

ATTACHMENT A - SCOPE OF WORK FOR RFP L232304

1. DESCRIPTION OF SERVICES – GENERAL REQUIREMENTS:

The Contractor shall provide 24-hour comprehensive operations and maintenance services and staff to all locations with daily hours of operations as described, but not limited to, herein.

- 1.1.** Provide, at a minimum, dedicated site staff sufficient to execute all responsibilities as outlined herein.
- 1.2.** Provide at least (1) one full-time on-site Facility Manager (FM) who shall administer the program on a full-time basis in consultation with the Executive Director (or Designee) of Planning & Operations (P&O).
- 1.3.** The FM shall be on duty during the regular schedule that is delineated by the University. Additional work hours may be required of the FM as requested by the Planning & Operations Executive Director (or Designee). The FM is a contract employee through this contract and may be requested to supervise other contract employees. The FM will commit 100% of their time to this project/contract.
- 1.4.** Staffing levels will be determined by the Contractor, however the following **minimum** staffing levels and positions shall be included as dedicated full-time staff to this service contract. Position descriptions, experience, duties, and knowledge & skills are included within sec 1.5.2 of this document.

Dedicated Site Staff	
Position Title	Quantity
Facility Manager	1
Lead Building Maintenance Technician	1
Building Maintenance Technician	2

- 1.5.** Staffing competency and required duties shall include, but not be limited to:

- 1.5.1.** Vendor will only employ individuals qualified to perform the on-site, day-to-day functions related to ensuring total maintenance of campus buildings and related systems as specified in contract. Vendor shall provide staff with necessary tools, equipment, and supplies to perform scope of work as specified at no additional expense to The University of Arizona. This individual will work 8 hours a day, Monday through Friday, utilizing work hours mutually agreed to by The University and vendor. Vendor will always ensure sufficient staffing levels.

- 1.5.1.1.** Perform on-site activities related to the scope of work as specified per contract, to include scheduled preventive maintenance and repairs, unscheduled maintenance and repairs and visual inspections for operational conditions as well as for unsatisfactory performance of systems and equipment operational condition and life-cycle.

- 1.5.1.2.** Identify the need for non-scheduled repair services and coordinate and perform appropriate repairs.

- 1.5.1.3.** Perform maintenance and repairs related to routine service calls and customer service, for example, temperature and air flow adjustments in occupied spaces, plumbing repairs and minor electrical service and repair.

- 1.5.1.4.** Vendor and vendor on-site representative are responsible for maintaining all equipment and systems related components which make up HVAC, Mechanical, Plumbing and HVAC

Controls Systems, including manufacturer and construction related warranty integrity, and provide written documentation and reports as specified in this document.

1.5.2. Vendor staff's job duties and the University's expected and demonstrated skill levels will include, but not be limited to, the following position experience, skills, and duties:

1.5.2.1. FACILITY MANAGER

The Facility Manager is a key leader with strong business acumen, technical knowledge, and professional communication skills. The position supervises, coordinates, performs, and assists the activities of maintenance staff and sub-contractors engaged in the repair, maintenance, and installation of building MEP equipment and other systems and related equipment at multiple sites. This person also must possess the ability to provide the campus with up-to-date assessment, planning, and other critical equipment information.

1.5.2.1.1. General Duties:

- Manage all facility related resources and activities to ensure prompt issue resolution, work order completion, client satisfaction and compliance with processes and financial controls.
- Perform and document regular property inspections and coordinate associated maintenance and repairs while supporting systems integration efforts and capital plan development.
- Manage complex vendor contracts to ensure excellent service and value.
- Have excellent communication skills adaptable to varied delivery methods and audiences; be able to convey information succinctly, make effective presentations and deliver professional reports.
- Possess awareness and understanding of regulatory and compliance requirements for environmental, health and safety programs, OSHA, ADA, ergonomics, and other facility related issues. Familiarity with emergency action plans and business recovery programs is preferred.
- Actively contribute to program development for energy conservation, operational sustainability, and MEP systems asset management.
- Management, Strategic Sourcing, and other key initiatives as directed by the Executive Director (or Designee) of Planning & Operations.
- Assist in the preparation of annual budgets, forecasts, management plans, monthly performance, and variance reports as directed by the Executive Director (or Designee) of Planning & Operations.
- Oversee and approve portfolio related purchasing and invoice payment ensuring adherence to strict financial controls.
- Actively develop and manage key relationships with industry and trade associations, representatives of government, public service organizations, customers, and vendors
- Challenge, mentor, and coach team to ensure optimal performance; manage staff to develop professionally and deliver consistently excellent service levels.
- Requisitions materials and supplies using established guidelines and procedures.
- Interacts courteously with the client staff, vendors, and public; maintains effective working relationships with other staff and cooperates with and follows directions of Supervisor to effectively meet departmental and client objectives.
- Prioritizes daily activities and work order scheduling with team members and keeps management informed on progress and delays of all preventive maintenance work orders, related jobs, and other repair activities to help assist with efficient and

adequate utilization of staff and resources; ensures timely completion of properly authorized work orders in a cost-effective manner.

- Responds to client questions on contracted maintenance activities and decisions in resolving problems in a professional and timely manner. Refers questions and comments to manager as required.
- Coordinates with vendors for performance of specialized maintenance, repair, or certification of equipment and systems. Inspects completed work for conformance with contract requirements and safety codes. Processes invoices for payment.
- Facilitates safety training and meetings and always uses safe working practices.
- Responds to emergencies as requested and coordinates after-hours work activities and repairs; informs Supervisor of all after-hours work requirements.
- Documents and records work performed, and materials used into a computerized maintenance management system (CMMS) in a timely manner.
- Inspects completed work for conformance with requirements of local building and safety codes.
- Assembles documentation for compliance with federal, state, local and company compliance and auditing requirements; participates in audits as required.
- Executes additional duties, projects and responsibilities as assigned by the Executive Director (or Designee) of Planning & Operations.

