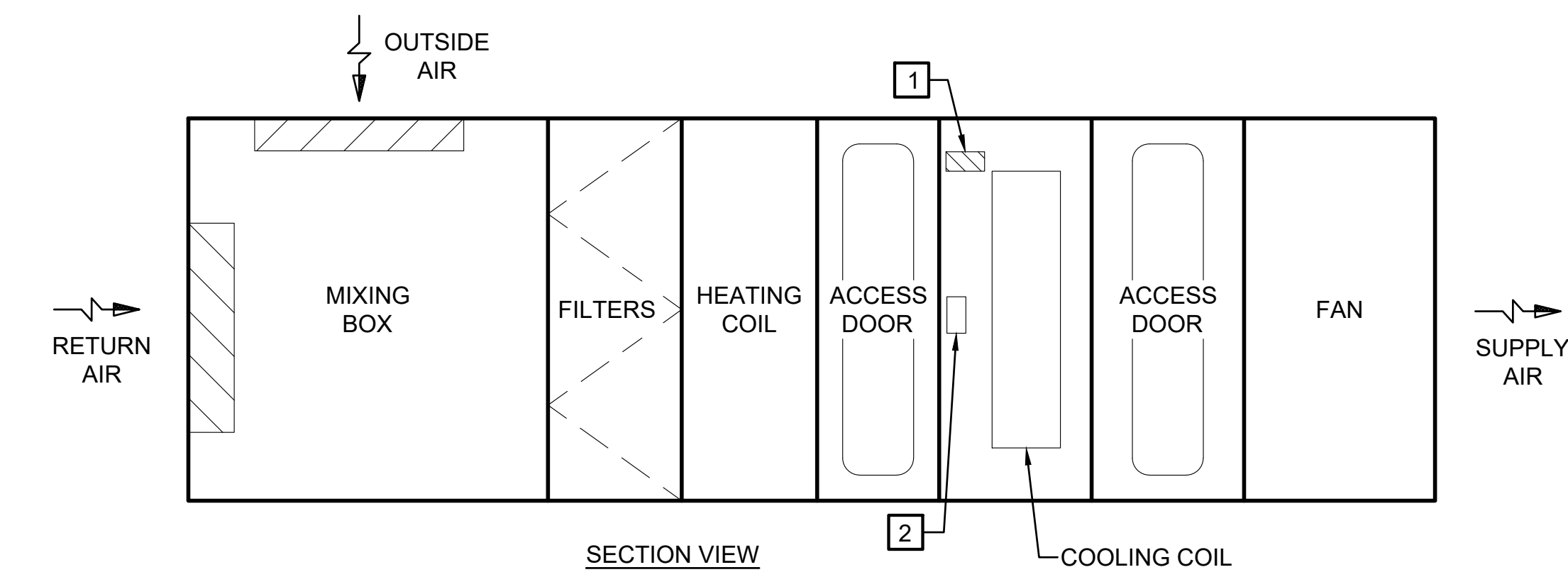


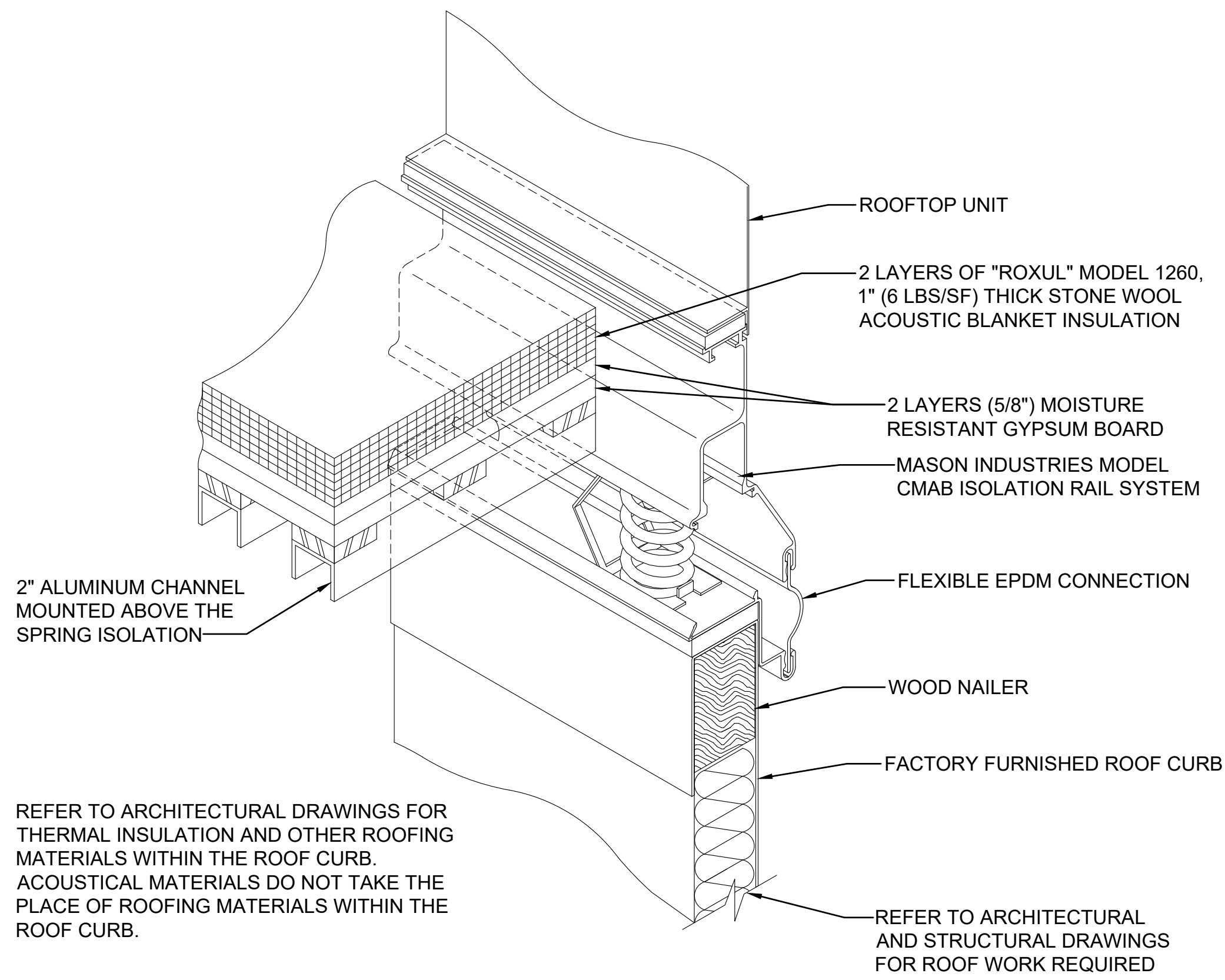
FIGURE 2: BI DEVICE MODULE ASSEMBLY



