**Lebanon VA Medical Center  
Lebanon, PA 17042**

Design/Build (DB) Scope of Work   
**Replace Multi-Stack Heat Pumps Building 37  
595-25-102**

Construction Documents Ready by 90 days after Notice to Proceed (NTP) issued

Construction Complete by 280 days after NTP issued

Contract Specialist: Amanda Murphy

Contracting Officer: Elijah McIntosh

Contracting Officers Representative (COR) Matthew Donmoyer

* Provide all labor, materials, tools and equipment, and design-build services necessary for design and construction of a project described here in other specific tasks as further defined by this request for proposal (RFP) of Project No. 595-25-102 Replace Multi-Stack Heat Pumps Building 37. The project shall replace the failing multi-stack heat pumps in Building 37. The resultant contract of this procurement is to provide required design and perform construction of completed design work. Project shall be designed and completed in accordance with VA Criteria, NFPA (National Fire Protection Association), EPA (Environmental Protection Agency) requirements, and VA Specifications developed for the project.
* This Request for Proposal (RFP) document is intended to generally define the scope and design parameters to be included in the project. It is the Design Build (DB) Team’s responsibility to provide a complete set of design documents in a manner consistent with VA guidelines, specifications, and design standards in order to complete construction within the 280-day schedule.
* Offeror shall be prepared for a 280-day schedule as indicated below in the Project Schedule. Offeror may propose an alternate schedule, in addition to the 280-day schedule, which will be reviewed by the VA. Schedules shall indicate the following:

o The design period and provisions for VA reviews;

o Phasing plans for coordination of any site utility relocation work;

o Construction period services including:

* Mobilization
* Demolition
* Excavation
* Enclosure
* Interior Construction
* Procurement and installation of equipment
* Provisions for overtime or shift work shall be included in the contract offer.
* Site utilities, temporary stairs, roadway realignments, and other site differing conditions as encountered during construction.
* Equipment unloading, placing, inspection, testing, commissioning, and reports.

**PROVIDE:**

Professional Design/Build (DB) and healthcare planning services to include but not limited to:

* Site investigation – architectural, civil, structural, electrical, mechanical and any other engineering services as needed, environmental studies, and materials testing.
* Contract drawings and specifications for construction.
* Construction period services for DB A/E - review of shop drawing submissions, provide recommendations regarding contractor change proposals and requests for information (RFI), DB A/E shall visit site per VA's request, add to drawings as-built conditions from contractor's record drawings; DB A/E shall respond on site within a two-hour period when requested.
* Construction of the Building 37 Multi-Stack Heat Pumps Replacement, including all Management, Supervision, Labor, Transportation, Equipment and Materials and perform work to include demolition, general construction, alterations, mechanical and electrical work, and certain other items as required by project drawings and specifications to create a complete and useable facility.

**-- Project Scope --**

**GENERAL:**

Provide a full set of construction documents for a project that shall replace the failing multi-stack heat pumps in Building 37, at the Lebanon VA Medical Center. The offeror shall be prepared to conduct site investigations to verify existing conditions, all dimensions (existing and proposed) and constructability.

Offeror shall be prepared to make layout changes, calculations, and provide documentation to support their design to replace the multi-stack heat pumps per the specifications and drawings approved through the Design and Project Design Team (PDT) process.

**SPECIFICS:**

The project to replace the failing multi-stack heat pumps in Building 37 shall include the following:

