Request for Proposal

John Paul Jones Arena
Heat Plant Improvements

September 11, 2013

A VASCUPP Member Institution
Issued by
Procurement and Supplier Diversity Services
Charlottesville, Virginia
# John Paul Jones Arena – Heat Plant Improvements

Request for Proposal #DM091113  
September 11, 2013

## Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Overview of the RFP Process</td>
<td>1</td>
</tr>
<tr>
<td>II. Background Discussion and Goals of the University</td>
<td>3</td>
</tr>
<tr>
<td>III. Scope of Goods and Services</td>
<td>4</td>
</tr>
<tr>
<td>IV. Basis of Selection</td>
<td>46</td>
</tr>
<tr>
<td>V. Contents of the Proposal</td>
<td>46</td>
</tr>
<tr>
<td>VI. Information about this RFP</td>
<td></td>
</tr>
<tr>
<td>A. Procurement Schedule</td>
<td>55</td>
</tr>
<tr>
<td>B. Issuance of RFP and Questions</td>
<td>55</td>
</tr>
<tr>
<td>C. Preproposal Conference</td>
<td>55</td>
</tr>
<tr>
<td>D. Proposal Deadline</td>
<td>56</td>
</tr>
<tr>
<td>E. Oral Presentations and Negotiations</td>
<td>57</td>
</tr>
<tr>
<td>F. Communications</td>
<td>57</td>
</tr>
<tr>
<td>G. Formation of the Agreement with the Selected Firm</td>
<td>58</td>
</tr>
<tr>
<td>H. Provisions Deemed Included in the Proposal</td>
<td>59</td>
</tr>
<tr>
<td>I. Rejection of Proposals</td>
<td>60</td>
</tr>
<tr>
<td>J. Virginia Freedom of Information Act</td>
<td>61</td>
</tr>
</tbody>
</table>

Attachment 1 - Mandatory Contractual Provisions | 62 |
Attachment 2 - Preferred Contractual Provisions | 68 |
Attachment 3 - Procedure for Resolution of Contractual Claims | 77 |
Attachment 4 – Office of the VP for Management and Budget’s Request for Commitment | 79 |
Attachment 5 – Pricing Schedule | 80 |
This Request for Proposal (RFP) has been posted on Procurement and Supplier Diversity Services web site for your convenience. Addenda and attachments are posted if issued. The RFP can be downloaded at this web site: [http://www.procurement.virginia.edu/pagerfp](http://www.procurement.virginia.edu/pagerfp). It is the firm’s responsibility to ensure that the latest version of the entire RFP and related links are reviewed prior to submission of a proposal. We encourage you to check the web site frequently for any changes prior to the due date. Call (434) 924-1346 if you have trouble accessing the RFP from the web. For questions about the content of the RFP, contact the buyer listed in Section VI, Information about this RFP. Additional information can be found on Procurement and Supplier Diversity Services web site: [http://www.procurement.virginia.edu/pagehome](http://www.procurement.virginia.edu/pagehome)

I. Overview of the RFP Process

The Rector and Visitors of the University of Virginia (the “University”), a Virginia public corporation, seeks experienced firm(s) to perform two separate projects, which consist of furnishing and delivering two new water tube heating boilers and/or furnishing, delivering, and supervising the installation of four replacement burner controls in the John Paul Jones Arena (JPJ), located at 295 Massie Road, Charlottesville, Virginia 22903. Firms are encouraged to submit proposals for any/all components of the two projects.

As part of this project, the University commissioned Facility Dynamics Engineering to draft specifications and drawings for the bent tube water type heating boilers and the replacement of the four existing burner controls. These specifications have been incorporated into the Scope of Goods and Services for this RFP. [Click here to view drawings.](#)

This RFP is part of a competitive procurement process which helps to serve the University's best interests. It also provides firms with a fair opportunity for its services to be considered. The process of competitive negotiation being used in this case should not be confused with the different process of competitive sealed bidding. The latter process is usually used where the goods or services being procured can be described precisely and price is generally the determinative factor. With competitive negotiation, however,
price is not required to be the determinative factor, although it may be, and the University has the flexibility it needs to negotiate with firms to arrive at a mutually agreeable relationship.

For ease of reference, each firm receiving this RFP is referred to as a "firm" and the firm selected to provide services for the University is referred to as the "Selected Firm." This RFP states the instructions for submitting proposals, the procedure and criteria by which a firm may be selected, and the contractual terms by which the University proposes to govern the relationship between it and the Selected Firm.

It is the policy of the Commonwealth of Virginia and the University to contribute to the establishment, preservation, and strengthening of small businesses and businesses owned by women and minorities, and to encourage its participation in State procurement activities. The Commonwealth and the University encourage firms to provide for the participation of small businesses and businesses owned by women and minorities through partnerships, joint ventures, subcontracts, or other contractual opportunities.

The University’s Energy & Utilities Department has wide responsibility for minimizing energy use and for implementing the energy management program. The program seeks to both achieve energy savings, and minimize the environmental impact of providing services.

The University’s energy management program is a comprehensive program that considers all opportunities for achieving energy savings including replacing building chillers and boilers with central plant connections, the design and construction of energy conservation measures, the implementation of energy saving operation and maintenance procedures, the utilization of an extensive university-wide building energy management system, and a university-wide commitment to modifying local behavior to decrease energy consumption.

The University’s Energy & Utilities Department administers and promotes sustainability initiatives related to the construction, operation, maintenance, and use of the facilities and
The overarching goal of the program is to reduce the University’s carbon footprint and advance University-wide sustainability by fostering stewardship of natural resources and the environment. This goal is achieved by promoting sustainable design of new facilities, retro-commissioning of existing buildings, and promoting sustainability through education and outreach. The program focuses on four major areas: energy and water conservation, storm water management; recycling and reducing waste; and education and outreach. Visit the University’s Newcomb Hall Sustainability Kiosk at [http://buildingdashboard.com/clients/uva/newcomb/](http://buildingdashboard.com/clients/uva/newcomb/)

The John Paul Jones Arena went into operation in 2006 with district heating and chilling systems. The district heating system was expected to support surrounding athletic precinct facilities. The resulting system is oversized leading to inefficient operation. Installing two new low load hot water boilers and downsizing the existing hot water boiler burners will better match the boiler capacity to the load which will result in reduced fuel and maintenance costs.

II. Background Discussion and Goals of the University
When Thomas Jefferson founded the University in 1819, he intended it to be nothing less than a world-class institution of higher learning. Jefferson’s spirit lives on – not only in the Rotunda and Academical Village he designed, and which remain treasures of American architecture, but in the University’s standing as a leader in education, research, and community service.

The John Paul Jones (“JPJ”) Arena went into operation 2006 with district heating and chilling systems. The district heating system was expected to support surrounding athletic precinct facilities. The resulting system is oversized leading to inefficient operation. Installing two new low load hot water boilers and downsizing the existing hot water boiler burners will better match the boiler capacity to the load which will result in reduced fuel and maintenance costs.
In support of its mission and in an effort to maintain the highest quality services for its customers, the University and its Department of Facilities Management seek qualified firm(s) to perform **two separate projects** at the JPJ Arena Heat Plant consisting of furnishing and delivering two new package bent tube type heating boilers and/or furnishing, delivering, and supervising the installation of the replacement burner controls for each of the four existing Unilux boilers with combination gas-oil burners. All incidental work related to the start-up and commissioning of the new equipment, whether specifically defined or implied, that may be required will be performed by the Selected Firm(s) and is included in the scope of this work. Firms are encouraged to submit proposals for any/all portions of the project(s) their firms are capable of performing.

Note: The University reserves the right to award to different Selected Firms respectively to provide any part of the goods and/or services discussed in this RFP.

The University invites firms responding to this RFP to submit proposals that present different options for provision of the Goods and Services, and/or alternate creative proposals. The University will, in its sole judgment, consider such options and/or alternatives as long as the functionality and minimum requirements of the University are met.

III. **Scope of Goods and Services**

It is the University's intent to enter into an Agreement(s) with the Selected Firm(s) for two separate JPJ Arena Heat Plant Improvement projects, consisting of furnishing and delivering two bent tube water tube type heating boilers and/or furnishing, delivering, and supervising the installation of the replacement of the four burner controls on the existing Unilux Boilers, to include those goods and services necessary to help the University achieve its goals as outlined in this RFP. In order to achieve this goal the Selected Firm(s) may be requested to provide those goods and services outlined in this section.
The Selected Firm(s) will be responsible to ascertain that its equipment will meet the specifications provided and supply adequate documentation showing dimensions, and full details to the University for proper operations and maintenance of the boilers and burner controls. Proposals submitted on equal products must include product data and/or specification sheets and other full descriptive details. Only data, specifications, drawings, and details submitted with proposal documents will be used in the comparative evaluation process by the University. Failure to submit adequate required documentation or note in detail any exceptions to the specifications will be sufficient grounds for rejection of any proposal. Any exceptions from the specifications must be clearly identified and fully described in performance and function and included with the proposal submission documents. All material that is specified to be used can be purchased by any boiler/burner company.

The Selected Firm(s) must meet the following minimum requirements for each separate project:

A. Project One: Bent Tube Water Tube Type Heating Boilers
   1. Factory assembled and wired Water Tube Heating Boilers with performance criteria and components as indicated, complete and ready for continuous and satisfactory operation, including but not limited to:
      a. Heat Exchanger.
      b. Forced Draft Natural Gas Burner.
      c. Combustion Control and Burner Management System.
      d. Wiring.
      e. Fuel piping, regulators, safety, and operating controls.
   2. Submittals Required for Evaluation of Proposals:
      a. Product Data: For the boilers and components to be provided by the Selected Firm(s) to include; performance and emissions data, operating characteristics, furnished specialties, and accessories.
      b. Exception List: Include exceptions to the specifications provided in the RFP, and any alternatives or substitutions proposed.
c. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.

d. Installation, Operation and Maintenance instructions may be provided with proposals as supporting documentation. This documentation will be required to be provided by the Selected Firm(s) prior to the University’s installation of the boilers.

e. Warranty information.

3. Submittals required by the Selected Firm(s), but not limited to:
   a. Source quality-control test reports.
   b. Field quality-control test reports.
   c. Other Informational Submittals:
      i. American Society of Mechanical Engineers (ASME) "H" Stamp Certification and Report: Submit "H" stamp certificate of authorization as required by authorities having jurisdiction, and document hydrostatic testing of piping external to boiler.
      ii. Startup service reports.
   d. Wiring diagrams showing all factory and field wiring for power and controls.
   e. Installation, Operation and Maintenance instructions.
   f. As-built wiring diagrams showing any field modifications to the submitted documents.
   g. Warranty documentation.

4. Quality Assurance
   a. Electrical Components, Devices, and Accessories: Listed and labeled as defined in National Fire Protection Association (NFPA) 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
   b. ASME Compliance: Fabricate and label boilers to comply with ASME Boiler and Pressure Vessel (B&PV) Code.
c. Underwriters Laboratories (UL) Compliance: Test Boilers for compliance with UL 795 Commercial-Industrial Gas Heating Equipment as applicable. Boilers will be listed and labeled by a testing agency acceptable to authorities having jurisdiction.

5. Warranty

a. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace heat exchangers damaged by thermal shock and boilers that fail in materials or workmanship within specified warranty period.

i. Warranty Period for Drums, Tubes, Cabinets, and Burner: Minimum of one year from date of Substantial Completion, pro rata.

ii. Warranty Period for Pressure Vessel: Minimum of 25 years from date of Substantial Completion for thermal shock.

6. Available Manufacturers: Basis of Design Manufacturer is Unilux; other manufacturers include, but are not limited to, Precision Boilers, Bryan Steam, and Cleaver Brooks. Selected Firm(s) must state any exceptions to these specifications in its proposal.

7. Boiler Schedule:

<table>
<thead>
<tr>
<th>BOILER SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILER ID</td>
</tr>
<tr>
<td>BOILER TYPE</td>
</tr>
<tr>
<td>DESIGN TEMPERATURE - DEGREE F</td>
</tr>
<tr>
<td>DESIGN PRESSURE - PSI</td>
</tr>
<tr>
<td>OPERATING LEAVING WATER TEMPERATURE - DEGREE F MAXIMUM</td>
</tr>
<tr>
<td>OPERATING ENTERING WATER</td>
</tr>
<tr>
<td>BOILER SCHEDULE</td>
</tr>
<tr>
<td>------------------</td>
</tr>
<tr>
<td>BOILER ID</td>
</tr>
<tr>
<td>TEMPERATURE - DEGREE F</td>
</tr>
<tr>
<td>OPERATING PRESSURE PSI</td>
</tr>
<tr>
<td>DESIGN WATER FLOW - GPM</td>
</tr>
<tr>
<td>DESIGN WATER FLOW - GPM</td>
</tr>
<tr>
<td>MINIMUM WATER FLOW - GPM</td>
</tr>
<tr>
<td>HEAD LOSS AT DESIGN WATER FLOW - FT. H2O</td>
</tr>
<tr>
<td>DESIGN OUTPUT CAPACITY - BTU/HR</td>
</tr>
<tr>
<td>FUEL 1 TYPE</td>
</tr>
<tr>
<td>SUPPLY PRESSURE - PSIG</td>
</tr>
<tr>
<td>HEATING VALUE</td>
</tr>
<tr>
<td>MAXIMUM FIRING RATE</td>
</tr>
<tr>
<td>MINIMUM FIRING RATE</td>
</tr>
<tr>
<td>TURNDOWN</td>
</tr>
<tr>
<td>EMISSION GUARANTEE</td>
</tr>
<tr>
<td>EFFICIENCY AT 180 DEG F LEAVING WATER TEMPERATURE, STATED MAXIMUM FIRING RATE</td>
</tr>
<tr>
<td>CODE COMPLIANCE</td>
</tr>
<tr>
<td>RELIEF VALVE SETTING</td>
</tr>
<tr>
<td>ELECTRICAL</td>
</tr>
</tbody>
</table>
8. **Pressure Vessel Design – Heat Exchanger:**
   
a. Boiler will be of the dual drum industrial style bent tube type with water and furnace.

b. The fireside of the boiler will have longitudinal gas passes, traveling the full length of the boiler, separated with tangential water wall tubes to insure maximum linear gas travel, increased gas side velocities and improved gas side heat transfer coefficients. Products of combustion will flow horizontally through the boiler across boiler tubes.

c. All tubes will be exposed to radiant luminous heat in the boiler furnace to create high water flow rates at all loads and substantially increase heat transfer in the convection zones outside the furnace.

d. Boiler tubes will be Standard Grade of seamless carbon tube steel SA 178 Grade A and will be no less than 1 ¼ inch diameter, .095 wall thicknesses, made of only domestic U.S. steel and will be easily removed and replaced if necessary without the need for any welding or rolling. The tubes directly beneath the flue gas outlet will be easily removable without the need to disconnect, move or modify the flue outlet cover arrangement or raise/remove any part of the roof panels.

e. Boiler vessel design will insure balanced flow through boiler.

