Howard

## INVITATION TO BID

## MECHANICAL INSULATION SERVICE <br> BID \#047.22.B3

To All Interested Bidders:

## Re: NOTICE TO BIDDERS <br> Bid \#047.22.B3, Mechanical Insulation Service

The Howard County Board of Education invites your participation in a bid for Mechanical Insulation Service. The work includes, but is not limited to, selecting experienced contractor(s) to provide mechanical insulation service, upgrades, maintenance and repair service to facilities within the Howard County Public School System. The awarded Bidder(s) shall provide (furnish and install) all supervision, tools, materials, parts, equipment, and labor necessary to complete each project.

Bid documents may be obtained on Tuesday, June 14, 2022 at the Howard County Department of Education, Purchasing Office website https://purchasing.hcpss.org/business-opportunities.

The Purchasing Office's contact for this project is Mr. Joe Veslany, jveslany@hcpss.org, (410) 313-6723.
Bids shall be submitted electronically via email in their entirety (all pages) in PDF format no later than Friday, July 1, 2022 at 10:00 A.M. to BidsandProposals@hcpss.org. Bids that contain either more than one file, or files larger than 75 MB , shall be inserted into an e-folder and compressed in a .zip file. To ensure delivery, if file size cumulatively exceed 75MB, it is recommended that bidders submit separate emails labeled No.1, No.2, etc.

Email subject lines, Folder names and File names shall include: "Bid Number, 047.22.B3 and Company Name". In the body of the email please include Bidder's contact person's email and cell phone number for contacting purposes if/when necessary.

It is the bidders sole responsibility to regularly visit the HCPSS Purchasing web site listed above to download and acknowledge receipt of all Addenda. It is highly recommended that bidders ascertain if they have received all the addenda issued prior to submitting their proposal. Failure of any bidder to receive any such Addenda or interpretation may not relieve such bidder from obligation under his/her proposal as submitted.

All questions shall be directed, in writing, no later than 12:00 P.M., Monday, June 20, 2022, to Mr. Joe Veslany, Procurement Specialist, iveslany@hcpss.org. The Howard County Public School System is under no obligation to respond to any questions that are received after the cutoff date and time. Only answers provided via addenda issued by the HCPSS will be binding. Under no circumstances are bidders, including third party vendors or their staff, to contact any other HCPSS Staff, employees or any related constituency for purposes associated with this solicitation, including but not limited to, obtaining or providing information. Bidders failing to comply with this requirement may be disqualified.

The Board reserves the right to waive any informalities in, or to reject any or all bids.
Certified Minority Business Enterprises are encouraged to respond to this solicitation notice.
Please return the attached NO BID REPLY FORM if your firm does not bid this project. This form may be faxed to (410) 313-6789.

Joe Veslany
Procurement Specialist

THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM<br>10910 Clarksville Pike<br>Ellicott City, Maryland 21042

NO BID REPLY FORM

Sealed Bid for: Mechanical Insulation Service
Bid Number:
Bid \#047.22.B3
Bidder:
To assist us in obtaining good competition on our request for bids, we ask that each firm that has received an invitation, but does not wish to bid, state their reason(s) below.

Unfortunately, we must offer a "No Bid" at this time because:
$\qquad$ 1. We do not wish to bid under the terms and conditions of the Bid document. Our objections are:
2. We do not feel we can be competitive.
3. We cannot submit a bid because of the marketing or franchising policies of the manufacturing company.
$\qquad$ 4. We do not wish to sell to The Howard County Public School System. Our objections are:
$\qquad$ 5. We do not sell the item(s)/service(s) requested in the specific specifications.
6. Other: $\qquad$
$\qquad$

## THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM <br> 10910 Clarksville Pike <br> Ellicott City, Maryland 21042

| SEALED BID FOR: | Mechanical Insulation Service |
| :--- | :--- |
| BID NUMBER: | 047.22.B3 |
| PRE-BID DATE: | N/A |
| PRE-BID TIME: | N/A |
| PRE-BID LOCATION: | N/A |
| LAST DATE \& TIME | June 20, 2022 at 12:00 PM in writing |
| FOR QUESTIONS: | Friday, July 1, 2022 |
| BID DUE DATE: | 10:00 AM |
| BID DUE TIME: | Joe Veslany, phone: 410-313-6723 |
| PROCUREMENT |  |
| SPECIALIST: |  |

## THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

## MECHANICAL INSULATION SERVICE

 BID \#047.22.B3
## I. INSTRUCTIONS TO BIDDERS

## A. BID PREPARATION

1. One (1) complete set of Invitation for Bid, consisting of: (1) Instructions to Bidders (2) Terms and Conditions; (3) the Specifications; (4) any plans or drawings made part of the Invitation for Bid; (5) any addenda, shall be provided to each prospective bidder. The original Bid Price Sheet/Form of Proposal must be returned: (1) with all questions answered; (2) without alteration; (3) with the BID SIGNATURE SHEET or No Bid Reply form properly signed; (4) Bids shall be submitted electronically via email in their entirety (all pages) in PDF format no later than the time and date specified in the Invitation to Bid to BidsandProposals@hcpss.org in order to be considered for this project/service. To determine timeliness, the time "received" by HCPSS will be verified by the time stamp on HCPSS's email server. Bids arriving after the due date and time will not be accepted. Bidders will be notified by email.
2. The remaining documents consisting of all pages of the Invitation for Bid, the General Provisions, Terms and Conditions, any plans, drawings or extraneous matter, are to be retained by the bidder and will form part of the contract resulting from this solicitation.
3. It is the bidder's responsibility to examine and understand all parts of the bid including all parts of the bidding documents, any addenda, drawings, or reference matter.
4. Any clarification or explanation desired by the bidder, regarding the meaning or interpretation of the bid, or any part thereof, must be made in writing to the Purchasing Office of The Howard County Public School System, 10910 Clarksville Pike, Ellicott City, Maryland 21042, allowing sufficient time for a reply to reach all prospective bidders for the time and date scheduled for the return of the bid.
B. OBJECTIVES
5. The objective of this bid is for The Board of Education of Howard County Schools (herein referred to as "the Board"), administrated by the Howard County Public School System (herein referred to as "HCPSS" or "the school system") to select a qualified contractor(s) to perform mechanical insulation service and associated work for the Howard County Public School Systems, Building Services department in accordance with these bid documents.
6. All work performed under this contract shall be in accordance with the $100 \%$ bid documents, procurement specifications, any applicable drawings and addenda issued and shall minimally follow current OSHA regulations.
7. The work will involve but is not limited to mechanical insulation service and repair.
8. Mechanical insulation services may be required at any one HCPSS facility, or at multiple facilities, at any given time. Only one contractor will be selected for each project.
C. CONTRACT DOCUMENTS
9. Contract Documents consist of the Bid Documents, the Procurement Specifications, and any applicable drawings and addenda issued.
10. All of these materials will be included in the contract which The Board of Education awards as a result of this solicitation and will be among the contract documents. The bidder, by submitting its bid, agrees that if awarded the contract that it will be bound under the contract to all the terms and conditions of the contract.
D. ISSUING OFFICE
a) The Issuing Office is:

The Howard County Public School System
Purchasing Office
10910 Clarksville Pike
Ellicott City, Maryland 21042
Attn: Joe Veslany
(410) 313-6723
iveslany@hcpss.org
https://purchasing.hcpss.org/business-opportunities
b) The Issuing Office shall be the sole point of contact with HCPSS for purposes of preparation and submittal of the Technical Offer and Bid Price.
E. QUESTIONS AND INQUIRIES

1. For purposes of preparation and submittal of bid, contact, Mr. Joe Veslany, 410-313-6723, jveslany@hcpss.org of the issuing office.
2. Items affecting the scope of work or conditions of the contract shall be subject to the conditions of addenda.
F. DUE DATE AND TIME
3. Bids shall be submitted electronically via email in their entirety (all pages) in PDF format no later than the time and date specified in the Invitation to Bid to BidsandProposals@hcpss.org in order to be considered for this project/service. Bids that contain either more than one file, or files larger than 75 MB , shall be inserted into an e-folder and compressed in a .zip file.
4. Email subject lines, Folder names and File names shall include: "Bid Number, 047.22.B3 and Company Name". In the body of the email please include Bidder's contact person's email and cell phone number for contacting purposes if/when necessary.
5. Electronic signatures, scanned or e-signature, will be accepted. By providing bids electronically to HCPSS, Bidders grant HCPSS an unlimited right to generate additional electronic and/or paper copies for distribution solely for the purpose of evaluation and review.
6. To determine timeliness, the time "received" by HCPSS will be verified by the time stamp on HCPSS's email server. Bids arriving after the due date and time will not be accepted. Bidders will be notified by email.
G. BASIS FOR AWARDING BIDS
7. The basis of award will be to the Bidder(s) with the lowest responsive and responsible price submitted in accordance with these bid documents including an evaluation of the technical portion of the bid documents.
8. Those bidders not demonstrating prior experience with mechanical insulation services and repair along with the bid price will not be considered for award.
9. It is the school system's intent to award one (1) or more contractors.
10. The Howard County Public School System reserves the right to make an award of the bid for all items, or any parts, thereof, to one or more bidders, as set forth in detail under the information furnished in this document. The owner further reserves the right to consider information other than price when evaluating bids.
11. In the event of tie bids where all factors are equal, award shall be made to the Howard County bidder, the out of county bidder but incorporated in Maryland, and the bidder not incorporated in the state of Maryland, in that order of preference. If bidders within one of these geographical designations are equal as to all factors of consideration, the award shall be made by the toss of a coin.
12. The Board of Education of Howard County reserves the right to reject any or all bids, in whole or in part, to make partial awards, to waive any irregularity, to increase or decrease quantities where quantities are shown and may reject any bid which indicates any omission, contains alteration of form or additions, or imposes conditions or offers alternate items and may make any award which is deemed in the best interest of The Howard County Public School System.
H. BID BOND
13. A Bid Bond is not required for this bid.
I. PERFORMANCE AND LABOR AND MATERIALS BONDS
14. This paragraph only applies to the contractor(s) selected as a result of this procurement. Awarded contractor(s) shall furnish a 100\% Performance and Labor and Materials Bond for any projects during the term of the contract that exceed $\$ 50,000$ to cover the work performed.
15. Bonds shall be written by a bonding company, licensed to do business in the state of Maryland and otherwise acceptable to The Howard County Public School System. Bonds shall be executed on AIA Document A312, or a bonding form approved by the HCPSS.
16. Bidders shall enclose a letter from its bonding company stating its willingness to provide the bidder with Performance, and Labor and Materials bonds.

## J. ESTIMATED QUANTITIES

1. Estimated dollar volume for mechanical insulation service is \$150,000 annually. All bidders are advised that such dollar volumes are estimates only and further understand and agree that in providing such estimates, the school system makes no guarantee that any or all of the estimated work will be assigned to the selected contractors.

## K. SITE INVESTIGATION

1. By submitting a bid the contractor acknowledges that they have investigated and satisfied themselves as to the conditions affecting the work, including, but not restricted to, those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, and electric power. Any failure by the
contractor to acquaint themselves with the available information will not relieve them from responsibility for estimating properly the cost of successfully performing the work. HCPSS shall not be responsible for any conclusions or interpretations made by the contractor of the information made available by HCPSS.
L. RIGHT TO REJECT BIDS AND WAIVE INFORMALITIES
2. The Howard County Public School System reserves the right to waive any technicality or minor irregularity in a bid in the interest of the Board.
M. BIDS FIRM FOR 120 DAYS
3. Bid prices shall remain firm for one hundred twenty (120) calendar days from the date of opening.
N. LICENSES AND QUALIFICATIONS
4. Bidders must be licensed to do business in the State of Maryland and shall submit proof of current licensing with their technical offer. Bidders are required to submit a copy of their license at time of bid.
5. HCPSS reserves the right to require that the contractor demonstrate that it has the skills, equipment and other resources to satisfactorily perform the nature and magnitude of work necessary to complete the project within the proposed contract schedule.
6. Bidder shall have a minimum of 5 year's experience as a mechanical insulation contractor under the same company name, with 3 year's experience in a school system preferred. The contractor must maintain an office within a 50 mile radius of the HCPSS.
O. CLARIFICATIONS AND ADDENDA
7. Should a Bidder find discrepancies in the bid documents, or should they be in doubt as to the meaning or intent of any part thereof, they must, not later than seven (7) days (Saturdays, Sundays and Holidays excluded) prior to the bid due date, request clarification in writing from the issuing office, who will issue a written Addendum to the contract. Failure to request such clarification is a waiver to any claim by the bidder for expense made necessary by reason of later interpretation of the bid documents by the HCPSS. Requests shall include the bid number and name.
8. Oral explanations or instructions will not be binding; only written addenda will be binding. Any addenda resulting from these requests will be posted on the school system website no later than two days prior to the bid due date. The bidder shall acknowledge the receipt of all addenda on the Bid Price Sheet.
P. CANCELLATION OF THE BID
9. HCPSS may cancel this Bid, in whole or in part, at any time before the opening of the Bids.
Q. BID ACCEPTANCE
10. The Howard County Public School System reserves the right to accept or reject any and all bids, in whole or in part, received as a result of this bid or to waive minor irregularities, in any manner necessary, to serve the interest of The Board of Education. HCPSS further reserves the right to award in full, make multiple awards, partial awards, or to make no award at all.
11. HCPSS reserves the right to require that the contractor demonstrate that it has the skills, equipment and other resources to satisfactorily perform the nature and magnitude of work necessary to complete the project within the proposed contract schedule.

