



Administered by  
**UNIVERSITY OF MAINE SYSTEM**  
Office of Strategic Procurement

**REQUEST FOR PROPOSALS (RFP)**

**Engineering Design Services  
Pleasant Street Academy Biomass District Heating System  
University of Maine at Fort Kent System &  
Maine School Administrative District 27**

**RFP # 15-13**

ISSUE DATE:  
December 5, 2012

PROPOSALS MUST BE RECEIVED BY:  
January 4, 2013

DELIVER PROPOSALS TO:

University of Maine System  
Office of Strategic Procurement  
Attn: Hal Wells  
16 Central Street  
Bangor, ME 04401

## SECTION ONE

### 1.0 GENERAL INFORMATION:

- 1.1 Purpose: The University of Maine System acting on behalf of the University of Maine at Fort Kent (UMFK), in collaboration with Maine School Administrative District 27 (MSAD 27), is seeking proposals for engineering design services from individual firms or teams for the Pleasant Street Academy Biomass District Heating System Project.

This Request for Proposals (RFP) states the instructions for submitting proposals, the procedure and criteria by which a vendor may be selected and the contractual terms by which the University intends to govern the relationship between it and the selected vendor.

- 1.2 Definition of Parties: The University of Maine System will hereinafter be referred to as the "University." Respondents to the RFP shall be referred to as "Bidder(s)" or "bidder(s)". The Bidder to whom the Contract is awarded shall be referred to as the "Contractor."
- 1.3 Scope: The project involves the purchase and installation of a large district biomass heating system that will be connected by underground hot water pipes to nine university buildings (together, the "UMFK Facilities"), and two high school building systems (together the "MSAD 27 Facilities"). In addition, the heating plant may be sized to accommodate other buildings in the area as well, such as the Elementary School and CHIPPY daycare center. Currently, a substantial portion of these buildings are heated with No. 2 heating oil. Market forecasts of this commodity are difficult to forecast, and past index rate performance have trended steadily upward, making the costs of heating our university and school buildings during Maine winters an ever increasing financial burden on operating budgets.

The selected firm will provide design services on a project team in support of construction as managed by the Office of Facilities Management (FM) at UMFK. This RFP seeks qualified firms to submit proposals with the intention of providing these services for the duration of the project from January 2013 to its anticipated completion by June 2014.

If the design causes any exterior view alterations, it is anticipated to match the existing buildings for materials, construction methods and aesthetics. The project will be a Fast-Track process, constructed through a Construction Manager at Risk method, and has a target of commissioning completion by January 2014, with follow up on decommissioning work completing in the summer of 2014.

Design for the project will begin immediately following execution of a design agreement with the selected firm or lead firm. Individual firms or teams desiring to be considered should submit a letter indicating interest and the ability to start work immediately.

This project has been funded through a grant award from the USDA.

- 1.4 Evaluation Criteria: Proposals will be evaluated on many criteria deemed to be in the University's best interests, including, but not limited to the items shown below.
- 1.4.1 Experience conducting feasibility assessments for integrating wood biomass energy systems for smaller-scale commercial and public building applications.
- 1.4.2 Experience in gathering thermal energy usage information, estimating project implementation costs, conducting life cycle cost analysis, and determining technical and economic feasibility of HVAC and biomass energy projects.
- 1.4.3 Demonstrated understanding of the purpose and procedures identified in this RFP and ability to successfully perform scope of work described.

