REQUEST FOR PROPOSAL SQ # 10175

ENGINEERING / ARCHITECTURAL CONSULTING SERVICES

HVAC UPGRADES

CENTER BUILDINGS I, II, III & IV,

L'HOMMEDIEU HALL,

NORTH HALL

PERFORMING ARTS CENTER

MIDDLESEX COUNTY COLLEGE
2600 WOODBRIDGE AVENUE
EDISON, NEW JERSEY 08818

Prepared By:

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Director, Facilities Engineering

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I. CLIENT PROFILE

Middlesex County College (MCC) is a two year community college with more than 12,000 full and part-time students and over 600 employees. The main campus is located in Edison, New Jersey on a portion of the former Raritan Arsenal. It consists of 33 buildings on 182 acres with over 800,000 square feet of building space. The buildings, grounds and infrastructure systems are a combination of those developed by the U.S. Army from 1918 through 1963 and by MCC over the past 50 years. In addition, MCC maintains centers in shared spaces in both New Brunswick and Perth Amboy.

II. PROJECT DESCRIPTION

A. MCC has determined that it requires the services of a professional consulting engineering firm. The consultant will perform a feasibility study for the four Center buildings (CI - CIV), L'Hommedieu Hall (LH), North Hall (NH) and Performing Arts Center (PA) HVAC Upgrade project, prepare a report of the study results, provide construction cost and schedule estimates, prepare construction documents, and provide construction observation services. The work will be performed in three phases. Phase I is the feasibility study, Phase II is the preparation of construction documents for bidding, and Phase III is the construction observation.

B. **Center I, II, III and IV (CI – CIV)** are basically four identical buildings approximately 4,300 square feet each. They are converted residential structures, originally constructed in 1932. The buildings are duplex units of brick construction, two story plus basement and attic with wood frame floors. They are primarily used as office space.

1. The buildings are currently heated by natural gas fired boilers with hot water cast iron radiators. They are cooled by two forced air central air conditioning systems located in the basement and attic of each building. The attic unit services the second floor of the building and the basement unit services the first floor of the building. Regarding heating, each building, all floors, are serviced by one boiler located in the basement.

2. It is desired that the existing cast iron radiators be removed and the buildings have two zones consisting of both first floor areas and both second floor areas (building split horizontally). One forced air central heating / cooling unit located in the basement would service the building first floor and one located in the attic would service the building second floor. It is desired that the new system in each building interface with MCC's existing Building Control System (Schneider Electric).

C. **L'Hommedieu Hall (LH)** is a two-story building with partial basement and a penthouse. It was constructed in 1970 and totals approximately 59,000 square feet. The building construction is steel frame / concrete composite and consists of classrooms, laboratories, office space and an amphitheater.

1. The main air handler in the LH building consists of a common return and outside air mixing box that splits into four separate hydronic heating and cooling chambers. The air is then distributed through four individual supply fan air distribution systems supplying four different areas of the building. These areas being North side inner and outer building sections and South side inner and outer building sections.

2. Consideration shall be given to refurbishing the existing air handling units and replacement of the hot water reheat coils and the cooling coils. The existing constant volume boxes should be replaced with VAV style boxes, ductwork cleaned and controls replaced with an up-to-date system interfaced with MCC's existing Building Control System (Schneider Electric).

D. **North Hall (NH)** building is a brick / concrete structure with steel frame roof construction. It consists of two stories plus a basement and attic and was constructed in 1931. The building totals approximately 9,300 square feet and is primarily used as office space.

1. The building is currently heated by natural gas fired boilers supplying hot water to a radiator system. The building is cooled by through the window packaged thermal air conditioning units.

2. The purpose of this portion of the project is to replace the window A/C units and cast iron radiators with a central HVAC system. A system consisting of a chiller, air handler, VAV boxes with reheat coils should be considered. It is desired that the new system be interfaced with MCC's existing Building Control System (Schneider Electric).

E. The **Performing Arts Center (PA)** is a three-story building constructed in 1975 that totals approximately 36,000 square feet. This building is attached to College Center and contains the College's theater auditorium, theater support areas and office space.