## R. ORAL PRESENTATION

1. Bidders who submitted technical offers may be required to make individual presentations to HCPSS representatives in order to clarify their proposals.
S. MODIFICATIONS AND WITHDRAWAL OF BIDS
2. Withdrawal of, or modifications to bids are effective only if written notice thereof is filed to the purchasing office prior to the time bids are due. A notice of withdrawal or modification to a bid must be signed by an officer with the authority to commit the company.
3. No withdrawal or modifications will be accepted after the time bids are due.
T. MULTIPLE/ALTERNATIVE BIDS
4. Bidders may not submit more than one (1) bid nor may bidders submit an alternate to this bid.
U. CONFIDENTIALITY
5. Bidders should give specific attention to the identification of those portions of their Technical Offers which they deem to be confidential, proprietary information or trade secrets, and provide any justification of why such materials, upon request, should not be disclosed by HCPSS under the Access to Public Records Act, State Government Article, Title 10, Subtitle 6 of the Annotated Code of Maryland. Contractors must clearly indicate each and every section that is deemed to be confidential, proprietary, or a trade secret. It is not sufficient to preface your technical offer with a proprietary statement. Bid prices will be opened publicly.
V. TERMS OF CONTRACT
6. By submitting a response to this solicitation, a firm affirms acceptance of all terms and conditions contained in the conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, and any addenda.

## W. RESOLUTION OF DISPUTES

1. Bid rejection for non-responsiveness and/or non-responsibility shall be made using the criteria guidelines as stated in the general provisions of bid proposal, terms and conditions, and technical specifications.
2. After bid opening and bid review, but prior to bid award, if a bidder's entire bid is declared to be non-responsive and/or non-responsible, the bidder will be notified as to the reason(s) for rejection.
3. Protests shall be filed in writing to the purchasing office within two days after notification.
4. Protests shall include the basis for the protest or appeal, complete in all respects, with relief sought, and whether the protester wishes to have a hearing with respect to the protest or appeal.
5. Protests shall be submitted electronically via email in PDF format to Attn: Joe Veslany, jveslany@hcpss.org labeled "Protest" and "Bid Number" The written protest shall include as a minimum the following:
a) Name and address of the protester
b) Appropriate identification of the bid
c) Supporting exhibits, evidence, and/or documents to substantiate any claims.
d) Suggested remedy(ies).
X. ETHICS REGULATIONS
6. The Board of Education of Howard County has adopted an Ethics Regulation policy. Required by the Annotated Code of Maryland, these ethics regulations cover members of the Board of Education, the Superintendent, and all employees; and it specifies limits of participation of these individuals with entities doing business with The Howard County Public School System. For a copy of the regulations, please contact the purchasing Office, Howard County Department of Education (410) 313-6644.
II. TECHNICAL EVALUATION AND FORMS
A. SIGNING OF FORMS
7. The Bid Affidavit \& Bid Price Sheet, if submitted by an individual, shall be signed by the individual; if submitted by a partnership, they shall be signed by such member or members of the partnership as have authority to bind the partnership; if submitted by a corporation, they shall be signed by an officer, and attested by the corporate secretary or an assistant corporate secretary. If not signed by an officer there must be attached a copy of that portion of the by-laws or a copy of a board resolution, duly certified by the corporate secretary, showing the authority of the person so signing on behalf of the corporation. Signatures shall be under seal, i.e.: indicated by the word "(Seal)" following signature of individual and partner bidders, and indicated by affixing the Corporate Seal at corporate signatures.
B. TECHNICAL OFFER CRITERIA
8. The following information (items 3 through 10) must be furnished in the technical offer portion of the Bid. Failure to include any of the items below in your response may result in the Bid being considered non-responsive. The criteria are listed in the order of importance. Bidders are to compile their technical information in this same order.
9. Loose blank forms for each of the items required are furnished with this bid package along with a checklist that lists all documents/responses to be submitted in your bid. Substitute forms and/or data may not be considered.
10. BID PROPOSAL AFFIDAVIT: The Bid/Proposal Affidavit enclosed in this document must be executed by each responding bidder and submitted with their bid.
11. EXPERIENCE REFERENCE FORM: Complete the enclosed Experience/Reference Form for three (3) recent projects within the past three years which demonstrate your firm's experience with security systems installation, upgrades, maintenance and repair work. Higher consideration will be given to those jobs that demonstrate your firm's experience at working on public school buildings under accelerated schedules
a) As indicated on the form, the following information is to be provided for each project:
a. Customer/Owner's name, address, contacts names and telephone number;
b. A brief description of the project including:
(a) Type of mechanical insulation service performed (installation, replacement, repair, etc.)
(b) Setting (school building, etc.)
(c) Name of your firm's Project Manager.
(d) Dollar amount of the contract;
(e) Type of contract: (on-call, time \& material, lump sum, etc.)
(f) Official start date and completion date, and;
(g) List all similarities of your projects to the sample projects provided and requirements of the HCPSS.
b) NOTE: Experience noted must demonstrate the bidder's knowledge and ability to perform similar mechanical insulation contractor work for a public school system. The bidder should place emphasis on the scope of work required, product manufacturer utilized, the time to complete, their ability to perform satisfactorily and their competency and responsibility to perform within limited time frames.
c) The references listed on the contractor's "Experience/Reference Form" will be checked by HCPSS. All references must include a contact person and telephone number who can comment on the firm's ability to do a project of this type. It is imperative that contact names and phone numbers given for the projects listed be accurate.
d) The school system reserves the right to check other sources available. References will be held in the strictest of confidence by the school system.
12. KEY PERSONNEL FORM: Complete the enclosed "Key Personnel Form", for one (1) Project Manager, two (2) Insulation Mechanics and (1) Insulation Apprentice. Provide the names of the Project Manager (100\% on site supervisor with authority to act on behalf of the firm) two (2) Insulation Mechanics and one (1) Insulation Apprentice to be assigned to this contract if awarded and a complete "Key Personnel Form" for these people inclusive of the following:
(1) Technical Training/Educational background;
(2) Direct work experience with the bidding firm;
(3) Work experience with other employers, duration of employment and position(s) held;
(4) Specific project experience similar to the mechanical insulation work described herein. Include:
(5) Individual's role on each project;
(6) A brief description of the project including the type of mechanical insulation service, the dollar volume of project and the start and completion dates;
(7) Personnel References: Provide two (2) project references for the Project Manager, two (2) Insulation Mechanics and one (1) Insulation Apprentice in the space provided on the Key Personnel Form. All references must include a contact person and telephone number who can comment on the individual's ability to manage a project of this type. It is imperative that contact names and phone numbers given for the projects listed be accurate. All references will be held in the strictest of confidence.
a) NOTE: Personnel Commitment: By submitting these names for consideration, the bidder is committing these people to HCPSS for any resulting contract's duration. Personnel changes will not be permitted without written authorization from HCPSS.
b) NOTE: Higher consideration will be given in the evaluation process if the Project Manager, Insulation Mechanic and Insulation Apprentice have worked together on previous successful projects and have demonstrated experience on projects similar in scope to the school system's sample projects.
13. PROFILE OF COMPANY FORM: Complete the enclosed "Profile of Company Form" included with this bid package. It is required that your firm have a least five (5) years mechanical insulation experience with three (3) years experience in a school system preferred. The contractor must maintain an office within a 50 mile radius of the Howard County Public School System. Include the following forms/copies with your submittal. Failure to provide copies of the following forms may result in your submittal being rejected.
14. Copy of Contractors License.
15. Copy of Certificate of Insurance.
16. Number of incidents cited for non-compliance by MOSH/OSHA/ MDE/EPA or letter stating no incidents on company letterhead.
17. Enclose a letter from your bonding company stating its willingness to provide your firm with Performance bonds for the projects over \$50,000.
C. EVALUATION PROCEDURE
18. Each Technical portion of the bid will be evaluated by a HCPSS evaluation committee along with the bid prices. Those bidders not demonstrating prior experience with security system installation, upgrades, maintenance and repair along with the bid price will not be considered for award.
19. The basis of award will be to the Bidder(s) with the lowest responsive and responsible price submitted in accordance with these bid documents including an evaluation of the technical portion of the bid documents.

## III. IMPLEMENTATION OF ON CALL CONTRACTING

A. It is the HCPSS intent to award to a minimum of one (1) or more contractor(s). The successful contractor(s) shall follow the procedure, as outlined below, when security system service is required.

1. For each job the school system's Contract Manager will contact the selected contractor(s) and initiate a site visit. A scope of work will be defined inclusive of project schedule.
a) For jobs estimated at under $\$ 7,500.00$, the school system will alternate contractors. Selection of the contractor to be utilized will be on a rotating basis; although schedule, availability and/or price may be considered.
b) For jobs estimated at over $\$ 7,500.00$, the contractors will be asked to submit written not-to-exceed costs for the scope of work, based on rates offered in the bid price. HCPSS will select from among the contractors
the contractor whose not-to-exceed price and/or time frame best serves the school system's interest.
2. The contractor, after initial contact, must be available within two (2) working days to measure the area and review the site conditions. For emergency projects, "same-day" commencement of work may be required. No additional costs, outside the terms of this contract, may be applied by the contractor for "same-day" work.
3. A written quotation showing itemized costs and a total not-to-exceed cost to include the cost of bonds for projects over $\$ 50,000$. A brief descriptive plan of action and a schedule of work shall be submitted to the Contract Manager for approval within two (2) working days after site visit.
4. After approval of the submittal by the Contract Manager, a purchase order will be issued by the school system's Purchasing Office to the selected contractor. This purchase order will confirm the scope of work, commencement date, time frame and price.
5. The contractor shall carefully field check all dimensions and other conditions affecting the work. HCPSS assumes no responsibility of errors made by the contractor when measuring and reviewing site conditions.

## IV. RATES AND MARK-UPS

A. UNIT COSTS

1. Unit Costs are to be all inclusive. The cost of all labor, material, equipment, supervision, travel time and mileage, waste disposal, overhead, and profit is to be included in the itemized bid prices stated in the response to this bid.
B. CONTRACTOR'S LABOR AND MATERIAL RATES
2. It is understood and agreed that the cost of all labor, material, equipment, supervision, mileage, waste disposal, overhead, and profit is included in the itemized bid prices stated in the response to this bid. Travel time shall be borne by the contractor.
3. The school system will not recognize any premium or incentive pay and no work shall be performed on an overtime basis or shift differential and no overtime pay or shift differential shall be included as a "job cost" unless the performance of such overtime or shift differential has been authorized by the issuance of an additional change order to the purchase order on a particular project or as agreed to in the submitted not-to-exceed price by the contractor or as required in the scope of work issued by the school system.
4. In the event an emergency exists which would require immediate overtime work, the school system's Contract Manger shall be verbally notified by the contractor immediately and if permission to perform this work is granted verbally, it shall be confirmed in writing by the school system within twenty-four (24) hours of such work with a change order amendment to be issued within one (1) week of such work.
5. In the event that overtime work is required by the school system it will be recognized as a "job cost" only if a change order amendment has been issued to the contractor's not to exceed price. The overtime work shall be limited to the work
and time approved in advance of its performance and paid at the recognized premium rate.
6. Incentive payments or premium payments made to any employees by the contractor either as permanent employee pay, subsistence or other pay in excess of the wage shall be at the expense of the contractor and must be included as part of the quoted rates shown on the bid price.
7. Invoices may be requested from the contractor to demonstrate the percentage cost over invoice submitted for time and material rates for materials, equipment rental and subcontractors.

## V. TERMS AND CONDITIONS

A. CONTRACT

1. If this bid is accepted and awarded, it shall become the contract document that governs the administration of the contract. All portions of this bid, including the bid documents, the procurement specification, drawings, any addenda, amendments, modifications, or any other extraneous matter incorporated shall be applicable as a result of this invitation to bid.
B. CONTRACT PERIOD
2. Any resulting contract(s) shall commence upon award. The Contract(s) is to be for two (2) years with the option to renew for two (2) additional two-year periods at the sole option of the school system pending successful performance and availability of funding.
C. CONTRACT MANAGER
3. The Howard County Public School System's Contract Manager shall be responsible for the day-to-day administration of the contract upon award by the Howard County Public School System. The HCPSS Contract Managers contact information will be made available upon award. All communications on projects are to be directed to the Contract Manager only. No instructions, directions, and information are to be given to the contractor by any other HCPSS personnel. Any change order work shall not proceed until a change order to the purchase order has been issued by the purchasing office confirming this additional work and the applicable additional cost.
D. TERMINATION FOR DEFAULT
4. When the contractor has not performed or has unsatisfactorily performed the contract, payment shall be withheld at the discretion of The Howard County Public School System. Failure on the part of the contractor to fulfill contractual obligations shall be considered just cause for termination of the contract and the contractor is not entitled to recover any costs incurred by the contractor up to the date of termination. Notification shall be in writing and shall be issued 30 days prior to termination date. In the event of default of contract The Howard County Public School System may procure services from other sources. The contractor found in default will be held responsible for all costs incurred.
E. TERMINATION FOR CONVENIENCE
5. The Howard County Public School System may terminate this contract, in whole or in part, without showing just cause upon giving written notice to the contractor. The Howard County Public School System shall pay all reasonable costs associated with termination of the contract. However, the contractor shall not be
reimbursed for any anticipatory profits which have not been earned up to the date of termination.