- 1.4.4 Demonstrated application of software and spreadsheet modeling used by the analyst that will be applied to feasibility assessments.
  - 1.4.5 Demonstrated knowledge of biomass energy systems for similar scale applications.
  - 1.4.6 Demonstrated successful design experience on past biomass boiler projects.
  - 1.4.7 Proposed fee
- 1.5 Communication with the University: It is the responsibility of the bidder to inquire about any requirement of this RFP that is not understood. Responses to inquiries, if they change or clarify the RFP in a substantial manner, will be forwarded by addenda to all parties that have received a copy of the RFP. Addenda will also be posted on our web site, [www.maine.edu/strategic/upcoming\\_bids.php](http://www.maine.edu/strategic/upcoming_bids.php). The University will not be bound by oral responses to inquiries or written responses other than addenda.
- Inquiries must be made to: Hal Wells  
Office of Strategic Procurement  
University of Maine System  
16 Central Street  
Bangor, Maine 04401  
(207) 973-3302  
hcwells@maine.edu
- 1.6 Award of Proposal: Presentations may be requested of two or more bidders deemed by the University to be the best suited among those submitting proposals on the basis of the selection criteria. After presentations have been conducted, the University may select the bidder which, in its opinion, has made the proposal that is the most responsive and most responsible and may award the Contract to that bidder. The University reserves the right to waive minor irregularities. Scholarships, donations, or gifts to the University, will not be considered in the evaluation of proposals. The University reserves the right to reject any or all proposals/submissions, in whole or in part, and is not necessarily bound to accept the lowest cost proposal/submission if that proposal/submission is contrary to the best interests of the University. The University may cancel this Request for Proposals or reject any or all proposals in whole or in part. Should the University determine in its sole discretion that only one bidder is fully qualified, or that one bidder is clearly more qualified than any other under consideration, a contract may be awarded to that bidder without further action.
- 1.7 Award Protest: Bidders may appeal the award decision by submitting a written protest to the University of Maine System's Director of Strategic Procurement within five (5) business days of the date of the award notice, with a copy of the protest to the successful bidder. The protest must contain a statement of the basis for the challenge.
- 1.8 Confidentiality: The information contained in proposals submitted for the University's consideration will be held in confidence until all evaluations are concluded and an award has been made. At that time, the winning proposal will be available for public inspection. Pricing and other information that is an integral part of the offer cannot be considered confidential after an award has been made. The University will honor requests for confidentiality for information of a proprietary nature to the extent allowed by law. Clearly mark any information considered confidential.
- 1.9 The University must adhere to the provisions of the Maine Freedom of Access Act (FOAA), 1 MRSA §401 et seq. As a condition of accepting a contract under this section, a contractor must accept that, to the extent required by the Maine FOAA, responses to this solicitation, and any ensuing contractual documents, are considered public records and therefore are subject to freedom of access requests.
- 1.10 Costs of Preparation: Bidder assumes all costs of preparation of the proposal and any

presentations necessary to the proposal process.

- 1.11 Debarment: Submission of a signed proposal in response to this solicitation is certification that your firm (or any subcontractor) is not currently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from participation in this transaction by any State or Federal department or agency. Submission is also agreement that the University will be notified of any change in this status.
- 1.12 Proposal Understanding: By submitting a proposal, the bidder agrees and assures that the specifications are adequate, and the bidder accepts the terms and conditions herein. Any exceptions should be noted in your response.
- 1.13 Proposal Validity: Unless specified otherwise, all proposals shall be valid for ninety (90) days from the due date of the proposal.
- 1.14 Non-Responsive Proposals: The University will not consider non-responsive proposals, i.e., those with material deficiencies, omissions, errors or inconsistencies.
- 1.15 Proposal Submission: A **SIGNED** original and five (5) copies of the proposal **PLUS ONE ELECTRONIC COPY** must be submitted to the Office of Strategic Procurement, University of Maine System, 16 Central Street, Bangor, Maine 04401, in a sealed envelope by **Friday, January 4, 2013**, to be date stamped by the Office of Strategic Procurement in order to be considered. Normal business hours are 8:00 a.m. to 5:00 p.m., Monday through Friday. **The ELECTRONIC COPY of the proposal must be provided on CD or flash drive with the complete narrative and attachments in Adobe Acrobat format.** Bidders may wish to check <http://www.maine.edu/alerts/> to determine if University operations have been suspended. Proposals received after the due date will be returned unopened. There will be no public opening of proposals (see Confidentiality clause). In the event of suspended University operations, proposals will be due the next business day. Vendors are strongly encouraged to submit proposals in advance of the due date to avoid the possibility of missing the due date because of unforeseen circumstances. Vendors assume the risk of the methods of dispatch chosen. The University assumes no responsibility for delays caused by any package or mail delivery service. Postmarking by the due date WILL NOT substitute for receipt of proposal. Additional time will not be granted to any single vendor, however additional time may be granted to all vendors when the University determines that circumstances require it. **FAXED OR E-MAIL PROPOSALS WILL NOT BE ACCEPTED.** The envelope must be **clearly** identified on the outside as follows:

Name of Bidder  
Address of Bidder  
Due Date  
RFP # 15-13

- 1.16 Site Visits: Before submitting a proposal, the bidder may visit the site of the proposed work to become fully acquainted with existing conditions, facilities, difficulties and restrictions, thoroughly examine and be familiar with the specifications included in the proposal. Contact Andy Jacobs, Director of Facilities at UMFK, at [andrew.jacobs@maine.edu](mailto:andrew.jacobs@maine.edu) to arrange for a site visit.
- 1.17 Any contract or agreement for services that will, or may, result in the expenditure by the University of \$50,000 or more must be approved in writing by the Director of Strategic Procurement and it is not approved, valid or effective until such written approval is granted.