* The project shall replace the existing Multi-Stack Heat Pumps in Building 37 with equivalent or new technology.
* DB A/E shall research the best options, including the latest technology in closed loop, water to water Geothermal heating and cooling.
* Replace deteriorated piping, valves, insulation, and appurtenances on remaining piping as necessary.
* Replace deteriorated wiring. Existing wiring can be used if it meets NEC standards.
* Do not use existing boxes or controllers as Junction Boxes. They all shall be removed.
* The new Heat pumps or equivalent or new technology shall be on a 4” concrete pad above the floor.
* Convert of all Bldg 37 HVAC controls to Distech Tridium, including providing a new JACE.
* Any factory controls where necessary to meet modern standards and must integrate via Bacnet/IP or Bacnet/MSTP into new Distech Tridium server.
* Safely remove and dispose of existing ground loop water contents and replace with newly treated water as per manufacturer recommendations.
* The new Heat Pumps or equivalent or new technology shall have stainless steel heat exchanger design.
* All work shall comply with the National Fire Protection Association (NFPA) 70 (National Electrical Code), 70B, 70E, 72, 99, 101, and 13, and Occupational Safety and Health Administration (OSHA) regulations.
* Everything that controls, consumes, or is capable of consuming electric shall have a label. Label shall have circuit identification, panel it is fed from, and where the panel is located.
* Layout of the space shall maximize staffing efficiencies. Installation will be required to occur during times that will minimize impact to the patients, staff and hospital in general.
* Utilities are to be separate from the medical center.
* Design bid deducts into the project to reduce the cost of the project by 20%.
* Collaboration between Design-Build team, COR and Lebanon VAMC Air Conditioning shop will be greatly encouraged during the project.

Construction shall be addressed in phases to allow operations to continue during construction. Heating and cooling shall be maintained for the building at all times. Phasing shall be determined during the 35% design review. Phasing must work within budget and allow the VA to continue operations at minimal interference.

The DB A/E is responsible for providing certified industrial hygiene services to perform asbestos survey investigations, bulk sampling, development of specifications and drawings, and construction period services. All designs shall be accomplished in accordance with VA guidelines and specifications, which are available on the Internet at <http://www.cfm.va.gov/til/>. DB A/E shall pay attention to NFPA, BOCA, VA Handbook 7610 space criteria and VA program guide PG-18-14.

The DB A/E is responsible for a full load test. It shall be performed to make sure fire pump controller is set up properly like an annual test.

SPECIAL NOTE: Be reminded that the VA guidelines are just a guide, and the project is not bound by them. If current healthcare trends dictate a different design approach is needed, we shall follow that approach. Also, it will be critical that all work minimize the duration of any outage of our fire suppression systems and that the contract shall be responsible for fire watches when any outage extends outside of duty hours or longer than eight hours since city pressure is not acceptable for coverage of an outage.

The DB A/E shall provide professional architectural and engineering and construction services for the project and is responsible for providing all services necessary for design of this project – i.e. mechanical, electrical, asbestos sampling and monitoring, structural, fire alarm and suppression, communications, cable tv, etc.

The DB construction contractor shall provide all Management, Supervision, Labor, Transportation, Equipment and Materials and perform work to include demolition, general construction, alterations, mechanical and electrical work, and certain other items as required by project drawings and specifications complete the Fire Pump Controllers Project.

**-- Site Investigations --**

***EXPECTATION:*** *The DB A/E shall make site visits as necessary to survey existing conditions.*

Make site visits as required to determine existing as-built conditions affecting this project. NOTE: Information including drawings and other documentation provided to the DB A/E is used as reference only. All additional references and specifications are available in VHA’s Technical Information Library at address: <http://www.cfm.va.gov/til/>. AutoCAD background drawings will be provided by the VA upon request. The DB A/E shall field verify all dimensions. The DB A/E shall field verify every aspect that relates to the project. Coordinate site visits with the Contracting Officer Representative (COR) as determined after award.

**-- Project Schedule --**

***EXPECTATION:*** *Submit review packages so they are received on the noted day*

**SUBMISSIONS:**

Submit review packages so they are received on the noted day (calendar days after NTP) or earlier:

Initial PDT Meeting 0 days

Design Development Documents (35%) 40 days

(PDT Meeting) 45 days

Design Development Documents (100%) 65 days

(PDT Meeting) 70 days

Construction Documents 90 days

(3 Sets of Drawings and Specifications)

Begin Construction on or before 100 days

Complete Construction on or before 280 days

Note: The issuance of the Notice to Proceed (NTP) for design will be at the first Project Design Team (PDT) Meeting. The Design-Build Team Contractor shall be required to attend and take minutes of each PDT meeting. Minutes shall be submitted electronically to the Project Manager and Contracting Officer within three calendar days of each meeting for approval and to be added to the official contract file.