## F. PRICE ADJUSTMENTS

1. The Howard County Public School System will only consider adjustments on labor rates based only upon federal minimum wage increases and decreases in the Consumer Price Index (CPI-W), Baltimore Region, as published by the Bureau of Labor Standards. Requested increases above a 10\% cap will not be considered. In order to receive consideration for a price increase, the contractor must submit to The Howard County Public School System, sixty (60) days prior to the contract expiration date, a statement of any change in the hourly rate wage actually to be paid to its employees during the renewal term. Adjustments will be calculated by comparing the current index with the previous year's index so as to determine the change in index points. The point change will then be divided by the price index to obtain the percentage of change. The percentage of change will then be multiplied by .75 to obtain the adjustment to be applied to the current prices.
2. The Howard County Public School System will also consider adjustments based on fees outside of the control of the contractor, such as manufacturer price increases. However, such increases will be a "pass through" to the Howard County Public School System with no mark-up allowed. For such changes to be considered by the Howard County Public School System, documentation from the manufacturer (or any other applicable party) assessing a cost increase must accompany a written request from the contractor.
3. The Howard County Public School System will then review the request and advise the contractor of approval or disapproval of the price change request.
4. Price increase requests will not be considered if not accompanied with the proper information.
G. LIQUIDATED DAMAGES
5. Liquidated damages shall be assessed at the rate of five hundred dollars ( $\$ \mathbf{5 0 0 . 0 0}$ ) per calendar day beyond the completion date indicated in the scope of work for each project and/or listed on the purchase order for work not $100 \%$ complete.
6. The contractor agrees that the sum specified for liquidated damages for delay by the contractor is not a penalty and is liquidated damages, that the damages resulting to the owner for delay in completion by the contractor are difficult of ascertainment and that the amount specified is not grossly excessive and it is not out of proportion to the damages that might readily be expected to result from delay caused by the contractor. Excluded from the liquidated damage provision, however, are any damages for loss of use of any facility of the owner that arises from a delay and the owner expressly reserves the right to claim damages for such loss of use. The contractor agrees that it has freely bid on this contract with the full and complete knowledge of the provisions for liquidated damages and waives all objections to such provisions as a penalty.
7. In addition, the owner shall assess and deduct from the contract sum any and all extra costs associated with maintaining the project (e.g. engineering fees, owner's overtime, etc.) for each calendar day of delay that the contractor extends substantial completion of the entire work beyond the completion date or time stipulated in the contract documents.
8. Any delays to projects must be communicated to the Contract Manager immediately.
H. TAXES
9. The Howard County Public School System is tax exempt, and the price quoted shall not include federal excise taxes, state or local taxes, or use taxes.
10. The bidder is responsible for all taxes, including but not limited to sales and use taxes on the purchase of the bidder's equipment and materials, or any equipment and materials supplied to the Board of Education on the project.
I. BILLING AND PAYMENT
11. The contractor shall submit invoices to the Howard County Department of Education, (Name of Department), 10910 Clarksville Pike, Ellicott City, MD 21042, Attn: (Name of Contact), at the completion of each job. Invoices must contain the following information:
a) Purchase Order Number
b) Name of school
c) Description of work along with quantities
d) Start date and completion date
e) Itemized breakdown of project costs to include labor and materials.
f) Total due
J. FUNDING
12. The contractual obligation of the Board of Education under any resulting contract is contingent upon the availability of appropriated funds.
K. ORDERS
13. Orders shall be in the form of an official Howard County Public School System purchase order. No deliveries are to be made under any contract(s) resulting from this bid without a purchase order.
L. PROCUREMENT CARD
14. The Howard County Public School System utilizes a Purchasing Card Program. Purchases resulting from this solicitation may be made through a Visa/Mastercard credit card.
15. Bidders are prohibited from charging any additional costs/fees above and beyond the established contract prices to process such orders. Bidders lacking Visa/Mastercard capability should contact the Purchasing Office.
M. INSURANCE
16. See ATTACHMENT A, INSURANCE REQUIREMENTS.
N. SAFETY DATA SHEETS
17. Pursuant to Occupational Safety and Health Act (OSHA) 29CFR1910, where applicable, SDS for the products supplied or used as a result of this contract must be attached to each shipment of product as well as mailed to:

The Howard County Public School System
Department of the Environment
10910 Clarksville Pike
Ellicott City, MD 21042
2. SDS must show the contract number under which the products were supplied or used and certify that no asbestos containing products have been installed.
3. The contractor must supply Safety Data Sheets (SDS) to the HCPSS Contract Manager, for all chemicals, finishes, paint, etc. as appropriate, prior to use on projects.

## O. ASSIGNMENTS

1. The contractor may not assign or transfer this contract, any interest herein or any claim hereunder, except as expressly authorized in writing by the Howard County Public School System. Unless the performance is expressly waived in writing by the Howard County Public School System, an assignment does not release the contractor from responsibility for performance of this contract. Assignment or subcontracting without the written approval of the Howard County Public School System will be cause for termination.

## P. SUBCONTRACTORS

1. Subcontractors may not be employed to perform any work under any resulting contract(s) unless specifically approved by the Contract Manager.
2. Nothing contained in these contract documents shall create any contractual relation between any subcontractor and the Howard County Public School System.
Q. TOBACCO FREE AND ALCOHOL/DRUG FREE ENVIRONMENT
3. The Board of Education of Howard County maintains a tobacco, alcohol/drug free environment. The sale or use of tobacco, alcohol or drugs, in any form, or related product, is prohibited in school buildings and grounds at all times. Persons found violating this policy will be requested to remove the product and themselves from school premises.
R. CRIMINAL HISTORY BACKGROUND CHECKS
4. All employees, agents, or representatives of the awarded contractor who will be performing work on any phase of the contract arising out of this bid are subject to a criminal history background check by the school system. Such persons, if requested by the school system, must provide fingerprints and other required information to facilitate such a check, as well as the necessary fees to obtain such a check from the federal or state government. At the completion of a background check, the school system may, at its sole discretion, decide that a particular employee, agent, or representative of the contractor be barred from school system property.

## S. CHILD SEX OFFENDER NOTIFICATION

1. Sex Offender Requirement: Maryland law requires certain sex offenders to register with the local law enforcement agency; See Maryland Annotated Code, Criminal Procedure Article, §11-704. One of the purposes of this law, is to inform school systems when a Registered Sex Offender is residing or working in the area. When the sex offender registers, the local police are required to notify the Superintendent of Schools, and the Superintendent, in turn, is required to send a notice to school principals.
2. As a contractor working for Howard County Public School System (HCPSS), we require that you do not employ Registered Sex Offenders to work on projects for our school system if they, as a result, are required to perform delivery, installation, repair, construction or any other kind of services on HCPSS property. Further, Maryland Law that became effective June 22, 2006, requires that any person who enters a contract with a county board of education or a non-public school "may not knowingly employ an individual to work at a school" if the individual is a
registered sex offender; See §11-722 Criminal Procedure Article. An employer who violates this requirement is guilty of a misdemeanor and if convicted may be subject to up to five years imprisonment and/or a \$5,000 fine.
3. Each contractor shall screen their work-forces to ensure that a Registered Sex Offender does not perform work at a county public school and also ensure that a subcontractor and independent contractor conducts screening of its personnel who may work at a school. The term "work force" is intended to refer to all of the contractor's direct employees and subcontractors and/or independent contractors it uses to perform the work. Violations of this provision may cause HCPSS to take action against the contractor up to and including termination of the contract.
4. Effective July 1, 2015, amendments to § 6-113 of the Education Article of the Maryland Code further require that a contractor or subcontractor for a local school system may not knowingly assign an employee to work on school property with direct, unsupervised, and uncontrolled access to children, if the employee has been convicted of, or pled guilty or nolo contendere to, a crime involving a sexual offense, child sexual abuse and crimes of violence.
5. The Contractor shall submit to HCPSS a listing of any employees assigned to perform under this agreement and certify that the necessary criminal history records checks have been conducted and that each employee complies with the requirements.
T. MULTI-AGENCY PARTICIPATION
6. Under §5-112, Paragraph (3) of the Education Article of the Annotated Code of Maryland HCPSS may with Board of Education approval participate in contracts for goods or commodities that are awarded by other public agencies or by intergovernmental purchasing organizations if the lead agency for the contract follows the public bidding procedures. HCPSS therefore reserves the right to extend the terms and conditions of this solicitation to any and all other agencies within the state of Maryland as well as any other federal, state, municipal, county, or local governmental agency under the jurisdiction of the United States and its territories. This shall include but not limited to private schools, parochial schools, non-public schools such as charter schools, special districts, intermediate units, non-profit agencies providing services on behalf of government, and/or state, community and/or private colleges/universities that require these goods, commodities and/or services. A copy of the contract pricing and the bid requirements incorporated in this contract will be supplied to requesting agencies.
7. Each participating jurisdiction or agency shall enter into its own contract with the Award Bidder(s) and this contract shall be binding only upon the principals signing such an agreement. Invoices shall be submitted in duplicate "directly" to the ordering jurisdiction for each unit purchased. Disputes over the execution of any contract shall be the responsibility of the participating jurisdiction or agency that entered into that contract. Disputes must be resolved solely between the participating agency and the award.
U. MINORITY BUSINESS ENTERPRISE PARTICIPATION
8. Certified Minority Business Enterprises are encouraged to respond to this solicitation notice. Minority Business Enterprise participation shall be as defined by the procedures established for State of Maryland funded public school construction projects.
9. The contractor or supplier who provides materials, supplies, equipment, and/or services shall attempt to achieve the established goals determined for each
project from certified minority business enterprises. The bidder or offeror agrees to make a good faith effort to achieve the established goals when applicable.
V. BUILDING/SITE OCCUPANCY
10. Under no circumstances shall any driveway, access road or walkway be blocked by the contractor's vehicles to prohibit use of, or disruption to pedestrian or vehicular traffic to the buildings or site.
W. OCCUPIED BUILDINGS - SIGN IN PROCEDURES
11. Work under this contract and any resulting contract or sub-contract will take place while school facilities are occupied by staff and often also by students and visitors. Every precaution shall be exercised to protect people from injury and to minimize disruption of activity. As well, contract employees shall conduct themselves in a professional manner while on The Howard County Public School System's premises. Any employee found to disregard the nature of the school system's surroundings shall be removed from the premises and may be prohibited from further servicing the HCPSS contract.
X. IDENTIFICATION
12. All contractor personnel, working in or around buildings designated under this contract, shall have a valid driver's license or photo ID in their possession at all times and wear distinctive uniform clothing while on the school system's premises.
13. Contractors will be required to provide identification and sign-in and sign-out at the front office at each site on a daily basis during the course of each project.
14. The contractor shall determine and provide additional personal protective equipment required for the safe performance of work. Protective clothing, equipment, and devices shall, as a minimum, conform to Occupational Safety and Health Administration (OSHA) standards for the products being used. Vehicles used by the contractor must be identified in accordance with state and local regulations and, if applicable, be labeled with an appropriate license number identifying the company's business license.
Y. PROJECT SCHEDULE
15. The majority of Security System Installation, Upgrades, Maintenance and Repair Service work will take place during summers, spring breaks, occasional weekends and during the school year when necessary. Most projects are planned in advance. Some projects may be performed in conjunction with renovations. Selected contractor(s) are to expect time constraints for any given project.
16. A school calendar can be found at www.hcpss.org.
17. By submission of a bid, the bidder agrees that once work commences, it shall be pursued on a daily basis. Schedules will vary from project to project. Specific schedules will be given for each project and will be identified on the purchase order.

## Z. LOCAL OFFICE

1. The contractor shall maintain a local office within 50 miles of the school system with telephone available for receiving and making calls throughout the working day and shall have available locally sufficient storage space for materials and equipment.
2. Office must be capable of communicating via email including the transfer of large drawing files and photos.
3. Bid documents may be distributed electronically by the HCPSS and the contractor will be responsible for printing drawings to scale at the contractors expense. Reproduction of drawings is also the responsibility of contractor.
4. For projects that do not include architect or engineered drawings, it will be the responsibility of the contractor to provide drawings suitable for obtaining permit, as well as, providing as-built drawings upon completion of project.

AA. CONTRACTOR'S CONTRACT PROJECT MANAGER

1. The contractor shall provide one employee who shall be designated as the onsite Project Manager. The onsite Project Manager shall be the contractor's agent for reviewing the project in the field when required with the school system's representatives and shall be the channel for all inquiries concerning work in progress or work to be started under this contract.
2. The onsite Project Manager should be readily available to review all phases of the project when requested by the school system. The contractor shall notify the school system for approval of any changes in persons designated as onsite Project Manager.
3. The contractor's onsite Project Manager shall provide the HCPSS with a project schedule and updates as required reflecting any and all changes.
4. The contractor's Project Manager shall have the ability (via, cellular phone, etc.) to reply to all calls within thirty (30) minutes after receipt of call. Service calls shall be considered "received" when received by any employee or answering service of the contractor.