## SECTION TWO

### 2.0 GENERAL TERMS AND CONDITIONS:

- 2.1 **Contract Administration:** The VP of Administration at the University of Maine at Fort Kent, John Murphy or his designee shall be the University's authorized representative in all matters pertaining to the administration of this Contract.
- 2.2 **Contract Documents:** The University intends to enter into an agreement using the UMS / AIA Design Service and Contract documents shown as Attachment B. If there is any conflict between the language of this RFP and the UMS / AIA Design Service and Contract documents the UMS / AIA Design Service and Contract documents shall prevail.
- 2.3 **Contract Modification and Amendment:** The parties may adjust the specific terms of this Contract (except for pricing and/or commission) where circumstances beyond the control of either party require modification or amendment. Any modification or amendment proposed by the Contractor must be in writing to the Contract Administrator. Any agreed upon modification or amendment must be in writing and signed by both parties.
- 2.4 **Contract Validity:** In the event one or more clauses of the Contract are declared invalid, void, unenforceable or illegal, that shall not affect the validity of the remaining portions of the Contract.
- 2.5 **Non-Waiver of Defaults:** Any failure of the University to enforce or require the strict keeping and performance of any of the terms and conditions of this Contract shall not constitute a waiver of such terms, conditions, or rights.
- 2.6 **Cancellation/Termination:** If the Contractor defaults in its agreement to provide personnel or equipment to the University's satisfaction, or in any other way fails to provide service in accordance with the contract terms, the University shall promptly notify the Contractor of such default and if adequate correction is not made within five (5) days the University may take whatever action it deems necessary to provide alternate services and may, at its option, immediately cancel this Contract with written notice.
- 2.7 **Employees:** The Contractor shall employ only competent and satisfactory personnel and shall provide a sufficient number of employees to perform the required services efficiently and in a manner satisfactory to the University. If the Contract Administrator or designee, notifies the Contractor in writing that any person employed on this Contract is incompetent, disorderly, or otherwise unsatisfactory, such person shall not again be employed in the execution of this Contract without the prior written consent of the Contract Administrator.
- 2.8 **Clarification of Responsibilities:** If the Contractor needs clarification of or deviation from the terms of the Contract, it is the Contractor's responsibility to obtain written clarification or approval from the Contract Administrator.
- 2.9 **Litigation:** This Contract and the rights and obligations of the parties hereunder shall be governed by and construed in accordance with the laws of the State of Maine without reference to its conflicts of laws principles. The Contractor agrees that any litigation, action or proceeding arising out of this Contract, shall be instituted in a state court located in the State of Maine.
- 2.10 **Assignment:** Neither party of the Contract shall assign the Contract without the prior written consent of the other, nor shall the Contractor assign any money due or to become due without the prior written consent of the University.

- 2.11 Equal Opportunity: In the execution of the Contract, the Contractor and all subcontractors agree, consistent with University policy, not to discriminate on the grounds of race, color, religion, sex, sexual orientation, including transgender status or gender expression, national origin or citizenship status, age, disability, genetic information, or veteran's status and to provide reasonable accommodations to qualified individuals with disabilities upon request. The University encourages the employment of individuals with disabilities.
- 2.12 Independent Contractor: Whether the Contractor is a corporation, partnership, other legal entity, or an individual, the Contractor is an independent contractor. If the Contractor is an individual, the Contractor's duties will be performed with the understanding that the Contractor is a self-employed person, has special expertise as to the services which the Contractor is to perform and is customarily engaged in the independent performance of the same or similar services for others. The manner in which the services are performed shall be controlled by the Contractor; however, the nature of the services and the results to be achieved shall be specified by the University. The Contractor is not to be deemed an employee or agent of the University and has no authority to make any binding commitments or obligations on behalf of the University except as expressly provided herein. The University has prepared specific guidelines to be used for contractual agreements with individuals (not corporations or partnerships) who are not considered employees of the University.
- 2.13 Sexual Harassment: The University is committed to providing a positive environment for all students and staff. Sexual harassment, whether intentional or not, undermines the quality of this educational and working climate. The University thus has a legal and ethical responsibility to ensure that all students and employees can learn and work in an environment free of sexual harassment. Consistent with the state and federal law, this right to freedom from sexual harassment was defined as University policy by the Board of Trustees. Failure to comply with this policy could result in termination of this Contract without advanced notice. Further information regarding this policy is available from the Executive Director of Human Resources/EEO Coordinator, Cyr Hall, (207) 834-7533.
- 2.14 Indemnification: The Contractor agrees to be responsible for, and to protect, save harmless, and indemnify the University and its employees from and against all loss, damage, cost and expense (including attorney's fees) suffered or sustained by the University or for which the University may be held or become liable by reason of injury (including death) to persons or property or other causes whatsoever, in connection with the operations of the Contractor or any subcontractor under this agreement.
- 2.15 Contractor's Liability Insurance: During the term of this agreement, the Contractor shall maintain the following insurance:

