# International Leadership of Texas Request for Proposal #20200108

Design and Installation of Dedicated
Outside Air System for ILTexas Saginaw K-8
and ILTexas East Fort Worth K-8

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#### **PUBLIC NOTICE**

# INTERNATIONAL LEADERSHIP OF TEXAS RFP #20200108

Design and Installation of Dedicated Outside Air System for ILTexas Saginaw K-8 and ILTexas East Fort Worth K-8

Issue Date: December 6, 2019

Due Date: January 8, 2020 2:00PM

International Leadership of Texas is accepting proposals from qualified design/build professionals to engineer and install a dedicated outside air handling system at ILTexas Saginaw K-8 campus and ILTexas East Fort Worth K-8 campus as described in the specifications. Specification are available on the International Leadership of Texas website at <a href="https://www.iltexas.org/purchasing">www.iltexas.org/purchasing</a>.

Sealed proposals will be accepted at the ILTexas Headquarters building located at the following address:

Attn: Frank Crabill

1820 N. Glenville Drive, Suite #100
Richardson, Texas 75081

Proposals may also be submitted electronically to Frank Crabill, Executive Director of Facilities and Maintenance at <a href="mailto:fcrabill@iltexas.org">fcrabill@iltexas.org</a>

Any proposal received after 2:00pm on January 8, 2020 will be rejected. Questions should be directed to Frank Crabill at the email listed above.

#### Information for Offerors

International Leadership of Texas is a public charter school with campuses located throughout the state of Texas. Two of those campuses are experiencing high levels of humidity. The charter school employed Edgar Stacy and Associates to conduct an analysis of the humidity levels and propose a solution (see attachment #1 and 2). Stacy and Associates propose the installation of six Dedicated Outside Air Handling systems. This RFP requests sealed proposals from interested qualified professionals to complete the project as a design/build project. The offeror will be expected to provide all design and engineering services, purchase necessary equipment, make necessary changes to existing facilities to accommodate new equipment, install the DOAS, and make necessary connections to integrate the new equipment to the existing facility. It is intended to be a "turn key" solution to our problem.

The RFP package will be available beginning December 9, 2019 at the ILTexas Headquarters, 1820 N. Glenville, Suite #100, Richardson, Texas. Proposers may also contact Executive Director of Facilities and Maintenance Frank Crabill at fcrabill@iltexas.org for an electronic copy of the RFP.

#### Receipt of Proposals

Proposals will be accepted until 2:00pm on January 8, 2020. One copy of the proposal must be delivered to the ILTexas Headquarters Office, 1820 N. Glenville, #100, Richardson, TX 75081 or emailed to Frank Crabill at <a href="mailto:fcrabill@iltexas.org">fcrabill@iltexas.org</a> before 2:00PM on January 8, 2020. At that time, all proposals will be opened publicly.

In the event the proposal is mailed, it is the responsibility of the offeror to allow enough time in transit for the proposal to be received by the School prior to the date and time of the opening. Proposals sent electronically will need to be in a single PDF file as an attachment to an email. It is the responsibility of the offeror to confirm receipt of any proposal sent by email. <a href="IMPORTANT-ILTexas">IMPORTANT-ILTexas</a> offices will be closed December 20, 2019 – January 3, 2020. Mail will not be delivered to our office during this time.

#### Confidentiality of Proposals

The School will secure any proposal sent by mail or hand delivered and open them only at the time of the opening on January 8, 2020 at 2:00PM. Any proposals sent electronically to Frank Crabill will be kept confidential until that time.

#### **Evaluation of Proposals**

Within 5 days after opening the proposals, ILTexas shall review the proposals and evaluate each of them using the following criteria:

Item#	Criteria	Points
1	Total cost of project	50
2	Timeline for completion of project	25
3	Proposers experience with similar projects	10
4	Proposers past relationship with ILTexas and/or other charter schools	10
5	References	5
	TOTAL	100

#### Reservation of Rights

ILTexas, the Owner, reserves the right to reject any and all proposals, and to waive any informality or irregularity in the proposals, when such rejection or waiver is in the best interests of the Owner.

#### **Project Locations**

The installation of DOAS units will take place at the following campuses and addresses:

ILTexas Saginaw K-8 campus	ILTexas East Fort Worth K-8
500 Old Decatur Road	5901 Boca Raton Blvd.
Saginaw, TX 76179	Fort Worth, TX 76112

Proposers may not visit either campus without prior permission. Any site visits must be approved through FRANK CRABILL.