ROOFTOP UNIT BIPOLAR IONIZATION INSTALLATION DIAGRAM

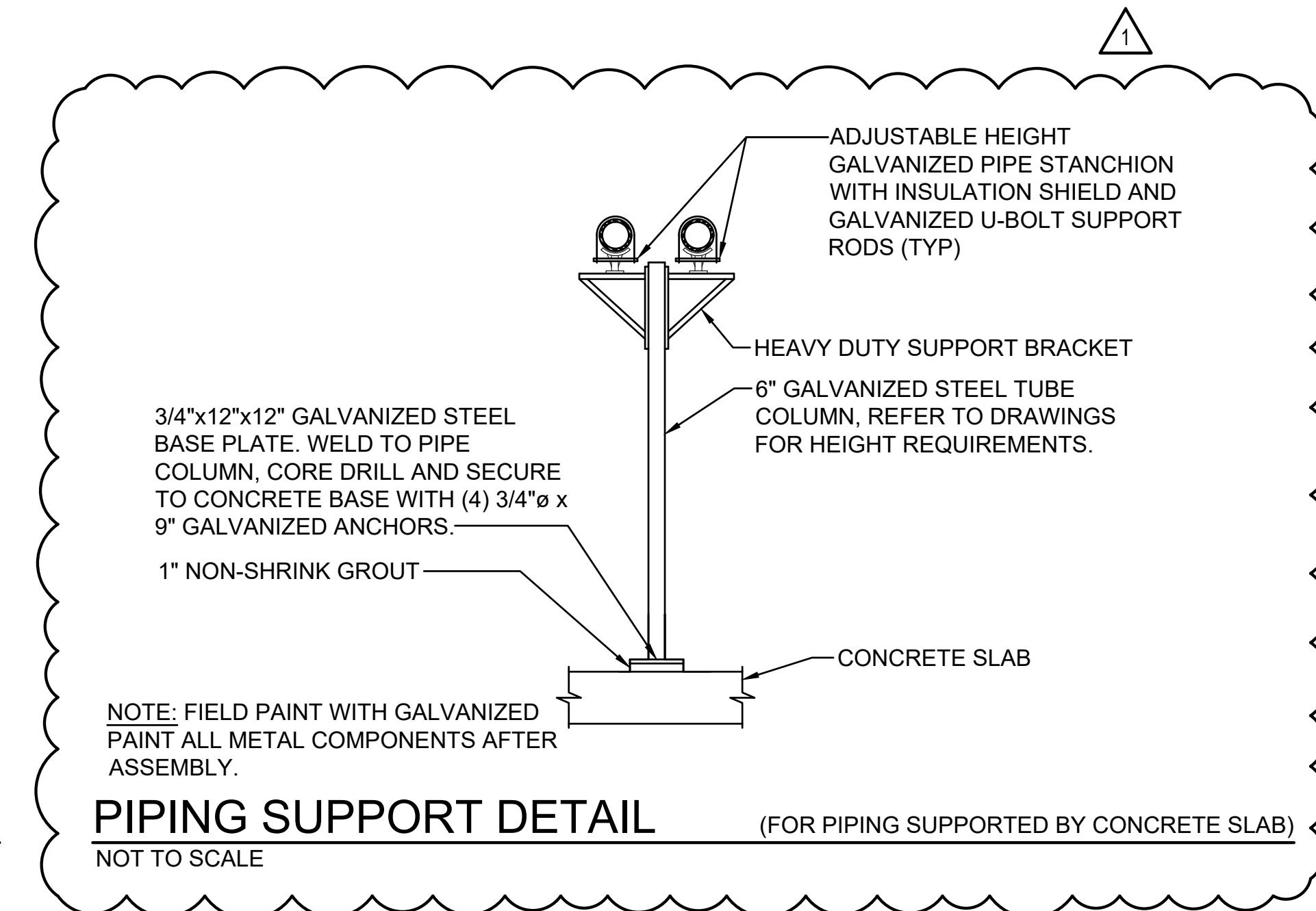
NOT TO SCALE

(RACU-1, AHU-1, AHU-2)