1. A HVAC unit replacement was performed in 1988. This existing roof mounted Trane Model RAUCD12SBA0021S air cooled condensing / DX unit is in need of replacement once again. The capacity of this unit is 1,595 MBH with 86,700 condenser CFM.

2. Replacing the existing equipment with a Trane air cooled scroll packaged water chiller and two compatible cooling coils should be considered. Consideration shall be given to the existing VFD drive air handlers that will reduce energy consumption and minimize noise.

3. Consideration shall also be given to the new unit being mounted on the existing roof curbs, utilizing the existing structural members.

4. The consultant will be responsible for designing the control sequences and components so that all new equipment will interface with MCC's existing Building Control System (Schneider Electric).

F. The consultant will be required to apply for any applicable New Jersey SmartStart rebates. This will include providing all required documentation and related correspondence.

G. The following are attached to this RFP for reference:

Campus Site Plan

Center Buildings - Typical Floor Plans (Basement, 1st, 2nd)

LH Floor Plans (Basement, 1st, 2nd , Penthouse)

NH Floor Plans (Basement, 1st, 2nd)

PA Floor Plans (1st, 2nd, 3rd)

H. The consultant selected for the project will be provided with copies of any available original construction plans and other drawings, specifications, and manuals of these areas that may be helpful.

I. The current total budget for all project work, including all contingencies, professional consulting fees, and testing, is $ 1,060,000.

III. PROJECT SCHEDULE

A. MCC intends to award a contract for Phase I at the Board of Trustees meeting of December 17, 2014. The award of subsequent phases is at MCC's discretion depending on the successful completion of previous phases, the results of those phases, and adequate funding. In the event the Phase 1 consultant is not awarded a contract for subsequent phases, all information and materials developed shall become the property of MCC. The information and materials shall be turned over to MCC at the conclusion of applicable Phase for possible future use.

B. Phase I shall be completed by January 16, 2015. After reviewing the report, MCC will advise if and how this project will proceed. Phase II will be divided into two Phases; Phase II A and Phase II B. Phase II A will consist of design documents for the work required in the four Center buildings (CI, CII, CIII & CIV). Phase II B will consist of design documents for the work required in L'Hommedieu Hall, North Hall and the Performing Arts Center buildings.

C. If MCC proceeds with any or all portions of Phase II, Phase II A shall then be completed by February 13, 2015. It is expected that the CI - CIV construction work (Phase III A) will be done from May through August 2015.

Phase II B would need to be completed by September 11, 2015. It is expected that the Performing Art Center construction work will be done from May 14, 2016 through June 26, 2016 (Phase III B). L'Hommedieu Hall and North Hall construction work is expected to take place between May 30, 2016 and August 12, 2016 (Phase III B).

D. MCC requires a minimum of a two month bidding period. This is measured from the date of delivery of all final and corrected bid documents to the monthly Board of Trustees meeting. These meetings are usually held on the fourth Wednesday of each month. If fully instituted, this project will have two separate Bidding cycles. One for the Center buildings I thru IV and one for L'Hommedieu Hall, North Hall and the Performing Arts Center inclusive.

IV. CONSULTANT QUALIFICATIONS

A. The following are the qualifications required:

1. Professional licensure in the State of New Jersey.

2. Demonstrated knowledge and experience in the applicable federal, state and local codes, laws, and regulations related to the design and construction of similar county college educational facilities.

3. Demonstrated knowledge and experience in the completion of projects with a scope of work similar to this one.

4. The capability to generate design drawings on AUTOCAD 2008 is required.

5. The capability to prepare the bid specifications in Microsoft Word 2010 is required.

V. SCOPE OF WORK

The consultant shall provide all of the labor, materials, and equipment in order to perform all of the professional services required. The services will be completed in three phases as follows:

A. **Phase I - FEASIBILITY STUDY**

1. Conduct on-site reviews of all relevant documents and meet periodically with MCC personnel as necessary to become thoroughly familiar with the site, project scope, budget, and existing conditions. Prepare and distribute meeting minutes as appropriate.