<u>Insurance Type</u>	<u>Coverage Limit</u>
1. Commercial General Liability (Written on an Occurrence-based form)	\$1,000,000 per occurrence or more (Bodily Injury and Property Damage)
2. Vehicle Liability (Including Hired & Non-Owned)	\$1,000,000 per occurrence or more (Bodily Injury and Property Damage)
3. Workers Compensation (In Compliance with Applicable State Law)	Required for all personnel

The University of Maine System shall be named as Additional Insured on the Commercial General Liability insurance.

Certificates of Insurance for all of the above insurance shall be filed with:  
Office of Strategic Procurement  
University of Maine System  
16 Central Street  
Bangor, Maine 04401

Certificates shall be filed prior to the date of performance under this Agreement. Said certificates, in addition to proof of coverage, shall contain the standard statement pertaining to written notification in the event of cancellation, with a thirty (30) day notification period.

As additional insured and certificate holder, the University should be included as follows:  
University of Maine System  
16 Central Street  
Bangor, Maine 04401

- 2.16 Smoking Policy: The University must comply with the "Workplace Smoking Act of 1985" and M.R.S.A. title 22, § 1541 et seq "Smoking Prohibited in Public Places." In compliance with this law, the University has prohibited smoking in all University System buildings except in designated smoking areas. This rule must also apply to all contractors and workers in existing University System buildings. The Contractor shall be responsible for the implementation and enforcement of this requirement within existing buildings.
- 2.17 Payments: Payment will be upon submittal of an invoice to the address shown on the purchase order by the Contractor on a Net 30 basis unless discount terms are offered. Invoices must include a purchase order number. The University is using several, preferred methods of payment: Bank of America's ePayables and PayMode electronic payment systems. Please indicate your ability to accept payment via any or all of these methods.

## SECTION THREE

### 3.0 PROJECT DESCRIPTION:

- 3.1 The project involves the purchase and installation of a large district biomass heating system that will be connected by underground hot water pipes to nine university buildings and a high school building with two separate heating systems. The heating plant will be designed for a future expansion, which will occur after this project is completed. Most of the project facilities currently have two oil boilers, one used to generate most heating needs and the other as a back-up and to supplement the primary during peak load periods. Each facility will retain an oil boiler to maintain 100% redundancy for emergencies and maintenance and to supplement the biomass plant during unusually cold periods. Some project facilities already share a boiler room, so connection costs are reduced for such buildings and most have hydronic (hot water) heat distribution systems. However, one of the High School building systems and two and one half UMFK building currently use steam. These steam distribution systems will be replaced with high efficiency hydronic distribution systems and connected to the new district heating plant.

Because UMFK and MSAD 27 are retaining oil boilers in all its boiler rooms for 100% redundancy, the system will be able to rely on oil backup during unusually extreme cold. This will allow for the most efficient biomass boiler size to be selected for the project. 15% of all Heating Degree Days occur during the coldest 20 days of the year in a typical year in Fort Kent. The boiler will provide hot water for space heating and domestic hot water for the combined campuses.

This biomass district heating plant will be similar to fossil fuel heating systems in that it provides hot water for a variety of uses to many buildings within a district. Instead of fossil fuels, this plant will burn locally sourced, environmentally friendly, climate neutral, renewable biomass. It is the intention to specify a multi-fuel boiler that can be converted to take other forms of biomass, such as wood and grass pellets, straw/grass bales, grains, and a variety of waste products. The preliminary fuel design is not yet determined. The scope also involves developing program logic controls, installing hydraulic delivery systems, and installing pneumatic and auger feed systems.