BB. WORKING HOURS
Normal working hours are defined as follows:
a) School in Session- 6:30 AM to 11:00 PM, Monday through Friday (excluding school board approved holidays).
b) Saturdays - between the hours of 6:30 AM and 6:00 PM.
c) Summer Break - 6:30 AM to 4:00 PM, Monday through Friday
2. The work shall be carried forward during normal work hours unless the contractor elects on his own volition to extend operations beyond regular hours. Overtime will be approved for payment only if the school system's Contract Manager authorizes the overtime in writing. Overtime (Premium Rate) shall be as shown in the proposal for change order work.
3. The contractor shall perform the work under this contract on the job site in the presence of HCPSS employees. If there is any off-site work such as shop fabrication, the school system shall be so notified at the time the not-to-exceed price is provided by the contractor. The school system reserves the right to inspect such off-site work, including the contractor's premises at any time.

## CC. MAINTENANCE OF MANPOWER

1. Any staff changes by the selected contractor(s) must be reviewed and approved by HCPSS prior to any reassignments being made.

DD. RIGHT TO ASSIGN WORK

1. The school system reserves the right to complete particular projects through this contract through the use of HCPSS employees or to obtain separate contracts through its normal procurement process according to the best interests of the school system

EE. RESPONSIBILITY OF BIDDERS

1. The contractor is assumed to be skilled in his trade, and is solely responsible for compliance with health and safety regulations, performing the work in a safe and competent manner, and in installation procedures required for the work as outlined in these documents.

FF. PERMITS, CODES, AND LAWS

1. All work shall be in accordance with the following rules and regulations and any applicable laws:
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National Fire Protection Association (NFPA)
Basic National Building Code (BOCA)
International Building Code (IBC)
State Building Code (SBC)
Local Building Codes (LBC)
National Electrical Code (NEC)
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2. Where any of the above is at variance with the drawings and specifications, the code requirements shall take precedence and any cost necessary to meet these shall be included in the contract.
3. All supervision assigned to this project shall be experienced in this type of work. The contractor's onsite Supervisor shall be designated as the "safety inspector," unless the contractor appoints another.
4. Contractor shall apply for and pay for all permits required to perform this work. These costs are to be included in contractor's bid price.
5. For projects that do not include architect or engineered drawings, it will be the responsibility of the contractor to provide drawings suitable for obtaining permit.

GG. ASBESTOS MATERIALS

1. No products shall contain asbestos.
2. Bidders/Contractor may be required to submit documentation stating that the products ordered, provided or supplied under this contract do not contain asbestos.
3. Any products from the bidder/contractor found to be containing asbestos shall be promptly removed from HCPSS property at the expense of the bidder/contractor. Credit for the product removed will be issued at the price paid. Bidder/Contractor shall be responsible for any disposal and removal costs.

HH. LEAD PAINT: 40 CFR PART 745 RENOVATION, REPAIR, AND PAINTING RULE

1. Any contractor disturbing known lead based paint surfaces of greater than 6 square feet (interior) and 20 square feet (exterior) in HCPSS facilities constructed prior to 1978 and within areas housing children under the age of 6 years shall comply with Environmental Protection Agency's (EPA) 40 CFR Part 745, herein known as the "Rule". The contractor shall be a certified firm, employ a certified renovator, and follow proper lead paint work practices.
2. A certified firm is a company who has successfully registered with the EPA. A certified renovator is an individual from the firm who successfully completed an accredited EPA 8-hour class per the Rule.
3. Examples of impacted areas may include kindergarten classrooms, early childhood classrooms, restrooms commonly used by children under 6 years of age, elementary cafeterias and gymnasiums, before and after care rooms, and high school teen's childcare environments. Exterior work is impacted by this Rule if within 10 feet of windows and/or doors to an interior classroom housing children under the age of 6 or an outdoor activity area, such a macadam or mulched play area.
4. HCPSS will identify the presence or absence of lead base paint within affected work areas and documentation will be made available upon request.
5. HCPSS will provide project notification and educational pamphlets as required per the Rule.
6. Contractor is to notify HCPSS Contract Manager and/or Office of Safety, Environment, and Risk Management when work area is ready for a Cleaning Verification Procedure as defined by the Rule. HCPSS will provide a certified third party to perform dust sampling. EPA's visual verification card will not be accepted.
7. The contractor's certified renovator shall be present as per the Rule during posting of signs, work area setup, and work area clean-up. Upon a request, the certified renovator shall be able to physically respond on-site within two hours.
8. HCPSS Contract Manager and/or Office of Safety, Environment, and Risk Management will sign related documents for the contractor as required per the Rule.
II. SITE WORK REQUIREMENTS
9. Contractor is responsible to work in a neat and orderly fashion, such as to minimize disruption of owner's employees. Job site shall be kept clean and free of debris.
10. Contractor shall work between the hours affirmed by the school system's Contract Manager. The HCPSS Contract Manager must approve any work performed outside of these hours.
11. Contractor shall provide storage for their tools, equipment, and materials. Owner does not assume responsibility for the security of these items.

JJ. PROTECTION OF ADJACENT FACILITIES AND PROPERTY

1. The contractor shall continuously maintain adequate protection of all his work from damage, and shall protect the Howard County Public School System property from injury or loss arising in connection with this contract. He shall make good any damages, injury, or loss, except such as may be directly due to errors in the contract documents or caused by agents or employees of the Howard County Public School System. He shall adequately protect adjacent property as provided by law and the contract documents.
2. If deemed necessary, box trees along the way of access, also all trees and shrubbery surrounding the building which are liable to injury by the moving,
storing, and working up of materials. Use no permanent tree for attachment for any ropes or derricks. Replace and put in good condition every public way and private way, catch basin, conduit, trees, fence or things injured in carrying out this contract, unless the same shall be permanently done away with by order of the Howard County Public School System.
3. The contractor shall erect and properly maintain at all times, as required by the condition and progress of the work, all necessary safeguards for the protection of workmen and the public, and shall post danger signs warning against the hazards created by such features of construction as protruding nails, overhead hoists, well holes, elevator hatchways, scaffolding, window openings, stairways, falling materials and overhead work.
4. In any emergency affecting the safety of life, or of the work, or of the adjoining property, the contractor, without special instruction or authorization, is hereby permitted to act, at his discretion, to prevent such threatened loss or injury. However, if he is specifically instructed by proper authority, he shall so act without appeal. Any compensation claimed by the contractor on account of emergency work shall be only authorized by the Howard County Public School System.
5. Gymnasium Floors: shall be protected from damage with $3 / 4$-inch plywood sheets when using a lift for obtaining access to high ceilings. Gymnasium floors shall be protected from damage and equipment traffic with a minimum of $1 / 4$-inch Masonite sheets when accessing gymnasium floors for storage of equipment, supplies or materials.

KK. FINAL CLEANING

1. Upon completion of the work specified in the contract and before final payment will be made, the construction area and all other adjoining areas occupied by the contractor during the construction of said contract shall be cleaned of all surplus and discarded materials, spilled materials, dust and excess materials left from the permanent work as a result of the contractor's operations at no additional cost to the HCPSS.
2. Cleaning shall include the cleaning of the debris collected above the ceiling tiles to include but not limited to the following: the top surface of the ceiling tiles, ceiling tile grid, ductwork, equipment and joints/beams as a result of the work.
3. HCPSS office of Custodial Services shall give final approval of all cleaned areas. Contractor shall be fully responsible for correcting deficiencies in cleanliness at no additional cost to the HCPSS including but not limited to providing labor, equipment, supervision and cleaning services.

LL. WARRANTY

1. All products shall minimally carry a standard factory warranty against defects in parts and workmanship for the period stated in the manufacturer's specifications and/or for a minimum of one year.
2. Upon completion the contractor shall submit a manufacturer's warranty when applicable.
3. All labor shall minimally carry a warranty against workmanship for a minimum of one year.
MM. DEMONSTRATION
4. Should any using school or office require a demonstration of equipment furnished by a contractor, the supplying contractor shall be obligated to provide such demonstration and use instruction to the requesting school or office at no additional cost. The use demonstration shall be accomplished at the school or office location.

NN. ACCEPTANCE \& INSPECTION

1. All work shall be subject to the inspection and approval of Howard County Public School System's Contract Manager during construction and before final payment is made.

OO. CONTRACTOR PERFORMANCE/EVALUATION SCORECARD

1. Upon completion of a project/service or at any time during the project/service, the awarded contractor shall receive a performance evaluation scorecard rating the contractor's performance on the project/service. The evaluation scorecard will become part of the contractor's permanent file. A sample Contractor Performance/Evaluation Scorecard is included with the bid documents.
2. The evaluation scorecard shall include the following performance indicators; Quality of Work, Responsiveness, Professionalism, Resources, Schedule Management, Quality Control, Deficiency Resolution, Submittal Management, Training, Appearance, Security, Safety, Utility Conservation, Disruptions, Quality of Materials, Emergency Response, Hazardous Materials, Innovation, Teamwork, Cost Management, Billing, Compliance.
3. A contractor shall have up to 3 weeks after notification to appeal, challenge or otherwise dispute the scorecard results. After the 3-week period, the scorecard shall be considered final and accepted by the contractor.
4. A contractor receiving a $70 \%$ or less overall evaluation scorecard rating for a project/service may be disqualified for bidding on any future project/service with the HCPSS for a period of three (3) years and/or for the remaining contract term including renewal options.

## VI. GENERAL REQUIREMENTS

A. GENERAL

1. Provide all necessary labor, equipment, materials, supervision, and tools to install, maintain, repair, and/or upgrade Mechanical insulation at various locations within the school system.
2. Mechanical insulation services may be required at any one HCPSS facility, or at multiple facilities, at any given time.
B. PROJECT SUBMITTALS
3. Certain submittal information will be mandatory while others may be required upon request. Submittals that are mandatory shall be submitted annually or when there is a change in relationship to the submittal (i.e. change in products use, MSDS updated, etc.).
C. SIGN-IN REQUIRED
4. Contractors will be required to sign-in and sign-out with the front office at each site on a daily basis during the course of each project.
D. EXPERIENCE
5. Installation, repair and replacement of all commercial mechanical insulation systems.
6. Installation and repair of insulation for commercial hot/chilled water piping.
7. Installation and repair of insulation for ductwork.
8. Installation and repair of insulation for hot/chilled water pumps.
9. Installation, repair and replacement of insulation for commercial boilers.
10. Installation, repair and replacement of insulation for commercial chillers.
11. Installation, repair and replacement of insulation for all mechanical systems ranging in temperature from;
a) Low Temperature Range $\left(-100^{\circ} \mathrm{F}\right.$ to $\left.60^{\circ} \mathrm{F}\right)$, refrigeration, cold/chilled water and commercial heating and cooling systems.
b) Medium Temperature Range $\left(61^{\circ} \mathrm{F}\right.$ to $\left.600^{\circ} \mathrm{F}\right)$, water and steam, power/process piping, ovens and stacks
c) High Temperature Range ( $601^{\circ} \mathrm{F}$ to $1500^{\circ} \mathrm{F}$ ), power generation, turbines, kilns, smelters exhaust systems and power piping.
12. Installation, repair and replacement of insulation for all indoor and outdoor mechanical systems.
13. Ability to complete Insulation Energy Appraisal (preferred) and make recommendations regarding specific types of insulation required to maximize savings and energy potential over the life of the facility.

## E. DIGITAL PICTURES

1. The contractor shall have the ability to provide digital pictures of work areas on CD for each project at the contractor's expense.

## VII. MECHANICAL INSULATION SPECIFICATIONS

### 1.1 REFERENCE:

A. The Conditions of the Contract and other General Requirements apply to the work specified in this Section.

### 1.2 DESCRIPTION:

A. All piping, ductwork and equipment installed under this Contract shall be covered as specified.

### 1.3 SCOPE:

A. The work covered by this specification consists of furnishing all labor, equipment, materials and accessories, and performing all operations required, for the correct fabrication and installation of thermal insulation applied to all piping, equipment, and duct systems, in accordance with applicable project specifications and drawings, subject to the terms and conditions of the contract.

### 1.4 REFERENCES:

A. Thermal insulation materials shall meet the property requirements of one or more of the following specifications as applicable to the specific product or use:

1. American Society for Testing of Materials Specifications:
a. ASTM C 547, "Standard Specification for Mineral Fiber Preformed Pipe Insulation"
b. ASTM C 533, "Standard Specification for Calcium Silicate Pipe \& Block Insulation"
c. ASTM C 55, "Standard Specification for Mineral Fiber Blanket and Felt Insulation"
d. ASTM C 585, "Recommended Practice for Inner and Outer Diameters of Rigid Pipe Insulation for Nominal Sizes of Pipe and Tubing (NPS System)"
e. ASTM C 612, "Standard Specification for Mineral Fiber Block and Board Thermal Insulation"
f. ASTM C 1136, "Standard Specification for Barrier Material, Vapor, "Type 1 or 2 (Jacket only)
g. ASTM C 795, "Thermal Insulation for Use Over Austenitic Stainless Steel"
B. Insulation materials, including all weather and vapor barrier materials, closures, hangers, supports, fitting covers, and other accessories, shall be furnished and installed in strict accordance with project drawings, plans, and specifications.

### 1.5 SYSTEM PERFORMANCE:

A. Insulation materials furnished and installed hereunder should meet the minimum economic insulation thickness requirements of the North American Insulation Manufacturers' Association (NAIMA) (formerly known as TIMA), to ensure cost-effective energy conservation performance. Alternatively, materials should meet the
minimum thickness requirements of National Voluntary Consensus Standard 90.1 (1989), "Energy Efficient Design of New Buildings," of the American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE). However, if other factors such as condensation control or personnel protection are to be considered, the selection of the thickness of insulation should satisfy the controlling factor.
B. Insulation materials furnished and installed hereunder shall meet the fire hazard requirements of any one of the following specifications:

1. American Society for Testing of Materials ASTM E 84
2. Underwriters Laboratories, Inc. UL 723
3. National Fire Protection Association NFPA 255, NFPA 90A
4. CAN/ULC ULC-S102
C. Calcium silicate products shall include a visual identification system to permit positive field determination of their asbestos free characteristic.