2. Take field measurements and other steps as necessary to verify existing conditions. Hire the services of other consultants, testing services, and any other such services required to complete the scope of work.

3. Prepare a report which includes detailed results of the study and an executive summary. Include in the report options, recommendations, cost estimates, schedule estimates, and any sketches, schematics, and any plans necessary to convey the scope and impact of the options.

4. Provide six (6) copies (one color, five black and white) of the draft report and meet with MCC personnel to review the findings. Revise as required and complete the final report.

5. Provide six (6) color copies of the completed final report and meet with MCC personnel to review it.

6. All site visits required to complete the scope of work described above shall be included in the lump sum fee.

B. **Phase II - CONSTRUCTION DOCUMENTS (Phase II A and Phase II B)**

1. Upon completion of Phase I and subsequent review of the report by MCC, the consultant will be provided with direction as to if or how the project will proceed. This will include a selection of the options presented which meets MCC's available budget for the project.

2. The design/construction document phase will consist of the preparation of design drawings, specifications, and other necessary bid documents for the scope of work selected and budgets established during Phase I. MCC will provide the "front end" documents. These consist of "Section A – Instructions to Bidders", "Section B – General Provisions", and "Section D – Required Contract Documents". The consultant will prepare "Section C – Technical Specifications" and the Contractor's Proposal pages of Section D. All of these specification sections, along with the design drawings, will form the complete bid document set.

3. The requirements of this phase are as follows:

   a. Prepare all design drawings and specifications necessary for bidding, permitting, and construction of the work identified in this project. Include all design disciplines (mechanical, plumbing, electrical, architectural, structural, etc.) necessary to complete the scope of work identified. Designs are to be prepared in accordance with the cost estimates established in Phase I. The use of alternates shall be minimized. In the event that all qualified bids exceed this budget, the consultant will revise the bid documents for re-bidding at no additional cost to MCC.

   b. Provide copies of preliminary drawings and specifications and meet with MCC personnel as required for review during design development. Prepare and distribute meeting minutes as appropriate.

c. Provide one set of vellum drawings and one electronic CAD copy of all completed final drawings. Provide one unbound set of the completed final specifications for printing and distribution by MCC and one electronic copy of the specifications in Microsoft Word 2007. This will be used for posting on MCC's website for viewing by potential bidders.

d. Provide a list of contractors who may be appropriate for the scope of work specified.

e. Conduct a pre-bid site visit and conference with the bidders and MCC personnel and issue any required addenda for distribution by MCC. Assist MCC in reviewing the bids and investigating prior work performed by the apparent low bidder(s). Make a recommendation for the award of the construction contract.

f. Provide two (2) sets of signed and sealed sets of drawings and specifications for permit application submittal by the contractor.

g. All site visits required to complete the scope of work described above shall be included in the lump sum fee.

C. **Phase III - CONSTRUCTION OBSERVATION (Phase III A & Phase III B)**

1. This phase consists of the services required to observe the construction and implementation of the work specified in the Phase II construction documents. The requirements of this phase are as follows:

a. Conduct a pre-construction site visit and conference with the awarded contractor and MCC personnel. Prepare and distribute meeting minutes.

b. Review the Schedule of Values (SOV) received from the contractor and make recommendations to MCC for approval.

c. Review all construction schedules submitted by the contractor, make recommendations, and respond to the contractor.

d. Review all Requests for Information (RFI) received from the contractor, make recommendations to MCC, and submit formal responses to the contractor within 5 business days.

e. Provide construction observation services, including one site visit per week, to monitor and inspect the contractor's work and materials used to ensure compliance with the contract documents. Conduct bi-weekly job progress meetings. Site visits and progress meetings may be combined. Prepare and distribute meeting minutes.

f. Review and approve material submittals and substitution requests and to review and resolve any conflicts, deviations, or changes in the plans or specifications. Advise MCC as to the best course of action. Maintain a submittal log, obtain responses from other consultants, submit responses, review and approve submittals, and distribute approved submittals to the contractor. Prepare and issue Change Directives as required. Visit the site as required for review and resolution.