- 3.2 Approximate timeframe for this proposal is as follows:

RFP Advertisement and Solicitation	December 5, 2012
RFP Due Date	January 4, 2013
Contract Award	January 25, 2013
Alternate Heating Fuel Consumption Start	January 2014



## SECTION FOUR

### 4.0 GENERAL SCOPE OF WORK FOR DESIGN SERVICES PROPOSAL:

- 4.1 Initial Facility Review to include, at a minimum, the following:
  - 4.1.1 Review facility information provided
  - 4.1.2 Verify facility information as needed via correspondence with facility
  - 4.1.3 Investigate the current heating system to determine steps to integrate a biomass system
  - 4.1.4 Work with facility staff to understand their needs and existing issues related to the heating and cooling system
- 4.2 Preliminary Site Investigation to include, at a minimum, the following:
  - 4.2.1 Available space (within existing structures or space for newly constructed building)
  - 4.2.2 Street access and space available for fuel storage and deliveries
  - 4.2.3 Any building or site constraints (i.e. topography, permitting, historical preservation, etc.)
  - 4.2.4 Estimate proper size of biomass heating system to meet needs of facility
  - 4.2.5 Based on site information gathered, formulate options for installing a biomass energy system. This may include generating an assessment of a few project options and/or scenarios for different types of technologies, wood fuels and/or financial scenarios.
- 4.3 Preliminary Cost Estimating: Provide *preliminary* cost estimates for installing a biomass energy system on site. Total project cost estimates will include, at a minimum, cost breakdown of:
  - 4.3.1 design and engineering,
  - 4.3.2 fees and permitting,
  - 4.3.3 mechanical integration to existing or new HVAC system,
  - 4.3.4 biomass energy unit (boiler or furnace package),
  - 4.3.5 structure to house biomass energy unit, conveyance and fuel storage (as needed),
  - 4.3.6 emission controls (if required)
  - 4.3.7 other equipment, materials, and construction costs.
- 4.4 Design Documents
  - 4.4.1 Conceptual Design Documents with narratives by discipline
  - 4.4.2 Schematic Design Documents
  - 4.4.3 Design Development Documents
  - 4.4.4 100% Construction Documents

Additional interim documents may be required for Early Work Packages and permit applications.

- 4.5 Contract Administration
  - 4.5.1 Participation in selection process for Construction Manager at-Risk
  - 4.5.2 Participation in construction progress meetings
  - 4.5.3 Review and endorsement of monthly construction requisitions
  - 4.5.4 Review of specification submittals
  - 4.5.5 Response to Requests for Information
  - 4.5.6 Maintain document control repository and provide access electronically for project team

## SECTION FIVE

5.0 SPECIFIC CONSIDERATIONS AND EXPECTATIONS WITH SCOPE OF DESIGN SERVICES: It is expected that the design services proposed will include, but are not limited to, the following:

5.1 Specification for boiler house:

5.1.1 Boiler house

- a) The boiler house, whether new or part of a renovation, must conform to Maine Uniform Building and Energy Code, University of Maine System Design requirements as well as any other governing codes and regulations pertinent to the installation
- b) Any boiler house must be able to safely accommodate the weight and size of the proposed boiler and ancillary plant (heat accumulation tank, pipe work, expansion vessels etc) if applicable. Coordinate space requirements with equipment suppliers.

5.1.2 Ventilation

- a) The supplier/installer should provide details of the level of ventilation required

5.1.3 Access for cleaning

- a) Provision must be made to ensure there is sufficient space to clean the boiler tubes either above the boiler (in the case of vertical tubes) or in front of the boiler (in the case of horizontal tubes);
- b) Provide boiler room dimensions

5.1.4 Access for installing the boiler (and Heat accumulation tank if applicable)

- a) Access details in the specification giving all pertinent dimensions.

5.1.5 Life Safety Systems

- a) Design shall accommodate all requirements for automatic fire suppression and monitoring
- b) Design shall accommodate all requirements for emergency egress

5.1.6 Accessibility

- a) Design shall conform to all requirements of the American with Disabilities Acts (ADA), latest edition

5.2 Specification for fuel store:

5.2.1 Biomass Bunker/Silo

- a) Design shall accommodate appropriately sized fuel storage facility or fixture as required to optimally stockpile biomass fuel as required for this project.
- b) Designer to consider and accommodate the physical constraints on each campus.
- c) Designer to investigate and recommend a biomass fuel type based on best overall fit and value to the facilities.

5.2.2 Store Size

- a) The store size will depend on a number of factors (size of plant, heat load being serviced, number of day's storage required, size of delivery vehicle(s) etc.). Design to include:
  - i. Site plans showing:
  - ii. location of boiler house;
  - iii. fuel store position;

- iv. access roads; and turning areas
- v. vehicle turning radius
- b) Stipulated delivery frequency in conjunction with market availability for the Fort Kent Region

5.2.3 Grate system

- a) A number of different grate systems are available and they are able to tolerate a variety of differing fuels. The specification should highlight what the proposed fuel is and therefore a preferred grate system. Grate system must be capable for use with a feedstock moisture content of 35%, +/- 5% (wet basis) or (dry basis), or as recommended by the selected boiler manufacturer.