ROOFTOP UNIT MOUNTING DETAIL

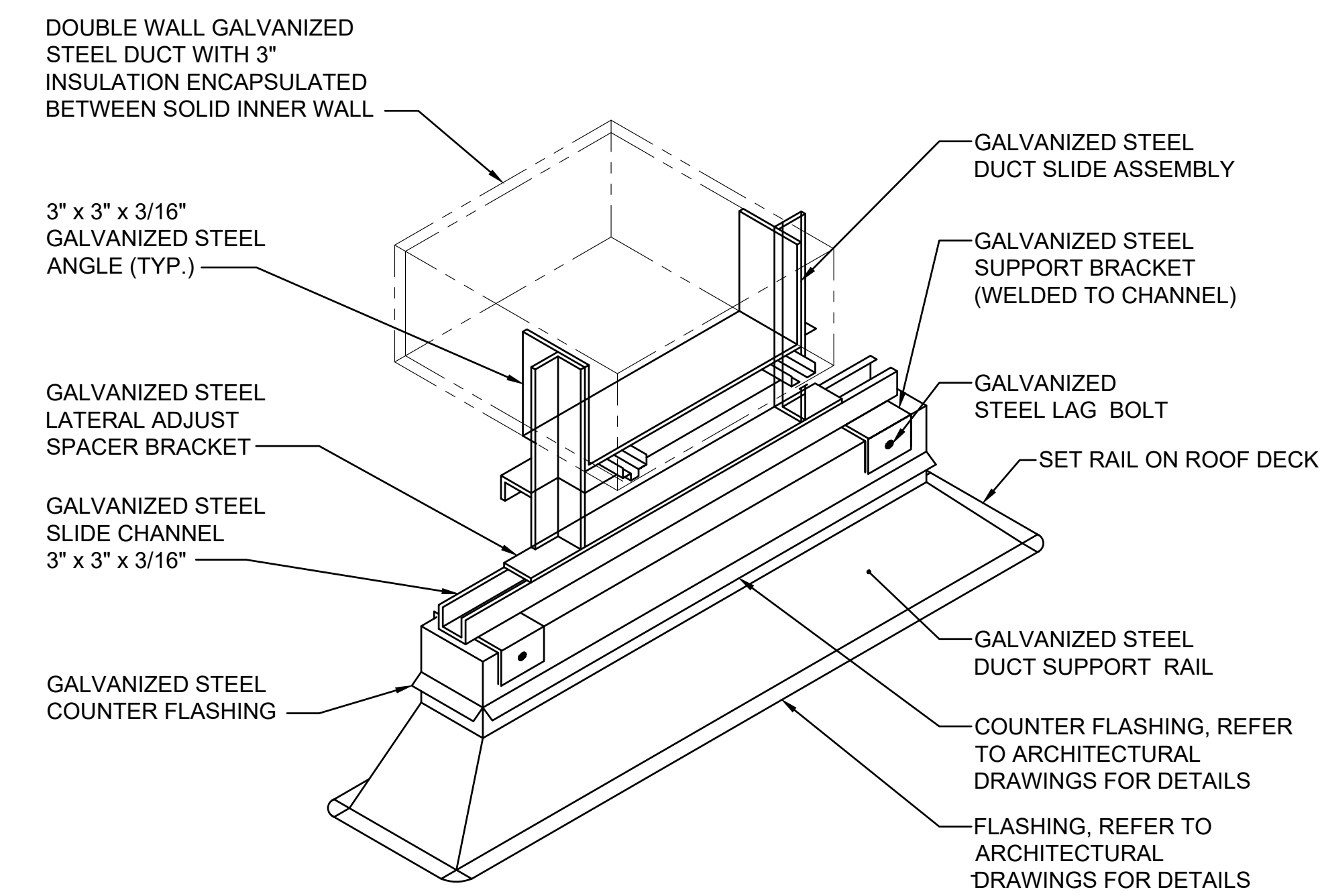
NOT TO SCALE



PIPING SUPPORT DETAIL

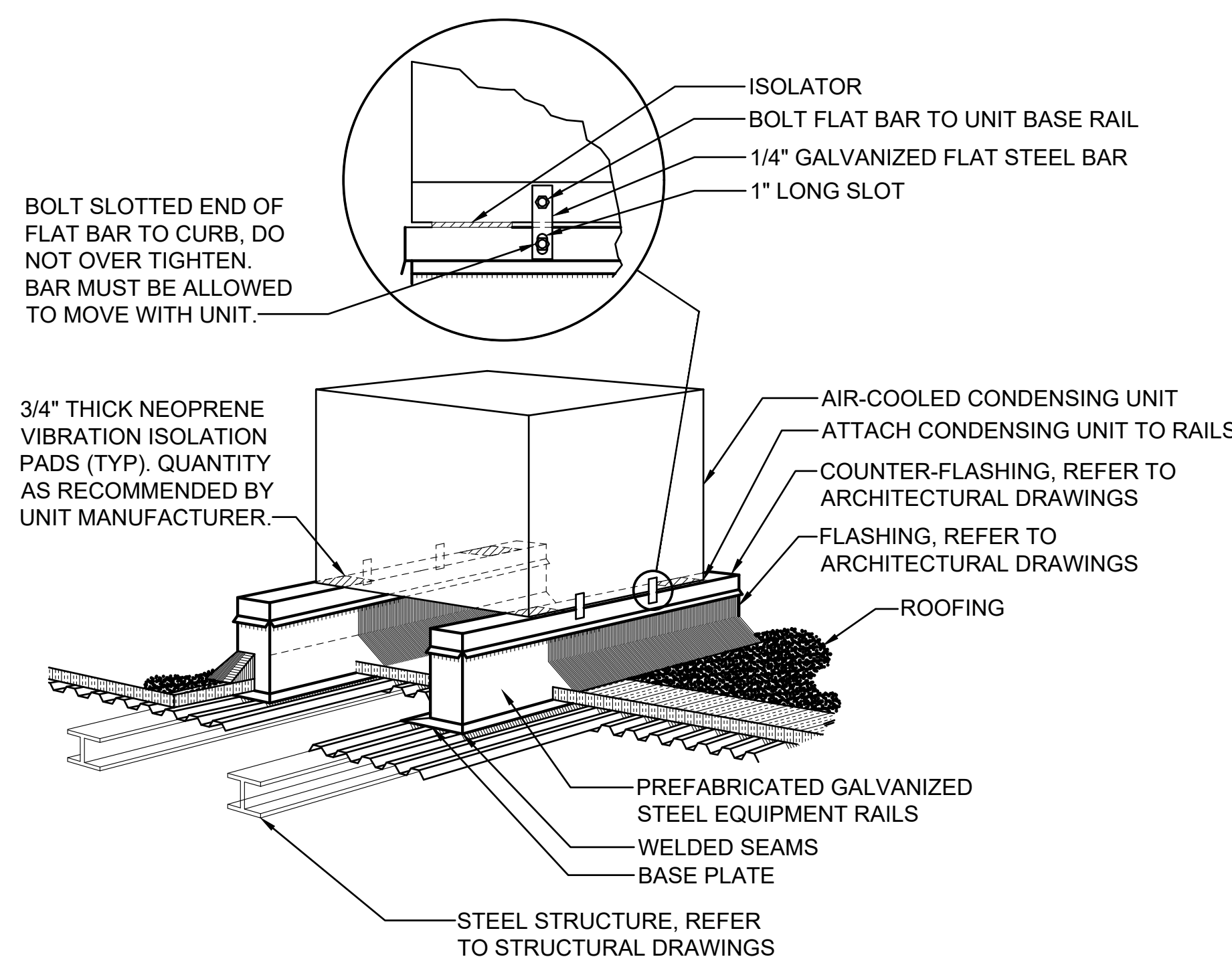
NOT TO SCALE

(FOR PIPING SUPPORTED BY CONCRETE SLAB)