1.5.2.1.2. Knowledge and Skills Required:

- Knowledge of OSHA occupational safety regulations.
- Knowledge of the architecture, engineering, and construction management industry.
- Knowledge of Infection Control Measures or ICRA when required.
- Demonstrated computer literacy for Microsoft Office programs and entering and looking up information using standard business software.
- Ability to read and understand construction, electrical and equipment blueprints, and schematics.

1.5.2.1.3. Education and Experience Required:

- Light electrical work (Install electrical outlets, light conduit installation, etc.)
- Minimum 10 years of HVAC field service, installation, and repair experience in a commercial environment.
- A strong working knowledge of building automation systems (i.e., Allerton, Siemens, Johnson Controls, etc.).
- Prior use of Computerized Maintenance Management Systems (CMMS) (i.e., Maintenance Connection, Archibus, Maximo, School Dude, etc.).

1.5.2.2. LEAD TECHNICIAN

1.5.2.2.1. General Duties

- Performs routine maintenance, troubleshooting, and repair on HVAC/Mechanical systems such as boilers, air handling units, exhaust fans, VAV's, fan coil units, water heaters, humidifiers, chilled water systems, pumps, water softener systems, lighting and ballast systems, electrical and electronic controls, plumbing and other equipment.
- Prioritizes daily activities and work order scheduling with team members and keeps management informed on progress and delays of all preventive maintenance work orders, related jobs, and other repair activities to help assist with efficient and

adequate utilization of staff and resources; ensures timely completion of properly authorized work orders in a cost-effective manner.

- Responds to client questions on contracted maintenance activities and decisions in resolving problems in a professional and timely manner. Refers questions and comments to manager as required.
- Interacts courteously with the client staff, vendors, and public; maintains effective working relationships with other staff; cooperates with and follows directions of Supervisor to effectively meet departmental and client objectives.
- Coordinates with vendors for performance of specialized maintenance, repair, or certification of equipment and systems. Inspects completed work for conformance with contract requirements and safety codes. Processes invoices for payment.
- Requisitions materials and supplies using established guidelines and procedures.
- Participates in safety training and meetings and always uses safe working practices.
- Responds to emergencies as requested and coordinates after-hours work activities and repairs; informs Supervisor of all after-hours work requirements
- Documents and records work performed, and materials used into a computerized maintenance management system (CMMS) in a timely manner.
- Inspects completed work for conformance with requirements of local building and safety codes.
- Assembles documentation for compliance with federal, state, local and company compliance and auditing requirements, and participates in audits as required.
- Repairs and replaces faulty switches, receptacles, and other elements of electrical systems to include fabrication of electrical control panels in a safe and qualified manner.
- Executes additional duties, projects and responsibilities as assigned by the manager.
- Leads Building Maintenance Technicians when Manager is off site.

1.5.2.2.2. Knowledge and Skills Required

- Knowledge of OSHA occupational safety regulations
- Knowledge of the architecture, engineering, and construction management industry.
- Ability to read and understand construction, electrical and equipment blueprints, and schematics.
- Knowledge of Infection Control Measures or ICRA when required.
- Knowledge of the proper use of specialized departmental equipment including those used in the plumbing, electrical, HVAC and general carpentry trades.
- Hands on experience in HVAC field service, installation, and repair in a commercial, industrial, or medical/laboratory environment.
- Be able to work in a structured team environment and possess strong communication skills and ability to build effective working relationships with staff, customers, and others in a fast-paced environment.
- Demonstrated computer literacy for Microsoft Office programs and entering and looking up information using standard business software.
- Prior experience with Computerized Maintenance Management Systems (CMMS) preferred.
- Demonstrated organizational, problem solving and common-sense skills.

1.5.2.3. BUILDING MAINTENANCE TECHNICIAN(S)

Under Supervision of the **Facility Manager and Lead Building Maintenance Technician:**

1.5.2.3.1. General Duties

- Performs routine maintenance, troubleshooting, and repair on HVAC/Mechanical systems such as boilers, air handling units, exhaust fans, VAV's, fan coil units, water heaters, humidifiers, chilled water systems, pumps, water softener systems, lighting and ballast systems, electrical and electronic controls, plumbing and other equipment.
- Prioritizes daily activities and work order scheduling and keeps management informed on progress and delays of all preventive maintenance work orders, related jobs, and other repair activities to help assist with efficient and adequate utilization of staff and resources; ensures timely completion of properly authorized work orders in a cost-effective manner.
- Responds to client questions on contracted maintenance activities and decisions in resolving problems in a professional and timely manner. Refers questions and comments to manager as required.
- Ability to read and understand construction, electrical and equipment blueprints, and schematics.
- Knowledge of the proper use of specialized departmental equipment including those used in the plumbing, electrical, HVAC and general carpentry trades.
- Hands on experience in HVAC field service, installation, and repair in a commercial, industrial, or medical/laboratory environment.
- Interacts courteously with the client staff, vendors, and public; maintains effective working relationships with other staff and cooperates with and follows the directions of Supervisor to effectively meet departmental and client objectives.
- Requisitions materials and supplies using established guidelines and procedures.
- Participates in safety training and meetings and uses safe working practices at all times.
- Responds to emergencies as requested and coordinates after-hours work activities and repairs; informs Supervisor of all after-hours work requirements.
- Documents and records work performed, and materials used into a computerized maintenance management system (CMMS) in a timely manner.
- Inspects completed work for conformance with requirements of local building and safety codes.
- Repairs and replaces faulty switches, sockets, and other elements of electrical systems to include fabrication of electrical control panels.
- Performs other duties and special projects as assigned.

1.5.2.3.2. Knowledge and Skills Required:

- Knowledge of OSHA occupational safety regulations.
- Knowledge of the architecture, engineering, and construction management industry.
- Knowledge of Infection Control Measures or ICRA when required.
- Ability to read and understand construction, electrical and equipment blueprints and schematics.
- Knowledge of the proper use of specialized departmental equipment including those used in the plumbing, electrical, HVAC and general carpentry trades.
- Strong communication skills and ability to build effective working relationships with staff, customers and others in a fast-paced environment.
- Basic computer literacy for entering and looking up information using standard business software (Word and Excel).
- Demonstrated organizational problem solving and common-sense skills.