#### **Project Schedule**

Sites are active, operating charter schools and installation of DOAS may not interfere with the safe operation of the campus. The school will be vacant of students during Spring Break March 9-13, 2020. Installation of the DOAS would best be accomplished during this week.

#### Interpretations and Clarifications

No Pre-Proposal Conference will be held.

Questions about the Project should be submitted in writing via email to FRANK CRABILL at <a href="mailto:fcrabill@iltexas.org">fcrabill@iltexas.org</a>. Questions or requests for interpretation must be received by December 17, 2019.

Clarification(s) for questions received will be issued no later than 4:00PM December 19, 2019. Answers will be issued in writing *via* email to all proposers who provide an email address for this purpose. Please provide FRANK CRABILL your email address to receive the clarification answers. Oral or other non-written interpretations or clarifications will be without legal effect.

#### Sales Tax

Under Ruling No. 9, Repairment and Contractor (amended April 3, 1962) Limited Sales, Excise and Use Tax Rules and Regulations, Comptroller of Public Accounts, State of Texas, tangible personal property (materials) becoming a part of improvements and structures and incorporated in such, under lump sum contracts, are not subject to sales tax when the cost of such materials is segregated from the cost of skill, labor, and all other materials not becoming a part of the improvement of structure. Under the interpretation of this ruling, contract will state not only the lump sum but also the value of materials and value of skill, labor, etc. Proposals are to be tendered in lump sum only.

#### Applicable Law

This agreement shall be governed by Texas Law. All parties agree that venue for any litigation arising from this contract/project shall lie in Dallas County, Texas.

#### PROPOSAL FORM

In submitting its Proposal, the undersigned agrees to the following:

- a) Accept right of Owner to reject any or all Proposals, or to waive formalities and to accept the Proposal that the Owner considers will provide the best value for ILTexas.
- b) By signing this Proposal Form, the Offeror affirms that, to the best of their knowledge, the information concerning this Proposal has been arrived at independently and is being submitted without collusion with anyone to obtain information or gain any favoritism that would in any way limit competition or give an unfair advantage over other respondents in the award of this Proposal.

FIRM INFORMATION:
Name of firm:
Address of principal office:
Phone:Fax:
Primary individual to contact:
Title:
FEE PROPOSAL:
It is anticipated that ILTexas will enter into a contract with the design/build firm in the total amount of
\$
This amount shall include the cost of all subcontractors, suppliers, materials, and fees to complete the project.
Dated, 20
Name Title
Signed

#### Representations and Certifications

The undersigned certifies under oath that the information provided herein is true and sufficiently complete so as not to be misleading.

Company Name <sub>-</sub>	 	 	
Address			

By execution and submission of this Proposal, the Offeror hereby represents and warrants to Owner as follows:

- a) The Offeror has prior experience on projects of the same or similar scope, nature and class as the Work described.
- b) The Offeror has read and understands the Proposal Documents, and this Proposal is made in accordance with the Proposal Documents.
- c) The Offeror has carefully inspected the Project site, and that from the Offeror's own investigation, the Offeror has satisfied itself as to the nature and location of the Work within the scope of the Project and the character, quality, quantities, materials and difficulties to be encountered; the kind and extent of equipment and other facilities needed for the performance of the Work; the general and local conditions and other items which may in any way affect the Work or its performance; and the Offeror has correlated the Offeror's site observations with the requirements of the Contract Documents. The Offeror understands and accepts the difficulties and costs associated with the Work and the Project site and the potential delays, disruptions in work and costs associated therewith and has included such considerations in its construction schedule and the Proposal amount.
- d) To the fullest extent permitted by applicable law, the Offeror waives any claim it has or may have against the Owner, and their respective officers, shareholders, directors, trustees, partners, agents, contractors, consultants and employees arising out of or in connection with the administration, evaluation or recommendation of any offers; waiver of any requirements under the Proposal Documents or the Contract Documents; acceptance or rejection of any proposals; and the award of the Contract.
- e) The Project will be undertaken in accordance with the applicable provisions of Chapter 44 of the Texas Education Code and Section 2269 of the Texas Government Code.
- f) Represents that to the best of its knowledge it is not indebted to ILTexas. Indebtedness to ILTexas shall be basis for non-award and/or cancellation of any award.
- g) Certifies that no suspension or debarment is in place, which would preclude receiving a federally funded contract.
- h) Section 44.034, of the Texas Education Code requires a person or business entity that enters into a contract with a school district or charter school must give advance notice to the district or school if the person and/or Owner or operator of the business entity has been convicted of a felony. The notice must include a general description of the conduct resulting in the conviction of a felony. Subsection (b), which also applies to charter schools, states "a school district may terminate a contract with a person or business entity if the district determines that the person

or business entity failed to give notice as required by Subsection (a) or misrepresented the conduct resulting in the conviction. The district must compensate the person or business entity for services performed before the termination of the contract." THIS NOTICE IS NOT REQUIRED OF A PUBLICLY HELD CORPORATION.