TYPICAL ROOF MOUNTED DUCT SUPPORT DETAIL

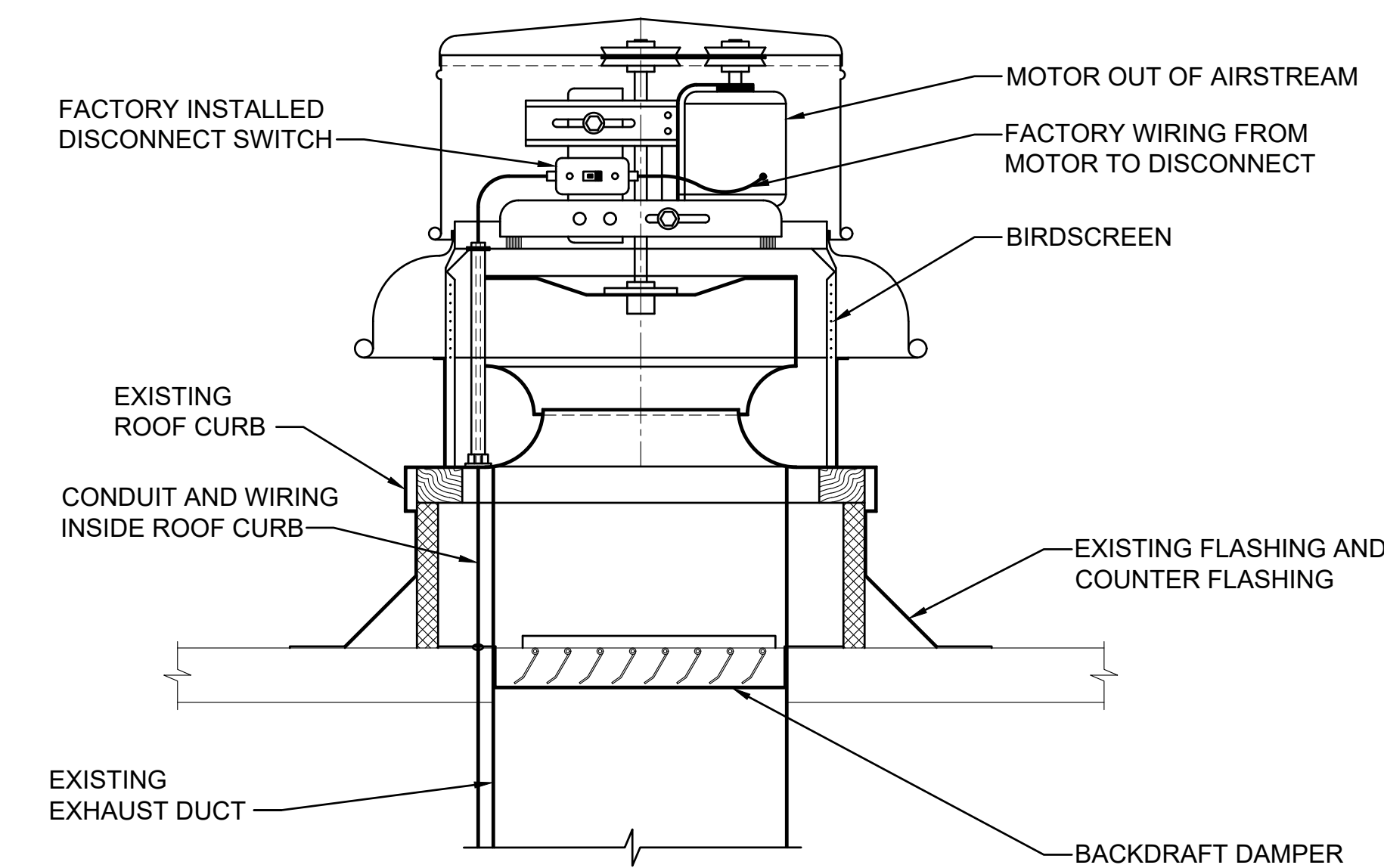
NOT TO SCALE



ROOF MOUNTED CONDENSING UNIT SUPPORT DETAIL

NOT TO SCALE

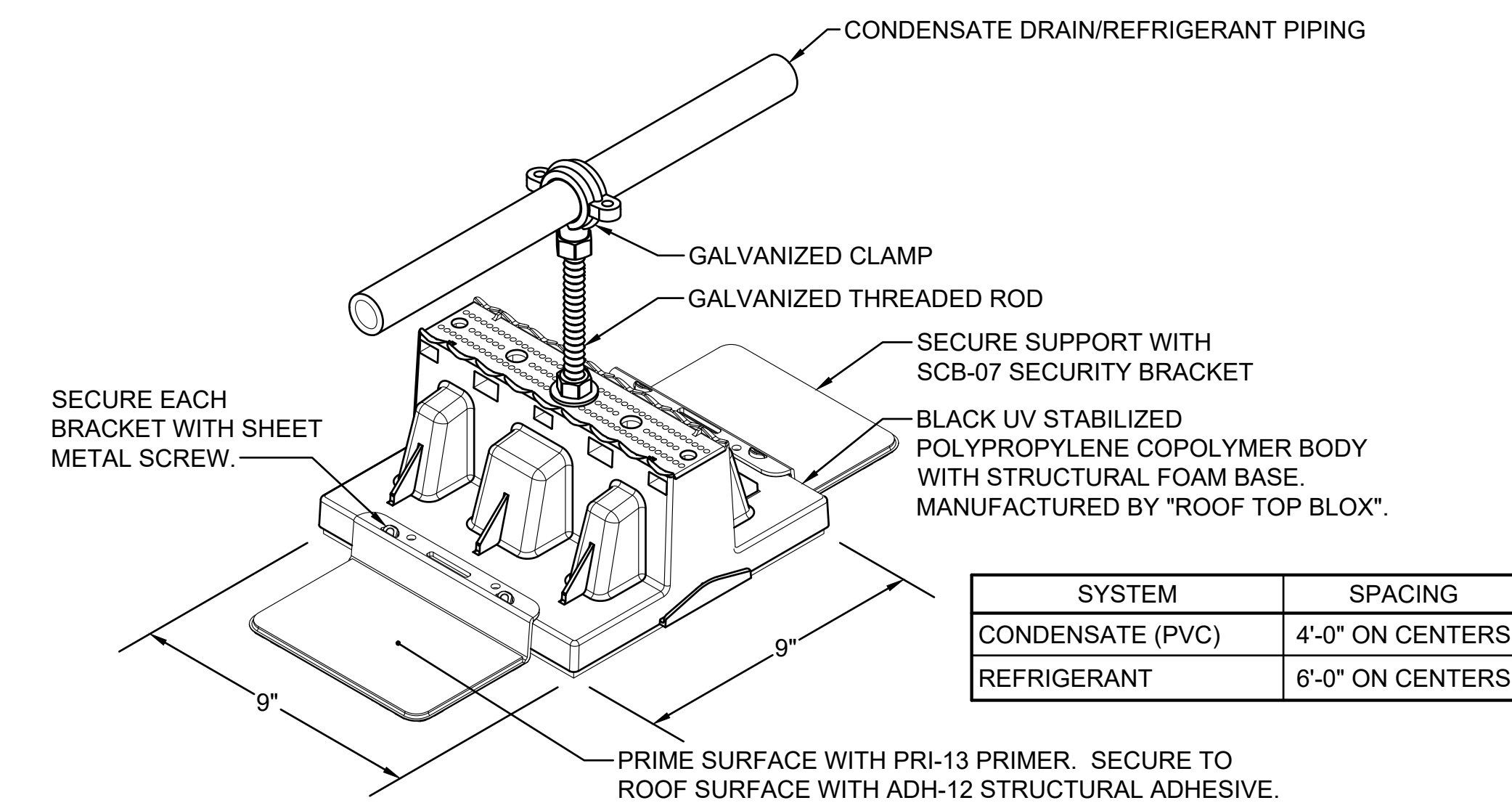
(OU-1, OU-2, OU-3, CU-1, CU-2)



ROOF EXHAUST FAN DETAIL

NOT TO SCALE

(EF-2,3,4,10,11)



PIPING SUPPORT DETAIL

NOT TO SCALE



HVAC REPLACEMENT
KILN CREEK ELEMENTARY SCHOOL
NEWPORT NEWS, VIRGINIA

MECHANICAL DETAILS

REVISIONS		
MARK	DESCRIPTION	DATE
1	ADDENDUM 3	04-26-21

COMM. NO: 20-126
DESIGNED BY: BDC
DRAWN BY: SLS
CHECKED BY: KDA

M3.3

DATE: 04/07/2021

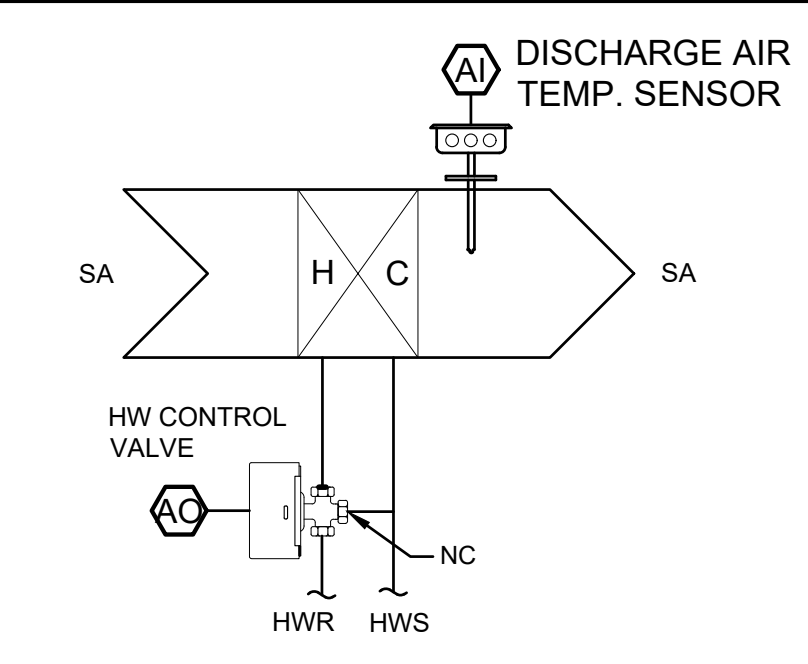
POINT NAME	HARDWARE POINTS				SOFTWARE POINTS		TREND	ALARM	SHOW ON GRAPHIC
	AI	AO	BI	BO	AV	BV			
UNIT ENABLE				X				X	X
OCCUPIED/UNOCCUPIED MODE				X			X	X	X
SUPPLY FAN START/STOP				X				X	X
SUPPLY FAN STATUS			X				X	X	X
SUPPLY FAN SPEED	X						X		X
EXHAUST FAN START/STOP				X				X	X
EXHAUST FAN STATUS			X				X	X	X
EXHAUST FAN SPEED	X						X		X
ENTHALPY WHEEL START/STOP				X				X	X
ENTHALPY WHEEL STATUS			X				X	X	X
WHEEL BYPASS DAMPERS				X			X	X	X
COMPRESSOR STATUS (TYP)			X				X	X	X
SPACE TEMP.	X						X	X	X
SPACE TEMP. SETPOINT					X			X	X
SPACE HUMIDITY	X						X	X	X
SPACE HUMIDITY SETPOINT					X			X	X
OUTSIDE AIR DAMPER POSITION	X						X	X	X
RETURN AIR DAMPER POSITION	X						X	X	X
EXHAUST AIR DAMPER POSITION	X						X	X	X
MIXED AIR TEMPERATURE	X						X	X	X
UNIT DISCHARGE AIR TEMP.	X						X	X	X
CONDENSATE SWITCH			X				X	X	X
SMOKE DETECTOR			X				X	X	X
FILTER STATUS			X				X	X	X