1.5.2.3.3. Education and Experience Required

- High School Diploma or GED; trade school coursework in general carpentry, HVAC, electrical and/or building maintenance.
- Minimum 5 years of related construction or maintenance experience in a commercial environment.
- A strong working knowledge of building automation systems (i.e., Allerton, Siemens, Johnson Controls, etc.).
- Prior use of Computerized Maintenance Management Systems (CMMS) (i.e., Maintenance Connection, Archibus, Maximo, School Dude, etc.).

1.5.2.4. LOCKSMITH

Only if requested and as directed by the Executive Director (or Designee) of Planning & Operations, contractor to provide an as needed basis, a licensed Locksmith to provide General Locksmithing duties and responsibilities across the campus properties. This position will work on campus on a case-by-case emergency need. Contractor to include as an add alternate service cost. The University shall provide all parts, and materials for the position to fulfill the following duties:

- General locksmith repair and replacement.
- Work with key/code type door locking hardware.
- Provide emergency unlocking services.

1.5.2.5. GENERAL MAINTENANCE MECHANIC(S) (GMM)

The Executive Director (or Designee) of Planning & Operations for the campus may ask the contractor to provide GMM staffing augmentation on an as needed basis for the UA maintenance team. The pricing for providing staff augmentation for this position(s) shall be listed separately within the pricing section of the Contractor's response to this RFP.

1.5.2.5.1. General Duties and Skillsets:

- Light drywall paint / patch repair
- Lighting repair (bulbs)
- General office moves.
- Light plumbing (drain clogs, flush valve repair, etc.).
- Equipment moves

1.6. General Account Manager

1.6.1. Contractor will ensure that Contractor's employees and its subcontractors are informed of infection control measures that are in place in all University Buildings regardless of tenants, use or operations

1.6.2. Provide account management to ensure services are delivered consistent with the stated scope of services, specifications, and service expectations. Management services shall include sourcing, supervising, and evaluating current service delivery methods and submitting enhancement opportunities to improve quality, customer service, and cost performance as well as satisfying current and new operational business requirements. Contractor shall follow all code regulations; safety regulation recommendations shall be followed within relation to any and all work accomplished under this contract.

- 1.6.3. Provide management services for all issues related to equipment and associated components of equipment included within the scope of the RFP.
- 1.6.4. Contractor shall be the subject matter expert and consultant for the University to ensure services are delivered per required codes and industry standard practices, consistent with agreement term of work completed by third-party vendor or performed by maintenance Contractor.
- 1.6.5. Contractor shall monitor any sub-Contractor/third party Contractor performance.
- 1.6.6. Sequence of Operations- Develop and maintain a library of facilities drawings, operation and maintenance manual, safety programs, and emergency procedures per University, federal, state and city guidelines.
- 1.6.7. Provide updated organizational charts, standard operating procedures for each repair process on campus, including stand-by or on-call procedures.
- 1.6.8. Provide expertise, supervision, maintenance repair and project management services associated with building systems within designated facilities. Ensure all systems function and operate per design, maintain operational reliability, and conserve energy usage.
- 1.6.9. Provide and review systems integration diagrams, data, and associated information at quarterly business review meetings to the Executive Director (or Designee) of Planning & Operations.
- 1.6.10. Provide and identify improvement opportunities to increase reliability of operation, extend life cycle of equipment and reduce operation cost to include the conservation of energy usage.
- 1.6.11. Provide dedicated account management, administrative, and certified technical staff consistent with the industry standard personnel qualifications. Staffing plans are to satisfy daily maintenance and service workload and coverage objectives consistent with established service level agreements, service level response goals, and other University requirements.
- 1.7. **Staffing considerations include:**
 - 1.7.1. Develop staffing plans that minimize overtime expenses by planning and scheduling, in advance, recurring work tasks assigned to staff that are on off-shifts and/or split shifts.
 - 1.7.2. Develop operating plans and strategies which ensure that adequate resources are always available to properly support or respond to the scale and technical complexity of the building systems equipment, events, and/or occurrences.
- 1.8. Provide monthly, quarterly, and year-to-date operational reporting services that highlight operational issues/conditions and summarize the preventive maintenance, remedial work requests and facility management operations. Reports to be prepared at the Facility level applicable portfolio summaries presented. (Portfolio – All facilities included within this document; Facilities added during the course of agreement).
- 1.9. Provide and operate a fully functional Computerized Maintenance Management System (CMMS) platform to effectively integrate the work order processing and reporting functions. Contractor shall effectively manage the work order processes for remedial service requests and preventive maintenance work, etc.

1.9.1. All work orders will be managed and presented to the Executive Director (or Designee) of Planning & Operations when requested. Format shall include all current, pending, and closed work orders.

1.9.2. The University currently utilizes the Accruent, Cloud Based, Maintenance Connection System.

1.9.3. Set-up and Implementation - Vendor shall include any costs for set-up and implementation of Maintenance Connection. Current Maintenance Connection License count is seven (7). Contractor shall provide a fee for additional license needs as the campus grows.

1.9.4. Vendor shall provide information on Maintenance Connection software updates and their frequency. Please note frequency of updates. Any additional cost associated with the upgrade will be paid by Contractor.

1.9.5. Training: Awarded vendor shall provide, as needed, on-site Maintenance Connection training and support to University staff as detailed:

1.9.5.1. Maintenance Management (Group Supervisors, Operation and or maintenance managers)

1.9.5.2. Administrative support (Help Desk Staff, Administrative Assistant, Customer Services Representatives)

1.9.6. The Contractor shall develop, implement, and maintain effective programs for the standardization of maintenance, utilizing University's computerized maintenance management system. All information contained in the computer system and files is the property of University.

1.9.7. The Contractor shall establish and maintain the computerized work order system that will serve as a mechanism for other departments requesting work and will serve as a means of instruction of work to be done. The system will, but not limited to, record the cost and completion date of each work order by room, building, campus, and University. All work orders shall be distributed, completed, and closed out by the Contractor.