I, the undersigned agent for the firm named below, certify that the information concerning notification of felony convictions has been reviewed by me and the following information furnished is true to the best of my knowledge.

COMPA	ANY NAME:	
1.	My firm is a publicly held corporation; therefore	
2. 3. felony.	My firm is not owned nor operated by anyone was My firm is owned or operated by the following	·
Name	e of Felon(s):	
Felon(	(s):	
Detail	s of Conviction(s):	
contrace propose defrauce employe condition and/or person	Collusion Statement": "The undersigned affirms ct, that this company, corporation, firm, partners cal in collusion (An agreement between two or mod the school district of its rights) with any other by yee, and that the contents of this proposal as to pons, etc., have not been communicated by the unrepresentative of the company, corporation, firm engaged in this type of business prior to the office of collusion."	chip, etc., or individual has not prepared this ore persons to deceive the school district or sidder, school board member, or school orices, quality of product, terms and/or ndersigned nor by any other employee, agent m, partnership, etc., or individual to any other
Name _		Title
Signatu	ure	Date

#### Request for Taxpayer Identification and Certification

	W-9 lanuary 2005) nent of the Treasury	Request for Taxpayer Identification Number and Certifi	cation	Give form to the requester. Do not send to the IRS.
Internal	Revenue Service			
page 2.	Name (as shown o	n your income tax return)		
8	Business name, if	different from above		
r type uction	Check appropriate	box: Individual/ Sole proprietor Corporation Partnership Cother I	·	Exempt from backup withholding
Print or type Specific Instructions	Address (number,	street, and apt. or suite no.)	Requester's name and a	ddress (optional)
pecific	City, state, and ZI	P code		
888	List account numb	er(s) here (optional)		
Part	Tax paye	er Identification Number (TIN)		
backu alien,	p withholding. For sole proprietor, or	propriate box. The TIN provided must match the name given on Line 1 to individuals, this is your social security number (SSN). However, for a redisergarded entity, see the Part I instructions on page 3. For other entity tion number (EIN). If you do not have a number, see How to get a TIN o	sident .	rity number 
Note. to ent		n more than one name, see the chart on page 4 for guidelines on whose	number Employer id	entification number
Part	II Certific	ation		

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- 3. I am a U.S. person (including a U.S. resident alien).

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real setate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. (See the instructions on page 4.)

Sign Signature of U.S. person ▶ Date ▶

#### Purpose of Form

A person who is required to file an information return with the IRS, must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

U.S. person. Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
- Certify that you are not subject to backup withholding, or
- or
  3. Claim exemption from backup withholding if you are a U.S. exempt payee.

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

For federal tax purposes you are considered a person if you are:

- An individual who is a citizen or resident of the United States.
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States, or

 Any estate (other than a foreign estate) or trust. See Regulations sections 301.7701-6(a) and 7(a) for additional information.

Foreign person. If you are a foreign person, do not use Form W-9. Instead, use the appropriate Form W-8 (see Publication 515, Withholding of Tax on Nonresident Aliens and Foreign Entitles).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treaty to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the recipient has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items:

- The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.
- 2. The treaty article addressing the income.
- The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

Cat. No. 10231X Form W-9 (Rev. 1-2005)