NOTES:
1 FIELD INSTALLED AND PROGRAMMED CT'S BY DDC CONTRACTOR

GRAPHICAL USER INTERFACE MAIN SCREEN									
POINT NAME	HARDWARE POINTS				SOFTWARE POINTS		TREND	ALARM	SHOW ON GRAPHIC
	AI	AO	BI	BO	AV	BV			
DISCHARGE AIR TEMPERATURE	X						X	X	X
DISCHARGE AIR TEMP. SETPOINT					X		X		X
HW CONTROL VALVE POSITION		X					X		X

NOTES:
① PROVIDE SECONDARY DATA PAGE IN GRAPHICAL USER INTERFACE CONTAINING ALL POINTS NOT LISTED ABOVE, BUT AVAILABLE THROUGH THE UNIT'S BACNET INTERFACE.

- A. THE DUCT HEATING COIL SHALL BE CONTROLLED BY A DISCHARGE AIR TEMPERATURE SENSOR.
- B. HEATING: WHEN THE DHC'S ASSOCIATED DOAS UNIT IS INDEXED INTO THE HEATING MODE, ON A FALL OF DISCHARGE TEMPERATURE BELOW THE DISCHARGE TEMPERATURE SETPOINT OF 70°F (ADJ.), THE BAS SHALL ENABLE THE DUCT HEATING COIL AND MODULATE OPEN THE HOT WATER VALVE TO MAINTAIN THE DISCHARGE AIR TEMPERATURE SETPOINT OF 72°F (ADJ.). ON A RISE IN DISCHARGE AIR TEMPERATURE ABOVE SETPOINT, THE DDC SHALL MODULATE THE HOT WATER VALVE CLOSED.