1.9.8. Historical corrective maintenance on equipment shall be documented in the CMMS. All files and related electronic hardcopy information shall be the property of University.

1.9.9. CMMS

1.9.9.1. Shall be utilized for, but not limited to:

- Work order management
- Preventative maintenance management
- Labor management
- Workflow management
- Materials management
- Asset and equipment management
- Automating work orders
- Controlling parts inventories tracking assets
- Creating purchase orders
- Easily accessing needed reports
- Estimate creation, routing, and approvals project management
- Assessments for current buildings, components, and assets
- Deferred maintenance identification/tracking
- Classification of ratings and priorities

- Collection of cost estimates

- 1.10.** Monitor technical subcontracted vendors ensuring services are delivered consistent with agreement terms and service specifications. As necessary, update service specifications based on changing business needs with appropriate approval by the Executive Director (or Designee) of Planning & Operations.
- 1.11.** Develop, maintain, and communicate the policies and procedures associated with the delivery of efficient and quality operations and maintenance services in support of the various University facilities and amenities. Library of Facility drawings, manuals or electronic files will include comprehensive operational manuals, safety programs, emergency procedures (per established University guidelines), building operations and maintenance procedures.
- 1.12.** Provide comprehensive capital planning services associated with Mechanical, Electrical and Plumbing (MEP) systems to ensure critical business operations are as free as possible from interruptions due to equipment failures and changing business requirements are accommodated within the MEP/operational system's capacities
- 1.13.** Provide complete and efficient operational management of all base building MEP systems. Ensure all business environments with full 24/7 auxiliary back-up power capabilities are protected from internal and external interruptions. Ensure all business environments without full 24/7 back-up capabilities are free from controllable interruptions.
- 1.14.** Maintain potable drinking water systems within designated Facilities.
- 1.15.** Maintain all plumbing systems and associated components including supply and waste piping.
- 1.16.** Provide the expertise, supervision, maintenance, repair services associated with the various building systems within designated Facilities. Ensure all systems function as designed to maintain system reliability and conserve energy.
- 1.17.** Provide preventive/predictive maintenance and property inspections supporting designated Facilities, including, but not limited to, base building mechanical, electrical, and plumbing systems to keep all in good working order and in compliance with manufacturer's recommendations and industry best practices.
- 1.18.** Maintain effective customer relations. Develop and implement procedures to define and ensure the prompt handling of remedial work requests, including the proper communication channels and service level response plans, charts, timelines and goals.
- 1.19.** Develop and implement 24-hour emergency response and procedures for responding to building alarms and severe weather conditions that affect life safety, physical assets, or business operations. Ensure off-hour response to alarm condition procedures include verbal response within 1- hour and on-site response by certified personnel within two (2) hours of the report to awarded Contractor.
- 1.20.** Participate in the review and revision of the emergency response plans as needed and be prepared to execute the support responsibilities identified by those plans.
- 1.21.** Designate a safety officer to coordinate all regulatory, building code, fire and safety requirements and to develop, implement, maintain and communicate to the Executive Director (or Designee) of Planning & Operations the following:
 - An effective program supporting all OSHA regulations, regulatory reporting requirements and safety related training requirements.

- A safety data sheets program (SDS) for all chemicals used at any site contained within the portfolio under the Contractor's range of responsibilities.
 - Safety officer shall correspond and be point of contact for regulatory agency inspections/visits to portfolio.
 - An effective infection control reduction plan (ICRA) with accompanied SOP for implementation. This shall include PPE and air scrubbing plans, and barrier installation and use.
- 1.22.** Provide after-hours emergency service call center to receive work requests, process remedial and preventive maintenance work orders and implement emergency and normal response procedures.
- 1.23.** Maintain and tabulate the information required to effectively prepare monthly, quarterly, and annual workload, financial and management reports. Develop and administer a process for measuring University satisfaction at a discrete business level; analyze results and translate survey results into specific business improvements.
- 1.24.** Safety Programs (applies to all services provided).
- 1.24.1.** Contractor shall provide the Executive Director (or Designee) of Planning & Operations with copies of its safety program(s) inclusive to this submittal.
- 1.24.2.** Contractor will be responsible for safety aspects relating to the range of services provided at each Facility.
- 1.24.3.** Contractor shall ensure that its subcontractors adhere to all safety requirements.
- 1.25.** Quality Control Programs (applies to all services provided).
- 1.25.1.** Contractor shall provide quality improvement monitoring and evaluation programs. Contractor shall supply a quality control program inclusive to this RFP submittal.
- 1.25.2.** Contractor shall effectively evaluate the building systems to ensure all components are serviced and renewed in a manner that ensures their integrity, appearance and reliability is maintained over the long term and extend useful life.
- 1.26.** Procurement Procedures and Programs (applies to all services provided).
- 1.27.** Contractor shall have a call center and answer phone calls, e-mails, and radio calls in a prompt manner.
- 1.28.** The status of work requests should be communicated to the Executive Director (or Designee) of Planning & Operations on a consistent regular basis.
- 1.29.** The contractor will track client satisfaction levels by conducting semi-annual surveys among University Occupants. Copies of the summary results should be sent to the Executive Director (or Designee) of Planning & Operations.
- 1.30.** Contractor shall ensure that appropriate documentation, procedures, and manuals are developed, maintained, and disseminated.
- 1.31.** Contractor shall utilize facility condition assessments to monitor the operational efficiency and quality of University portfolio as requested by the Executive Director (or Designee) of Planning & Operations.