9. A large down comer will be located external to the boiler housing. This down comer will provide natural internal circulation without requiring external pumping sources.
10. Boiler will have an air vent connection located at the highest point of the vessel and one hand hole type inspection opening at each end of each drum with yolk type covers. Threaded pipe type openings will not be accepted. Lower drum will have a 90 degree threaded drain opening at the rear of the vessel at the lowest point as standard.

11. The furnace heat release will not exceed 45,000 Btu/hour per square foot of heating surface exposed directly to the radiant flame. For boilers with heat releases greater than 45,000 Btu/hour per square foot of heating surface, then a minimum of five square feet of total heating surface per boiler horsepower will be required. The furnace volumetric heat release will not exceed 67,000 Btu/hour per cubic foot of furnace volume.

12. Housing and Jacket Construction:
   a. The boiler base will be constructed of heavy gauge steel. Base will be poured with one layer of 1,900 degree F insulating refractory to cover all base plate steel contact points. An additional two inch layer of 2,700 degree castable refractory will then be poured covering the insulating refractory. The high temperature refractory will have no contact points with the boiler base steel.
   b. The rear target wall will be of industrial grade heavy-duty construction. Wall will be constructed of no less than four inches of 1,900 degree F insulating poured refractory, one inch of high temperature mineral board and four inches of 2,700 degree F castable refractory. The high temperature refractory will have no contact points with the boiler furnace wall steel. Total thickness of the rear furnace wall will be not less than nine inches. Stainless steel stays will be permanently welded to the steel rear wall enclosure in intervals of at least every ten square inches. Rear wall will be warranted against “hot spotting” failure on the outside enclosure for a period of not less than five years. Rear wall will incorporate burner observation sight glass with shutter.
c. The front wall will be constructed of the same industrial grade materials as the rear wall described above. Total wall thickness will be no less than seven inches. Blanket or fiber wool insulated type front and rear walls are not acceptable.

d. Boiler inner casing will be fabricated of not less than 11 gauge reinforced steel. Entire boiler casing will be comprised of “bolt on” type panels. Each panel will be independently insulated with a minimum of three inches of 2,400 degrees F fiber wool insulation. Each panel will be easily removable and replaceable with standard hand tools.

e. Roof panels will be constructed of not less than 11 gauge reinforced steel and insulated with not less than one inch of high temperature insulating fiber board. Board will be affixed to the roof panel by stud nails and one and one-half inch collar stays at four inch seam intervals. Roof panel will be supplied with a factory installed round flanged smoke outlet with top outlet position located on the centerline of the boiler at the rear.

f. Entire inner housing will be fully sealed to insure that the products of combustion are contained within the boiler up to five inch water column (w.c.) pressure.

g. Boiler outer jacket will be constructed of 20 gauge insulated steel panels. Overall boiler inner/outer housing design will allow for a two inch insulating air space between the inner and outer panels. Outer panels will be finished with a rust resistant, polyester paint impregnated powder coat finish.

h. The overall heat losses through boiler housing and jacket panels will not exceed 0.50% of maximum input rating. Outer skin temperatures of the jacket panels will be no greater than 20 degrees F above ambient room temperature.

i. The combustion chamber will be easily accessed via a hinged, tapered refractory burner plate or through a rear access door for
inspection and required maintenance. All boiler and jacket panels will be easily removed and replaced, using only standard hand tools, for access to all boiler tube surfaces.

13. Boiler Trim and Controls
   a. Will comply with the requirements of ASME CSD-1 and FM Global (i.e. an Engineering Guideline for burner management systems by an insurance company used to prevent property loss due to fire and explosion).
   b. Safety valve(s) will be in accordance with the appropriate ASME code and local requirements.
   c. Boiler operating trim will consist of a minimum of the following: Operating, Modulating, High Limit aquastat control with well to include a manual reset; independently mounted three inch dial thermometer and a four and one-half inch pressure gauge; and probe type Low Water Cutoff with manual reset.
   d. Boiler controls will be factory piped and wired. Operating, modulating, and High Limit controls will be furnished as a flush mounted factory control package and affixed to the front of the boiler in plain view.
   e. All trim and control wiring will be routed to the clearly marked strip in the panel.

14. Natural Gas Burners
   a. Preferred Manufacturers/Model Numbers includes, but are not limited to, Power Flame CMAX and Riello RLS.
   b. Codes: Each burner will be listed by UL and will bear the appropriate UL label. In addition to the UL requirements, all equipment and installation procedures will meet the requirements of ASME CSD-1, NFPA 85 series, and FM Global. Each burner will be designed and constructed as an integrated combustion system package and will be factory fire tested.
   c. Burner Schedule
<table>
<thead>
<tr>
<th>Boiler Number</th>
<th>Boiler 5 and 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel 1</td>
<td>Natural Gas, 1000 Btu/Cubic Foot, 0.6 SG</td>
</tr>
<tr>
<td>Fuel 1 Maximum Firing Rate</td>
<td>5400 Cubic Feet per Hour (cfh) Natural Gas, 5,400,000 Btuh</td>
</tr>
<tr>
<td>Fuel 1 Minimum Firing Rate</td>
<td>700 cfh Natural Gas, 700,000 Btuh</td>
</tr>
<tr>
<td>Fuel 1 Gas Train Inlet Pressure</td>
<td>2 psig</td>
</tr>
<tr>
<td>Fuel 1 Burner Combustion Efficiency at maximum firing rate and 300 degrees F stack temperature</td>
<td>85 percent</td>
</tr>
<tr>
<td>Fuel 1 Emissions Requirements</td>
<td>NOx &lt;30 ppm at 3% O2 at maximum firing rate</td>
</tr>
</tbody>
</table>

d. Combustion Head:
   i. Each burner will be of welded steel construction and have a baked on powder coat finish.
   ii. Incorporate a heat and corrosion resistant flame retention diffuser.
   iii. The gas firing head will include a series of gas injection spuds that distribute the fuel evenly around the periphery of the diffuser assembly. A gas annulus will provide a secondary layer of fuel to create a staging effect to achieve maximum fuel/air mixing and minimal emissions.
   iv. The burner combustion head will have a full five year replacement warranty.
e. Ignition System:
   i. The burner ignition system will utilize natural gas as the fuel source. The gas pilot system components will include spark ignited pilot assembly, 6,000 Volt ignition
transformer, pilot solenoid valve, pilot gas pressure regulator, and manual gas shutoff cock.

ii. The flame proving system will incorporate a Ultra-Violet flame detector, which will monitor both the pilot and main flames.

f. Fuel Control Trains
   i. The gas train will be designed for the specific minimum and maximum fuel flow rates and will incorporate UL approved components supplied by the burner manufacturer to include, but not limited to, the following:
      2. Main gas pressure regulator – tight shutoff type.
      3. Automatically operated main gas valve.
      4. Interlock switch.
      5. Automatically operated auxiliary gas valve.
      8. Burner manifold gas pressure gauge and gauge cock.

15. Burner Management and Combustion Control System (Boiler Control System) (BCS)
   a. Preferred Manufacturers include, but are not limited to: Siemens LMV3x, and Fireye NX6100, Integrated Burner Management and Parallel Positioning Combustion Control Systems.
   b. Submittals:
      i. Control Wiring Diagrams to include wire and terminal identification codes. All field and panel wiring will be identified.
ii. Hardware Documentation for all components to include specifications, operation, and installation instructions.

iii. Operation and Maintenance Manuals.

iv. Recommended spare parts list.

c. Each unit will be equipped with a factory wired boiler control system mounted in a separate NEMA 1 panel (factory mounted or shipped loose for field mounting on the side of each boiler and field wiring to all necessary points).

d. BCS will be factory equipped with a pre-configured Programmable Logic Controller (PLC) and Human Machine Interface (HMI).

e. Control Panels:

i. Enclosure will be NEMA 1, and may be floor or frame mounted.

ii. Provided with a cooling system “as needed” to adequately cool the components in an operating environment at temperatures up to 120 degrees F.

iii. Provide a continuous-duty single phase, surge protection system.

f. Major System Components will include at a minimum:

i. Programmable Controller.

ii. Touch screen monitor.

iii. Communication Network.

iv. Various controller input/output modules.

v. Temperature Sensors.

vi. Micro-Processor based flame safeguard control to include the chassis, display module, programmer, amplifier, wiring sub-base, and flame scanner.

g. BCS Will Provide the Following Minimum Major Functions:

i. Automatic sequencing of the boiler through stand-by, pre-purge, pilot flame establishing period, main flame establishing period, run, and post purge.
ii. Flame proving and lockout on flame feature during pilot flame proving, main flame proving, or run.

iii. Low fire damper/valve position for flame ignition trials.

iv. Full modulation control of the fuel and combustion air.

v. Utilization of solid state controls and sensors for various control functions such as modulating control and O2 trim of algorithm Proportional-Integral Derivative (PID) type.

vi. High and low limit alarms and shutdowns will include, but are not limited to, include:

1. Automatic Reset Limits: high water temperature, fuel safety valve limits, and draft control interlock (new draft control, existing combustion air intake louver contacts in series).


h. Touch Screen Graphical Operator Interface and Monitoring to Include at a Minimum:

i. Manual control of the boiler-firing rate utilizing control screens on the HMI to increment and decrement the firing rate.

ii. On-screen: indication of the burner management/flame safeguards control status and diagnostics, real-time display of all connected process parameters, display of system alarms and faults, recommendation for troubleshooting fault conditions, water temperature indication and alarms, and alarm/fault history.

i. Terminals will be provided for hardwired remote enable/disable, firing rate control (when set for” remote” mobilization), and summary alarm for any manual reset safety.
j. BCS will include at a minimum, tamper resistant control logic, password protection, stack flue gas and shell (water) temperature sensing, remote modulation or firing rate set point control, assured low fire cut-off, and assured start permissive safety interlocking.

k. BCS will provide the following minimum safety provisions:
   i. Integrated Burner Management.
   ii. Examine all load terminals to assure it is capable of recognizing the true status of the external controls, limits, and interlocks. If any input fails this test, the burner management system will lockout on safety shutdown.
   iii. Closed-loop logic test will verify integrity of safety critical loads (ignition, pilot, and main fuel valves) and will lockout on safety.
   iv. Pre-ignition interlocks (i.e. fuel valve proof of closure) and flame signal will be checked during stand-by and pre-purge.
   v. Dynamic checking of the flame signal amplifier will be provided. The control flame signal amplifier will recognize a no flame signal during this dynamic amplifier check.
   vi. Safe start checks to include monitoring of the flame signal during stand-by.
   vii. Check high and low fire switches for proper sequencing.
   viii. Tamper-proof purge timing and safety logic.
   ix. Integrated boiler controls to include at a minimum: operating and modulating controls, primary low water cut-off, password protection of the Programmable Controller Logic and the Parallel Positioning Control System.

l. BCS will provide the following annunciation and diagnostics at a minimum:
   i. Active alarm annunciation.
   ii. Historical alarm information for on screen display.
iii. Detect and isolate an alarm and report internal circuit faults.

iv. English text description of the system fault and troubleshooting procedures.

v. Low water shutdown alarm.

vi. Dynamic self-checking.

vii. Electrical and Environmental:

1. Supply voltage: 120 Volts Alternating Current (VAC) (+10%/-15%) 50 or 60 Hz.


3. Operating Temperature Limits: 32 to 130 degrees F.

4. 85% Relative Humidity (RH) Continuous, non-condensing, humidity.