#### Conflict of Interest Questionnaire

CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity	FORM CIQ
This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.	OFFICE USE ONLY
This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).	Date Received
By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. See Section 176.006(a-1), Local Government Code.	
A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.	
Name of vendor who has a business relationship with local governmental entity.	
Check this box if you are filing an update to a previously filed questionnaire. (The law recompleted questionnaire with the appropriate filing authority not later than the 7th busines you became aware that the originally filed questionnaire was incomplete or inaccurate.)  Name of local government officer about whom the information is being disclosed.	s day after the date on which
Name of Officer	
officer, as described by Section 176.003(a)(2)(A). Also describe any family relationship wit Complete subparts A and B for each employment or business relationship described. Attack CIQ as necessary.  A. Is the local government officer or a family member of the officer receiving or I other than investment income, from the vendor?  Yes No  B. Is the vendor receiving or likely to receive taxable income, other than investment of the local government officer or a family member of the officer AND the taxable local governmental entity?  Yes No  Describe each employment or business relationship that the vendor named in Section 1 m	h additional pages to this Form likely to receive taxable income, t income, from or at the direction income is not received from the
other business entity with respect to which the local government officer serves as an ownership interest of one percent or more.	-
Check this box if the vendor has given the local government officer or a family member as described in Section 176.003(a)(2)(B), excluding gifts described in Section 176.007 (a) (b) (c) (d) (d) (e) (e) (e) (e) (e) (e) (e) (e) (e) (e	
Signature of vendor doing business with the governmental entity	)ate
Form provided by Texas Ethics Commission www.ethics.state.tx.us	Revised 11/30/2015

### CONFLICT OF INTEREST QUESTIONNAIRE For vendor doing business with local governmental entity

A complete copy of Chapter 176 of the Local Government Code may be found at http://www.statutes.legis.state.tx.us/ Docs/LG/htm/LG.176.htm. For easy reference, below are some of the sections cited on this form.

<u>Local Government Code § 176.001(1-a)</u>: "Business relationship" means a connection between two or more parties based on commercial activity of one of the parties. The term does not include a connection based on:

- (A) a transaction that is subject to rate or fee regulation by a federal, state, or local governmental entity or an agency of a federal, state, or local governmental entity;
- (B) a transaction conducted at a price and subject to terms available to the public; or
- (C) a purchase or lease of goods or services from a person that is chartered by a state or federal agency and that is subject to regular examination by, and reporting to, that agency.

#### Local Government Code § 176.003(a)(2)(A) and (B):

- (a) A local government officer shall file a conflicts disclosure statement with respect to a vendor if:
  - (2) the vendor:
    - (A) has an employment or other business relationship with the local government officer or a family member of the officer that results in the officer or family member receiving taxable income, other than investment income, that exceeds \$2,500 during the 12-month period preceding the date that the officer becomes aware that
      - (i) a contract between the local governmental entity and vendor has been executed; or
      - (ii) the local governmental entity is considering entering into a contract with the vendor;
    - (B) has given to the local government officer or a family member of the officer one or more gifts that have an aggregate value of more than \$100 in the 12-month period preceding the date the officer becomes aware that:
      - (i) a contract between the local governmental entity and vendor has been executed; or
      - (ii) the local governmental entity is considering entering into a contract with the vendor.

#### Local Government Code § 176.006(a) and (a-1)

- (a) Avendor shall file a completed conflict of interest questionnaire if the vendor has a business relationship with a local governmental entity and:
  - (1) has an employment or other business relationship with a local government officer of that local governmental entity, or a family member of the officer, described by Section 176.003(a)(2)(A);
  - (2) has given a local government officer of that local governmental entity, or a family member of the officer, one or more gifts with the aggregate value specified by Section 176.003(a)(2)(B), excluding any gift described by Section 176.003(a-1); or
  - (3) has a family relationship with a local government officer of that local governmental entity.
- (a-1) The completed conflict of interest questionnaire must be filed with the appropriate records administrator not later than the seventh business day after the later of:
  - (1) the date that the vendor:
    - (A) begins discussions or negotiations to enter into a contract with the local governmental entity; or
    - (B) submits to the local governmental entity an application, response to a request for proposals or bids, correspondence, or another writing related to a potential contract with the local governmental entity; or
  - (2) the date the vendor becomes aware:
    - (A) of an employment or other business relationship with a local government officer, or a family member of the officer, described by Subsection (a);
    - (B) that the vendor has given one or more gifts described by Subsection (a); or
    - (C) of a family relationship with a local government officer.