### 1.6 QUALITY ASSURANCE:

A. Insulation materials and accessories furnished and installed hereunder shall, where required, be accompanied by manufacturers' current submittal or data sheets showing compliance with applicable specifications listed in Section 1.4 above.
B. Insulation materials and accessories shall be installed in a workmanlike manner by skilled and experienced workers who are regularly engaged in commercial insulation work.
C. Provide at project site a sample of each type of insulation hereinafter specified. Display insulation in an "installed" condition, showing typical completed pipe, covers, fittings, ductwork and equipment insulation. No insulation shall be applied until these samples have been accepted by the HCPSS. Any insulation work which does not conform to the accepted samples will not be acceptable, and shall be removed and re-installed in a manner acceptable to the HCPSS at no additional cost to the HCPSS.

### 1.7 DELIVERY AND STORAGE OF MATERIALS:

A. All of the insulation materials and accessories covered by this specification shall be delivered to the job site and stored in a safe, dry place with appropriate labels and/or other product identification.
B. The Contractor shall use whatever means are necessary to protect the insulation materials and accessories before, during, and after installation. No insulation material shall be installed that has become damaged in any way. The Contractor shall also use all means necessary to protect work and materials installed by other trades.
C. If any insulation material has become wet because of transit or job site exposure to moisture or water, the contractor shall not install such material, and shall remove it from the job site. An exception may be allowed in cases where the contractor is able to demonstrate that wet insulation when fully dried out (either before installation, or afterward following exposure to system operating temperatures) will provide installed performance that is equivalent in all respects to new, completely dry insulation. In such cases, consult the insulation manufacturer in writing for technical assistance.

## PART 2 - PRODUCTS

### 2.1 GENERAL:

A. All materials to be insulated shall be thoroughly cleaned, after completion of successful tests, and shall be covered as specified below. Insulation shall be Owens-Corning Fiberglass, Mannville, Armstrong, or P.P.G, or as approved equal.

### 2.2 PIPE INSULATION MATERIALS:

A. Insulation shall be one piece or half sectional molded fibrous glass with " $K$ " of .23 at 75 -degrees $F$ mean temperature, for services for minus 60 -degrees $F$ to plus 450 -degrees $F$. All exposed piping (occupied space, mechanical equipment rooms, etc.) shall be provided with a 20 mil PVC jacketing system. As a Contractor's option, a paper-free vapor barrier system shall be used for all pipe insulation. Paper free insulation shall be Owens Corning Evolution. Provide flexible/removable insulation bags (drawstring ends/Velcro fasteners) or pre-molded insulation covers for fan coil unit and unit ventilator piping specialties (e.g., control valves). Install per Manufacturer's recommendations.
B. Pipe insulation jacket shall be factory applied vinyl coated, embossed and reinforced vapor barrier laminate, with a perm rating of not more than 0.02 perms. All hot and cold, concealed and exposed butt strips shall be of the same material as jacket. Jacket and butt strips shall be sealed with field applied Benjamin foster adhesive. Jacket and butt strips shall be off-white color and shall be equivalent to Owens-Corning Fiberglass 25-ASJ.
C. For fittings on all piping, valves and flanges, apply fiberglass molded or segmented insulation equal in thickness to the adjoining insulation and securely fasten in place using wire. Apply a skin coat of insulating cement to produce a smooth surface. After cement is dry, apply a light coat of fitting mastic, UL labeled, Type C, for cold water piping, and Type H for hot water piping. Wrap fitting with fiberglass reinforcing cloth overlapping adjoining sections of pipe insulation by $2^{\prime \prime}$. Apply a second coat of Type C or Type H mastic over the reinforcing cloth, working it to a smooth finish. As an option to the above fittings, a polyvinyl chloride fitting cover may be supplied.
D. All pipe insulation, jackets, or facings, and adhesives used to adhere jacket or facing to the insulation, including fittings and butt strips, shall have non-combustible fire and smoke hazard system rating and label as tested by ASTM E-84, NFPA 225, and UL 73 not exceeding Flame Spread 25 , Fuel Contributed 50, Smoke Developed 50. Accessories such as adhesives, mastic cements, tapes and cloth for fittings shall have the same ratings as listed above. All products or their shipping cartons shall bear the Underwriter's label indicating that flame and smoke ratings do not exceed the above criteria.
E. All concealed pipe insulation shall be held in place with $3 / 4^{\prime \prime}$ wide aluminum bands. Bands shall be spaced to hold the ends and center of each section, and in no case shall the spacing exceed $18{ }^{\prime \prime}$. Bands shall not be used in exposed work.
F. For piping having a vapor barrier insulation and for all insulated piping requiring supports, hangers and supports shall be installed outside the insulation. Wherever hangers and supports are installed outside the insulation, pipe insulation protecting shields shall be provided. Where insulation is a load bearing material, of sufficient strength to support the weight of the piping, pipe shields one-third the circumference of the insulation and of a length not less than three times the diameter of the insulation (maximum length 24 ") shall be provided. Insulation of 7-1/4 pound or greater density will be considered as load bearing for pipe sizes up to and including $2^{\prime \prime}$. Where insulation is not of sufficient strength to support the weight of the piping, a half section of calcium silicate insulation, such as Kaylo, shall be provided. Vapor barrier and finish shall be applied as required to match adjoining insulation. In addition, shields shall be furnished as specified above.
G. For piping located outside of the building an aluminum weatherproof jacketing system shall be provided. This system shall be Micro-Lok ML as manufactured by Mannville, Polyweld by Pabco Metals Corp., Childers, or as approved equal, and installed per the manufacturers recommendations. Where outdoor piping is receiving electric heat tape, the insulation shall be oversized so that the heat tape is not compressed tightly to the pipe. Pipe jacketing shall be corrugated ( $3 / 16^{\prime \prime}$ ) deep aluminum, $.016^{\prime \prime}$ thickness of $\mathrm{H}-14$ temper with aluminum strapping of $3 / 4^{\prime \prime}$ width and .020 inch thickness with moisture barrier. Aluminum jacketing elbows shall be smooth, .016 " thickness and 1100 alloy. All jacketing shall have an integrally bonded moisture barrier
over the entire surface in contact with the insulation. Longitudinal joints shall be applied so they will shed water and shall be sealed completely. Circumferential joints shall be closed using preformed butt strips following manufacturer's recommendations for securement.
H. In lieu of the above, Armstrong's Self-Seal Armaflex 2000 or equal may be used for domestic water systems wherever $1 / 2^{\prime \prime}$ thickness is allowed. Apply per manufacturer's recommendations.
I. Damaged or wet insulation shall be replaced.
J. On cold systems (domestic cold water, chilled water, rainleaders, cooling coil drains, etc.) vapor barrier performance is extremely important. All penetrations of the ASJ and exposed ends of insulation must be sealed with vapor barrier mastic. The ASJ must be protected with either a mastic coating or a suitable vapor retarding outer jacket. Vapor seals at butt joints shall be applied at every fourth pipe section joint and at each fitting to provide isolation of water incursion.
K. Fittings and valves shall be insulated with pre-formed fiberglass fittings, fabricated sections of Fiberglass pipe insulation, Fiberglass pipe and tank insulation, Fiberglass blanket insulation, or insulating cement. Thickness shall be equal to adjacent pipe insulation. Finish shall be with pre-formed PVC fitting covers or as otherwise specified on contract drawings.
L. Flanges, couplings and valve bonnets shall be covered with an oversized pipe insulation section sized to provide the same insulation thickness as on the main pipe section. An oversized insulation section shall be used to form a collar between the two insulation sections with low density blanket insulation being used to fill gaps. Jacketing shall match that used on straight pipe sections. Rough cut ends shall be coated with a suitable weather or vapor resistant mastic as dictated by the system location and service. On hot systems where fittings are to be left exposed, insulation ends should be beveled away from bolts for easy access. On cold systems, particular care must be given to vapor sealing the fitting cover or finish to the pipe insulation vapor barrier. All valve stems must be sealed with caulking which allows free movement of the stem but provides a seal against moisture incursion.
M. All piping shall be supported in such a manner that neither the insulation nor the vapor/weather barrier is compromised by the hanger or the effects of the hanger. In all cases, hanger spacing must be such that the circumferential joint may be made outside the hanger. On cold systems, vapor barrier must be continuous, including material covered by the hanger saddle.

1. Piping systems $3^{\prime \prime}(7.5 \mathrm{~cm})$ in diameter or less, insulated with Fiberglass insulation, may be supported by placing saddles of the proper length and spacing, as designated in OwenCorning Pub. 1-IN-12534, under the insulation.
2. For hot or cold piping systems larger than $3^{\prime \prime}(7.5 \mathrm{~cm})$ in diameter, operating at temperatures less than $+200^{\circ} \mathrm{F}\left(93^{\circ} \mathrm{C}\right)$ and insulated with fiber glass, high density inserts such as wood or foam with sufficient compressive strength shall be used to support the weight of the piping system. At temperatures exceeding $+200^{\circ} \mathrm{F}\left(93^{\circ} \mathrm{C}\right)$, Owens-Corning Pink Calcium Silicate pipe insulation shall be used for high density inserts.
3. Owens-Corning Pink Calcium Silicate pipe insulation may be used to support the entire weight of the piping system provided the hanger saddle is designed so the maximum compressive load does not exceed $100 \mathrm{psi}(7 \mathrm{~kg} / \mathrm{cm})$.
4. Where pipe shoes and roller supports are required, insulation shall be inserted in the pipe shoe to minimize pipe heat loss. Where possible, the pipe shoe shall be sized to be flush with the outer pipe insulation diameter.
5. Thermal expansion and contraction of the piping and insulation system can generally be taken care of by utilizing double layers of insulation and staggering both longitudinal and circumferential joints. Where long runs are encountered, expansion joints may be required
where single layers of insulation are being used and should be so noted on the contract drawings.
6. On vertical runs, insulation support rings shall be used.
7. Provide semi-rigid pipe and tank insulation for chilled water and dual temperature valves, fittings, flanges, and exterior piping systems.

### 2.3 PIPING INSULATION THICKNESSES:

A. Service:

Chilled Water Piping 2-1/2" and Larger
Chilled Water Piping 2" and Smaller
1-1/2" thickness
Condenser Water Piping (Exterior)
2" thickness
Condenser Water Piping 2-1/2" and Larger
1-1/2" thickness
Condenser Water Piping 2 " and Smaller
1" thickness
Heating Hot Water Piping 2" \& Smaller
Heating Hot Water Piping 2-1/2" and Larger
Dual Temperature Water Piping and Larger
Dual Temperature Water Piping and Smaller
All Horizontal Roof Drain and Overflow Piping Including Sumps
All Drain Piping from Cooling Coils
All Domestic Hot Water Piping, including Recirculating Piping 1" and Less
All Domestic Hot Water Piping including Recirculating 1-1/2" andLarger
Domestic Cold Water Piping 2-1/2" and Larger
Domestic Cold Water Piping 2' and Smaller
Chemical Feed System
Handicapped Lavatory/Sink Insulation
Above Grade Trap Priming Lines
All Horizontal Sanitary F.D. Piping Receiving Condensate
All Run-Out Piping, 2" and smaller, 12 feet and less in length
Refrigeration Suction and Hot Gas Piping 7/8" and Smaller
1-1/2" thickness
2" thickness
2-1/2" thickness
2" thickness
1" thickness
1" thickness
1" thickness
1-1/2" thickness
1" thickness
1/2" thickness

Refrigeration Suction and Hot Gas Piping 1" and Larger
1" thickness
1/2" thickness
1/2" thickness
1" thickness
1/2" thickness
3/4" thickness
1" thickness

### 2.4 EQUIPMENT:

A. The following shall be insulated with Fiberglass Rigid Board Insulation:

1. Chilled Water and Dual Temperature Water Pumps
2. Air Separators
3. Expansion Tanks
4. Chiller Heads (1" thick Armaflex)
5. Condenser Water Pumps
6. Flat Plate Heat Exchangers
B. Insulation for cold surfaces shall be 2" thickness, 6 lb . density, Owens Corning Type 705 FRK with a "K" of .22 at $75^{\circ} \mathrm{F}$ mean temperature. Insulation for hot surfaces except as otherwise noted shall be 1-1/2" thickness, 6 lb . density, Owens Corning Type 705 with a "K" of .22 at $75^{\circ} \mathrm{F}$ mean temperature. Insulation shall be applied with staggered joints firmly butted and joined. The insulation shall be held in place by mechanical
fasteners (weld pins and/or speed clips). All joints and voids shall be filled with Owens-Corning \#110 cement, well troweled into openings. For Owens Corning Type 705 FRK insulation, all joints and voids shall be FRK taped and vapor sealed. Install metal corner beads at all corners and edges in order to provide a permanent installation. Onto the dry cement surface apply a brush coat of Foster Sealfas 30-36 at the rate of 60-70 square feet per gallon. Embed into wet coating a layer of 8 ounce canvas smoothed out to avoid wrinkles and lap all seams a minimum of 2". Apply a second brush coat of Sealfas $30-36$ to the entire surface at the rate of 60-70 square feet per gallon. Cleanouts, nameplates, and manholes shall not be insulated and the insulation on surrounding surfaces shall be neatly beveled off at such openings.
C. If required, boards shall be scored to allow them to conform to curved or irregular surfaces.
D. Mechanical fasteners shall be utilized to hold insulation to surface with bands as required to hold the curvature of the material.
E. Support rings shall be provided to support the top head insulation where required.
F. Outdoor installations require a weather barrier for protection of the insulation jacketing.