5. 0.5 Gravity (G) continuous vibration.

m. Field Devices – All New Equipment

i. All gas valves and safety devices will be provided by the burner firm for the stated inlet pressure and flow requirements.

ii. Available Manufacturers: include, but are not limited to, Fisher and Maxitrol.

iii. Temperature switches with Operating and Manual Reset Limits.

iv. Draft fan air flow switch will be furnished with the burner.

v. Flue gas recirculation control valve and piping will be provided, when required for emissions compliance.

vi. Temperature Sensors: precision Resistive Thermal Device (RTD) or thermocouple, at the option of the Selected Firm(s).

vii. Actuators for the positioning of fuel and air will be listed as part of the system, and will include position feedback and
better than one percent positioning accuracy and 
repeatability in response to the control signal. Linkages for 
connection of the actuators to final control elements will be 
furnished by the manufacturer of the Burner Management 
and Combustion Control System and designed for the 
specific valve or damper they are connected to.

n. All BCS’s wiring will be in accordance with the National 
Electrical Code and all local electrical codes.

o. BCS component functions will include at a minimum the 
following:

i. Burner Management controller: will provide sequencing 
logic to meet FM Global/UL/NFPA approval body 
requirements.

ii. Touch Screen Graphical HMI: will provide user interface 
to the control system, boiler overview screen with 
connected boiler parameter readouts, Burner Management 
Control status screen, alarm banners, diagnostic screens for 
fault troubleshooting, alarm history screen, system firing 
rate screen, and system configuration screens.

iii. Communication Network: will provide communication 
between the PLC and other peripheral devices.

iv. Various Programmable Controller Input/output modules: 
will provide interface for discrete powered and/or isolated 
relay signals, as well as for analog signals, from and/or to 
other input/output devices.

v. Stack Temperature Sensor: will measure and transmit a 
signal to the PLC in relation to the boiler exit flue gas 
temperature. The signal will be used as an indication and 
in the calculation of the boiler efficiency. The signal would 
also be used to shut the boiler down on high stack 
temperature.
vi. Water Temperature Transmitters: will provide an analog signal to the PLC for indication of the boiler leaving water temperature; utilized for an on/off and modulating controls of the burner.

p. Each control system will include a control module capable of communications between the boiler’s PLC system and other devices, as-needed, via Modbus Remote Terminal Unit (RTU) or other approved communication protocol.

q. Building/Plant Automation System interface will be compatible with the existing Automated Logic BACnet based system (i.e. The University’s Facility Management System). Acceptable communication protocols include Modbus RTU and BACnet. BCS firm will provide point mapping database as required for supervision of the following points. In addition to providing a point mapping database, the scope of work of the resulting Agreement from this RFP includes coordination with the selected control system integrator and all associated programming required for the burner management/combustion control integration into the existing system. Programming of the Facility Management side of the interface will be by Automated Logic the University’s Facility Management System firm.

r. Each boiler will have:
   i. Status – On-/Off.
   ii. Water Supply/Return Temperature – degrees F.
   iii. Firing rate.
   iv. Stack Temperature – degrees F.
   v. Stack O2 – percent.
   vi. Low O2 Alarm Status.
   vii. Local/Remote Temperature Control Status.
   ix. Alarm Status (each manual and auto reset alarm and limit).
x. Forced draft fan drive speed – Hz or rpm.
xi. Boiler Efficiency.
xii. Water flow and Btu.
xiii. Oil Flow and Total Oil per boiler.
xiv. Gas flow and Total Gas per boiler.
 xv. Supply Temperature.
xvi. Lead Boiler – 1, 2, 3, 4, 5, or 6.
xvii. First Lag Boiler - 1, 2, 3, 4, 5, or 6.
xviii. Second Lag Boiler- 1, 2, 3, 4, 5, or 6.
s. Provide one spare fuse for each type and rating used.


a. Each boiler will be equipped with a sequencing type furnace draft controller, the basis of design is Hays Cleveland Model C-07720, but is not limited to this manufacturer and model number. The draft controller (controller) will be microprocessor based for all control functions and must be approved for the application.

b. The controller will have the capability to perform the following:
   i. An alpha-numeric operator displays for all tuning and scaling operations and for display of variables (i.e. draft pressure).
   ii. The operator interface will include four pushbuttons on the front panel for all operator functions to include, but not limited to, alarm acknowledgement, selection of displays, and control functions. The displays will include set points, tuning parameters, and operational values (i.e. flue gas temperature, draft pressure, and alarms).
   iii. Sense the draft pressure by direct connection to the furnace tap, and include, a sending element that is capable of measuring positive or negative pressures within the range of 0 +/- 2 inches w.c.. The sensing system will be temperature compensated and produce a signal that is
directly proportional to the differential pressure between atmospheric and furnace pressure.

iv. Field configurable for selecting the sequence mode from non-sequencing to sequencing with post and pre-purge capability and for positive or negative set point control applications. Pre- and Post-Purge capability will have adjustable time delays of 20 to 120 seconds selectable from the front panel.

v. Retransmit the draft pressure as 4-20 milliamps Direct Current (mA DC) signal for recording or remote display and will have Modbus (selectable as 9600 or 19200 baud rate) communications as standard.

vi. Include an electronic draft indicator. The draft pressure will be indicated on the two line vacuum fluorescent display for the range.

vii. Enclosure will be NEMA 1, and include a closed/auto/open selector switch and all necessary relays for full programming and control actions. The closed position will bypass all automatic functions and close the damper. The open position will open the damper and permit the boiler to be operated in the case of controller malfunction or boiler maintenance. In the automatic position, the controller will maintain the desired setting to within 0.01" w.c. by varying the position of the draft damper. The controller will include proportioning band adjustment and will filter out the furnace pulsation without loss of sensitivity.

viii. Circuit will interconnect with the combustion safeguard and limit control circuits governing burner operation, to provide fixed damper opening for pre-purge and stable ignition, full modulation of damper during firing, and damper closure after boiler shut down. Burner will shut
down when switch is moved from automatic. The open damper switch will provide a means to fully open the damper without interrupting firing.

ix. Integral UL approved cutoff switch, preferred manufacturer is Hays Cleveland Model AFS-288-112, but is not limited to this manufacturer and model number, that will shut down the system in the event of an unsafe draft/pressure condition in the furnace extending over eight seconds. The alarm will also be indicated on the display. After safe draft is reestablished, the combustion system will recycle from the original starting position. The cutoff point of the minimum draft switch will be adjustable from 0.05” ± 0.02 " w.c. to the maximum operating range.

x. Integral flue gas temperature indicator and transmitter that meet International Society of Automation (ISA) Sequence M alarm function requirements. A Type J thermocouple with 100 ft. of cable will be provided and remote mounted by the Selected Firm(s). Accept the input from the thermocouple directly and display the temperature on the front panel vacuum fluorescent display. Ability to set the alarm temperature, provides a flashing display of temperature alarms, and has two alarm contact outputs. Include local reset, remote reset, or automatic alarm reset capability.

xi. Dual fail-safe Single Pull Double Throw (SPDT) contacts for remote alarming or indication. This temperature will retransmit as a 4-20 mA DC signal within the range of 32 F to 1000 F. The controller will display temperature in degrees F via front panel operation. Thermocouple failure will result in a fail-safe response by immediately going to the maximum output of 20 mA DC.
xii. Output will be switched from 117 VAC to an electric actuator for control of the draft damper. Include 24 Volts Direct Current (VDC) control output capability as an option.

xiii. The actuator will be a linear actuator with instantly reversible jackscrew and rugged construction with sufficient power to raise and lower a damper equal to a 150 lb. weight continuously without overloading. The mechanism will be totally enclosed in a dust-tight cabinet. Basis of Design is Hays Cleveland Model 9142-0101A, but is not limited to this manufacturer and model number.

xiv. The actuator will be equipped with adjustable “start positions” switches. The actuator will have integral limit and purge position signal switches and will be equipped with switches permitting selection of the damper position for purge (minimum 20 percent damper open). This feature will allow the full range of the damper opening to be utilized during the firing cycle and permit adjustment of the purge position to provide maximum opening of the damper without adverse effect on pilot operation. All necessary linkage, including adjustable clevises, pipe adapters, and damper lever arms will be designed for the particular use of the equipment to be installed, to provide free, smooth and rigid operation, but eliminate unnecessary play and lost motion.

17. Package Water Tube Heating Boilers and Burners Start-Up and Commissioning Minimum Requirements:

Provide a copy of the burner start-up checklist to the University’s CA or designated representative and the testing plan a minimum of 30 days prior to start-up and testing.
Furnish personnel and equipment to include a manufacturer’s representative on-site to perform the following; boiler equipment installation inspection, start-up, adjustments, and tests:

a. Boiler Pressure Vessel, Refractory and Combustion Chamber.
b. Stack and Draft Controls.
c. Fuel metering systems.
d. Flame safeguard.
e. Limit action.
f. Flame failure.
g. Power failure.
h. Boiler water level safety controls.
i. Burner atomizing air and fuel pressures.
j. Adjust fuel/air ratios.
k. Adjust flue gas recirculation systems where applicable.
l. Record the following data for each fuel at low fire, 25 percent, 50 percent, 75 percent, and 100 percent firing rate and submit with start-up report:
   i. Fuel input. (i.e. Gallons oil or standard cubic feet gas per hour from existing meters).
   ii. Flue gas temperature.
   iii. Oxygen (O2).
   iv. Carbon Dioxide (CO2).
   v. Nitrous Oxide (NOx).
   vi. Carbon Monoxide (CO).
   vii. Percent excess air.
   viii. Combustion efficiency.
   ix. Draft.

m. Demonstrate safeties as applicable including:
   i. Operating and auxiliary low water cut-off switches.
   ii. High water temperature switches.
   iii. Draft control safeties and combustion air interlocks.
iv. High water level switches.

18. Boiler Package Control Demonstration: Following burner adjustment, operate each boiler for a minimum of 72 hours with no safety shutdowns in its local panel automatic modulating mode to demonstrate that the boiler controls are properly adjusted and that the boiler can successfully follow normal system load swings.

19. Minimum Operator Training to include:
   a. Provide one electronic copy on a thumb drive formatted as a Word document and six hard copies of operation and maintenance manuals including the boiler, burner, and the burner management and combustion control system.
   b. Train the University’s operators in the operation and maintenance of the burners and their controls. Review operation and maintenance manual information and recommended spare parts. Allow for a minimum of two – four hour training sessions, during normal working hours.
   c. Prepare and submit an Agenda to the University’s CA or designated representative a minimum of one week in advance of training.
   d. Maintain an Attendance Log for each training session.
   e. Submit the Agenda and Attendance Logs to the University’s CA or designated representative at the completion of the required training.

20. Provide technical support via telephone during normal business hours at no cost for five years following the date of acceptance of the system by the University.

B. Project Two: Replacement of Four Existing Burner Controls

1. General Requirements:
a. Furnish, deliver, and supervise the installation of replacement Underwriters Labeled combination gas-oil burners for the four existing Unilux Model Number ZF1200W Water tube type boilers.

b. The burner design, construction, and components will meet all applicable code requirements.

c. The University will mount the burner to fire on the centerline of the boiler furnace. The Selected Firm(s) will provide:
   i. A new steel boiler/burner mounting plate to match the thickness of the existing plate.
   ii. A new refractory plate shaped in accordance with the burner manufacturer’s instructions.

d. The University will provide labor for the demolition and removal of the existing burners, modifications to the existing piping, electrical, control, and installation of the new burners under the direction and supervision of the burner manufacturer’s authorized representative.

2. Scope of Work will include the following minimum new equipment, but is not limited to:
   a. Forced draft combination gas-oil burners.
   b. Combustion and flame safeguard controls.
   c. Interface for new controls to the existing Automated Logic BAS Control System.
   d. Fuel oil circulation pumps (if required by the new burner design).
   e. Air filter and pressure regulator for atomizing air supply from the JPJ Heat Plant air.
   f. Start-up, Demonstration, and Commissioning of the new burners and controls.

3. Supervision will include, but is not limited to:
   a. Selective demolition and removal of existing natural gas, natural gas vent, fuel oil supply, and return to points indicated for connection to the new work.
b. Rigging and hoisting as necessary for demolition and the new work.
c. Demolition and removal of existing burners and components.
d. Rework of existing boiler front including metal and refractory work to accommodate the attachment of the new burners.
e. Provide design for miscellaneous structural steel fabrication as required for the burner equipment and piping support.
f. Protection of the premises from damage due to demolition and construction activities.
g. Connection and reconnection of electrical power, control wiring, and devices.
h. Installation of modifications to Medium Temperature Hot Water (MTHW), natural gas, fuel oil, vent and drain piping, valves, and specialties.
i. Installation of pipe and equipment for new and existing piping and equipment.

4. Submittals Required for Evaluation of Proposals:
   a. Product Data: for the burner and components to be provided by the Selected Firm to include; performance and emissions data, operating characteristics, furnished specialties, and accessories.
   b. Exceptions List: Include exceptions to the specifications provided in the RFP, and any alternates or substitutions proposed.
   c. Installation, Operation and Maintenance instructions may be provided with the firm’s proposal as supporting documentation. This documentation will be required to be provided by the Selected Firm prior to installation of the burners.
   d. Warranty information.

5. Submittals required by the Selected Firm, but not limited to:
   a. Boiler Front Plate shop drawing detailing proposed modifications and/or new front plate, for approval by the University.
b. Wiring diagrams showing all factory and field wiring for power and controls.

c. Installation, Operation and Maintenance instructions.

d. As-built wiring diagrams showing any field modifications to the submitted documents.

e. Warranty information.