- 1.32.** Contractor will monitor and report on its progress in meeting project-oriented objectives as requested. Contractor shall provide Additional Work Services—unique or specialized requests outside the base building services—as requested. Contractor shall supply the University with bid quotations, as needed, from reputable vendors and submit all information for review and approval by the Executive Director (or Designee) of Planning & Operations. Once approved by the Executive Director (or Designee) of Planning & Operations, including all support information (including all itemized bid quotations) related to any request, shall be provided to the University.
- 1.33.** Contractor shall develop a methodology to track Additional Work Services work order costs and volumes separately from base building services.
- 1.34.** Contractor should make client satisfaction a priority in providing services under the agreement.
- 1.35.** Contractor's employees should be trained to be customer-service oriented and to interact with University employees positively and politely and the public when performing contract services. Contractor's employees should be clean, courteous, efficient, and neat in appearance always, and committed to offering the highest degree of service to the public. If, in the Executive Director (or Designee)'s determination, the Contractor is not interacting in a positive and polite manner with University employees and the public, the Contractor shall take all remedial steps to conform to the standards set by the agreement and is subject to termination for breach of contract.
- 1.36.** The Contractor shall provide for a maintenance management system to apply proven management principles to optimize the use of the contract-designated levels of personnel, equipment, material, space, time, and funds. The Contractor will also provide effective maintenance support and response to University administrative and operational requirements. Work schedules or shifts for FTEs will be generated by the Contractor and approved by the University.
- 1.37.** Maintain a high level of productivity in the maintenance work force.
- 1.38.** Assure a high-quality standard for maintenance performance.
- 1.39.** Develop operating plans and strategies, which ensure that adequate resources are always available (24/7/365) to properly support or respond to the scale and technical complexity of the building systems and operational occurrences. This shall include inclement weather, environmental or other events that may disrupt normal day-to-day operations.
- 1.40.** Provide effective communications and coordination with major capital improvement initiatives that are directly managed by other entities to the Executive Director (or Designee) of Planning & Operations.
- 1.41.** Achieve cost reductions in performing proper maintenance in University facilities. Meeting or exceeding national comparable cost data for this area.
- 1.42.** Provide a maintenance program. The Contractor shall advise University of maintenance project resource requirements.
- 1.43.** Contractor's actions shall respond to University's current designation of priorities for the completion of preventive maintenance, corrective maintenance, and predictive maintenance.
- 1.44.** Provide University with a successful maintenance program that is measurable through weekly inspections with an inspection report signed by the Contractor. Provide monthly preventive maintenance/work order metrics to review with FE/M team. If acceptable, these will be approved by the Executive Director (or Designee) of Planning & Operations.

1.45. CURE PERIODS: Service errors may occur from time-to-time. The Contractor will ensure that major service errors are avoided. When errors or mistakes occur on the part of the Contractor; the contractor shall identify, in writing, what the service error was and how long the “CURE PERIOD” will be.

1.45.1. Cure periods must be recorded by the Contractor and submitted to the University in writing. Cure periods that require submittal to the University are:

- Major water spills or floods caused by Contractor staff.
- Failure to perform preventive maintenance on equipment as agreed to in the RFP.
- Failure to adhere to safety precautions such as entering hazardous areas, failure to wear required PPE.
- Failure to operate equipment in a safe manner.
- Causing personal injury or damage to property due to negligence by Contractor staff.
- Failure to maintain Infection Control Reduction (ICRA) during maintenance procedures.
- Failure to provide On-Call response when required as referenced in the scope of work.
- Theft of University property, unprofessional behaviors.

1.45.2. Number of allowable cure periods shall not exceed three (3) in a fiscal year [July to June]. If a fourth (4th) does occur in a fiscal year; the Contractor will submit a reimbursement fee back to the University for 2% of the total contract amount. Cure period violation reimbursements will be submitted to the Financial Service Office at the University no later than 30 days after the notice of the 4th service error.

1.45.3. Exclusions: Security, Janitorial, and Landscaping

2. MECHANICAL, ELECTRICAL, AND PLUMBING (MEP) SYSTEM MAINTENANCE SERVICES

The vendor shall provide professional maintenance services, labor, supervision, administrative and technical direction for managing the maintenance function, and shall administer major maintenance/repair services on building HVAC, Mechanical and Plumbing systems throughout the Phoenix BioScience Core Campus, including the UA Cancer Center and other building infrastructure as indicated by the scope documents or at the request of the Executive Director (or Designee) of Planning & Operations. Such services shall include, at a minimum, implementation of a complete and comprehensive preventive maintenance program at RFP specified intervals, pertaining to all HVAC, Mechanical, Plumbing and HVAC Controls Systems, including verification of manufacturer and construction related warranty issues versus maintenance issues. The vendor shall also provide sufficient full time/five days per week on-site skilled maintenance staff that will respond to routine maintenance related service calls from the building occupants and on-site University Management Staff related to HVAC, Mechanical, Plumbing, and routine Electrical trouble calls, as further specified in this document.

The Mechanical Services vendor would also provide 24/7 on-call coverage for off-shift response, with vendor provided backup personnel available as required, as further specified in this document.

Systems and asset types included, but are not limited to, are referenced below.

Note: This RFP will include an “Attachment B” document that contains a representation of all Assets, Preventive Maintenance Tasking, Preventive Maintenance Schedules, and Intervals. Any reference throughout this RFP to these items will be found in “Attachment B”.

3. UA PBC ASSET TYPES

Classification Nomenclature Only

Air Compressor	Filtration System
Air Conditioning Unit	Fire Control Panel
Air Filter	Fume Hood
Air Handler Unit	Generator
Air Separator	Heat Exchanger
Air Terminal	Heater
Automatic Transfer Switch	Humidifier
Back Flow Preventer	Mechanical Room
Boiler	Monitor
Bypass Feeder	Panelboard
Chemical Delivery System	Pot Feeder
Chilled Beam	Pump
Circuit Breaker	Pump Controller
Condensing Unit	Reheat Coil
Control Panel	RO/DI System
Cooler	Roll Up Door
Damper	Roof Top Unit
Disconnect	Shower Room
Dock Lift	Sprinkler Riser
Door	Sprinkler Valve
Door Opener	Supply Valve
Door-Fire	Switch
Duct Heater, Electric	Tank (pressure vessel)
Electrical Panel	Toilet
Electrical Switchboard	Transfer Switch
Elevator	Transformer
Emergency Eye Wash and Shower	Uninterruptible Power Supply
Energy Recovery Unit	Valve
Equipment	Variable Frequency Drive
Exhaust Fan	Variable Volume Box
Exhaust Terminal	Venturi Air Flow Valve
Exhaust Valve	Water Circulating Pump
Expansion Tank	Water Filter
Eye Wash Station	Water Fountain
Fan	Water Heater
Fan Coil Unit	Water Softener