### 2.5 DUCTWORK:

A. Insulate all supply and return/relief ductwork from air handling units, relief/exhaust air upstream and downstream of heat recovery devices, and outside air intake ductwork with fiberglass exterior duct insulation with factory-applied foil facing. All other exhaust air systems from the louver to the isolation damper shall be insulated. Exposed fiberglass duct insulation shall be 1-1/2" rigid or non-flexible board type, 3.0 pcf minimum density, 0.25 max. "K" factor, with white vinyl A.S.J. vapor barrier facing. All concealed fiberglass duct insulation shall be 1-1/2" flexible blanket type,1.0 PCF minimum density, all concealed insulation shall be 0.30 max. "K" factor, with reinforced foil-scrim-Kraft vapor barrier facing.
B. Where a vapor barrier is required, all joints, seams, tears, punctures, and other penetrations shall be closed with $3^{\prime \prime}(7.5 \mathrm{~cm})$ pressure - sensitive tape matching the facing or with vapor barrier mastic reinforced with 3 " $(7.5 \mathrm{~cm})$ glass scrim tape.
C. Contractor applied internal linings shall be as specified and installed in accordance with Section 15700. Internally lined ductwork does not require external insulation unless specified otherwise.
D. Exposed fiberglass duct insulation; tightly butt all edges and seams. Secure insulation with flush mechanical fasteners spaced not less than one per square foot. Insulation may be secured with 100\% coverage of adhesive with mechanical fasteners on the underside of the duct only, in addition to adhesive. Cover all seams, joints and fasteners with not less than 3 " wide tape matching the insulation facing. Prefinished white fastener caps may be left exposed if the spacing and pattern is uniform in appearance. Staples will not be permitted.
E. Duct insulation damaged due to installation of new work shall be replaced.
F. All supply air diffusers shall be fully insulated on the rear exposed surface to prevent condensation. Interior exhaust plenums and ducts shall be insulated from louvers and/or outside penetrations to the point of isolation (i.e., motor-operated dampers). Insulation shall be 1-1/2" flexible blanket type 1.5 PCF minimum density with reinforced foil-scrim-kraft vapor barrier facing.

### 2.6 ACCESSORY MATERIALS:

A. Accessory materials installed as part of insulation work under this section shall include but not be limited to:

1. Closure Materials - Butt strips, bands, wires, staples, mastics, adhesives; pressure-sensitive tapes.
2. Field-applied jacketing materials - sheet metal, plastic, canvas, fiber glass cloth, insulating cement; PVC fitting covers.
3. Support Materials - Hanger straps, hanger rods, saddles.
4. Fasteners, weld pins/studs, speed clips, insulationwashers.
5. Metal mesh or expanded metal lagging.
B. All accessory materials shall be installed in accordance with project drawings and specifications, manufacturer's instructions, and/or in conformance with the current edition of the Midwest Insulation Contractors Association (MICA) "Commercial \& Industrial Insulation Standards."

## PART 3 -EXECUTION

### 3.1 WORKMANSHIP:

A. Contractor shall take special care to prevent soiling equipment below or adjacent to areas being insulated. He shall be completely responsible for removing insulation cement splashes and smears and all surfaces that he mars or otherwise soils or defaces, and he will be totally responsible for restoring these damaged surfaces to their like new condition when delivered to the site.

### 3.2 SITE INSPECTION:

A. Before starting work under this section, carefully inspect the site and installed work of other trades and verify that such work is complete to the point where installation of materials and accessories under this section can begin.
B. Verify that all materials and accessories can be installed in accordance with project drawings and specifications and material manufacturers' recommendations.
C. Verify, by inspecting product labeling, submittal data, and/or certifications which may accompany the shipments, that all materials and accessories to be installed on the project comply with applicable specifications and standards and meet specified thermal and physical properties.

### 3.3 PREPARATION:

A. Ensure that all pipe and equipment surfaces over which insulation is to be installed are clean and dry.
B. Ensure that insulation is clean, dry, and in good mechanical condition with all factory-applied vapor or weather barriers intact and undamaged. Wet, dirty, or damaged insulation shall not be acceptable for installation.
C. C. Ensure that pressure testing of piping or duct systems has been completed prior to installing insulation.

### 3.4 INSTALLATION:

A. Piping Systems

1. General:
a. Install all insulation materials and accessories in accordance with manufacturer's published instructions and recognized industry practices to ensure that it will serve its intended purpose.
b. Install insulation on piping subsequent to installation of heat tracing, painting, testing, and acceptance tests.
c. Install insulation materials with smooth and even surfaces. Insulate each continuous run of piping with full-length units of insulation, with single cut piece to complete run. Do not use cut pieces or scraps abutting each other. Butt insulation joints firmly to ensure complete, tight fit over all piping surfaces.
d. Maintain the integrity of factory-applied vapor barrier jacketing on all pipe insulation, protecting it against puncture, tear or other damage.
e. Insulate all duct-mounted heating coils installed in air conditioning ducts, including all piping, valving, and specialties installed within three (3) feet of the coil. Valving and piping specialties installed beyond this point in heating water systems do not require insulation.
2. Fittings:
a. Cover valves, fittings, and similar items in each piping system using one of the following:
1) Mitered sections of insulation equivalent in thickness and composition to that installed on straight pipe runs.
2) Insulation cement equal in thickness to the adjoining insulation.
3) PVC fitting covers insulated with material equal in thickness and composition to adjoining insulation.
4) Provide removable insulation covers for all fan coil unit cooling coil control valves and piping accessories.
3. Penetrations: Extend piping insulation without interruption through walls, floors, and similar piping penetrations, except where otherwise specified.
4. Joints:
a. Butt pipe insulation against hanger inserts. For hot pipes, apply 3 " $(7.5 \mathrm{~cm})$ wide vapor barrier tape or bank over butt joints. For cold piping apply wet coat of vapor barrier lap cement on butt joints, and seal joints with 3 " $(7.5 \mathrm{~cm}$ ) wide vapor barrier tape or band.
b. All pipe insulation ends shall be tapered and sealed, regardless of service.
B. Equipment Insulation:
5. General:
a. Install insulation in accordance with manufacturer's published instructions and recognized industry practices to ensure that it will serve its intended purpose.
b. Install insulation on equipment after installation of heat tracing, painting, testing, and acceptance tests.
c. Install insulation materials with smooth, even surfaces. Rework poorly fitted joint. Do not use joint sealer or mastic as filler for joint gaps and excessive voids resulting from poor workmanship. Apply insulation using staggered joint method for both single and double layer installation, applying each layer of insulation separately.
d. Coat insulated surfaces where specified on contract drawings with layer of insulating cement, troweled in a workmanlike manner, leaving a smooth and continuous surface. Fill in seams, broken edges, and depressions. Cover over wire mesh and joints with cement sufficiently thick to remove surface irregularities.
e. Maintain the integrity of factory-applied vapor barrier jacketing on all insulation, protecting it against puncture, tears or other damage.
f. Where specification calls for field-applied all-service vapor barrier jacketing, it shall be neatly fitted and tightly secured. Lap seams 2" ( 5 cm ) (min.). Seal all joints with adhesive. Tape with $3^{\prime \prime}(7.5 \mathrm{~cm})$ matching pressure-sensitive tape or 3 " ( 7.5 cm ) glass fabric and mastic.
6. Removable Insulation: Provide removable insulation sections to cover parts of equipment which must be opened periodically for maintenance, such as vessel covers, fasteners, flanges, frames and accessories.
7. Areas Left Uninsulated: Items such as boiler manholes, handholes, clean-outs, ASME stamp, and manufacturers' nameplates, may be left uninsulated unless omitting insulation would cause a condensation problem. When such is the case, appropriate tagging shall be provided to identify the presence of these items. Provide neatly beveled edges at interruptions of insulation.
8. Equipment Exposed to Weather: Protect outdoor insulation from weather by installation of weather barrier mastic protective finish or jacketing as recommended by the jacketing manufacturer.
C. Ductwork Insulation:
9. General:
a. Before installing insulation, ensure that all seams and joints in ductwork have been sealed by the Contractor responsible for the duct system.
b. Install insulation in accordance with manufacturer's published instructions and recognized industry practice to ensure that it will serve its intended purpose.
c. Install insulation materials with smooth and even surfaces. Butt joints firmly together to ensure complete and tight fit over surfaces to be covered.
d. Maintain the integrity of factory-applied vapor barrier jacketing on all insulation, protecting it against puncture, tears or other damage. All staples used on cooling ductwork insulation shall be coated with suitable sealant to maintain vapor barrier integrity.
10. Penetrations: Extend ductwork insulation without interruption through walls, floors and similar ductwork penetrations, except where otherwise specified.
11. Rigid Insulation:
a. Rigid duct insulation may be impaled over welded pins and secured with insulation caps and washers matching the color of the vapor barrier facing. All seams shall be firmly butted and sealed with pressure-sensitive vapor barrier tape matching the facing.
b. Corner angles shall be installed on all external corners of rigid duct insulation in exposed finished areas before jacketing, except oven and hood exhaust duct insulation which shall have no corner angles.
c. All ductwork located in the gymnasium and auditorium mechanical equipment rooms shall be provided with rigid insulation in addition to the internal lining. Additionally, all ductwork connected to rooftop units shall also be provided with rigid insulation in addition to the internal lining.
12. Duct Wrap Insulation: Duct wrap insulation shall be applied with all joints butted firmly together. All joints in the insulation covering shall be sealed with adhesive. Duct wrap insulation shall be secured to bottom of rectangular or oval ducts over 24 " $(60 \mathrm{~cm})$ wide with mechanical fasteners on $16^{\prime \prime}(40 \mathrm{~cm})$ (approx.) centers to prevent sagging.
13. Duct Lining Insulation: Duct liner insulation shall be applied with all joints tightly butted using $90 \%$ coverage of adhesive meeting the requirements of ASTM C 916 plus mechanical fasteners spaced according to the liner manufacturer's schedule for the interior width of the plenum, housing, or air shaft. (Also refer to Section 15700, Air Distribution System, Metal Ductwork.)

### 3.5 FIELD QUALITY ASSURANCE:

A. Upon completion of all insulation work covered by this specification, visually inspect the work and verify that it has been correctly installed. This may be done while work is in progress, to assure compliance with requirements herein to cover and protect insulation materials during installation.

### 3.6 PROTECTION:

A. Replace damaged insulation which cannot be satisfactorily repaired, including insulation with vapor barrier damage and moisture-saturated insulation.
B. The insulation contractor shall advise the HCPSS as to requirements for protection of the insulation work during the remainder of the construction period, to avoid damage and deterioration of the finished insulation work.

### 3.7 SAFETY PRECAUTIONS:

A. Insulation contractor's employees shall be properly protected during installation of all insulation. Protection shall include proper attire when handling and applying insulation materials, and shall include (but not be limited to) disposable dust respirators, gloves, hard hats, and eye protection.
B. The insulation contractor shall conduct all job site operations in compliance with applicable provisions of the Occupational Safety and Health Act, as well as with all state and/or local safety and health codes and regulations that may apply to the work.

### 3.8 INSULATION COVERING:

A. All exposed pipe insulation shall have a PVC jacket neatly cut and pasted over pipe. All exposed equipment and duct insulation shall have an 8 ounce canvas cover neatly cut and pasted over ductwork and equipment. Exposed areas include, but are not limited to, all mechanical equipment rooms, storage rooms, boiler rooms, and piping and ductwork exposed in an occupied space.

### 3.9 HANDICAPPED LAVATORY/SINK INSULATION:

A. All handicapped lavatories and sinks shall be provided with under counter pipe and trim insulation.
B. Insulation shall be fully molded "P" trap and angle valve insulated Hand-I-Lav Guard, Truebro Model \#101, 102, and 105 to suit.
C. Insulation to meet ADA \#4 19.4 ANSI A117.1.
D. Self-extinguishing ASTM D635 burn characteristics, thermal conductivity ASTM C177K-Value=1.17.
E. Insulation thickness to be minimum $1 / 2$ inch.
4.0 RESTRICTIONS:
A. Sweat Valve Covers are restricted.

## ATTACHMENT A

## INSURANCE REQUIREMENTS

## 1 - General Insurance Requirements:

1.1 - The Contractor shall not commence Work until he has obtained at his own expense all of the insurance as required hereunder and such insurance has been approved by the Board of Education of Howard County Maryland; nor shall the Contractor allow any Subcontractor to commence Work on his subcontract until all similar insurance required of the Subcontractor has been so obtained and approved by the Contractor. Approval of insurance required of the Contractor will be granted only after submission to the Board of Education of Howard County Maryland of original, signed certificates of insurance or, alternately, at the Board of Education of Howard County Maryland's request, certified copies of the required insurance policies.
1.2 - The Contractor shall require all Subcontractors to maintain during the term of this agreement, commercial general liability insurance, business automobile liability insurance, and Workers' Compensation and employers' liability insurance, in the same manner as specified for the Contractor. The Contractor shall furnish Subcontractors' certificates of insurance to the Board of Education of Howard County Maryland immediately upon request.
1.3 - All insurance required hereunder shall include the following provision: "It is agreed that this policy is not subject to cancellation, non-renewal, material change, or reduction in coverage until sixty (60) days prior written notice has been given to the Board of Education of Howard County Maryland."