**-- Design Requirements/Submissions --**

***EXPECTATIONS*:** S*ubmit complete review package in accordance with the following requirements and guidelines outlined in* [*http://www.cfm.va.gov/til/aeDesSubReq.asp*](http://www.cfm.va.gov/til/aeDesSubReq.asp) *Please pay specific attention to the schematic, design and construction submission requirements. As appropriate and depending upon the complexity of the design, the DB A/E may elect to delete individual submissions where not required (i.e. Do not address Site Development, Landscaping for interior renovation projects)*

**DELIVER:**

All design packages directly to the Contracting Officer and Project Engineer on the established dates to allow the VA to review. Include all information as follows and as outlined in the attachments for each submission. Information required for each submittal is outlined in Program Guide PG-18-15 Volume C November 2008. The manual is available at the following address: <http://www.cfm.va.gov/til/aeDesSubReq.asp>

**Area of Construction: Building 37, See Attachment A.**

**Design Development 35%: Attachment “B” 35% Submission Requirements**

* Requirements for the 35% Design Development Documents Submission.
* Define the design elements based on the presented option and submit all information required by the PG-18-15 (35% Design Development).
* Identify Working Drawings scope within the construction budget.
* Identify all design calculations.
* Identify impact of existing asbestos.
* Develop plans and marked up specifications to meet all applicable federal and state
* codes/requirements, including but not limited to PENDOT, OSHA, DER, EPA, NEC, NFPA 101 Life Safety Code.
* Identify all design calculations.
* Identify all existing utilities and utilities requirements.
* Identify all potential bid deduct alternatives.
* Identify all phasing requirements for construction.
* Develop Infection Control Risk Assessment (VA EC-43)

**Design Development 100%: Attachment “C” 100% Submission Requirements**

* Requirements for the 100% Design Development Documents Submission.
* Address all comments from the 75% review.
* Consolidate all necessary submittals by specification section on an Excel spreadsheet. Checklist to be utilized to track/monitor submittal process.
* Revise and update cost estimate.
* Preparation of project scope for CBD/ negotiated advertisement and account for any bid deduct alternatives developed in the 75% design submission
* Finalize all design calculations.
* Finalize all potential bid deduct alternatives.
* Finalize all phasing requirements for construction.
* Finalize impact of existing asbestos.
* Finalize Infection Control Risk Assessment (VA EC-43)
* Address all comments from the VISN Safety & Fire Protection Review.

**Construction Documents (CD): Attachment “D” Construction Documents Submission Requirements**

Submit a complete set of documents of all contract requirements. The Cover Page shall be submitted for approval signatures. If necessary, update and submit until approved by the VA.

**-- Construction Period Services --**

***Expectations:*** *Respond to submittals and other requests in a timely manner.*

**PROVIDE:**

* Review all shop drawing submissions and provide recommendations to the VA within five calendar days upon request.
* Make site visits on requests of the VA and prepare written reports to include agreed upon changes in design as determined necessary during the construction. Visits made based on errors and omissions in design shall be at no cost to the VA.
* Participate in partial and/or final acceptance inspections as scheduled and generate punch list items for completion. The punch list shall reference the contract documents for specific deficiencies (i.e. specification section, drawing detail, etc.)
* Prepare as-built drawings on original set with DB A/E’s stamp, based on record drawings that the contractor kept during construction. Transpose contractor’s as-built’s to AutoCAD 2007 – 2014 and in PDF form and provide a set of updated as-built’s on CD within 30 days to the COR.

**ATTACHMENT “A”**

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| **Bld 37-** **The A/E is responsible for checking all information and providing new solutions** |

**ATTACHMENT “B”**

**Design Development 35% Submission Requirements**

**Deliver** the following (labeled with 35% submission) and **includ**e this attachment as a checklist with your submission:

q **3 copies** of a narrative report forwarding the design develop 75% submission addressing items listed in the design requirements and any additional A/E recommendations. The report should include identifying potential bid deduct alternatives, recommended construction phasing based upon discussions with the program manager, and any design calculations or analysis.

q **3 sets** of all drawings updating all previous comments required by project and produced in AutoCAD 2007 – 2014 and in PDF form.

q **2 copies** of updated itemized cost estimate by spec section or trade (labor, material and equipment) and by VA criteria, NRM, Minor, BSER and BSEA.