4. HVAC SYSTEMS MAINTENANCE SERVICES

- 4.1.** Contractor shall create a detailed equipment list of all components associated with UNIVERSITY's HVAC systems. This list shall be shared with UNIVERSITY and updated as any changes are made. This list will include at minimum: type, location, model number, serial number and filter size & quantity.
- 4.2.** University will provide Contractor with all current equipment lists. Contractor will be responsible for verifying accuracy of existing list and adding/subtracting equipment as necessary to create a comprehensive equipment list.
- 4.3.** The Contractor shall furnish labor, tools, equipment, transportation, and supervision necessary for the maintenance, inspections and repairs to all air conditioning, heating, and ventilating systems located in all University buildings listed at the front of this RFP. All materials, system components, refrigerant, lubricants, and parts necessary for routine preventive maintenance in heating, ventilating and air conditioning units shall be supplied by the Contractor.
- 4.4.** The Contractor shall perform complete maintenance service, inspections, and emergency calls for all equipment Included under this Scope of Services. This service shall consist of thorough maintenance work in accordance with the equipment manufacturers recommended tasks and frequency and best commercial practice governing the maintenance of air, heating and ventilating systems.
- 4.5.** The services shall include Routine Preventive Maintenance, and Miscellaneous and Emergency Service and Repairs as outlined below.
 - 4.5.1. Routine Preventative Maintenance Defined:**

Such service shall include regularly scheduled maintenance tasks and inspections for each unit listed herein. The maintenance tasks and inspection shall consist of, but not limited to, furnishing of all labor, equipment, parts, materials, and tools necessary to perform a thorough servicing of all integral parts, oiling, adjusting, protective painting and replacing of all parts where needed to keep the unit in continuous efficient operating condition. Filter change and coil cleaning shall be the responsibility of the Contractor. Filters are to be replaced at manufacturer's recommendation or when conditions require change, whichever comes first. A report detailing each unit whose filters have been replaced shall be submitted monthly. Coil inspections are not limited to fan coil units; yet encompass all heating or cooling coils regardless of location, size, or function.
- 4.6.** The Contractor shall replace worn or failed components and parts. All replacement parts will be of like or current design to minimize system depreciation obsolescence.
- 4.7.** The Contractor shall provide Manufacture Startup checklist, monitoring and completion forms complete with any major repairs on HVAC system. Completed Forms shall be presented to the Executive Director of Planning & Operations (or Designee).
- 4.8.** All work shall comply with all city, state, federal, and industry standards.
- 4.9.** Valves associated with the HVAC system are the responsibility of the Contractor to maintain as part of the Routine Preventive Maintenance schedule.
- 4.10.** Chemical treatment of all closed loop condensing water, and hot water systems

5. GENERAL MAINTENANCE

- 5.1.** HVAC systems maintenance includes parts, predictive, preventive, and corrective maintenance including, but not limited to the list of systems. The Contractor must define what HVAC systems are included in the preventive and corrective maintenance. HVAC maintenance to include but not limited to annual chiller preventive maintenance services of one (1) Annual oil analysis, tube cleaning, vibration report, and general efficiency checks and adjustments. These specified services as listed are in addition to all other normal preventive maintenance tasks as scheduled. Water treatment and filter replacement is included in these services. All filters shall be dated at installation. All associated HVAC components are included, along with air intakes, registered louvers and return grills.
- 5.2. Schedule of Work:**
- 5.2.1.** It shall be the Contractor's responsibility to notify University's representative in writing before scheduling Multi-year Major Stop Maintenance or other maintenance repairs requiring a shutdown of systems so as to coordinate with University's schedule. It shall also be the Contractor's responsibility to provide advance written notification to University of any Miscellaneous and Emergency Services and Repairs needed to be performed that are in addition to the Routine Preventive Maintenance. The University's Executive Director (or Designee) of Planning & Operations must authorize these additional services.
- 5.3.** It is the intent of this contract that all HVAC components be maintained by the Contractor. All-inclusive preventive maintenance service shall be expected under the terms of this contract.

6. BUILDING AUTOMATION SYSTEM (BAS)

- 6.1.** BAS service to include energy management monitoring, adjustments and repair.
- 6.2.** BAS Monitoring and Service covers the requirements for the Contractor to provide Building Automation System monitoring and service:
- 6.2.1.** The Contractor shall also support a reporting system that includes both written and online formats.
- 6.2.2.** Contractor shall provide, but not limited to, all supervision, labor, materials, spare parts, supplies, equipment and services, whether or not specifically mentioned in these documents, to operate and maintain the Building Automation System and instrumentation on a continuous basis 24 hours per day, 7 days per week, 365 days per year.
- 6.2.3.** Contractor will be required to have someone that is trained and/or certified by Climatec who can use and understand the control systems.
- 6.2.4.** The Contractor shall seek approval from the Executive Director (or Designee) of Planning & Operations prior to any adjustments or requests to adjust temperatures or pressures in any campus building.
- 6.2.5.** The Contractor shall be responsible for costs incurred by the University due to HVAC maintenance errors causing a re-balance of the building HVAC system.
- 6.2.6.** The Contractor shall follow the Climatec SOP when engaging Climatec for any Reason whereby repairs to equipment or re-programming is required in the Compass BMS system.