The phrases "endeavor to" and "... but failure to mail such notice shall impose no obligation or liability of any kind upon the company, its agents or representatives" are to be eliminated from the cancellation provision of standard ACORD certificates of insurance.
1.4 - No acceptance and/or approval of any insurance by the Board of Education of Howard County Maryland shall be construed as relieving or excusing the Contractor, or the Surety, or his bonds, from any liability or obligation imposed upon either or both of them by the provisions of the Contract Documents.
1.5 - The Board of Education of Howard County Maryland and its elected or appointed officials, agents and employees are to be named as an additional insured under all coverages except Workers compensation and business automobile liability, and the certificate of insurance, or the certified policy, if requested, must so state this. Coverage afforded under this paragraph shall be primary as respects the Board of Education of Howard County Maryland, its agents and employees.
1.6 - The Contractor shall be responsible for the Work performed under the Contract Documents and every part thereof, and for all materials, tools, equipment, appliances, and property of any and all description used in connection with the Work. The Contractor assumes all risk for direct and indirect damage or injury to the property or persons used or employed on or in connection with the Work contracted for, and of all damage or injury to any person or property wherever located, resulting from the action, omission, commission or operation under the contract, or in connection in any way whatsoever with the contracted Work, until final acceptance of the Work by the Board of Education of Howard County Maryland.
1.7 - Insurance coverage required in these specifications shall be in force throughout the contract term. Should the Contractor fail to provide acceptable evidence of current insurance within seven days of written notice at any time during the contract term, the Board of Education of Howard County Maryland shall have the absolute right to terminate the contract without any further obligation to the Contractor, and the Contractor shall be liable to the Board of Education of Howard County Maryland for the entire additional cost of procuring performance and the cost of performing the incomplete portion of the contract at time of termination.
1.8-Contractual and other liability insurance provided under this contract shall not contain a supervision, inspection or engineering services exclusion that would preclude the Board of Education of Howard County

Maryland from supervising or inspecting the project as to the end result. The Contractor shall assume all on-the-job responsibilities as to the control of persons directly employed by it and of the Subcontractors and any persons employed by the Subcontractor.
1.9 - Nothing contained in the specifications shall be construed as creating any contractual relationship between any Subcontractor and the Board of Education of Howard County Maryland. The Contractor shall be fully responsible to the Board of Education of Howard County Maryland for the acts and omissions of the Subcontractors and of persons employed by them as it is for acts and omissions of persons directly employed by it.
1.10 - Precaution shall be exercised by the Contractor at all times for the protection of persons, (including employees) and property. All existing structures, utilities, roads, services, trees and shrubbery shall be protected against damage or interruption of service at all times by the Contractor and its Subcontractors during the term of the contract, and the Contractor shall be held responsible for any damage to property occurring by reason of its operation on the property.
1.11 - If the Contractor does not meet the insurance requirements of the specifications, alternate insurance coverage, satisfactory to the Board of Education of Howard County Maryland, may be considered. Written requests for consideration of alternate coverages must be received by the Board of Education of Howard County Maryland at least ten Working days prior to the date set for receipt of bids or proposals. If the Board of Education of Howard County Maryland denies the request for alternate coverages, the specified coverages will be required to be submitted.
1.12 - All required insurance coverages must be acquired from insurers allowed to do business in the State of Maryland and acceptable to the Board of Education of Howard County Maryland. The insurers must also have a policyholders' rating of "A-" or better, and a financial size of "Class VII" or better in the latest edition of Best's Insurance Reports, unless the Board of Education of Howard County Maryland grants specific approval for an exception.
1.13 - The Board of Education of Howard County Maryland will consider any deductible amounts as part of its review of the financial stability the Contractor. Any deductibles shall be disclosed by the Contractor, and deductible amounts are the responsibility of the Contractor.

## 2-Contractor's Liability Insurance - "Occurrence" Basis:

2.1 - The Contractor shall purchase the following insurance coverages:
2.1.1 - Commercial general liability with a minimum limit of $\$ 1,000,000$ per occurrence, \$1,000,000 annual aggregate including all of the following:
i. General aggregate limit is to apply per project;
ii. Premises/operations;
iii. Actions of independent Contractors;
iv. Products/completed operations to be maintained for two years after completion of the Work;
v. Contractual liability including protection for the Contractor from claims arising out of liability assumed under this contract;
vi. Personal injury liability including coverage for offenses related to employment;
vii. Explosion, collapse, or underground (XCU) hazards (confirmation of underground hazard coverage must be confirmed by either certificate of insurance or in writing by Contractor's agent, broker or insurer);
2.1.2 - Business automobile liability including coverage for any owned, hired, or non-owned motor vehicles and automobile contractual liability with a limit of \$1,000,000 per accident; uninsured motorist coverage at minimum statutory limits.
2.1.3 - Workers compensation with statutory benefits as required by Maryland law or the U. S. Longshoremen's and Harbor Workers' Compensation Act, or other laws as required by labor union agreements, including standard other states coverage; employers' liability coverage with limits of $\$ 100,000$ per accident, $\$ 100,000$ per employee for disease, and a $\$ 500,000$ disease policy limit.
2.1.4 - Total limit requirements of 2.1.1, 2.1.2 and 2.1.3 may be met by a combination of primary and umbrella excess liability coverage.

## 3 - Commercial General or Other Required Liability Insurance - "Claims Made" Basis

3.1 - If commercial general or other liability insurance purchased by the Contractor has been issued on a "claims made" basis, the Contractor must comply with the following additional conditions:
i. Agree to provide certificates of insurance evidencing the above coverages for a period of two years after final payment for the contract. Such certificates shall evidence a retroactive date, no later than the beginning of the Contractors' or Subcontractors' Work under this contract, or
ii. Purchase an extended (minimum two years) reporting period endorsement for the policy or policies in force during the term of this contract and evidence the purchase of this extended reporting period endorsement by means of a certificate of insurance or a copy of the endorsement itself.

## CONTRACTOR PERFORMANCEIEVALUATION SCORECARD

Upon completion of a project or at any time during the project, the awarded contractor shall receive a performance evaluation scorecard rating the contractor's performance on the project. The evaluation scorecard will become part of the contractor's permanent file. A sample Contractor Performance/Evaluation Scorecard is included with the bid documents.

The evaluation scorecard shall include the following performance indicators; Quality of Work, Responsiveness, Professionalism, Resources, Schedule Management, Quality Control, Deficiency Resolution, Submittal Management, Training, Appearance, Security, Safety, Utility Conservation, Disruptions, Quality of Materials, Emergency Response, Hazardous Materials, Innovation, Teamwork, Cost Management, Billing, Compliance.

A contractor shall have up to 3 weeks after notification to appeal, challenge or otherwise dispute the scorecard results. After the 3-week period, the scorecard shall be considered final and accepted by the contractor.

A contractor receiving a $70 \%$ or less overall evaluation scorecard rating for a project may be disqualified for bidding on any future projects with the HCPSS for a period of three (3) years and/or for the remaining contract term including renewal options.

## Name of Contractor:

Name of Project: $\qquad$ Contract/Bid Number:

Reviewed by: $\qquad$ Department: $\qquad$
Please take a moment to tell us about this contractor's performance. We will summarize all the information we obtain about each contractor and provide it to them. Supporting documentation shall be required to support any scores noted on the performance evaluation scorecard.

HOW SATISFIED. Please tell us how satisfied you are with the performance of the contractor named above. Circle a 10 if you are highly satisfied with their performance on a measure. Circle a 1 if you are highly dissatisfied with their performance on a measure. Circle a number in between to show different degrees of satisfaction. Circle N/A for any performance indicators that do not apply to the project. There are no right or wrong answers; just tell us how you feel.

A contractor receiving a $70 \%$ or less overall evaluation scorecard rating for a project may be disqualified for bidding on any future projects with the HCPSS for a period of three (3) years and/or for the remaining contract term including renewal options. The contractor shall be notified of their performance status after each project.

Satisfaction with the contractor's performance:

1. Quality of Work. The contractor's ability to do the job right the first time.
2. Responsiveness. The contractor's ability to adapt to changes and meet unusual needs.
3. Professionalism. The courtesy and standards of conduct maintained by the contractor and his or her employees.
4. Resources. The contractor's ability to provide his or her employees with the tools, parts, and supplies needed to do the job.
5. Schedule Management. The contractor's ability to show up when scheduled and complete the work on time.
6. Quality Control. The contractor's ability to identify problems and deficiencies before you do.

| Highly <br> Dissatisfied |  |  |  |  | Highly <br> Satisfied |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $\mathrm{~N} / \mathrm{A}$ |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | $\mathrm{~N} / \mathrm{A}$ |

## CONTRACTOR PERFORMANCE/EVALUATION SCORECARD

7. Deficiency Resolution. The contractor's ability to rapidly correct deficiencies in his or her work.
8. Submittal Management. The contractor's ability to provide submittals In a timely and efficient manner.
9. Training. The contractor's ability to provide employees well-trained in all aspects of their jobs.
10. Appearance. The contractor's ability to keep uniforms, tools, and vehicles clean so as to portray a positive image.
11. Security. The contractor's ability to safeguard your facilities and assets.
12. Safety. The contractor's ability to keep the workplace safe and comply with OSHA requirements.
13. Utility Conservation. The contractor's ability to use only the water, gas, electricity, and air conditioning needed to do the job.
14. Disruptions. The contractor's ability to keep interruptions to the operations of your firm or agency to a minimum.
15. Quality of Materials. The contractor's ability to use high quality parts and supplies.
16. Emergency Response. The contractor's ability to rapidly restore normal operations after an emergency, power outage, or severe weather.
17. Hazardous Materials. The contractor's ability to properly handle hazardous materials.
18. Innovation. The contractor's ability to use new materials and adopt new methods to increase effectiveness.
19. Teamwork. The contractor's ability to be a team player in order to assist in accomplishing the objectives of your firm or agency.
20. Cost Management. The reasonableness of the contractor's costs, especially for contract changes.
21. Billing. The contractor's ability to present correct and properly documented invoices.
22. Compliance. The contractor complied with all rules, requests, regulations And requirements. This includes compliance with instructions Regarding interactions with students, staff and others.
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## CONTRACTOR PERFORMANCEIEVALUATION SCORECARD

Please summarize the contractor's overall performance based on the scores for the performance indicators noted above:
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$\qquad$

Please return the completed survey by email to: jveslany@hcpss.org or fax (410) 313-6789
Thank you for your prompt assistance.

## MECHANICAL INSULATION SERVICE BID \#047.22.B3

Date: $\qquad$
Bidder: $\qquad$

## ADDENDA

Receipt of the following Addenda is acknowledged:
Addendum No. $\qquad$ Dated $\qquad$ Addendum No. $\qquad$ Dated $\qquad$
Addendum No. $\qquad$ Dated $\qquad$ Addendum No. $\qquad$ Dated $\qquad$

## AFFIDAVIT

Special Instructions: An authorized representative of the bidder shall complete the following affidavit in accordance with these bid documents and insert an answer to paragraphs 1 and 3.

Statutory Affidavit and Non-Collusion Certification
I, $\qquad$ , being duly sworn, depose and state:

1. I am the $\qquad$ (officer) and duly authorized representative of the organization named whose address is $\qquad$ of myself and the firm for which I am acting.
2. Except as described in Paragraph 3 below, neither I, nor to the best of my knowledge, the above firm, nor any of its officers, directors, or partners, or any of its employees who are directly involved in obtaining or performing contracts with any public bodies has:
(a.) Been convicted of bribery, attempted bribery, or conspiracy to bribe, under the laws of any state of the federal government;
(b.) Been convicted under the laws of the state, another state, or the United States of: a criminal offense incident to obtaining, attempting to obtain, or performing a public or private contract; or fraud, embezzlement, theft, forgery, falsification or destruction of records, or receiving stolen property;
(c.) Been convicted of a criminal violation of an antitrust statute of the State of Maryland, another state, or the United States;
(d.) Been convicted of a violation of the Racketeer Influenced and Corrupt Organization Act, or the Mail Fraud Act, for acts in connection with the submission of bids or proposals for a public or private contract;
(e.) Been convicted of any felony offenses connected with obtaining, holding, or maintaining a minority business enterprise certification, as prohibited by Section 14-308 of the State Finance and Procurement Article;
(f.) Been convicted of conspiracy to commit any act or omission that would constitute grounds for conviction under any of the laws or statutes described in Paragraph (a) through (e) above; or
(g.) Been found civilly liable under an antitrust statute of this State, another state, or the United States for acts or omissions in connection with the submission of bids or proposals for a public or private contract.
3. The only conviction, plea, or admission by any officer, director, partner, or employee of this firm to involvement in any of the conduct described in Paragraph 2 above is as follows:

If none, write "None" below. If involvement, list the date, count, or charge, official or administrative body, the individuals, their position with the firm, and the sentence or disposition of the charge.
(you may attach an explanation as necessary)
4. I affirm that this firm will not knowingly enter into a contract with a public body under which a person or business debarred or suspended under Maryland State Finance and Procurement Title 16, subtitle 3, Annotated Code of Maryland, as amended, will provide, directly or indirectly, supplies, services, architectural services, constructionrelated services, leases of real property, or construction.
5. I affirm that this proposal or bid to the Board of Education of Howard County Maryland is genuine and not collusive or a sham; that said bidder has not colluded, conspired, connived and agreed, directly or indirectly, with any bidder or person to put in a sham bid or to refrain from bidding and is not in any manner, directly or indirectly, sought by agreement of collusion or communication or conference, with any person to fix the bid prices of the affidavit or any other bidder, or to fix any overhead, profit or cost element of said bid price, or that if any bidder, or to secure an advantage against the Board of Education of Howard County Maryland or any other person interested in the proposed contract; and that all statements in the proposal or bid are true. I acknowledge that, if the representations set forth in this affidavit are not true and correct, the Board of Education of Howard County Maryland may terminate any contract awarded and take any other appropriate action.
6. I affirm that this firm will not knowingly employ an individual to work at a school if the individual is a Registered Sexual Offender, pursuant to section 11-722 (C) of the Criminal Procedure Article of the Annotate Code of Maryland. A firm or person who violates this section is guilty of a misdemeanor and on conviction is subject to imprisonment not exceeding 5 years or a fine not exceeding $\$ 5,000$ or both.