5.3 Specification for boiler:

5.3.1 Boiler output

- a) The boiler output required should be stated in BTU/H and HP in the specification. This information should be evaluated in the feasibility stage. Alternatively, site owners may request the supplier to specify size based on heat demand data that the site owner supplies.
- b) Boiler must be provided with all applicable stamps, seals, markings and certifications as required for installation in the United States and State of Maine (Fuel Board rules) (ASME, etc.).

5.3.2 Boiler efficiency

- a) Biomass boiler efficiencies are typically between 80 and 90%. The manufacturer should have efficiency independently verified in accordance with a recognized national standard.

5.3.3 Turndown

- a) Most modern biomass boilers can turn down to between 20 and 30% of the MCR (maximum capacity rating). The site owner should give the range of outputs over which the boiler is likely to operate (i.e. summer and winter loads) and request details of whether the boiler can operate over this range using the fuel specification recommended by the manufacturer, and the effect on boiler performance of operating below MCR for long periods.
- b) Information to include / to be requested:
  - i. Provide details of range of outputs required in accordance with energy profile presented previously;
  - ii. Request manufacturers' information on effects of operating below MCR maximum turndown.

5.3.4 Burn-back protection

- a) Burn-back protection is an essential requirement to minimize the potential for the fuel to burn back along the fuel-feed system and into the fuel store.

5.3.5 Force draft (FD) fans

- a) Modern automatic biomass boilers are fitted with FD fans as standard. The more basic models use a single fan that provides both primary and secondary air.
- b) The number of FD fans fitted is a function of the design, controllability, grate system used, and combustion efficiency of the boiler, and does not therefore have to be specified.
- c) Information to include / to be requested: details of electrical consumption of fans and power supply required (i.e. single phase, or 3- phase, voltage and amperage etc).

5.3.6 Flue gas induced draught (ID) gas fans

- a) ID fans may also be needed if the flue run has significant horizontal and/or has numerous bends
- 5.3.7 De-ashing
- a) Automatic de-ashing reduces the amount of manual intervention required, helps to maintain high levels of efficiency, and is essential for a situation where regular attendance is not available.
  - b) Most, but not all, manufacturers offer automatic de-ashing and some fit it as standard. Therefore the specification will need to state whether it is required or not.
  - c) Information to include / to be requested:
    - i. Automatic de-ashing requirements
    - ii. Grates
- 5.3.8 Boiler Emissions
- a) Supplier/manufacturer to provide copy of independently verified test results and certificate, stating how the proposed system complies with relevant legislation.
- 5.4 Specification for flues and chimneys:
- 5.4.1 Independent flue
- a) The flue should be twin-walled insulated stainless steel welded construction.
  - b) Coordinate requirements with the boiler manufacturer/supplier
  - c) Securing/ support for flues must comply with applicable codes
- 5.4.2 Access for cleaning and dust removal
- a) The flue will require cleaning at least twice a year. Provide details of cleaning method recommended, access, and frequency.
- 5.4.3 Flue pipes and transition pieces
- a) All transition pieces and flue pipes for connecting the boiler to the flue should be made from stainless steel and be certified suitable for use with wood-fuels.
- 5.4.4 Draft stabilizer
- a) For boilers without ID fans, provide a draft stabilizer as required.
- 5.5 Specification for flue extraction and feed:
- 5.5.1 Fuel feed mechanism
- a) Fuel is fed from the bunker/silo to the boiler via a conveyance system. It is an integral and crucial part of the design of the system.
  - b) Design to provide a fully integrated and reliable fuel delivery system with proven track record in similar installation.
- 5.5.2 Fuel silo agitator (woodchip only)
- a) Provide details of proposed solution from feasibility study. Information to include / to be requested:
    - i. Spring/articulated arm;
    - ii. Auger;
    - iii. Walking floors.
    - iv. Supplier/installer to specify with reference to the details of proposed solution from feasibility study.
- 5.6 Specification for piping distribution system:
- 5.6.1 Underground Distribution System
- a) Design to specify piping distribution system to accommodate heat needs of all buildings described herein