q **3 copies** of custom edited VA Master Specifications of sections to be used for this project and a master submittal list identifying all the submittals required to be submitted by the contractor for review.

q **1 set** of all drawings and specifications, to send for **3rd party Life Safety Review**.

q **1 copy** of drawings in AutoCAD 2007 – 2014 and in PDF form and specifications in Microsoft Word 2007 or higher on (CD)

**ATTACHMENT “C”**

**Design Development 100% Submission Requirements**

**Deliver** the following (labeled with 100% submission) and **include** this attachment as a checklist with your submission:

q **3 copies** of a narrative report forwarding the design develop 100% submission addressing items listed in the design requirements and any additional A/E recommendations. The report should include identifying potential bid deduct alternatives, recommended construction phasing based upon discussions with the program manager and any design calculations or analysis.

q 2 **sets** of all drawings updating all previous comments required by project produced in AutoCAD 2007 – 2014 and in PDF form.

q **3 copies** of the proposed construction schedule.

q **2 copies** of final itemized cost estimate by spec section or trade (labor, material and equipment) and by VA criteria, NRM, Minor, BSER and BSEA.

q 2 **copies** of final edited VA Master Specifications of sections to be used for this project and a master submittal list identifying all the submittals required to be submitted by the contractor for review.

q **1 CD containing**

q All drawings in AutoCAD 2007 - 2014 and in PDF form.

q All specifications in Microsoft Word 2007 or higher on (CD)

**ATTACHMENT “D”**

***Expectation:*** *Submit complete contract documents for final review prior to Notice to Proceed for Construction. Continue to submit contract documents until all changes are incorporated by the DB A/E for final signature prior to Notice to Proceed for Construction. Upon approval duplicate copies as required.*

**Deliver** the following (labeled with Contract Documents Submission) and **include** this attachment as a checklist with your submission:

**Contract Document Submission Requirements**

q **1 copy** of the Cover Sheet (AutoCAD) for final VA signatures.

q **2 sets** of all drawings updating all previous comments required by project, produced in AutoCAD 2007 – 2014 and in PDF form **– for final VA review.** If approved final sets to be submitted with signed off cover sheet.

q **3 copies** of final project specification (two bounds; one loose) prepared in Microsoft Word 2007 or higher. Include a master submittal list in the specifications.

q **1 CD containing**

q All drawings in AutoCAD 2007 – 2014 and in PDF.

q All specifications in Microsoft Word 2007 or higher.

q Submittal Spreadsheet – identifying all the submittals required to be submitted by  
the contractor for review. The list shall be organized by division and specification.

q **Upon signature approval, provide three (3) sets of final Contract Documents (complete with VA signed Cover Sheet). Provide two (2), half (1/2) size sets of final drawings.**

**ATTACHMENT “E”**

**Specifications (All downloadable from the VA Technical Information Library (**[**www.cfm.va.gov/TIL**](http://www.cfm.va.gov/TIL)**) unless otherwise noted)**

**01 00 00 Lebanon General Requirements (attached)**

**01 35 26 Lebanon Safety Requirements (attached)**

**01 33 23 Shop Drawings, Product Data, and Samples**

**01 45 00 Quality Control**

**01 45 29 Testing Laboratory Services**

**01 91 00 General Commissioning Requirements**

**02 41 00 Demolition**

**03 30 00 Cast-in-place Concrete**

**07 84 00 Firestopping**

**23 05 11 Common Work Results for HVAC**

**23 05 12 General Motor Requirements for HVAC**

**23 05 41 Noise and Vibration Control for HVAC Piping and Equipment**

**23 05 93 Testing, Adjusting, and Balancing for HVAC**

**23 07 11 HVAC Insulation**

**23 08 00 Commissioning of HVAC Systems**

**23 09 23 Direct-Digital Control System for HVAC (attached)**

**23 25 00 HVAC Water Treatment**

**23 81 46 Water-Source Unitary Heat Pumps**

**23 81 49 Ground Source Heat Pumps**

**26 05 11 Requirement for Electrical Installations**

**26 05 19 Low-Voltage Electrical power Conductors and Cables**

**26 05 26 Grounding and Bonding for Electrical Systems**

**26 05 33 Raceway and Boxes for Electrical Systems**