The statements contained in this affidavit shall be incorporated into the awarded contract as material provisions and shall be effective throughout the life of the contract. The firm has a continuing obligation through the life of the contract to submit a revised affivdavit should the firm discover information, or events occur, which render the contents of this affidavit erroneous or incomplete or which would result in the firm providing a different response. The firm's failure to submit a revised affidavit within three (3) working days of either its awareness of any error, change of circumstances, incompleteness, etc., or request by the owner shall constitute breach of contract. Upon submission of a revised affidavit, the owner has the right to take such actions as may be necessary, in the judgement of the owner, to maintain and enforce the provisions of the affidavit, including termination of the contract.

I DO SOLEMNLY DECLARE AND AFFIRM under the penalties of perjury that the contents of these affidavits (Statutory and Non-Collusion) are true and correct, that I am executing this Affidavit in compliance with Section 16-311 of the State Finance and Procurement Article, Annotated Code of Maryland, and the Non-Collusion Certification in compliance with requirements of the Board of Education of Howard County Maryland, and that I am executing and submitting this Form of Proposal on behalf of and as authorized by the bidder named below.
$\qquad$ day of $\qquad$ 2022. NOTARY PUBLIC Name $\qquad$ Seal:

My Commission Expires $\qquad$
(Legal Name of Company)
(Address)
(City) (State) (Zip)
(Telephone)
(Fax)
(E-mail address)

Contractor's License Number \# $\qquad$

We are/l am licensed to do business in the State of Maryland as a:
( ) Corporation ( ) Partnership ( ) Individual () Other

## EXPERIENCE/REFERENCE FORM

Bidder: $\qquad$

1. Customer Name: $\qquad$
2. Customer Address: $\qquad$
3. Contact Name and Title: $\qquad$
4. Contact Phone \#: $\qquad$
5. Describe customer's facility: $\qquad$
$\qquad$
$\qquad$
6. Describe insulation service performed: $\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
7. Name your firm's Project Manager for service: $\qquad$
8. Is this contract renewable? yes $\square$ no $\square$
9. If yes to the above, was the contract renewed? And if not, why not? $\qquad$
$\qquad$
$\qquad$
$\qquad$
10. Was service performed on an on-call basis?

Yes
No $\square$
11. Was this fixed price, $T$ \& $M$, lump sum, other: $\qquad$
12. Annual Dollar amount of contract: $\qquad$
13. Commencement Date: $\qquad$ Termination date: $\qquad$
14. List of all similarities to HCPSS requirements: $\qquad$
$\qquad$
$\qquad$

Note: Three (3) Experience/Reference Forms for recent projects completed within the past 3 years must be provided with the submittal of bid documents.

## KEY PERSONNEL FORM

## STAFFING PLAN - Project Manager

Bidder:
Project Manager:
(Name)

Phone \#: $\qquad$
Cell\#: $\qquad$

Email: $\qquad$
TECHNICAL TRAINING/EDUCATIONAL BACKGROUND:
Association/Institution Licenses/Certifications

Licenses/Certifications
Date Earned
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

Number of years with previous firm: $\qquad$
Name of previous firm: $\qquad$

Positions held for the past three years: $\qquad$

Number of years as a full time employee with present firm: $\qquad$
Positions held for the past three years: $\qquad$
$\qquad$
$\qquad$

List similar projects worked on and particular role this individual had during each project:

- Customer Name: $\qquad$
- Contact Name and Title: $\qquad$
- Address: $\qquad$ held: $\qquad$
- Position held:
- Specific work performed: $\qquad$
- Brief description of project $\qquad$
$\qquad$
- Customer Name: $\qquad$
- Contact Name and Title: $\qquad$
- Address: $\qquad$ Phone \#: $\qquad$
- Position held: $\qquad$
- Specific work performed: $\qquad$
- Brief description of project
$\qquad$
$\qquad$
It is imperative that accurate contact names and phone numbers be given for the references listed. All references are to include a contact person who can comment on the Project Manager's ability to perform work such as is specified in the bid documents.


## KEY PERSONNEL FORM

## STAFFING PLAN - Apprentice



Number of years with previous firm: $\qquad$
Name of previous firm: $\qquad$
Positions held for the past three years:

Number of years as a full time employee with present firm: $\qquad$
Positions held for the past three years: $\qquad$

List similar projects worked on and particular role this individual had during each project:

- Customer Name: $\qquad$
- Contact Name and Title: $\qquad$
- Address: $\qquad$ Phone \#: $\qquad$
- Position held:
- Specific work performed: $\qquad$
- Brief description of project $\qquad$
$\qquad$
$\qquad$
- Customer Name: $\qquad$
- Contact Name and Title: $\qquad$
- Address: $\qquad$ Phone \#: $\qquad$
- Position held: $\qquad$
- Specific work performed: $\qquad$
- Brief description of project $\qquad$
$\qquad$
$\qquad$
It is imperative that accurate contact names and phone numbers be given for the references listed. All references are to include a contact person who can comment on the Apprentice ability to perform work such as is specified in the bid documents.


## KEY PERSONNEL FORM <br> STAFFING PLAN - Insulation Mechanic



List similar projects worked on and particular role this individual had during each project:

- Customer Name: $\qquad$
- Contact Name and Title: $\qquad$
- Address: $\qquad$ Phone \#: $\qquad$
- Position held:
- Specific work performed: $\qquad$
- Brief description of project $\qquad$
$\qquad$
$\qquad$
- Customer Name: $\qquad$
- Contact Name and Title: $\qquad$
- Address: $\qquad$ Phone \#: $\qquad$
- Position held: $\qquad$
- Specific work performed: $\qquad$
- Brief description of project $\qquad$
$\qquad$
$\qquad$
It is imperative that accurate contact names and phone numbers be given for the references listed. All references are to include a contact person who can comment on the Insulation Mechanics ability to perform work such as is specified in the bid documents.

Note: This form must be completed for two (2) Insulation Mechanics.

## PROFILE OF COMPANY FORM

## Comprehensive Description of Organization

Complete for local office which will be performing The Howard County Public School System work.


Date of Incorporation: $\qquad$ State of Incorporation: $\qquad$

State of Maryland Contractors License number: $\qquad$

Number of Years in business under present name: $\qquad$

Other or former names under which your organization has operated: $\qquad$

| Percent (\%) of Work Performing: | Services (new installation) | $\%$ <br>  |
| :---: | :---: | :---: |

Name of Principal(s) and Title(s):
$\qquad$
$\qquad$
$\qquad$
$\qquad$

History of Firm: $\qquad$
$\qquad$

Total Number of Employees: $\qquad$ Number of Office Personnel: $\qquad$
Number of Insulation Mechanics: $\square$ Number of Field Employees: $\qquad$

Bonding capacity: $\qquad$
Has your firm, in the last five years, ever had a contract terminated for any reason? Yes $\square$ No $\square$ If Yes, Explain: $\qquad$

Total Company Annual Dollar Volume for all Mechanical Insulation work:
2021\$

# THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM <br> MECHANICAL INSULATION SERVICE <br> BID \#047.22.B3 

## BID PRICE SHEET

Bidder: $\qquad$

Date: $\qquad$

Mr. Joe Veslany
Purchasing Office
Howard County Public School System
10910 Clarksville Pike
Ellicott City, MD 21042
The undersigned hereby submits a bid price to provide all labor, material, equipment, and supervision to complete the services as set forth in Bid \#047.22.B3. The entire bid document including the Instruction to Bidders, Terms and Conditions, Specifications, any Addenda, Drawings, and the Bid Price will be part of any resulting contract.

## I. PRICE

Having received clarification on all matters upon which any doubt arose, the undersigned proposes the guaranteed pricing noted below:

## LABOR RATES

Project Manager
Insulation Mechanic
Insulation Apprentice
Laborer/Helper
\$
\$ $\qquad$ /hr
$\$$ $\qquad$ /hr
\$ $\qquad$ /hr

REGULAR RATE

## PREMIUM RATE

\$ /hr
\$ $\qquad$ /hr
$\$$ $\qquad$ /hr

Laborer/Helper
$\$$ $\qquad$ /hr

## TIME \& MATERIAL RATES

NOTE: If a percentage markup does not apply to materials, equipment and subcontractors then the bidder should note $0 \%$ in the space provided, (Example- 0\%). If a percentage markup applies the bidder shall note the percentage markup in the space provided, (Example-5\%). Bidders shall provide an explanation for any additional rates or markups associated with Time and Material Rates along with their bid price sheet at time of bid.

| Material Mark up: | \% over invoice (inclusive of freight/handling costs, overhead <br> and profit) | \% |
| :--- | :--- | :--- |
| Equipment Rental Markup: | \% over invoice (inclusive of freight/handling costs, overhead <br> and profit) | $\%$ <br> Subcontractor Mark up: |
| $\%$ over invoice (inclusive of all coordination, time, set up, etc.) | $\ldots$ |  |

NOTE: Unit Costs are to be all inclusive. The costs of all mileage, waste disposal, overhead, and profit are to be included in the itemized Bid Prices. Travel time shall be borne by the Contractor.

## II. COMPANY INFORMATION

$\overline{\text { Name of company }}$
years in business

## Street Address

| $\overline{\text { City }}$ | $\overline{\text { State }}$ | $\overline{\text { Zip }}$ |
| :--- | :--- | :--- |
| $\overline{\text { Telephone\# }}$ | $\overline{\text { Fax \# }}$ | $\overline{\text { Web Page }}$ |

## III. CONTACT FOR INSIDE CONTRACT ADMINISTRATION

In the event your firm receives a contract as a result of this Invitation for Bid, please designate an inside person whom we may contact during the period of the contract for prompt contract administration showing:
$\qquad$ Title $\qquad$

Address $\qquad$ Phone $\qquad$
e-mail $\qquad$ Cell $\qquad$
IV. SUBCONTRACTORS: Identify all subcontractors:

Name of Company
$\qquad$
$\qquad$

Type of Work
$\qquad$
$\qquad$
$\qquad$

## V. RECEIPT OF ADDENDA

| Addendum: | Dated: | Received: |
| :---: | :---: | :---: |
| Addendum: | Dated: | Received: |
| Addendum: | Dated: | Received: |

## THE HOWARD COUNTY PUBLIC SCHOOL SYSTEM

BID SIGNATURE SHEET

## A. Bidder's Certification

1. I/we hereby propose to furnish and deliver supplies, equipment, or services, in accordance with specifications and stipulations contained herein, and at the prices quoted. I/we certify that this bid is made without any previous understanding, agreement, or connection with any person, firm, or corporation making a bid for the same supplies, materials, or equipment and is in all respects fair and without collusion or fraud.
2. I/we certify that this bid is made without having contacted any employee within The Howard County Public School System unless such contacts were previously authorized by the Purchasing Officer.
3. I/we certify that this bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived and agreed, directly or indirectly, with any bidder or person to put in a sham bid or to refrain from bidding and is not in any manner, directly or indirectly, sought by agreement of collusion or communication or conference, with any person to fix the bid prices of the affidavit or any other bidder, or to fix any overhead, profit or cost element of said bid price, or that of any bidder, or to secure any advantage against the Board of Education of Howard County or any other person interested in the proposed contract; and that all statements in said proposal or bid are true.
4. I/we affirm that this firm will not knowingly employ an individual to work at a school if the individual is a Registered Sexual Offender, pursuant to section 11722 ( C ) of the Criminal Procedure Article of the Annotate Code of Maryland. A firm or person who violates this section is guilty of a misdemeanor and on conviction is subject to imprisonment not exceeding 5 years or a fine not exceeding $\$ 5,000$ or both.
5. I hereby certify that I am authorized to sign for the bidder.
B. Vendor/Contractor Disqualification - Bribery

A person convicted for bribery, attempted bribery, or conspiracy to bribe shall be disqualified from entering into a contract with any county or other subdivision of the state. Every business entity upon submitting a bid or otherwise applying for a contract shall submit an affidavit stating whether it, its officers, directors, or partners, or its employees have been convicted of bribery, attempted bribery, or conspiracy to bribe under the laws of any state or federal government.

Submitted by:
(company name)
(person authorized to sign bids)
(title of authorized representative)
(signature of authorized representative)
(date)