7. CORRECTIVE REPAIRS

- 7.1.** To increase the continuity of service and responsibilities all Corrective Repairs to the equipment, systems, and assets within the scope of this RFP where the total cost of the repairs including all labor, materials and vendors / subcontractors is under twenty-five thousand dollars (\$25,000.00) per individual occurrence are included within the Contractors responsibility to perform.
- 7.2.** Contractor shall prepare a repair estimate for each repair and send to the Executive Director (or Designee) of Planning & Operations or other designated University representative for review and approval prior to commencing repairs.
- 7.3.** The University shall maintain the right to have the repairs performed by the other vendors / subcontractors at their sole discretion.
- 7.4.** Corrective repairs shall be billed to the University as Additional Services to this contract monthly. Contractor shall be responsible for providing a detailed invoice along with all necessary back-up documentation to detail and support the services provided to make the associated repairs.
- 7.5.** Contractor will provide a cumulative additional services document showing which additional services have been performed. This list will be inclusive of all additional service work and costs for the duration of the contract.
 - 7.5.1.** Back-up documentation shall include at a minimum the following data: work order number, total labor hours, building asset, area, and all parts and materials used, and any outsourced vendor / subcontractor.
 - 7.5.2.** All parts, materials, and outsourced vendors / subcontractors shall have a maximum mark-up by the Contractor of ten percent (10%).
 - 7.5.3.** All parts included in the repairs will have an attached copy of the parts purchase receipt or invoice from the manufacturer or point of sale.
- 7.6.** If corrective repairs are found to be necessary because of the lack of, improper, or failure to perform Preventive Maintenance tasking on a system, piece of equipment, or other asset as per the requirements of this RFP, then the Contractor shall be responsible for the cost of repairs associated with the failure to perform the requisite Preventive Maintenance.
 - 7.6.1.** This requirement shall be limited to costs associated only with failures that are a direct result of the lack of or improper Preventive Maintenance tasking and intervals according to this RFP and shall not include repair or other costs not directly caused failing to meet the Preventive Maintenance requirements.
- 7.7.** If corrective repairs are found to be necessary because a previously performed repair service was performed improperly or negligently according to the manufactures recommendations or standard industry practices, then Contractor shall be responsible for the cost to properly repair the system, equipment, as well as any associated equipment impacted by the negligence or other asset within the scope of this RFP.
 - 7.7.1.** This requirement shall be limited to costs associated only with the previously performed services that are determined to be improper or negligent and shall not include repair or other costs unless associated within the immediate system or associated function with said failed services.
- 7.8.** Research equipment assessments, evaluations, repairs, and repair coordination may be required.

7.8.1. The Contractor in any situation involving research equipment service, may be required to coordinate or repair research equipment. In some situations, equipment may need to be replaced.

7.8.2. The Contractor may contract with other service providers for any of the aforementioned scenarios after approval by the Executive Director (or Designee) of Planning & Operations.

7.8.3. Any expenses associated with research equipment repairs or replacements will be invoiced as additional services work with specifics to the building, lab or research area, and room number included on the invoice.

7.8.4. Contractor will not provide consultation to research requestors without prior approval from the Executive Director (or Designee) of Planning & Operations.

7.8.5. Any preventive or corrective work on research equipment shall be billed as such to the University.

8. MINOR ALTERATIONS

8.1. To increase continuity of service and responsibilities, Minor Alterations to the spaces, equipment, systems, and assets within the scope of this RFP where the total cost of the alterations including all labor, materials and vendors / subcontractors is under ten thousand dollars (\$10,000.00) may be included within the Contractors responsibility to perform.

8.2. Contractor shall prepare an estimate for each requested alteration and send to the Executive Director (or Designee) of Planning & Operations or other designated University representative for review and approval prior to commencing work.

8.3. The University shall maintain the right to have minor alterations performed by other vendors/subcontractors at their sole discretion.

8.4. Corrective repairs shall be billed to the University as Additional Services to this contract monthly. Contractor shall be responsible for providing a detailed invoice along with all necessary back-up documentation to detail and support the services provided to make the associated repairs.

8.4.1. Back-up documentation shall include, at a minimum, the following data: work order number, total labor hours, all parts and materials used, and any outsourced vendor/subcontractor.

8.4.2. All parts, materials, and outsourced vendors/subcontractors shall have a maximum mark-up by the Contractor of ten percent (10%).

9. CORRECTIVE REPAIRS ALLOWANCE

9.1. Contractor is responsible for repairing all defects, malfunctions, or breakdowns of or within any facility, equipment, system, or service either discovered by Contractor or reported by an authorized representative of the University that is within the scope of the services of this RFP.

9.2. Contractor's annual fixed fee bid shall include an allowance to be used to cover the costs of all parts and materials, labor, equipment, and outsourced vendor costs to perform repairs up to two-hundred thousand dollars (\$200,000.00) annually.

9.2.1. If Contractor uses subcontractors to accomplish repair work included within the firm fixed fee, there shall not be cost mark-ups exceeding 10% for using subcontractors to perform repairs.

9.2.2. All parts, materials, or equipment necessary to complete the repairs shall not be marked-up exceeding 10%.

9.3. Labor rates for repairs shall be billed according to the Additional Services Rate Schedule associated with the Contractor's Proposal to this RFP.

9.4. Any repair costs exceeding the above inclusive allowance threshold shall be billed as additional services per this SOW.

9.5. Any amount less than \$200,000.00 shall be returned to the University as a credit.

9.6. All repair work shall be in accordance with accepted commercial best practices using parts specified by the manufacturer. Downtime will be kept to an absolute minimum.

10. LIFE CYCLE COST ANALYSIS / 5-YEAR CAPITAL IMPROVEMENT PLAN (CIP)

10.1. Capital Improvement Plan

10.1.1. Contractor will collaborate with the UA Phoenix to develop a Capital Improvement Plan (CIP) for the Biomedical Campus. The CIP will be used to coordinate the timing and budgeting of improvements over a 5-year period. Capital improvements refer to major, non-recurring physical expenditures for items such as equipment, structures, and building systems. Contractor will complete the following to assist in the development of a 5-year CIP:

10.1.1.1. Contractor will review all existing and supplemental FCA studies.

10.1.1.2. Contractor will review regulatory requirements with the UA Phoenix in addition to the development of any prioritization categories and long-range funding strategies.