6. Combination Gas/Oil Low NOx Forced Draft Burner:

a. Preferred manufacturer(s) model numbers include, but are not limited to, Power Flame CMAX or Riello RLS.

b. Codes: Each burner will be listed by UL, and will bear the appropriate UL label. In addition to the UL requirements, all equipment and manufacturers installation procedures will meet the requirements of ASME CSD-1, NFPA 85 Series, and FM Global.

c. Each burner will be designed and constructed as an integrated combustion system package and will be factory fire tested.

d. Burner Schedule:

<table>
<thead>
<tr>
<th>FUEL 1</th>
<th>NATURAL GAS, 1000 BTU/CUBIC FOOT., 0.6 SG</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUEL 1 MAXIMUM FIRING RATE</td>
<td>9900 CFH NATURAL GAS, 9,900,000 BTUH</td>
</tr>
<tr>
<td>FUEL 1 MINIMUM FIRING RATE</td>
<td>1000 CFH NATURAL GAS, 1,000,000 BTUH</td>
</tr>
<tr>
<td>FUEL 1 GAS TRAIN INLET PRESSURE</td>
<td>2 PSIG</td>
</tr>
<tr>
<td>FUEL 1 BURNER COMBUSTION EFFICIENCY AT MAXIMUM FIRING RATE AND 300 DEG F STACK TEMPERATURE</td>
<td>85 PERCENT</td>
</tr>
<tr>
<td>FUEL 1 EMISSIONS REQUIREMENTS</td>
<td>NOX &lt;30 PPM AT 3% O2 AT MAXIMUM FIRING RATE</td>
</tr>
<tr>
<td>FUEL 2</td>
<td>NUMBER 2 FUEL OIL, 140,000 BTU/GAL</td>
</tr>
<tr>
<td>FUEL 2 MAXIMUM FIRING RATE</td>
<td>70 GPH NO. 2 FUEL OIL</td>
</tr>
<tr>
<td>FUEL 2 MINIMUM FIRING RATE</td>
<td>10 GPH NO. 2 FUEL OIL</td>
</tr>
<tr>
<td>FUEL 2 OIL TRAIN INLET PRESSURE</td>
<td>2-20 PSI</td>
</tr>
</tbody>
</table>
ELECTRICAL

460 VOLTS, 3 PHASE, 60 Hertz, including 120 volt single phase surge protected power source for controls.

EMISSIONS

EACH BURNER (at Stated Maximum Firing Rate)

<table>
<thead>
<tr>
<th>Particulate Matter</th>
<th>0.24 Pounds/Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM-10</td>
<td>0.07 Pounds/Hour</td>
</tr>
<tr>
<td>PM-2.5</td>
<td>0.07 Pounds/Hour</td>
</tr>
<tr>
<td>Sulfur Dioxide</td>
<td>0.51 Pounds/Hour</td>
</tr>
<tr>
<td>Nitrogen Oxides</td>
<td>0.72 Pounds/Hour</td>
</tr>
<tr>
<td>Carbon Monoxide</td>
<td>0.80 Pounds/Hour</td>
</tr>
<tr>
<td>Volatile Organic Compounds</td>
<td>0.05 Pounds/Hour</td>
</tr>
</tbody>
</table>

e. Combustion Head:

i. Each burner will be of welded steel construction and have a baked on powder coat finish, and the combustion head will incorporate a heat and corrosion resistant flame retention diffuser.

ii. The gas firing head will also include a series of gas injection spuds that distribute the fuel evenly around the periphery of the diffuser assembly. A gas annulus will provide a secondary layer of fuel to create a staging effect to achieve maximum fuel/air mixing and minimal emissions.

iii. The burner will include a pressure or low pressure air atomized oil gun design for proper atomization and efficient combustion of the specified oil fuel over the specified range of turndown.

iv. The oil nozzle will be serviceable without removing the burner, via a removable oil gun design or by suitable removable access to the nozzle.

vi. The burner combustion head will carry a minimum of a full five year replacement warranty.
f. Ignition System:
   i. The burner ignition system will light either the main gas or oil flame, and will utilize natural gas as the fuel source. The gas pilot system components will include spark ignited pilot assembly, 6000 Volt ignition transformer, pilot solenoid valve, pilot gas pressure regulator, and manual gas shutoff cock.
   ii. Provide an auxiliary pilot gas regulator in parallel with the natural gas regulator that is selected for propane use, a locking three way ball valve to select natural gas or propane pilot, and an inlet isolation manual ball valve for both regulators.
   iii. The flame proving system will incorporate a Ultra-Violet flame detector, which will monitor both the pilot and main flames.

g. Fuel Control Trains:
   i. The gas train will be designed for the specified minimum and maximum fuel flow rates and will incorporate UL approved components supplied by the burner manufacturer including, but not limited to the following:
      2. Main gas pressure regulator – tight shutoff type.
      3. Automatically operated main motorized gas valve with proof of closure interlock switch.
      4. Automatically operated auxiliary gas valve.
      7. Burner manifold gas pressure gauge and gauge cock.

ii. The oil train will be designed for the specified minimum and maximum fuel flow rates and will incorporate UL approved components as supplied by the burner manufacturer including but not limited to the following:

1. Fuel flow to the air or steam atomizing nozzle will be delivered by a single or two stage gear type pump capable of producing 100 PSIG discharge pressure and 15 inches of Mercury (HG) vacuum. It will be a separate unit mounted on its own support base with direct drive motor. The unit will be complete with suction line manual valve, removable mesh type oil strainer, 0-30 inches HG 0-30 PSIG vacuum/pressure gauge with gauge dampening orifice, 0-100 PSIG oil nozzle pressure gauge with gauge dampening orifice and nozzle line solenoid safety shutoff oil valve.

2. Additional oil components will be provided as follows:
   a. Oil nozzle line auxiliary solenoid safety shutoff oil valve.
   b. Low oil pressure switch, when remote burner pump is furnished.

3. Burner mounted air atomizing piping train will be designed to utilize existing 80 PSI plant control air and will consist of filter-regulator, solenoid shutoff valve, low atomizing air or steam pressure switch and pressure gauge.

4. Furnish and install simplex oil circulating pump set(s) which will supply the specified fuel oil at the
required pressure to the inlet of the burner. The oil pump will be rotary gear type with suitable relief valve.

5. Provide two UL and FM Global labeled valves with proof of closure switches.

7. Burner Management and Combustion Control System (Boiler Control System) (BCS)
   a. Preferred Manufacturer(s) and model numbers include, but are not limited to, Siemens LMV5x, and Fireye NX6100.
   b. Submittals:
      i. System Architecture Diagram showing all communication networks and devices, including the required interface with the University’s existing Automated Logic BAS Control System.
      ii. Control Wiring Diagrams to include wire and terminal identification codes. All field and panel wiring will be identified.
      iii. Hardware Documentation for all components to include specifications, operation, and installation instructions.
      iv. Operation and Maintenance Manuals.
      v. Recommended spare parts list.
   c. Each unit will be equipped with a factory wired boiler control system mounted in a separate NEMA 1 panel (shipped loose for field mounting on the side of each boiler and field wiring to all necessary points).
   d. BCS will be factory equipped with a pre-configured Programmable Logic Controller (PLC) and Human Machine Interface (HMI).
   e. Control Panels:
      i. Enclosure will be NEMA 1, and may be floor or frame mounted.
ii. Provided with a control panel cooling system “as needed” to adequately cool the components in an operating environment at temperatures up to 120 degrees F.

iii. Control panel air conditioners will utilize HFC-134a refrigerant or an approved equal, and tested in accordance with UL50 to provide separation between the panel interior and exterior air flow.

iv. Preferred manufacturer is Hoffman, but is not limited to this manufacturer.

v. Provide a continuous-duty single phase, surge protection system.

f. Major System Components will include at a minimum:

i. Programmable Controller.

ii. Touch screen monitor.

iii. Communication Network.

iv. Various controller input/output modules.

v. Temperature Sensors.

vi. Micro-Processor based flame safeguard control to include the chassis, display module, programmer, amplifier, wiring sub-base, and flame scanner.

g. BCS Will Provide the Following Minimum Major Functions:

i. Automatic sequencing of the boiler through stand-by, pre-purge, pilot flame establishing period, main flame establishing period, run, and post purge.

ii. Flame proving and lockout on flame feature during pilot flame proving, main flame proving, or run.

iii. Low fire damper/valve position for flame ignition trials.

iv. Full modulation control of the fuel and combustion air.

v. Utilization of solid state controls and sensors for various control functions such as modulating control and O2 trim of algorithm Proportional-Integral Derivative (PID) type.
vi. High and low limit alarms and shutdowns will include, but are not limited to:

1. Automatic Reset Limits (existing devices): primary low water cut-off, high water temperature, fuel safety valve limits, and draft control interlock (existing draft control, existing combustion air intake louver contacts in series).


h. Touch Screen Graphical Operator Interface and Monitoring to Include at a Minimum:

i. Manual control of the boiler-firing rate utilizing control screens on the HMI to increment and decrement the firing rate.

ii. On-screen: indication of the burner management/flame safeguards control status and diagnostics, real-time display of all connected process parameters, display of system alarms and faults, recommendation for troubleshooting fault conditions, water temperature indication and alarms, and alarm/fault history.

i. Terminals will be provided for hardwired remote enable/disable, firing rate control (when set for “remote” mobilization), and summary alarm for any manual reset safety.

j. BCS will include at a minimum, tamper resistant control logic, password protection, stack flue gas and shell (water) temperature sensing, remote modulation or firing rate set point control, assured low fire cut-off, and assured start permissive safety interlocking.
k. BCS will provide the following minimum safety provisions:

i. Integrated Burner Management.

ii. Examine all load terminals to assure it is capable of recognizing the true status of the external controls, limits, and interlocks. If any input fails this test, the burner management system will lockout on safety shutdown.

iii. Closed-loop logic test will verify integrity of safety critical loads (ignition, pilot, and main fuel valves) and will lockout on safety.

iv. Pre-ignition interlocks (i.e. fuel valve proof of closure) and flame signal will be checked during stand-by and pre-purge.

v. Dynamic checking of the flame signal amplifier will be provided. The control flame signal amplifier will recognize a no flame signal during this dynamic amplifier check.

vi. Safe start checks to include monitoring of the flame signal during stand-by.

vii. Check high and low fire switches for proper sequencing.

viii. Tamper-proof purge timing and safety logic.

ix. Integrated boiler controls to include at a minimum: operating and modulating controls, primary low water cutoff, VSD fault shutdown, password protection of the Programmable Controller Logic and the Parallel Positioning Control System.

l. BCS will provide the following annunciation and diagnostics at a minimum:

i. Active alarm annunciation.

ii. Historical alarm information for on screen display.

iii. Detect and isolate an alarm and report internal circuit faults.
iv. English text description of the system fault and troubleshooting procedures.

v. Low water shutdown alarm.

vi. Dynamic self-checking.

vii. Electrical and Environmental:

1. Supply voltage: 120 Volts Alternating Current (VAC) (+10%/-15%) 50 or 60 Hz.


3. Operating Temperature Limits: 32 to 130 degrees F.

4. 85% Relative Humidity (RH) Continuous, non-condensing, humidity.

5. 0.5 Gravity (G) continuous vibration.

m. Field Devices:

i. Provide new loop powered 4-20 mA temperature transmitter or RTD or Thermistor sensor input to the controller, where compatible.

ii. Utilize existing oil and gas flow meters for each boiler, with output for connection to the existing Automated Logic BACnet based system (i.e. The University’s Facility Management System).

iii. All gas and oil valves and safety devices will be new and will be provided by the burner Selected Firm for the stated inlet pressure and flow requirements. Existing gas regulator will be replaced with regulator sized for the requirements of the burner furnished, preferred Manufacturers are Fisher, or Maxitrol, but are not limited to these manufacturers.

iv. All new oil components will be furnished with the burner.

v. Existing water temperature switches may be reused at the Selected Firm’s option.
vi. A new draft fan air flow switch will be furnished with the burner.

v. Flue gas recirculation control valve and piping will be provided, when required for emissions compliance.

vi. Temperature Sensors: precision RTD or thermocouple, at the option of the Selected Firm(s).

n. All BCS’s wiring will be in accordance with the National Electrical Code and all local electrical codes.

o. BCS component functions will include at a minimum the following:

i. Burner Management controller: will provide sequencing logic to meet FM Global/UL/NFPA approval body requirements.

ii. Touch Screen Graphical HMI: will provide user interface to the control system, boiler overview screen with connected boiler parameter readouts, Burner Management Control status screen, alarm banners, diagnostic screens for fault troubleshooting, alarm history screen, system firing rate screen, and system configuration screens.

iii. Communication Network: will provide communication between the PLC and other peripheral devices.

iv. Various Programmable Controller Input/output modules: will provide interface for discrete powered and/or isolated relay signals, as well as for analog signals, from and/or to other input/output devices.

v. Stack Temperature Sensor: will measure and transmit a signal to the PLC in relation to the boiler exit flue gas temperature. The signal will be used as an indication and in the calculation of the boiler efficiency. The signal would also be used to shut the boiler down on high stack temperature.
vi. Water Temperature Transmitters: will provide an analog signal to the PLC for indication of the boiler leaving water temperature; utilized for an on/off and modulating controls of the burner.

vii. Control Power Supply: Two or more power supply modules arranged in parallel with a minimum of one redundant module providing surge suppression and regulated power. Each power supply circuit will be individually protected by a fuse or circuit breaker.

p. A Variable Speed Drive (VSD) controller with closed loop control using motor speed feedback device will be furnished for each burner and will interface with the boiler management control system. The VSD is for use with the burner’s Combustion Air Fan blower motor for the purpose of providing improved boiler efficiency and reduced electrical consumption. The drive’s voltage, frequency, and current ratings will be rated in accordance with the electrical requirements as dictated by the job site specifics, for the properly rated motor horsepower and include the following:

i. VSD will be capable of communicating over the control network protocol and reading on the Touch Screen Monitor for set-up, alarm history, troubleshooting information, and operating parameters, or it will have its own operator interface panel providing these features. The VSD will comply with the burner manufacturer’s requirements.

ii. A motor suitable for VSD service must be supplied with the burner for use with the VSD and sized to match the requirements of the Combustion Air Fan Blower. Motor will be totally enclosed fan cooled.

iii. VSD will be interlocked with boiler control to ensure safe operation.