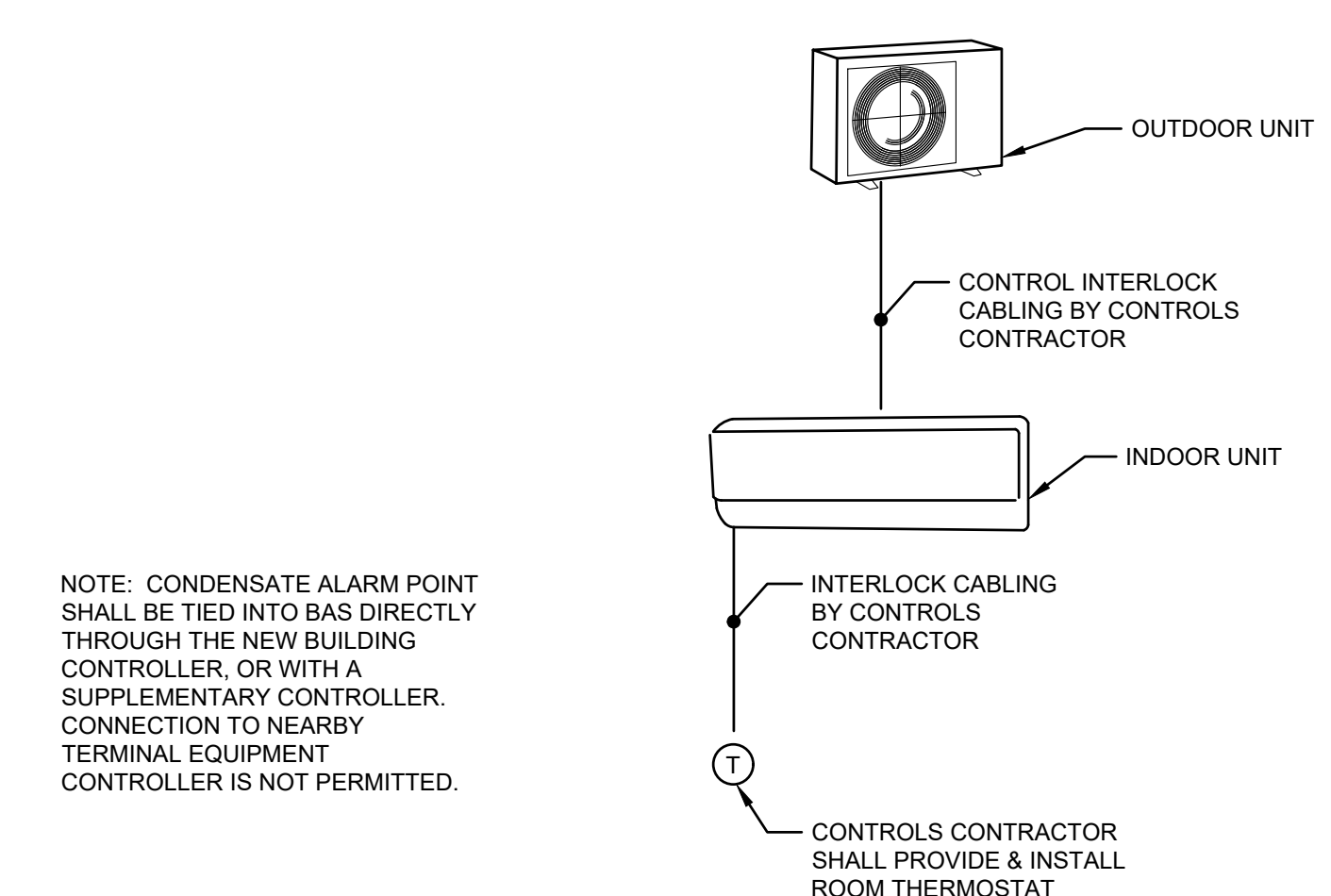
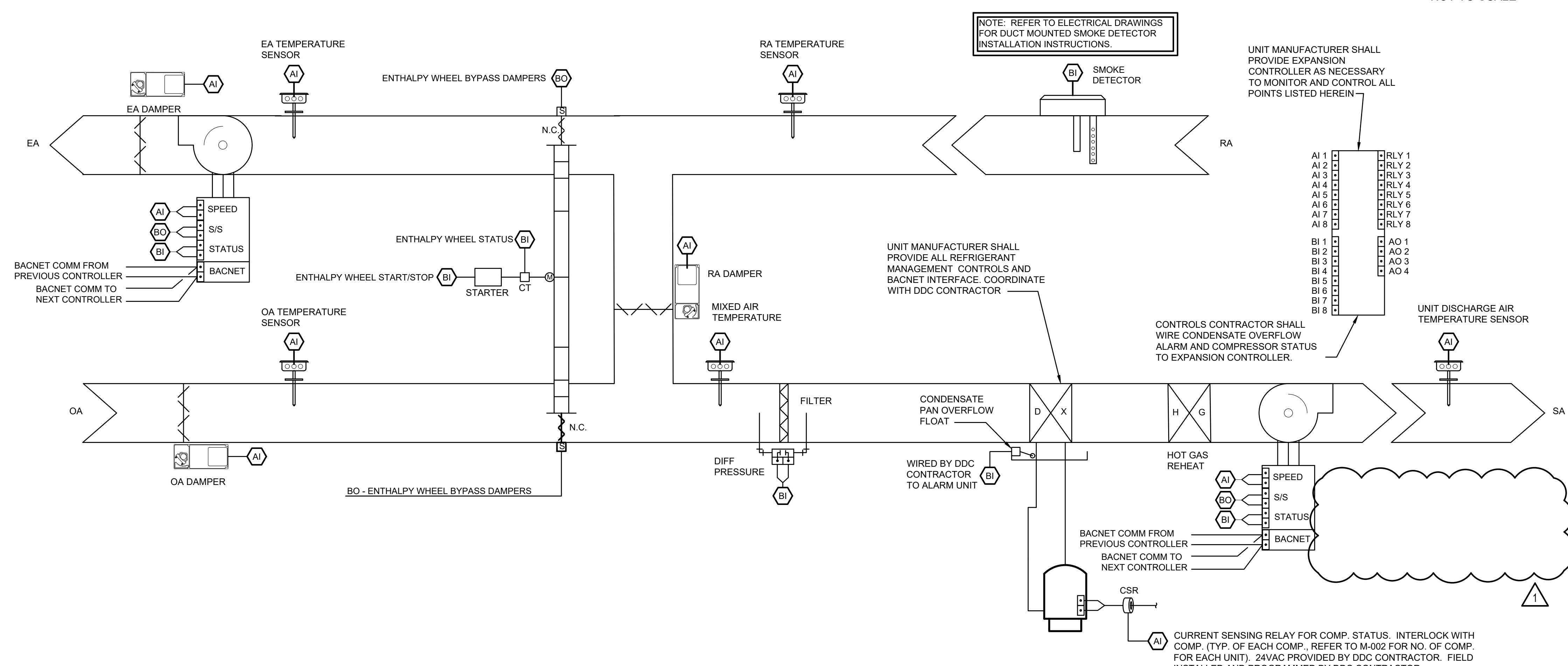
AIR-COOLED DEDICATED OUTSIDE AIR SYSTEM WITH ENERGY WHEEL (DOAS) DDC POINTS LIST

(TYP DOAS-1 AND DOAS-2)

DUCT HEATING COIL SEQUENCE OF OPERATION AND DDC POINTS LIST

NOT TO SCALE (TYP. DHC-4 AND DHUC-5)

POINT NAME	HARDWARE POINTS				SOFTWARE POINTS		TREND	ALARM	SHOW ON GRAPHIC
	AI	AO	BI	BO	AV	BV			
SPACE TEMP.	X						X	X	X
SPACE TEMP. SETPOINT					X				X
CONDENSATE SWITCH			X				X	X	X



DUCTLESS SPLIT SYSTEM DIAGRAM
NOT TO SCALE

AIR-COOLED DEDICATED OUTSIDE AIR SYSTEM WITH ENERGY WHEEL (DOAS) CONTROL DIAGRAM

NOT TO SCALE (TYP. DOAS-1 AND DOAS-2)