Certification of Criminal History Review of Employees of Public Works Contractors and Subcontractors

I, the undersigned agent for ("Contractor"), certify that Contractor has received all criminal history record information relating to any person to whom Section 22.08341(b) of the Texas Education Code applies, and that each of Contractor's subcontractors on the Project has complied with Section 22.08341(e), as it relates to such subcontractor's employees.
I further certify that Contractor, and each of its subcontractors, does not and will not employ any person on the Project to whom Section 22.08341(b) applies that has, during the preceding 30 years, been convicted of any of the following offenses, where the victim was under 18 years of age or was enrolled in a public school:
<ul> <li>A felony offense under Title 5, Penal Code;</li> <li>An offense on conviction of which a defendant is required to register as a sex offender under Chapter 62, Code of Criminal Procedure; or</li> <li>An offense under the laws of another state or federal law that is equivalent to an offense under Subdivision (1) or (2).</li> </ul>
I further certify that Contractor, and each of its subcontractors, shall comply with Section 22.08341 of the Texas Education Code in all other respects for the duration of the Project, and that:
Upon receipt of information that any employee of Contractor, or any of its subcontractors, on the Project has a reported criminal history including any of the above offenses, such employee shall be immediately removed from the Project and notice provided to the School in writing within three business days.
Upon request, Contractor will provide the School with the name and any other requested information regarding any employee of Contractor, or any of its subcontractors, so that the School may obtain criminal history record information on such person.
If the School objects to the presence of any employee of Contractor, or any of its subcontractors, on the basis of the employee's criminal history record information, Contractor agrees to immediately remove that employee from the Project, or to discontinue using that subcontractor on the Project until such employee to provide services to the School.
I further certify that Contractor has obtained written certifications and assurances from each of its subcontractors on the Project in the same manner and form as provided herein, and that the form of each subcontractor's certification shall be provided to the School.
I understand that non-compliance with this certification by Contractor may be grounds for contract termination and/or barring disqualified persons from performing the work.

Date

Signature of Contractor Official

#### **Child Support Certification**



## State of Texas Health & Human Services Commission

#### Child Support Certification

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Section 231.006, Texas Family Code, as amended by Section 82 of House Bill No. 433, 74th Regular Legislative Session (Acts 1995, 74th Leg., R.S., cb. 751), prohibits the payment of state funds under a grant, contract, or loan to

- . a person who is more than 30 days delinquent in the payment of child support, and
- a business entity in which such a person is the sole proprietor, partner, shareholder or owner with an ownership interest of at least 25%.

Section 231.006 further provides that a person or business entity that is ineligible to receive payments for the reasons stated above shall continue to be ineligible to receive payments from the state under a contract, grant, or loan until

- all arrearages have been paid, or
- the person is in compliance with a written repayment agreement or court order as to any existing delinquency.

Section 231.006 further requires each bid, or application for a contract, grant, or loan to include

- the name and social security number of the individual or sole proprietor and each partner, shareholder, or owner with an ownership interest of at least 25% of the business entity submitting the bid or application, and
- the statement in Part III below.

Section 231.006 authorizes a state agency to terminate a contract if it determines that statement required below is inaccurate or false. In the event the statement is determined to be false, the vendor is liable to the state for attorney's fees, costs necessary to complete the contract [including the cost of advertising and awarding a second contract], and any other damages provided by law or contract.

	II.
	nes and social security numbers of the individual identified in the on with a minimum 25% ownership interest in the business entity
Name	Social Security #
	III.
As required by Section 231.006, the undersigned	certifies the following:
715 required by economic to 1.000, and andersigned to	rectance the following.
	the vendor or applicant certifies that the individual or
	t, bid, or application is not ineligible to receive the I acknowledges that this contract may be terminated and
payment withheld if this certification is	
<u> </u>	
Signature	Title
Printed Name	Date

# IL TEXAS SAGINAW ELEMENTARY SCHOOL

Recommendations for Reasonable & Necessary Repairs Limited to repairs to maintain RH levels and mitigate mold and mildew propagation

Prepared: October 11, 2019
Revised: November 21, 2019
Prepared by: EDGAR STACY & ASSOCIATES

The IL Texas Saginaw Elementary School has suffered from extreme mold and mildew growth (see Report of Mike Krismer CMAP) and associated inordinately high relative humidity levels. This recommendation is for HVAC system repairs that will allow the HVAC system to control and maintain relative humidity levels within the school and will be in compliance with relative humidity level recommendation in ASHRAE Standard 62.1 and thus will not be conducive to mold and mildew propagation. This recommendation is issued prior to my HVAC system report (forthcoming) so as to allow IL Texas to contract for a design/build contract to install the recommended equipment prior to the upcoming hot and humid season (June, 2020).