iv. VSD will interface with the burner O2 trim system.
q. Each system will include an Oxygen Trim Control and Monitoring System to monitor and display oxygen concentration, in conjunction with combustion air and flue gas temperature sensors to calculate the overall efficiency of the boiler and provide O2 trim control thru the VSD Controller and the Boiler Management Controls System, with access of all pertinent data, adjustments of set points, alarm and troubleshooting information, and O2 display through Touch Screen Monitor. Components will include:

i. Oxygen sensor, integrated type Zirconia Oxygen Analyzer, direct insertion type, built-in heater (field replaceable), 4-20 mA DC process variable output, and field replaceable cell

ii. Combustion air temperature probe – type-J thermocouple

iii. Analyzer will be integrated type (in probe head)

iv. Monitoring System will indicate: O2 percentages, provide low O2 alarm indication, perform efficiency calculations and display in resulting O2 percentages.

r. Each control system will include a control module capable of communications between the boiler’s PLC system and other devices, as-needed, via Modbus Remote Terminal Unit (RTU) or other approved communication protocol.

s. Building/Plant Automation System interface will be compatible with the existing Automated Logic BACnet based system (i.e. The University’s Facility Management System). Acceptable communication protocols include Modbus RTU and BACnet. BCS firm will provide point mapping database as required for supervision of the following points. In addition to providing a point mapping database, the scope of work of the resulting Agreement from this RFP includes coordination with the selected control system integrator and all associated programming required for the burner management/combustion control integration into the
existing system. Programming of the Facility Management side of the interface will be by Automated Logic the University’s Facility Management System firm.

t. Each boiler will have:
   i. Status – On-/Off.
   ii. Water Supply/Return Temperature – degrees F.
   iii. Firing rate.
   iv. Stack Temperature – degrees F.
   v. Stack O2 – percent.
   vi. Low O2 Alarm Status.
   vii. Local/Remote Temperature Control Status.
   ix. Alarm Status (each manual and auto reset alarm and limit).
   x. Forced draft fan drive speed – Hz. or rpm.
   xi. Boiler Efficiency.
   xii. Water flow and Btu .

u. Provide one spare fuse for each type and rating used.

8. Heating Boilers Replacement Burners Start-Up and Commissioning:
Provide a copy of the burner start-up checklist and the testing plan for review a minimum of 30 days prior to start-up and testing.

Furnish personnel and equipment to include a manufacturer’s representative on-site to perform the following minimum boiler equipment installation inspection, start-up, adjustments and tests:

a. Fuel metering systems.
b. Flame safeguard.
c. Limit action.
d. Flame failure.
e. Power failure.
f. Boiler water level safety controls.
g. Burner atomizing air and fuel pressures.
h. Adjust fuel/air ratios.

i. Adjust flue gas recirculation systems where applicable.

j. Record the following data for each fuel at low fire, 25 percent, 50 percent, 75 percent, and 100 percent firing rate and submit with start-up report:
   i. Fuel input (i.e. gallons oil or standard cubic feet gas per hour from existing meters).
   ii. Flue gas temperature.
   iii. Oxygen (O2).
   iv. Carbon Dioxide (CO2).
   v. Nitrous Oxide (NOx).
   vi. Carbon Monoxide (CO).
   vii. Percent excess air.
   viii. Combustion efficiency.

m. Demonstrate safeties as applicable including:
   i. Operating and auxiliary low water cut-off switches.
   ii. High water temperature switches.
   iii. Draft control safeties and combustion air interlocks.
   iv. High water level switches.

9. Boiler Package Control Demonstration: Following burner adjustment, operate each boiler for a minimum of 72 hours with no safety shutdowns in its local panel automatic modulating mode to demonstrate that the boiler controls are properly adjusted and that the boiler can successfully follow normal system load swings.

10. Minimum Operator Training to include:
   a. Provide one electronic copy on a thumb drive formatted as a Word document and six hard copies of operation and maintenance manuals including the burner and the burner management and combustion control system.
   b. Train University’s operators in the operation and maintenance of the burners and their controls. Review operation and maintenance
manual information and recommended spare parts. Allow for a minimum of two – four hour training sessions, during normal working hours.

c. Prepare and submit an Agenda to the University’s CA or designated representative a minimum of one week in advance of training.

d. Maintain an Attendance Log for each training session.

e. Submit the Agenda and Attendance Logs to the University’s CA or designated representative at the completion of the required training.

11. Provide technical support via telephone during normal business hours at no cost for five years following the date of system acceptance by the University.

12. Minimum Procedures Common to Both Projects:

a. Checkout will proceed from devices to the components to the systems.

b. Verify the following:

i. Labeling and identification is affixed per the specification and visible.

ii. Prerequisite procedures are done.

iii. System is applied per the manufacturer’s recommendations.

iv. System has been provided with electrical and mechanical utilities per the manufacturer’s recommendations.

v. The manufacturer’s prescribed start-up procedure is followed and that all required manufacturers’ forms are completed.

vi. Access is provided for inspection, operation, and repair.

vii. Access is provided for replacement of the equipment.

viii. The record drawings; submittal data, and Operations and Maintenance (O&M) documentation accurately reflect the installed systems.
ix. All gauge and test ports are provided as required by Construction Documents and manufacturer’s recommendations.

x. All recorded nameplate data is accurate.

xi. Installation is done to ensure safe operation and maintenance.

xii. Specified replacement material/attic stock has been provided as required by the Construction Documents.

xiii. All rotating parts are properly lubricated.

xiv. All monitoring and ensure all alarms are active and set per Owner’s requirements.

c. Inspect for damage and ensure none is present.

d. Complete and record all nameplate data and confirm that ratings conform to the design documents.

13. Warranty

Any proposed new equipment identified in the Selected Firm’s Proposal will be fully maintained (i.e. all parts, labor, travel, and routine maintenance) for a period of 12 months from date of system acceptance at no additional cost to the University. In addition, all maintenance costs associated with any proposed equipment must be clearly identified and included in the Selected Firm’s Financial Proposal.

14. Guarantee

The Selected Firm(s) will guarantee the material and workmanship against defect due to faulty workmanship or negligence for a period of twelve months following the final acceptance of the equipment. Where items of equipment or material carry a manufacturer's warranty for any period in excess of twelve months, then the manufacturer's warranty will apply for that particular piece of equipment or material. The Selected Firm(s) will replace such defective materials, equipment, or workmanship without cost to the University within the stipulated guarantee period. The Selected
Firm(s) will guarantee results of the equipment provided to include start-up and commissioning.

15. Performance Requirements to include:

a. An experienced, professional supervision workforce.

b. The Selected Firm(s) will be responsible for supervising and directing the work under this Agreement and all subcontractors, that it may utilize, using its best skills and judgment. Subcontractors which perform work under the resulting Agreement will be responsible to the prime contractor. The Selected Firm(s) agrees that it is fully responsible for the acts and omissions of its subcontractors and of persons employed by the subcontractor’s, as it is for the acts and omissions of its own employees.

c. Subcontract: No portion of this work will be subcontracted without prior written consent of the University. In the event that the Selected Firm(s) desires to subcontract any part of the work specified herein, the Selected Firm(s) will furnish the University the names, qualifications, and experience of its proposed subcontractors. The Selected Firm(s) will remain fully liable and responsible for the work to be performed by its subcontractor(s) and will assure compliance with all requirements of the Agreement.

15. Special Work Requirements

a. Provide uniforms for all personnel assigned to work at the University on behalf of the Selected Firm(s). Uniforms will contain the Selected Firm’s name and person’s name designated on the upper portion of the shirt. Uniforms must be worn at all times while on University property to designate affiliation with the Selected Firm(s).

b. Work hours will be from 7:00 a.m. to 3:30 p.m., Monday through Friday.
IV. Basis of Selection:

The University will evaluate proposals and, if a firm is to be selected, select the firm on the basis of:

A. The firm's plan to assist the University to meet its goals for the John Paul Jones Arena – Heat Plant Improvements as discussed in Section II, Background Discussion and Goals of the University, and Section III, Scope of Goods and Services;

B. The firm's relevant experience, qualifications and success in providing the goods and services described in this RFP; to include the firm’s references from clients, which are comparable to the University;

D. The firm's financial proposal including but not limited to discounts, service charges, and other charges;

E. The quality of the proposal, specifically, responsiveness to requirements and adequacy of information provided;

F. Any other factors relevant to the firm's capacity and willingness to satisfy the University; and

G. The firm’s plan for the utilization of Small, Women-owned and Minority-owned (SWAM) businesses. (In evaluating the firm’s proposal, the University will assign a minimum of 10 percent of the total selection weight to this individual selection criterion.).

Note: The University reserves the right to award to different Selected Firms to respectively provide any part of the goods and services discussed in this RFP.

V. Contents of the Proposal

Proposals should include information outlined in this section. Copies of proposals must be sent to the Issuing Office, Procurement and Supplier Diversity Services, Carruthers Hall, and not to any other office or department whatsoever at the University.
Unnecessarily elaborate brochures and other presentations beyond that sufficient to present a complete and effective proposal are not desired and may be construed as an indication of a firm’s lack of cost consciousness. Elaborate artwork, expensive paper and bindings, and expensive visual and other presentation aids are neither necessary nor desired.

The University invites proposals that present different options for provision of the Goods and Services, and/or alternate creative proposals from firms. The University will, in its sole judgment, consider such options and/or alternatives as long as the functionality and minimum requirements of the University are met.

It is the University’s intent to enter into an Agreement(s) with the Selected Firm(s) to provide the University’s Facilities Management Department with two new boilers and/or four replacement burner controls, and to provide supervision during demolition and installation of the replacement burners. In order to achieve the University’s goals the Selected Firm(s) may be requested to provide the Goods and/or Services including, but not limited to, those outlined in this RFP. The University reserves the right to award to different Selected Firm(s) to respectively provide any part of the Goods and/or Services discussed in this RFP. The University guarantees no amount of business resulting from an Agreement(s). Changes in Goods and/or Services with the Selected Firm(s) may be added to or deleted from any Agreement resulting from this solicitation with thirty days’ notice from the University, according to the terms and conditions agreed upon by the University and the Selected Firm(s).

The Selected Firm(s) must meet the following minimum requirements:

A. Goods and Services

1. Describe how the firm plans to furnish and deliver the two new boilers and/or four replacement burner controls, to include providing supervision during the demolition/installation of the burner controls, which are the primary goals of this RFP. Include a narrative on how the firm will work
with the University’s Facilities Management Department to provide the Goods and Services.

2. Each firm will indicate in their proposal the firm’s ability to achieve/comply with each specification. In the event that the firm wishes to propose an alternate specification that, in any way, differs from the above specifications, the firm will detail their proposed change(s) and how the proposed change would compare to the listed specification. Proposals will be formatted in such a way to address each of the above specifications in a line-by-line process.

3. Provide a plan of operation to achieve the objectives set forth in Section II Background Discussion and Goals of the University and Section III, Scope of Goods and Services, specifically responding to each paragraph and subparagraph in the order addressed.

4. Work hours will be from 7:00 a.m. to 3:30 p.m., Monday through Friday.

5. Provide a detailed Gantt Chart of materials and equipment from the time of order (ARO) to include the major steps of the equipment procuring process (i.e. equipment lead time, shop drawings, etc.); and the supervision procedures during demolition and installation of the new burner controls.

6. The University prefers non-proprietary equipment and controls. In the firm’s proposal specifically indicate any proprietary controls systems, equipment, or other items that are included.

7. Provide submittals for all equipment your firm is proposing to furnish and deliver as requested in Section III, Scope of Goods and Services, Sections A.2. and/or B.4., Submittals Required for Evaluation of Proposals. Submittals must include any exceptions taken to the specifications provided in the RFP.

8. State the firm’s willingness to provide supervision to the University’s labor forces during the demolition and installation process for the replacement burner controls.
9. Provide a statement that all gauges and readouts will be in US Standard
(i.e. degrees F, Btu’s, psi, gpm, etc.) with none displayed in the metric
system.

10. Provide a narrative of the training program the firm will offer the
University.

11. Provide the firm’s plan for customer service to include how the ordering
process will function.

12. The University invites proposals that present different options for
provision of the Goods and Services, and/or alternate creative proposals
from firms. The University will, in its sole judgment, consider such
options and/or alternatives as long as the functionality and minimum
requirements of the University are met.

B. Firm Information, Personnel, References

1. Provide a brief history of the firm and its experience in providing boilers
and/or gas/oil burner controls similar to those described in this RFP.

2. Provide information on those individuals assigned to work with the
University including a description of its experience in providing water
tube type heating boilers and/or furnishing and supervising the installation
of the replacement burner controls. Specifically identify the name and
contact information for the individual assigned to act as the coordinator
for both the firm’s proposal and any subsequent responses required of the
firm as a part of the RFP process.

3. Provide uniforms for all personnel assigned to work at the University on
behalf of the Selected Firm(s). Uniforms will contain the Selected Firm’s
name and person’s name designated on the upper portion of the shirt.
Uniforms must be worn at all times while on University property to
designate affiliation with the Selected Firm(s).

4. Provide a list of all of the firm's clients comparable to the University
indicating the length of service of each account. The University may
contact and/or visit any of these accounts.
5. Provide a list of institutions of higher education with which the firm has signed a term contract.

6. Provide a list of all clients lost within the last three years which includes:
   a. A contact name and telephone number
   b. Length of service at the account
   c. Reason for the loss

7. Provide the amount of annual sales the firm has with each VASCUPP Member Institution. A list of the VASCUPP Members can be found at [https://vascupp.org.](https://vascupp.org)

8. Provide the name of the individual responsible for the firm’s supplier diversity program. This individual is responsible for implementing and reporting on the firm’s Small, Women-owned and Minority-owned (SWAM) program as it will relate to this procurement should the firm be selected.