g. Review the contractor's monthly applications for payment, coordinate corrections with the contractor, make recommendations to MCC, and certify the applications as agreed. Review the contractor's change order requests for appropriateness and cost, coordinate corrections with the contractor, make recommendations to MCC, and certify the change orders as agreed.

h. Provide any drawing or specification changes required by permitting agencies and any additional replacement sets of prints and vellums necessitated by these changes.

i. Maintain a record of any changes made during construction and, along with information provided by the contractor, provide MCC with a complete set of updated as-built Mylar® drawings and an electronic copy of the drawings as further detailed.

j. Upon substantial completion, provide MCC with written notice of the project's completion.

k. Upon substantial completion, the Engineer shall revise all affected design drawings to reflect all design changes made after bidding. These revisions shall include all design changes made through addenda, bulletins, change orders, field clarifications, and any other such methods. Provide the following:

1. A complete set of updated as-built Mylar® drawings.

2. An electronic copy of the drawings in AutoCAD 2008 (or previous version). This shall be used by MCC for its record archives and for printing additional copies as required. It may be restricted by the consultant to prevent revisions.

3. A second electronic copy of the drawings in AutoCAD 2008 (or previous version). It shall be provided with unlocked layers including the "X REF's" in a format that will allow MCC to make revisions in order to update facility drawings. This may be provided with the consultant's name, title, block, logo, and other such information removed in order to protect the consultant from future liability due to drawing revisions by others.

4. Provide MCC with a third electronic copy of the drawings in PDF format that will allow MCC to make revisions in order to file these as record archive drawings. This may be provided with the consultant's name, title, block, logo, and other such information removed in order to protect the consultant from future liability due to drawing revisions by others.

l. Review all warrantee information and other such submittals from the contractor, before transmitting to MCC.

m. Review all final operating manuals and other such submittals from the contractor for completeness and accuracy before transmittal to MCC.

n. Prepare a punch list of items to be completed or corrected by the contractor and coordinate this list with any input received from MCC. Inspect the site for compliance until all punch list work is completed.

o. Review the contractor's remaining outstanding change order requests that may be in dispute for appropriateness and cost, coordinate corrections with the contractor and make recommendations to MCC to resolve these issues. The Final Change Order (3 originals) shall be prepared by MCC and, if agreed, signed by the contractor, engineer, and MCC. After Board approval, MCC will distribute them.

p. Review the contractor's final application for payment and make recommendations to MCC. The final application shall then be certified by the Engineer and submitted to MCC for final approval by the Board of Trustees.

q. All site visits required to complete the scope of work described above shall be included in the lump sum fee.

VI. FORM OF PROPOSAL

A. Based on the information contained in this RFP, provide the total lump sum fee and work schedule for each phase on the attached Form of Proposal. Include with the proposal, the rate schedules for all of the required fees and additional, reimbursable out-of-pocket expenses.

B. The lump sum fees submitted are to include the hiring of all consulting services required to complete the project. They are not considered additional reimbursable out-of-pocket expenses. Reimbursable expenses are additional reproductions beyond the specified quantities (see below), postage, and similar costs. Local travel costs such as tolls and mileage allowance will not be considered for payment as a reimbursable expense. Any such travel costs estimated by the consultant shall be included in the lump sum fee.

1. In addition to regular correspondence, meeting minutes, preliminary, partially completed drawing and specification copies, etc. that are included in the lump sum fees, the following reproductions shall be included in the lump sum fee as well:

a. One color and five black and white copies of the draft feasibility study report.

b. Six bound color copies of the final feasibility study report.

c. One bound set each of drawings and specifications at 80% and 100% completion for review by MCC.

d. One final unbound set of vellum drawings for bidding.

e. One final unbound set of specifications for bidding and one electronic copy for posting on the MCC website.

f. Two bound sets of signed and sealed drawings and specifications for permit application submittal.

g. One post-construction unbound set of as-built Mylar® drawings and two electronic AutoCAD 2008 (or previous version) copies for MCC's records. One electronic file may be restricted to prevent MCC from making revisions. The second electronic file shall be submitted with unlocked layers along with the "X REF's" to allow MCC to make revisions. A third electronic file shall be submitted in PDF format including the "X REF's" to allow MCC to make revisions.