- b) Design to include double-walled, insulated piping system, as well as all fixtures, expansion loops, service pits, and appurtenances as required
  - c) Design to make determination and recommendation on hot water or steam distribution system.
  - d) Design to include details on meters, valves, and automated controls/ system monitoring and measurement during operation
  - e) Design to investigate and recommend best pathway and routing for distribution pipe system on the campuses based on all applicable constraints and considerations
  - f) Design to include calculations, programming, and sequences necessary to utilize some or all existing oil-fire boilers as supplemental injection points during peak heating demand days
- 5.7 Specification for connecting to existing buildings:
- 5.7.1 Design to investigate and include details for connecting each individual building to the new heating system distribution piping. This includes installing tee's and valves in each building during the summer season such that tie-ins can be completed at any time without disruption of service to the campuses.
  - 5.7.2 Automated temperature control system shall be specified to manage the new heating district.
  - 5.7.3 Any asbestos discovered during the course of the project will be removed by UMFK and MSAD 27.

## SECTION SIX

### 6.0 PROPOSAL CONTENT:

Bidders shall ensure that all information required herein is submitted with the proposal. All information provided should be verifiable by documentation requested by the University. Failure to provide all information, inaccuracy or misstatement may be sufficient cause for rejection of the proposal or rescission of an award. Bidders are encouraged to provide any additional information describing operational abilities. Responses to each requirement below should be in order and clearly marked with the section number to which they respond.

- 6.1 Proposal Format: Proposals shall be submitted in the quantities described under at paragraph 1.15 above.
  - 6.1.1 Bound package of qualifications, experience, and qualitative responses to this RFP requirements.
  - 6.1.2 CD or flash drive with PDF copy of proposal and supplemental information
- 6.2 Statement of Qualifications: Please prepare a statement of qualifications presenting relevant information for the following areas:
  - 6.2.1 Name, address, telephone number, and e-mail address of the firm.
  - 6.2.2 Names and qualifications of all team members, resumes and their areas of responsibility.
  - 6.2.3 Description of experience conducting preliminary feasibility assessments for integrating biomass energy systems at facilities. Include a list of specific projects.
  - 6.2.4 Description of experience gathering thermal energy usage information, estimating project implementation and operation and maintenance costs, conducting life cycle cost analysis, and determining technical and economic feasibility of HVAC and biomass energy projects. Include a list of specific projects.
  - 6.2.5 Documentation demonstrating technical skills and knowledge of wood biomass heating, and/or cooling and combined heat and power systems for similar scale facilities.
  - 6.2.6 Documentation demonstrating an understanding of the purpose and procedures identified in this RFP. Response to this section must convincingly demonstrate that respondents will successfully perform scope of work described herein.
  - 6.2.7 Description of the software and spreadsheet modeling applications used by the design firm that will be applied to feasibility assessments. Include a sample spreadsheet.
  - 6.2.8 Description of past experience in working on higher education projects.
- 6.3 Project Team: Provide an organizational chart showing the key personnel who will be engaged in the execution of this project. Include resumes and an hourly billing rate sheet along with list of reimbursable expense categories that are not included in the proposed fee.

- 6.4 Fee for services: Submit your proposed lump sum fee for services.
- 6.5 Specializations: Provide a checked list of the following specializations and any additional relevant specializations of your company. Check all that apply.

Services Provided

- Pre-Feasibility Assessments for biomass energy Investment-Grade biomass energy assessments
- Biomass fuel supply assessment
- Biomass energy system manufacturer/distributor
- Energy Analysis
- Mechanical Engineering
- Engineering/Design
- Installation
- Commissioning
- Financing

Technologies Experienced With

- HVAC
- Hydronic
- Steam
- Forced Air
- Automated wood-chip type system
- Wood pellet furnace/boiler
- Indoor cordwood
- Outdoor cordwood
- Combined heat and power systems

Sectors Served

- Schools
- Healthcare
- Government
- Non-profits
- Residential
- Commercial

- 6.6 Payment Method: Indicate your ability to accept electronic payments. (Section 2.17)
- 6.7 References: A list of three references is required to be submitted with your proposal. These references should be agencies your firm has done business with in the past year **on projects with a similar scope to this one**. Provide company names with contact person, telephone number and email address.