9. Describe those aspects of the firm and its proposed equipment/services that the firm believes will differentiate its proposal from other firms.

10. State law requires that certain projects within the scope of this RFP be performed by a contractor licensed by the Commonwealth of Virginia. Other projects within the scope of this RFP need not be performed by a licensed contractor. If a firm desires to be considered for all projects within the scope of this RFP, the firm will provide with its proposal a copy of the firm’s Commonwealth of Virginia Contractor’s License. If a firm does not provide with its proposal a copy of the firm’s Commonwealth of Virginia Contractor’s License, the firm will be considered by the University, if at all, only in connection with the award of a contract or contracts for projects which, in the sole and absolute discretion of the University, need not be performed by a licensed contractor.

### C. Financial Proposal

1. The firm’s proposed fees for providing the Goods and Services, to include all charges. Ensure that fees are provided for all Goods and Services’
categories proposed by the firm. The inspection, start-up, and commissioning costs must be included in every firm’s proposal. Include any additional discounts available for early payment of invoices.

2. Provide fees for all products/equipment/services the firm is able to provide as listed in Attachment 5, Pricing Schedule. Provide fees for any additional goods and/or services the firm is able to offer the University that are not listed. **The University cannot accept any pricing based on a “Cost-Plus a Percentage of Cost Basis”**.

3. Include all applicable hourly or daily rates. The proposed fee must include all travel and related expenses.

4. Net pricing to the University on all products should be inclusive of all fees associated with delivery; such as, but not limited to: freight, handling fees, fuel surcharges, hazardous material fees, etc. The University’s shipping terms are FOB Destination.

5. Firms warrant that the fees offered are for FOB destination and include only the actual freight rate costs at the lowest possible rate and is based on the actual weight of the goods to be shipped. Standard commercial packaging, and packing and shipping containers will be used. All shipping containers will be legibly marked and labeled on the outside with the purchase order, commodity description, and quantity.

6. Provide the amount of any trade-in value and/or credit the Selected Firm(s) will provide for the equipment the University is removing and replacing.

7. Fees on all software related products should also include all future upgrades to the purchased software along with no-charge telephone/internet access to on-going software customer service.

8. Information on the warranty associated with the product(s)/services the firm is proposing and any extended warranty (include the price) that may be available.

9. Provide the following fee details:
   a. When or how often do fee increases and/or escalation rates occur?
b. What is the firm’s plan for dealing with fee increases and/or escalation rates?

10. Provide a listing and the fees associated with the recommended spare parts listing for the boilers and/or burner controls.

11. All maintenance costs associated with any proposed equipment must be clearly identified and included in the firm’s Financial Proposal.

12. Describe how the University will be charged for all new/replacement products/equipment. Provide a discount schedule off a published list price for any future equipment/repair/spare parts the University may purchase.

13. Include the fees associated with Annual Maintenance Service/PM Agreements your firm may offer.

14. Include the fees if any, to provide supervision to the University’s labor forces during the installation process.

15. The University may procure additional Products and Services (“Services”) from the Selected Firm(s) throughout the term of the Agreement as a result of this RFP. The exact pricing of these Services will be determined at the time of purchase and be provided under Most Favored Nations Pricing, identified in Attachment 2, Preferred Contractual Provisions, Section M., Favored Nations.

16. Describe how the University will benefit from cost savings by accepting the firm's proposal.

17. State the firm’s agreement to receive payments electronically via Bank of America’s (“BoA”) ePayables® method of electronic payment or BoA’s PayMode® method of electronic payment. Prior to contract award, the Selected Firm will be required to contact University Procurement and Supplier Diversity Services’ Payment Processor Specialist group to set up its preferred method of receiving electronic payments [Phone: (434) 924-4212 and E-mail: uva-prs-boa@virginia.edu].
D. Contractual Arrangements
1. Provide the University with any form or contract the University may be requested to sign.
2. State the firm's acceptance of Attachment 1, Mandatory Contractual Provisions.
3. State the firm's acceptance, with any proposed modifications, of Attachment 2, Preferred Contractual Provisions.
4. Provide a written statement with the firm’s proposal that its principals or legal counsel have reviewed Attachment 1, Mandatory Contractual Provisions, and Attachment 2, Preferred Contractual Provisions, and agree that these provisions will become a part of any final agreement.
5. Provide a list of clients with which the firm has signed a term contract that allows for cooperative procurement and/or if the firm has a General Service Accounting (GSA) schedule contract.

E. Site Visits
It may be necessary or desirable for the University's evaluation team of less than ten people to travel to a site chosen jointly by the firm and the University to view its operation. Each firm will indicate whether it will reimburse the University for the reasonable and actual expenses (travel, lodging, meals, etc.) incurred by the University for its travel.

F. Small, Women-owned and Minority-owned (SWAM) Business
The University is committed to the goal of non-discrimination and to giving fair consideration for all vendors in its procurement programs. The University has set a voluntary goal of doing 5% more business with SWAM firms each year. The University’s 2014 SWAM plan spend goal for firms certified by the Commonwealth of Virginia’s Department of Minority Business Enterprise (DMBE) is 45%. Targets for each business segment are as follows:
<table>
<thead>
<tr>
<th>Minority Business Enterprises</th>
<th>6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women Business Enterprises</td>
<td>7%</td>
</tr>
<tr>
<td>Small Business Enterprises</td>
<td>32%</td>
</tr>
</tbody>
</table>

This goal does not allow for "set aside" purchases. SWAM firms must compete equally with majority firms and be able to provide the University with quality goods and services at competitive prices. To view the University’s current quarterly achievements, click here [Current SWAM Report]. As this report shows, the University is in need of assistance in the Minority-owned and Women-owned categories. Please tailor your firm’s SWAM plan to assist the University in meeting its goal and targets.

Specify whether the firm is a SWAM. Firms can only be considered a Small, Women-owned or a Minority-owned Business Enterprise if certified by DMBE. All certified SWAM firms will be assigned a specific identification number. No SWAM firm is required to certify under this program and no SWAM firm will be excluded from doing business with the Commonwealth because of its failure to certify as a SWAM firm.

If the firm is not a SWAM firm, describe the firm’s partnering relationships with SWAM firms and how it plans to support the University’s goal to increase business annually by 5% with these firms in accordance with Attachment 4, Office of the VP for Management and Budget’s Request for Commitment letter.

G. Other Information

Provide any other information which the University should consider in evaluating the firm's proposal.
VI. Information about this RFP

A. Procurement Schedule

Here is a brief schedule for this procurement, specifying the important dates and milestones:

- Issue Date of RFP: 9/11/13
- Preproposal Conference: 9/24/13
- Deadline for Receipt of Proposals: 10/15/13
- Oral Presentation and Negotiations: 11/11/13 and 11/12/13
- Contract Award: 1/31/14

B. Issuance of RFP and Questions

The Issuing Office for this RFP is:
Procurement and Supplier Diversity Services
University of Virginia
1001 North Emmet Street
P.O. Box 400202*
Charlottesville, Virginia 22904-4202

**NOTE: If RFP proposal is sent U. S. Postal Service use the P. O. Box. The University does not take responsibility for lost or misdirected mail.

Attention: Diane Morse, VCO Buyer
Telephone: (434) 982-5076
TDD: (434) 982-HEAR
Email: dm5h@virginia.edu

Any questions concerning this RFP will be directed to Diane Morse as listed above and not to any other person at the University, with the exception of issues directly related to SWAM business and SWAM subcontracting opportunities. Such SWAM issues may be alternately directed to Les Haughton, Director, Supplier Diversity, at (434) 924-7174 or lh7sn@virginia.edu. The University will determine whether any addenda should be issued as a result of any question or other matters presented.

C. Preproposal Conference

An optional *(firms are strongly urged to attend)* conference for firms receiving this RFP will be held on Tuesday, September 24, 2013 at 10:00 a.m. in the JPJ
Arena Conference Room located at 295 Massie Road, Charlottesville, Virginia
(map viewed at this web site: [http://www.virginia.edu/webmap/FUHallAndAthletic.html](http://www.virginia.edu/webmap/FUHallAndAthletic.html))

**Parking will be available at the back side of the building off of Copley Road before the Electronic Gate entrance.**

Attendance at this conference is advised if your firm wishes to raise any questions in connection with this RFP. Please print a copy of the RFP and bring it with you as no additional copies will be provided at the conference. The University intends to present general information which may be helpful in the preparation of proposals and to offer firms the opportunity to ask questions concerning this RFP. No firm may have more than two representatives present at the conference.

Firms planning to attend the Preproposal Conference should notify Rebecca Sims by email [pur-rfp@virginia.edu](mailto:pur-rfp@virginia.edu) no later than 3:00 p.m. on Thursday, September 19, 2013 of the names, titles, and phone numbers of the individuals who will attend. Firms traveling to Charlottesville can go to the following website for travel arrangement assistance: [http://www.virginia.edu/placestostay](http://www.virginia.edu/placestostay)

**D. Proposal Deadline**

All proposals must be received at the Issuing Office by 3:00 p.m., on Tuesday, October 15, 2013. The University may, at its discretion, accept late proposals if it is determined to be in the best interest of the University. Firms must submit an electronic original proposal that will be received by the University by the proposal deadline. The electronic original proposal must be submitted on a USB Flash Drive or CD-ROM. In addition to the original proposal, firms must provide five hard copies of the original proposal in individual, bound volumes. Each hard copy of the proposal must be accompanied by an electronic copy of the proposal on a thumb drive or CD-ROM. All electronic proposal documents, originals or copies, should be formatted as Microsoft Word documents. Any proposals submitted in Adobe PDF format may be rejected.
Any trade secrets or proprietary information submitted with a proposal (original or copy) for which the firm seeks protection from public disclosure must be clearly identified by the specific page and section number in the proposal and accompanied by a suitable justification requesting non-disclosure. RFP Section VI-J, Virginia Freedom of Information Act, applies.

E. Oral Presentations and Negotiations
An oral presentation by two or more firms may be required after written proposals are received by the University. If the University requires such a presentation, the Issuing Office will schedule a time and place. Each firm should be prepared to discuss and substantiate any of the areas of the proposal it submitted, its own qualifications for the services required and any other area of interest relative to its proposal. Oral Presentations and Negotiations are tentatively scheduled for November 11, and November 12, 2013. Oral Presentations and Negotiations with two or more firms will be conducted by the University based on the firms' financial proposals and proposed terms and conditions.

F. Communications Between the University and the Firms regarding This RFP
Informal Communications
From the date of receipt of this Request for Proposal by each firm until a binding contractual agreement exists with the Selected Firm and all other firms have been notified, or when the University rejects all proposals, informal communications regarding this procurement will cease. Informal communications will include but not be limited to:

1. Requests from the firms to any department at the University, with the exception of Procurement and Supplier Diversity Services for information, comments, speculation, etc.; and

2. Requests from any department at the University, or any employee of the University, with the exception of Procurement and Supplier Diversity Services for information, comments, speculation, etc.
Formal Communications

From the date of receipt of this Request for Proposal by each firm until a binding contractual agreement exists with the Selected Firm and all other firms have been notified, or when the University rejects all proposals, all communications between the University and the firms will be formal, or as provided for in this Request for Proposal, or as requested by Procurement and Supplier Diversity Services.

Formal communications will include but not be limited to:
1. Preproposal Conference
2. Oral presentations
3. Site visits, Interviews, etc.

Any failure to adhere to the provisions set forth in Informal Communications and the Formal Communications sections above may result in the rejection of any firm's proposal or cancellation of this RFP.

G. Formation of the Agreement with the Selected Firm

All proposals received will first be carefully evaluated by the University, and then the University intends to conduct negotiations with two or more firms. After negotiations have been conducted, if the University chooses to make award, the University will select the firm which, in its opinion, best meets the needs of the University. Alternately, if the University determines in writing and in its sole discretion that only one firm is fully qualified, or that one firm is clearly more highly qualified than the others under consideration, it may decide to negotiate and award an agreement to that single firm. In either event, the University intends to execute a mutually satisfactory written agreement which will reflect and largely incorporate this RFP as reconciled with any pertinent documents, such as the proposal submitted and relevant negotiation correspondence.

Because the University may choose to negotiate and award to a single firm as discussed above, each firm must include in its written proposal all
requirements, terms or conditions it may have, and should not assume that an opportunity will exist to add such matters after the proposal is submitted.

Any firm(s) invited to negotiations should note that the University reserves the right to begin negotiations by combining the best aspects of submitted proposals from all responding firms as the basis for subsequent formation of any Agreement resulting from this RFP.

Firms should also note that, as described in Section H, Provisions Deemed Included in the Proposal, certain matters will automatically be deemed part of the proposal.

H. Provisions Deemed Included in the Proposal

The University will consider each proposal to include not only the matters expressly stated in the proposal as requested in Section V, Contents of the Proposal, but also other provisions which consist of two different types: those which are "mandatory" and cannot be changed by a firm in its proposal; and those which are "preferred" by the University, but which a firm may wish to alter by expressly and specifically so stating in its proposal.

The University includes mandatory provisions so that all proposals will be governed by the same basic contractual terms. The University encourages any firm which feels that a mandatory provision is unreasonable to contact the University before proposals are due so the University can consider amending the provision. The University includes preferred provisions so that any difference between the firm and the University's preferred contractual provisions can be considered during the University's evaluation of proposals.