C. The lump sum fee submitted shall include all site visits necessary and as specified in the scope of work. Any additional site visits required shall be paid based on a unit cost submitted in the proposal. A site visit shall be defined as travel to and from the site and up to two hours on site inclusive of travel costs. Additional time on site in excess of two hours will be paid according to the hourly fee schedule submitted.

D. Provide the following information in the firm's proposal:

1. A brochure or letter describing the firm, its size, structure, disciplines, experience, and a profile of its philosophy and approach to design, construction monitoring, scheduling, and cost control.

2. Copies of professional licensure in the State of New Jersey.

3. Documentation of knowledge and experience in the applicable federal, state and local codes, laws, and regulations related to the design and construction of similar county college educational facilities.

4. Documentation of experience in the completion of five projects within the last five years with a similar scope of work. Provide the following for each project:

a. Name and location of project

b. Owner's name, address and contact telephone number

c. Description and size of project

d. Description of the services provided

e. Initial, pre-construction and final construction costs and time schedules

5. Resumes, of all project team members anticipated to be assigned to this project, which demonstrate their qualifications and experience in projects with similar scope.

6. An organizational chart of the project team including the names of engineers and other professional or subcontracted services anticipated to be used on this project. The firm submitting the proposal will be solely responsible for the requested services. Joint ventures with others will not be considered.

7. An estimated milestone schedule, in weeks, indicating your approach to the project, for each of the phases including design, bidding, and construction.

8. A detailed hourly fee schedule, by title, of all personnel to be assigned to this project. A schedule of reimbursable expenses to be billed. These fee schedules shall stay in effect for the duration of all phases of the project.

9. A listing and proof of adequate insurance policies carried by the firm and/or individuals or proof that insurance can be acquired for this project. List types and amounts of coverage for liability, errors and omissions, etc.

VII. SELECTION PROCESS

A. The selection process is described as follows:

1. Responses to this RFP will be reviewed by the Facilities Management Division and the Purchasing Department. Interviews may be conducted as necessary.

2. A recommendation will be made to the Board of Trustees who will give the final approval on the selected firm at their next scheduled meeting.

B. Proposals will be evaluated on the basis of the most advantageous price and other factors considered. The evaluation will consider the following criteria:

1. Qualifications: The professional and technical expertise and capabilities of the firm's staff and any other consultants used to supplement the firm's staff as related to the requirements of this project.

2. Experience: The history of the successful completion of projects with similar scope and requirements of this project.

3. Staff: Sufficient professional and support staff in place to successfully complete this project in an efficient and timely manner.

4. Cost Control: A demonstrated ability to provide project cost estimates that compare favorably with actual bid costs as well as ensuring that designs are prepared to reflect the financial resources available and that change orders are kept to a minimum.

5. Code Compliance: Knowledge of applicable codes, regulations, and laws governing public entities with emphasis on the New Jersey County College Statute 18A:64A-25 et seq.

6. Fee and Proposal: Compliance with all requirements of the RFP and an evaluation of the fees submitted.

VIII. PAYMENT

Payment will be made based on the percentage completed of the phase contract amount plus allowable reimbursable expenses per the schedule submitted. A MCC Claim Voucher and itemized invoice shall be submitted monthly to MCC's Director of Facilities Engineering for review, no later than the second Wednesday of the month. Final approval by MCC's Board of Trustees, who usually meet on the fourth Wednesday of each month, will be required prior to the release of the payment.

IX. SITE VISIT AND ADDITIONAL INFORMATION

Additional information may be obtained from the following:

Facility / Site:
Randolph Larate
Director of Facilities Engineering
732-906-7780
732-906-4199 fax

Proposal:
David Fricke
Director of Purchasing
732-906-2519
732-906-4236 fax