SIGNATURE PAGE

COMPANY NAME: \_\_\_\_\_

By: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Phone)

\_\_\_\_\_  
(Cell Phone)

\_\_\_\_\_  
(E-mail Address)

\_\_\_\_\_  
(Date)



# ATTACHMENT A – CAMPUS DETAILS

# University of Maine at Fort Kent



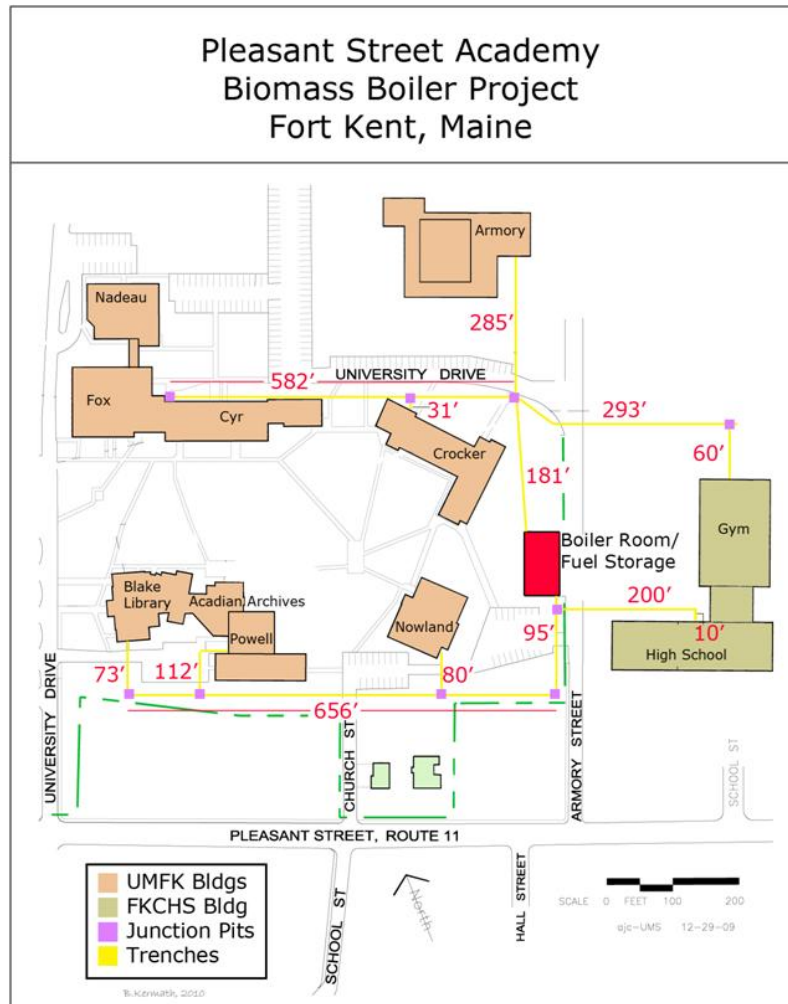
**TABLE UMFK-1: Summary**

Item	Value
Heating Degree Days (Year Cumulative @ 65F)	9830
#2 Heating Oil Consumption (Annual)	94,301
Equivalent MMBTUs (Projected Consumption)	13,296
Number of Buildings to be Converted	9

**TABLE UMFK-2: Building Details**

Building (Tank) Location	Tank Size	Fuel Type	Estimated Annual Volume
Armory	5,000	#2	14,132
Cyr-Fox-Nadeau	8,000	#2	26,403
Crocker	6,000	#2	13,886
Blake Library	4,000	#2	6,255
Powell Hall- Acadian Archives	6,000	#2	16,169
Nowland Hall	6,000	#2	14,274
Facilities Physical Plant	330	#2	3,182
<b>Total #2 Fuel</b>			<b>94,301</b>

# Overall Proposed Project Plan



**TABLE MSAD27-1: Summary**

Item	Value
Heating Degree Days (Year Cumulative @ 65F)	9830
#2 Heating Oil Consumption (Annual)	32,225
Equivalent MMBTUs (Projected Consumption)	4,544
Number of Buildings to be Converted	2

**TABLE SAD27-2: Building Details**

Building (Tank) Location	Tank Size	Fuel Type	Estimated Annual Volume
High School Main Building	6,000	#2	14,872
High School Gym	6,000	#2	17,353
<b>Total #2 Fuel</b>			<b>32,225</b>

# ATTACHMENT B – AIA CONTRACT DOCUMENTS

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AIA B102 – Standard Form of Agreement between Owner and Architect (Sample)

Appendix A – Supplementary Requirements to AIA B102-2007

Appendix B – University of Maine System Design Criteria

AIA B201 – Standard Form of Architect’s Services (Sample)

Appendix D – Supplementary requirements to AIA B201

PDF files attached to the email

# ATTACHMENT C – CONCEPTUAL PROJECT SCHEMATIC PLAN

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PDF file attached to the email

# ATTACHMENT D – CONCEPTUAL PROJECT SCHEDULE

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PDF file attached to the email