1. Mandatory Provisions

Each proposal received by the University in response to this RFP will automatically be deemed to include the firm's agreement to the provisions of (a) and (b) below. Although such provisions will govern the firm's proposals as submitted, the University and one or more firms may later
mutually agree to amend such provisions, such as when additional time is needed to consider proposals, or when contractual negotiations or performance indicate that such amendments are appropriate.

a. The proposal constitutes an offer by the firm which will remain open and irrevocable for a period of 120 days from the deadline for submitting proposals as stated in Section C, Proposal Deadline.

b. If selected by the University, the provisions governing the firm's performance will include all the provisions of Attachment 1, Mandatory Contractual Provisions.


Unless a firm expressly and specifically provides otherwise in its written proposal, the proposal received by the University in response to this RFP will automatically be deemed to include the firm's agreement to these provisions:

a. The firm consents to the University contacting and obtaining any information relevant to this RFP from the references and others identified by the firm in its proposal, as well as from any other persons, firms, or organizations which the University wishes to contact; and

b. If selected by the University, the provisions governing the firm's performance will include all the provisions of Attachment 2, Preferred Contractual Provisions.

I. Rejection of Proposals

The University reserves the right to reject any or all proposals received. Non-acceptance of a firm's proposal will mean that one or more proposals were deemed more advantageous to the University or that all proposals were rejected. Firms whose proposals are not accepted will be notified after a binding contractual agreement between the University and the Selected Firm exists, or when the University rejects all proposals.
J. Virginia Freedom of Information Act

Except as provided, once an award is announced, all proposals submitted in response to this RFP will be open to inspection by any citizen, or interested person, firm or corporation, in accordance with the Virginia Freedom of Information Act. Trade secrets or proprietary information submitted by a firm prior to or as part of its proposal will not be subject to public disclosure under the Virginia Freedom of Information Act only under the following circumstances: (1) the appropriate information is clearly identified by some distinct method such as highlighting or underlining; (2) only the specific words, figures, or paragraphs that constitute trade secrets or proprietary information are identified; and (3) a summary page is supplied immediately following the proposal title page that includes (a) the information to be protected, (b) the section(s)/page number(s) where this information is found in the proposal, and (c) a statement why protection is necessary for each section listed. The firm must also provide a separate electronic copy of the proposal (CD, etc.) with the trade secrets and/or proprietary information redacted. *If all of these requirements are not met, then the firm’s entire proposal will be available for public inspection.*

**IMPORTANT:** A firm may not request that its entire proposal be treated as a trade secret or proprietary information, nor may a firm request that its pricing/fees be treated as a trade secret or proprietary information, or otherwise be deemed confidential.
Attachment 1

Mandatory Contractual Provisions

A. Nondiscrimination
During the performance of this Agreement, the Selected Firm will comply with the contract provisions contained in Section 2.2-4311 (1) & (2) of the Code of Virginia or any successor provisions which may be applicable to this Agreement. Also, in accordance with Section 2.2-4343.1, the University does not discriminate against faith-based organizations.

B. Conflict of Interests
The Selected Firm represents to the University that its entering into this Agreement with the University and its performance through its agents, officers and employees does not and will not involve, contribute to nor create a conflict of interest prohibited by the Virginia State and Local Government Conflict of Interests Act (Va. Code 2.2-3100 et seq), the Virginia Ethics In Public Contracting Act (Va. Code 2.2-4367 et seq), the Virginia Governmental Frauds Act (Va. Code 18.2-498.1 et seq) or any other applicable law or regulation.

C. Assignment
Neither party to this Agreement will have the right to assign this Agreement in whole or in part without the prior written consent of the other.

D. Amendments
No amendment of this Agreement will be effective unless it is reduced to writing and executed by the University's Director of Procurement and Supplier Diversity Services and by the individual signing the Selected Firm's proposal or by other individuals named by either party as specified in Section E, Notices below. If the Selected Firm deviates from the terms of this Agreement without a written amendment, it does so at its own risk.
E. Notices

Any notice required or permitted to be given under this Agreement will be in writing and will be deemed duly given: (1) if delivered personally, when received; (2) if sent by recognized overnight courier service, on the date of the receipt provided by such courier service; (3) if sent by registered mail, postage prepaid, return receipt requested, on the date shown on the signed receipt; or (4) if sent by facsimile, when received (as verified by sender’s machine) if delivered no later than 4:00 p.m. (receiver’s time) on a business day or on the next business day if delivered (as verified by sender’s machine) after 4:00 p.m. (receiver’s time) on a business day or on a non-business day. All such notices will be addressed to a party at such party’s address or facsimile number as shown below.

If to the University:
Eric N. Denby
Director of Procurement and Supplier Diversity Services
Carruthers Hall
University of Virginia
1001 North Emmet Street
P.O. Box 400202
Charlottesville, Virginia 22904-4202
Fax: (434) 982-2690

If to the Selected Firm:
The person signing the Selected Firm's proposal in response to the University's RFP, at the Selected Firm's address indicated in such proposal; or to such other person or address as either may designate for itself in writing and provide to the other.

F. Independent Contractor

The Selected Firm is not an employee of the University, but is engaged as an independent contractor. The Selected Firm will indemnify and hold harmless the Commonwealth of Virginia, the University, and its employees and agents, with respect to all withholding, Social Security, unemployment compensation and all other taxes or amounts of any kind relating to the Selected Firm's performance of this Agreement. Nothing in this Agreement will be construed as authority for the Selected Firm to make commitments which will bind the University or to otherwise act on behalf of the University, except as the University may expressly authorize in writing.
G. Workers' Compensation and Employers' Liability
The Selected Firm(s) and any Subcontractor will (i) maintain Employers Liability coverage of at least $500,000 and (ii) comply with all federal or state laws and regulations pertaining to Workers' Compensation Requirements for insured or self-insured programs.

H. Drug-Free Workplace
The Selected Firm, its agents and employees are prohibited, under the terms of this Agreement, Code of Virginia Section 2.2-4312, and the Commonwealth of Virginia, Department of Human Relations Management Policy Number 1.05, from manufacturing, distributing, dispensing, possessing, or using any unlawful or unauthorized drugs or alcohol while on University property.

During the performance of this Agreement, the Selected Firm agrees to 1) provide a drug-free workplace for the Selected Firm's employees; 2) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Selected Firm's workplace and specifying the actions that will be taken against employees for violations of such prohibition; 3) state in all solicitations or advertisements for employees placed by or on behalf of the Selected Firm that it maintains a drug-free workplace; and 4) include the provisions of the foregoing clauses in every subcontract or purchase order of over $10,000, so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific agreement awarded to a Selected Firm, the employees of who are prohibited from engaging in the unlawful manufacturing, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the agreement.
I. Information Technology Access

All electronic and information technology procured through this RFP must meet the applicable accessibility standards of Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d) as amended and is viewable at [http://www.section508.gov](http://www.section508.gov).

Additionally, in accordance with § 2.2-3504 of the Code of Virginia, the following will apply to all information technology Agreements:

NON-VISUAL ACCESS TO TECHNOLOGY: All information technology (the "Technology") which is purchased or upgraded by the University will comply with the following non-visual access standards from the date of purchase or upgrade until the expiration of the Agreement:

- Effective, interactive control and use of the Technology will be readily achievable by non-visual means;
- Technology equipped for non-visual access will be compatible with information technology used by other individuals with whom any blind or visually impaired user of the Technology interacts;
- Non-visual access technology will be integrated into any networks used to share communications among employees, program participants or the public; and
- Technology for non-visual access will have the capability of providing equivalent access by non-visual means to telecommunications or other interconnected network services used by persons who are not blind or visually impaired.

Compliance with the foregoing non-visual access standards will not be required if the Director of Procurement and Supplier Diversity Services, University of Virginia determines that 1) the Technology is not available with non-visual access because the essential elements of the Technology are visual and 2) non-visual equivalence is not available.

Installation of hardware, software, or peripheral devices used for non-visual access is not required when the Technology is being used exclusively by individuals who are not blind or visually impaired, but applications programs and underlying operating systems
(including the format of the data) used for the manipulation and presentation of information will permit the installation and effective use of non-visual access software and peripheral devices.

If requested, the Agreement must provide a detailed explanation of how compliance with the foregoing non-visual access standards is achieved and a validation of concept demonstration.

J. Intellectual Property Rights/Disclosure

Unless expressly agreed to the contrary in writing, all goods, products, materials, documents, reports, writings, video images, photographs or papers of any nature including software or computer images prepared or provided by the Selected Firm(s) (or its subcontractors) for the University will not be disclosed to any other person or entity without the written permission of the University. The Selected Firm(s) warrants to the University that the University will own all rights, title and interest in any and all intellectual property rights created in the performance or otherwise arising from any Agreement(s) resulting from this RFP and will have full ownership and beneficial use free and clear of claims of any nature by any third party including without limitation copyright infringement claims. The Selected Firm(s) will execute any assignments or other documents needed for the University to perfect such rights. Notwithstanding the foregoing, for research collaboration pursuant to subcontracts under sponsored research agreements administered by the University's Office of Sponsored Programs, intellectual property rights will be governed by the terms of the grant or contract to the University to the extent such grant or contract requires intellectual property terms to apply to subcontractors.

K. eVA Business to Government Registration

The eVA Internet electronic procurement solution, web site portal [www.eva.virginia.gov](http://www.eva.virginia.gov), is the Commonwealth of Virginia's comprehensive electronic procurement system. The portal is the gateway for firms to conduct business with state agencies and public bodies. All agencies and public bodies are expected to utilize eVA. All firms desiring to provide
goods and/or services in the Commonwealth are encouraged to participate in the eVA Internet e-procurement solution. The Selected Firm is required to register in the eVA Internet e-procurement solution prior to an award being made.

L. eVA Transaction Fee
The Selected Firm agrees, by accepting an award as a result of this RFP, that it is a registered eVA vendor and will be subject to an eVA transaction fee, for which the Selected Firm will be invoiced by Commonwealth of Virginia, Department of General Services. Additional information is available at www.eva.virginia.gov.

M. Contractor License Requirements
State statutes and regulatory agencies require that some firms be properly registered and licensed, or hold a permit, prior to performing specific types of services. If firms provide removal, repair, improvement, renovation or construction-type services they, or a qualified individual employed by the firm, must possess and maintain an appropriate State of Virginia Class A, B, or C Contractor License (as required by applicable regulations and value of services to be performed) for the duration of the Agreement. It is the firm’s responsibility to comply with the rules and regulations issued by the appropriate State regulatory agencies.

License #______________  Type___________________
Subject to Section V., Contents of the Proposal, item B. Firm Information, Personnel, and References, #10 of this RFP, a copy of the license must be furnished upon request to the University or VASCUPP member institution.

N. Unauthorized Alien Use.
The Selected Firm warrants that it does not knowingly employ an “unauthorized alien,” as such term is defined in the federal Immigration Reform and Control Act of 1986. The Selected Firm furthermore agrees that, during the term of the Agreement, it will not knowingly employ an unauthorized alien.
Attachment 2
Preferred Contractual Provisions

A. Goods and Services
During the term of this Agreement, the Selected Firm will provide for the University the goods and services offered to the University by the firm in its proposal and/or any addenda to its proposal which has been approved in writing by the University and as may be further specified by the University in writing when it selected the firm.

B. Term of Agreement
The term of this Agreement will be for three years, with the ability to renew on the same or similar terms and conditions, for two additional two-year periods if mutually agreeable to the University and the Selected Firm(s). (NOTE: initial term cannot exceed five years with two additional one year renewals without the Director's approval). The Selected Firm and the University will mutually agree at least 120 days prior to each renewal period whether to renew the terms of the Agreement.

C. Contract Administrator
The University will identify a Contract Administrator for any Agreement which results from this RFP. The individual will be the point of contact at the University for Day-to-day Operations but cannot approve amendments to the Agreement or price changes.

D. Waiver
No waiver of any right will be deemed a continuing waiver, and no failure on the part of either party to exercise wholly or in part any right will prevent a later exercise of such or any other right.

E. Indemnification
The Selected Firm will indemnify and hold harmless The Commonwealth of Virginia, The Rector and Visitors of the University of Virginia, and its agents, employees and officials from any and all costs, damage or loss, claims, liability, damages, expenses
(including, without limitation, attorneys' fees and expenses) caused by or arising out of the performance or non-performance of the Agreement by the Selected Firm or its agents or subcontractors, including the provision of any services or products. The Selected Firm warrants that the products, goods and services provided the University may be used by the University without being in violation of any copyright, patent or similar property right or claim by others and will defend, indemnify and save the University (its employees and agents) from and against any such claim.

F. Governing Law
This Agreement will be governed in all respects by the laws of the Commonwealth of Virginia.

G. Termination
If the Selected Firm fails to provide quality goods or services in a professional manner, solely as determined by the University, and, upon receipt of notice from the University, does not correct the deficiency to the University's satisfaction within a reasonable period of time, not to exceed five calendar days unless otherwise agreed to by both parties in writing, the University reserves the right to terminate this Agreement upon written notice to the Selected Firm.

H. Non-Appropriation
Funding for any Agreement between the University and a Selected Firm is dependent at all times upon the appropriation of funds by the Virginia General Assembly and/or any other organization of the Commonwealth authorized to appropriate such funds. In the event that funding to support this Agreement is not appropriated, whether in whole or in part, then the Agreement may be terminated by the University effective the last day for which appropriated funding is available.
I. Right of Audit

The University reserves the right to audit or cause to be audited the Selected Firm's books and accounts regarding the University's account at any time during the term of this Agreement and for three years thereafter. The Selected Firm will make available to the University all books and records relating to performance of this Agreement as may be requested during said period. This specifically includes, but is not limited to, the right of the University to require that the Selected Firm perform self-audits within reasonable parameters established by the University.