- THE BUILDING DDC CONTROLLER SHALL ENABLE AND DISABLE THE UNIT AND CONTROL AND MONITOR ALL POINTS OF CONTROL DESCRIBED HEREIN. THE UNIT'S CONTROLLER SHALL START AND STOP THE SUPPLY AND EXHAUST FANS AND CONTROL OUTSIDE AIR/EXHAUST AIR DAMPER AND RECIRCULATION DAMPERS. THE UNIT CONTROLS SHALL STAGE CONTROLS FOR DIRECT EXPANSION COOLING, MODULATE CONDENSER REHEAT COIL VALVE, AND CONTROL ALARM POINTS.
- OCCUPIED
 - WHEN THE ROOFTOP UNIT IS INDEXED TO THE OCCUPIED MODE, THE SUPPLY AIR FAN AND EXHAUST AIR FANS SHALL BE ENABLED.
 - COOLING AND DEHUMIDIFICATION: ONCE THE SUPPLY AIR FAN OPERATION HAS BEEN ESTABLISHED AS SENSED BY ITS RESPECTIVE PROOF OF FLOW SWITCH, THE OUTSIDE AIR DAMPER SHALL MODULATE OPEN TO 100% WHILE THE RECIRCULATION DAMPER SHALL MODULATE CLOSED TO 0%. THE UNIT SHALL BEGIN TO STAGE THE COMPRESSORS ON TO MAINTAIN THE COOLING SUPPLY AIR TEMPERATURE OF 55°F (ADJ.). THE HOT GAS REHEAT SOLENOID VALVE SHALL MODULATE TO MAINTAIN A DISCHARGE AIR TEMPERATURE 72°F (ADJ.) AS SENSED BY A UNIT-MOUNTED DISCHARGE AIR TEMPERATURE SENSOR.
 - HEATING: ONCE THE SUPPLY AIR FAN OPERATION HAS BEEN ESTABLISHED AS SENSED BY IT'S RESPECTIVE PROOF OF FLOW SWITCH, THE OUTSIDE AIR DAMPER SHALL MODULATE OPEN TO 100% WHILE THE RECIRCULATION DAMPER SHALL MODULATE CLOSED TO 0%. DISCHARGE AIR TEMPERATURE SHALL BE MONITORED BY A DUCT-MOUNTED TEMPERATURE SENSOR.
 - SUPPLY AND EXHAUST FANS: THE SUPPLY FAN SHALL RUN AT A CONSTANT SPEED TO PROVIDE THE AIRFLOW AS IDENTIFIED ON THE SCHEDULE. THE EXHAUST FAN SHALL RUN AT A CONSTANT SPEED TO PROVIDE THE AIRFLOW AS IDENTIFIED ON THE SCHEDULE.
- UNOCCUPIED: IN THE UNOCCUPIED MODE, THE UNIT SHALL REMAIN DISABLED.
- SMOKE DETECTOR(S): ON DETECTION OF PRODUCTS OF COMBUSTION, THE DUCT SMOKE DETECTOR(S) SHALL STOP THE UNIT SUPPLY AND EXHAUST FAN. THE SMOKE DETECTORS SHALL BE WIRED DIRECTLY TO THE UNIT'S SUPPLY AND EXHAUST FAN STARTER BY THE BUILDING DDC CONTRACTOR.
- FROST CONTROL: THE UNIT CONTROLLER SHALL INCLUDE FROST CONTROL FOR THE ENERGY RECOVERY WHEEL. THE UNIT CONTROL PANEL SHALL HAVE A VFD TO CONTROL THE SPEED OF THE WHEEL BASED ON OUTDOOR AIR TEMPERATURE AND RETURN AIR HUMIDITY TO PREVENT A FROST CONDITION.
- SCHEDULE: RTUS SHALL BE SCHEDULED TO OPERATE IN ACCORDANCE WITH THE OWNER'S INSTRUCTIONS.
- ENTHALPY WHEEL - CONSTANT SPEED: THE CONTROLLER SHALL ENABLE THE ENTHALPY WHEEL FOR ENERGY RECOVERY WHEN THE UNIT IS IN OPERATION AND DISABLE THE ENTHALPY WHEEL WHEN THE UNIT IS IN ECONOMIZER MODE. ECONOMIZER MODE SHALL BE ENABLED WHENEVER:
 - HEATING SEASON:
 - OUTSIDE AIR ENTHALPY IS LESS THAN THE RETURN AIR ENTHALPY;
 - AND THE DISCHARGE AIR TEMPERATURE IS ABOVE THE OUTSIDE AIR TEMPERATURE;
 - AND THE SUPPLY FAN IS ON.
 - COOLING SEASON:
 - THE OUTSIDE AIR ENTHALPY IS GREATER THAN THE RETURN AIR TEMPERATURE;
 - AND THE SUPPLY FAN IS ON.
- ECONOMIZER: WHEN THE ECONOMIZER MODE HAS BEEN ENABLED BASED ON THE CRITERIA IN THE PREVIOUS PARAGRAPH, THE ENERGY WHEEL SHALL BE DISABLED AND THE BYPASS DAMPERS SHALL BE OPEN. THE OUTDOOR AIR SHALL BE DRAWN THROUGH THE BYPASS DAMPERS TO REDUCE THE PRESSURE DROP OF THE OUTDOOR AIR STREAM.
- HOT GAS REHEAT BYPASS MODE: THE OWNER SHALL HAVE THE OPTION TO REMOTELY DISABLE THE HOT GAS REHEAT CAPABILITY OF THE UNIT TO PROVIDE PARTIAL COOLING IN THE EVENT THAT CLASSROOM WSPH'S ARE OFFLINE. THE DOAS UNIT SHALL MODULATE THE COMPRESSORS TO MAINTAIN A 55°F LAT. THIS OPTION SHALL NOT BE MADE VISIBLE ON THE MAIN WORKSTATION GRAPHICAL SCREEN FOR THIS UNIT AND SHALL ONLY BE VISIBLE ON A SECONDARY PAGE.

WATER-COOLED DEDICATED OUTSIDE AIR SYSTEM WITH ENERGY WHEEL (DOAS) CONTROL DIAGRAM

(TYP. DOAS-1 AND DOAS-2)



VIRGINIA
 HVAC REPLACEMENT
 KILN CREEK ELEMENTARY SCHOOL
 NEWPORT NEWS,
 AUTOMATIC TEMPERATURE CONTROLS

REVISIONS		
MARK	DESCRIPTION	DATE
1	ADDENDUM 3	04-26-21

COMM. NO: 20-126
 DESIGNED BY: BDC
 DRAWN BY: SLS
 CHECKED BY: KBA

M4.2

DATE: 04/07/2021