It is the intent that a qualified and experienced design/build contractor (and his team of professionals) will engineer and install the DOAS system as described below. The contractor shall procure the services of qualified registered architects and professional engineers to provide final design to of the project, provide sealed permit and construction documents and provide appropriate construction observation. The contractor shall obtain any and all necessary and required building permits and shall construct the project in compliance with all applicable codes, ordinances and laws.

It is the contractor's responsibility to determine what disciplines are required and to obtain those professionals and subcontractors. The following disciplines shall be a part of the design team as a minimum.

- ➤ Architecture as a minimum to evaluate sight lines (considering new equipment) and to provide roof penetration and flashing details and interior finishes as well as ceilings.
- ➤ Mechanical Engineering to provide thoroughly engineering drawings and to properly specify and indicate the DOAS units as well as size and show air distribution, condensate drains and gas piping.
- ➤ Electrical Engineering to size electrical service for the DOAS units and, as necessary, to check and possibly upsize existing electrical circuits.

Structural Engineering – to provide engineered structural support frames for the DOAS units.

I am recommending installation of 6 Munters Hcuc type desiccant Dedicated Outside Air Units (DOAS) (one unit on each wing of the classroom area) to precondition outside air for each classroom HVAC unit. These units shall be as noted on the attached roof sketch; units shall be capable of processing OSA as scheduled on the sketch at 83.7 db – 75.0 dp to 71db/46dp. (Contact BHS Enterprises (Brad Holder) at 214-519-4833 for purchase and delivery information). Provide units with variable speed supply fan drive, digital scroll compressors, modulating natural gas post-heat and Merv 13 air filters. Provide unit mounted disconnect.

Install Galvalume spiral ductwork (double wall insulated with 2" fiberglass insulation) to each HVAC unit OSA intake (see sketch).

I also recommend that the entire DOAS system (including units it connects to) be tested and balanced at the end of the project and the system be fully commissioned by an accredited commissioning agent. Provide for Factory start-up technician to start and log start-up data of each unit. Provide not less than 4 hours of on-site training for owner's staff; make a permanent video record of training session and provide to owner.

(2) (3)

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# K-8 SPCINPM' IFT-TX-12 K-8 SPCINPM' IFT-TX-15

esignation	Designation Areas Served	Mech Equipment Served	DOAS / OSA CFM	Munters Model
DOAS - 1	Classroom + Support Areas	AC 36-43	4860	HCUc 6030
DOAS - 2	Classroom + Support Areas	AC 30-35	4470	HCUc 6030
DOAS - 3	Classroom + Support Areas	AC 24-29, AC 52, AC 53	4885	HCUc 6030
DOAS - 4	Classroom + Support Areas	AC 18-23, AC 51	4685	HCUc 6030
DOAS - 5	Classroom + Support Areas	AC 10-17	5580	HCUc 8040
DOAS - 6	Classroom + Support Areas	AC 1-9	6615	HCUc 8040

AC (1)

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(3)

- Constructed in accordance with Munters standard double wall constructed in accordance with Munters standard double wall constructed on security of the provised with Safavium Casaba & Protective Obstings.
   DOAS units a point on manage furnituding and conditioned outside air for ventilation and building pressurcation to manage thumidity.
   DOAS units shall have a minimum ISMRE of 7.5 when tested in accordance with AHRI Standard 920.
   Capable of providing conditioned outside air at 70-22.7 fd bemperature and a 47\*±27 fd bemperature at ASHARAE dehumidification design conditions for project location.
   Powide additional support of TOAS units as required
   Obtain the services of a Registered Professional Structural Engineer and sealed drawings for additional support at Powde conditions with 0.4 FAR Asterdated on mechanical plans.
   Provide Casa heat, Provide Casa plum and a cocessories as required to DOAS Unit.
   Provide condensate dain services for DOAS units, sope dain as required and discharge system. Provide copper Efficient outlier for DOAS units, sope dain as required and discharge into code approved drainage system. Provide connective the analysis of the provide condensate dain services for DOAS units, supported, and aloped in accordance with code. Insulate drains indoors with 1 thick Armaflex washed lones.
  - Provided with fabricated roof curb specifically designed for the roof style and pitch and 12" tall above for disafface, installed curb shall be dead level or <2% sloped toward unit condensate drain outliet. Curb to be flashed and counticitashed to roof system.

    Provided with stand-alone microprocessor control with capability of connecting to the internet for Provided with capability of connecting to the internet for

1 HVAC ROOF PLAN - AREA B - Proposed DOAS Units SULE STREETS