J. Contractual Claims

This Agreement is subject to the University's policy on Contractual Claims which is provided as Attachment 3, Procedure for Resolution of Contractual Claims.

K. Insurance

Listed below is the insurance the Selected Firm must maintain under any Agreement resulting from this RFP. In no event should the Selected Firm construe these minimum required limits to be its limit of liability to the University. The Selected Firm will maintain insurance which meets or exceeds the requirements of the University with insurance companies that hold at least an A- financial rating with A.M. Best Company. No Agreement will be executed by the University until the Selected Firm satisfies the insurance requirements of the University. The Selected Firm may be required to provide the University with a valid Certificate of Insurance before providing any goods or services to the University. The University reserves the right to approve any insurance proposed by the Selected Firm.

Commercial General Liability:

The Selected Firm and any Subcontractor will provide a minimum combined single Limit of Liability for bodily injury and property damage of $2,000,000 per occurrence and an aggregate limit of not less than $4,000,000 with coverage for the following:

- Premises/Operations
- Products/Completed Operations
- Contractual
- Independent Contractors
- Personal Injury
- Additional Insured

*Additional Insured
Automobile Insurance:
The Selected Firm and any Subcontractor will provide a minimum combined single Limit of Liability for bodily injury and property damage of $1,000,000 per occurrence with the following coverage for vehicles operated by its employees.

{X} Any Automobile  {X} Owned and Non-Owned Automobiles

Umbrella/Excess Liability:
The Selected Firm(s) and any Subcontractor will maintain excess liability coverage of at least $2,000,000 per occurrence that provides coverage uniform with underlying general liability insurance.

*Additional Insured:
The University will be named as an Additional Insured, and the proper name is: "The Commonwealth of Virginia, and the Rector and Visitors of the University of Virginia, its officers, employees, and agents."

L. Cooperative Purchasing/Use of Agreement by Third Parties

It is the intent of this solicitation and any resulting Agreement to allow for cooperative procurement. Accordingly, any public body (to include government/state agencies, political subdivisions, etc.), cooperative purchasing organizations, public or private health or educational institution, or any University related foundation may access the Agreement if authorized by the Selected Firm(s).

Participation in this cooperative procurement is strictly voluntary. If authorized by the Selected Firm(s), the Agreement may be extended to the entities indicated above to purchase goods and services in accordance with the Agreement. As a separate contractual relationship, the participating entity will place its own orders with the Selected Firm(s) and will fully and independently administer its use of the Agreement to include contractual disputes, invoicing and payments without direct administration from the University. No modification of this Agreement or execution of a separate agreement is required to participate; however, the participating entity and the Selected Firm(s) may
modify the terms and conditions of this Agreement to accommodate specific governing laws, regulations, polices, and business goals required by the participating entity. Any such modification will apply solely between the participating entity and the Selected Firm(s).

The Selected Firm(s) will notify the University in writing of any such entities accessing this Agreement. The Selected Firm(s) will provide semi-annual usage reports for all entities accessing this Agreement. The University will not be held liable for any costs or damages incurred by any other participating entity as a result of any authorization by the Selected Firm(s) to extend this Agreement. It is understood and agreed that the University is not responsible for the acts or omissions of any entity, and will not be considered in default of this Agreement no matter the circumstances.

Use of this Agreement does not preclude any participating entity from using other agreements or competitive processes as the need may be.

M. Favored Nations
The Selected Firm represents that the prices, terms, warranties, and benefits specified in its proposal are comparable to or better than the equivalent terms being offered by the firm to any present customer.

N. The University's Authorized Representatives
The only persons who are or will be authorized to speak or act for the University in any way with respect to this Agreement are those whose positions or names have been specifically designated in writing to the Selected Firm(s) by the University's Director of Procurement and Supplier Diversity Services.

O. Purchasing Manual
This Agreement is subject to the provisions of the Commonwealth of Virginia "Purchasing Manual for Institutions of Higher Education and Their Vendors" and any subsequent revisions, which is available at this web site: [https://vascupp.org/hem.pdf](https://vascupp.org/hem.pdf)
P. Small, Women-owned and Minority-owned (SWAM) Business Reporting

The Selected Firm will identify and fairly consider SWAM firms for subcontracting opportunities when qualified SWAM firms are available to perform a given task in performing for the University under the resulting Agreement. The Selected Firm will submit a quarterly SWAM business report to the University by the 8th of the month following each calendar quarter, specifically the months of April, July, October, and January. The Selected Firm will submit the quarterly SWAM business reports to:

Lorie Strother
SWAM Contract Administrator
Procurement and Supplier Diversity Services
E-mail: ljs8n@virginia.edu

The quarterly SWAM business reports will contain this information:

- SWAM firm’s name, address and phone number with which the Selected Firm has contracted over the specified quarterly period.
- Contact person at the SWAM firm who has knowledge of the specified information.
- Type of goods and/or services provided over the specified period of time.
- Total amount paid to the SWAM firm as it relates to the University’s account.

The Selected Firm’s failure to provide SWAM reports on a quarterly basis which contains the information required by this section and/or the Selected Firm’s failure to comply with the plan for utilizing SWAM businesses submitted by the Selected Firm as part of its proposal and/or negotiation response may be grounds for debarment pursuant to Section 9. G. 4 of the “Purchasing Manual for Institutions of Higher Education and their Vendors.”

Q. Payment Terms

The Selected Firm(s) may indicate payment terms of less than 45 days so long as those terms also contain a cash discount for early payment. For example: “1.25% 20/Net 30” would correspond to a 1.25% discount if paid in 20 days, otherwise net 30. The University will compute discounts from the date of delivery of goods at destination, after
final inspection, and acceptance, from the date of completion of services, or from the date the correct invoice is received in the Accounts Payable Division, whichever is later. The University will take the cash discount if payment is made within the specified time frame. Unless alternate payment terms, with cash discounts, are proposed by the Selected Firm(s), invoices submitted to the University by the Selected Firm(s) for the Goods and Services described in this RFP will be paid on a **Net 45 days** after receipt of the Goods and Services and University receipt and approval of the corresponding invoice.

The Selected Firm agrees to receive payments electronically and provide any additional discounts that may result from paying electronically. The firm will contact the University’s Payment Processor Specialist group in Procurement and Supplier Diversity Services to set up its preferred method of receiving electronic payments [Phone: (434) 924-4212 or email: uva-prs-boa@virginia.edu]. Accordingly, the Selected Firm agrees to accept Bank of America’s (“BoA”) ePayables® method of electronic payment or BoA’s PayMode® method of electronic payment.

R. Marketing

The University encourages the Selected Firm to appropriately and specifically market itself to applicable end-using University departments that may be interested in the Selected Firm’s Goods and Services. However, the Selected Firm will not use non-specific mass marketing formats; such as, but not limited to, spam, emails and junk mail. In the event that the Selected Firm engages in non-specific mass marketing formats, the University, in its sole discretion, may choose to terminate this Agreement.

S. Future Goods and Services

The University reserves the right to have the Selected Firm provide additional goods and/or services under the same pricing, terms, and conditions to make modifications or enhancements. Such additional Goods and Services may include other products, components, accessories, subsystems or related services that are newly introduced during
the term of this Agreement. Such newly introduced additional Goods and Services will be provided to the University at favored nations pricing, terms, and conditions.

T. System Acceptance

“System Acceptance” will encompass testing and observation of the fully functional and operational product. The University’s designated representative will determine if the product specifications have been met, shortly after installation and integration of the product. Warranty will begin as of the date of System Acceptance. In the event that the University does not accept the product, the University may elect to require the Selected Firm(s) to provide a replacement product or terminate the Agreement.

The University’s designated representative will be the sole representative of the University and will have sole authority to act on the University’s behalf with regard to System Acceptance; however, in the event of a dispute regarding any material aspect of System Acceptance unable to be resolved by the University’s designated representative, then the procedures in Attachment 3, Procedure for Resolution of Contractual Claims will be followed.

U. Ordering Procedures

The University does not place verbal orders for the Goods and Services. The University may only place orders for the Goods and Services by issuing a formal written Purchase Order in advance of Selected Firm’s provision of the Goods and Services. Accordingly, at the University’s request, the Selected Firm will issue a proposal/quotation listing the Goods and Services desired by the University and the corresponding fees and/or fee estimates. After any necessary discussions and/or revisions, the University will issue a corresponding Purchase Order for a specified fee amount. This specified fee amount cannot be exceeded by the Selected Firm unless a new formal written Purchase Order or Purchase Order revision is issued by the University authorizing a specific additional fee amount. Under no circumstances does the University authorize the Selected Firm to provide the Goods and Services before receipt of a formal written Purchase Order corresponding to its proposal/quotation. If the Selected Firm provides Goods and
Services prior to receipt of a formal written Purchase Order, or incurs costs in excess of authorized purchase order fee amounts, it does so at its own risk.
Attachment 3

Procedure for Resolution of Contractual Claims

The Virginia Acts of Assembly of 2007, Chapter 943, Chapter 3, Exhibit P and its attachments requires contractors with the University to submit any claims, whether for money or other relief, in writing no later than 60 days after final payment; however, written notice of the contractors' intention to file such a claim must be given at the time of the occurrence or beginning of the work upon which the claim is based.

The University's procedure for deciding such contractual claims is:

A. The Selected Firm must provide the written claim to:
   Assistant Director of Procurement and Supplier Diversity Services
   University of Virginia
   1001 North Emmet Street
   P. O. Box 400202
   Charlottesville, Virginia 22904-4202

B. Although the Selected Firm may, if it chooses, attempt to resolve its claim by dealing with a University department other than the one stated in Section A above, the Selected Firm must submit any unresolved claim in writing no later than 60 days after final payment to the Assistant Director of Procurement and Supplier Diversity Services if it wishes to pursue its claim.

C. Upon receiving the written claim, the Assistant Director of Procurement and Supplier Diversity Services will review the written materials relating to the claim and decide whether to discuss the merits of the claim with the Selected Firm. If such discussion is to be held, the Assistant Director of Procurement and Supplier Diversity Services will contact the Selected Firm and arrange such discussion. The manner of conducting such discussion will be as the Assistant Director and the Selected Firm mutually agree.
D. The Assistant Director of Procurement and Supplier Diversity Services will mail his or her decision to the Selected Firm within 60 days after receipt of the claim. The decision will state the reason for granting or denying the claim.

E. The Selected Firm may appeal the decision to:

   Director of Procurement and Supplier Diversity Services
   University of Virginia
   Carruthers Hall
   1001 North Emmet Street
   P.O. Box 400202
   Charlottesville, Virginia 22904-4202

   by providing a written statement explaining the basis of the appeal, within 15 days after the Selected Firm's receipt of the decision.

F. Upon receiving the written appeal, the Director of Procurement and Supplier Diversity Services will review the written materials relating to the claim and decide whether to discuss the merits of the claim with the Selected Firm. If such discussion is to be held, the Director of Procurement and Supplier Diversity Services will contact the Selected Firm and arrange such discussion. The manner of conducting such discussion will be as the Director of Procurement and Supplier Diversity Services and the Selected Firm mutually agree.

G. The Director of Procurement and Supplier Diversity Services will mail his or her decision to the Selected Firm within 60 days after the Director of Procurement and Supplier Diversity Services receipt of the appeal. The decision will state the reasons for granting or denying the appeal.

H. Nothing in this Attachment 3 will preclude either party from filing a claim in any court of the Commonwealth of Virginia to seek legal or equitable remedy if a dispute should arise, in addition to such other remedies as are expressly provided in this Agreement; provided, the Selected Firm may not file such claim unless and until it has complied fully with the procedure set forth in this Attachment 3.
Greetings:

The quality of service the University of Virginia is able to deliver to its customers is directly related to the excellent support we receive from you and many other outstanding suppliers of goods and services. Without you, we would not be able to fulfill our educational, health care and research missions. An important part of our procurement program involves our commitment to doing business with small, women- and minority-owned (SWaM) businesses. As one of our most important vendors, we look to you to help us achieve this objective.

We conduct substantial business with small firms. We have a particular institutional focus on developing long-term business relationships with minority-and women-owned businesses. We count on our majority firms to help us achieve our goal.

I seek your assistance in two areas. First, to the extent practical, I ask that you involve small, women-and minority-owned businesses in the delivery of services you provide to UVa. The office of Procurement and Supplier Diversity Services is ready to assist you in identifying qualified diverse business partners. Second, I seek your help in reporting your results through our quarterly subcontracting reports. The terms and conditions previously provided to your organization outlined this process.

This effort is important to us. We depend on you in so many ways – this is another way that we can partner with your company to make things better.

Sincerely,

Colette Sheehy
Vice President for Management and Budget
Attachment 5

Pricing Schedule

1. Furnish and deliver two new boilers $________________
2. Furnish and deliver four replacement burner controls $__________
3. Inspection, Start-up, Commissioning of Boilers$___________
4. Inspection, Start-up, Commissioning of Burners$____________
5. Supervision During Demolition and Installation:
   $______ Hourly Rate X Number of Hours _____ = $_______ Total
6. Itemized Listing and Unit Pricing for Spare Parts Boilers and/or
   Burners$____________
7. Manufacturers List price Discount for future Purchases Equipment and/or Parts
   _______ Percentage (%) discount from Manufacturer’s List.
8. Maintenance and/or Service Agreement Fees for one year or multiple years if discounted
   $__________ per ________ number of years.
9. Listing of Additional Goods/Services Firm can provide:
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________
   ___________________________________________________________________