10.1.1.3. CIP plan will be based on the priorities of the University of Arizona.

10.1.1.4. As part of the Capital Improvement Plan, Contractor will provide a total cost of ownership for the Phoenix BioScience Core Campus to predict the total life cycle cost of maintaining and operating the campus. This will provide the UA PBC Phoenix with predictive analytics forecasting operational costs over the useful life of the assets.

10.1.1.5. Incorporating all analyses and findings from the previous steps, Contractor will issue a draft CIP for UA Phoenix to review and provide feedback. The CIP will include a brief description of proposed improvement projects, a year-by-year schedule of project costs, and funding sources. Upon receipt of the University feedback, Contractor will incorporate all comments into the final CIP.

10.2. Facility Condition Assessment (FCA)

10.2.1. Contractor will visually examine the mechanical, electrical, and plumbing systems (as codified in ASTM E2018-15) to determine condition and remaining useful life. Mechanical systems to be reviewed include HVAC, plumbing equipment, and visible waste and vent lines, and pumps and motors. Electrical systems to be reviewed include power distribution, emergency power, and lighting systems.

10.2.2. Upon completion of the visual walk-through survey, Contractor shall perform all tasks necessary to compiling and preparing a draft report. A statement of probable cost (SPC) conforming to ASTM Uniformat II Classification for Building Elements (E1557-97; Level 3) will be generated for each

deficiency identified. The SPC shall be a budget level conceptual cost estimate expressed in an agreed upon method.

10.2.3. The report will reflect a maintenance/repair/replacement plan based on the system evaluation. Contractor shall develop a draft report for review and comments. After receiving Universities report review comments, Contractor shall make any necessary adjustments and deliver a final report to in digital and editable (spreadsheet only) formats.

10.2.4. CIP and FCA shall both be completed within the first 120 days after the date contract period commences.

11. OTHER INFORMATION

11.1. As used in this Agreement, the following terms are defined as follows:

11.1.1. Preventative Maintenance:

- Any planned maintenance activity that is designed to improve equipment life and avoid any unplanned maintenance activity.
- The Contractor shall schedule preventive maintenance tasks by Computerized Maintenance Management System (CMMS) to assure a uniform and detailed preventive maintenance program.
- Inspections
- Lubrications
- Tests
- Adjustments
- Corrective maintenance tasks found during preventive maintenance
- **A discussion of the organization of essential elements of an effective program is as follows, but not limited to:**
 - Work instructions
 - Cost for parts must be included or attached in Work Order
 - Work inventory
 - Work assignments
 - Basic records

11.2. Condition Based Maintenance (aka real-time inspection) shall be based on data from any, and all available sources such as sensors, meters or other means. Real-time inspections should utilize trending methodology.

11.3. Random Failures are any failure that occurs without notice or warning.

11.4. Normal Wear Out is a type of failure that can be designed in a preventive maintenance program. Designed to prolong or prevent and these types of failures occur progressively over a relatively long period of time. The Contractor should design programs to spot signs of wear and take appropriate measures to correct the situation.

11.5. Mandatory Preventive Maintenance are those that must be performed at all costs when they are due. They may involve, but not limited to, OSHA, safety, EPA, and license inspections as well as state and local inspections. This shall follow any, and all city, state, and federal codes/requirements.

11.6. Non-mandatory preventive maintenance includes inspections or service PMs that can be postponed for a short time period or even eliminated for the present cycle without resulting in immediate failure or performance penalty. Each PM task should be designated in one of these categories.

11.7. Inspections noting additional maintenance shall be documented through the work order system at a minimum.

11.8. Task-oriented preventive maintenance allows the individual performing the PM to take time to make minor repairs or adjustments. All repairs will be documented regardless of the level or type. For scheduling purposes, a time limit shall be set on how long each task should take. The Contractor shall set time limits for each type of PM task for each critical piece of equipment.

11.9. Operator Time Loss - shall include but is not limited to the following:

- Time to report the failure
- Time for maintenance to arrive
- Time for maintenance to make repair
- Time to restart the equipment

11.10. Maintenance Costs - shall include but not limited to the following:

- Time to obtain the equipment
- Time to repair the equipment
- Cost of materials
- Time to dispatch staff to area

12. CONTRACTOR RESPONSIBILITIES

12.1. Administrative and Technical Direction

12.1.1. The Contractor shall provide, but not limited to, administration and technical direction in the management of the plant operations and maintenance organization. In the discharge of their responsibilities, the Contractor shall be guided by the highest professional technical standards.

12.1.2. The Contractor shall establish and/or maintain records of employees to facilitate the measurement of individual progress, and for preparation of performance reports and to assure that the Contractor's employees are working in the best interest of University.

12.1.3. The Contractor shall supervise all maintenance skilled employees as shown in the Contractor's proposed plant operations and maintenance organization plan.

12.1.4. Contractor shall follow Industry Standard Operational Procedures. Standards must be cited if requested by the Executive Director (or Designee) of Planning & Operations.

12.2. Objectives

12.2.1. The Contractor shall design and implement, with the concurrence of University's Facilities Department, Standard Operational Procedures. These procedures shall be to, but not limited to, coordinate efforts, skills, and other designated resources through the establishment of clearly defined objectives. The primary objectives shall include a functional, safe environment, and the ability to provide the designated levels of plant environment and maintenance. Research areas that

have additional requirements for environmental integrity and infection control will be a priority objective.

12.2.2. Management Systems

12.2.2.1. The Contractor shall provide clearly defined routines, record requirements, reports, tests and inspections, plant operating instructions and administrative procedures essential to the designated levels of plant operations and maintenance.

12.2.2.2. The contractor shall identify systems that require sub-metering or other quality control measures. The Contractor shall recommend installation of such devices and if approved ensure installation of those devices. Costs for devices shall be inclusive within this scope.

12.2.2.3. The Contractor shall provide the research necessary to design and implement the respective plant operations and maintenance levels and programs.

12.2.3. Direction: The Contractor shall develop and maintain a departmental maintenance procedures manual containing instructions on how each scheduled preventive maintenance task should be performed. All preventive maintenance tasks should be logged into a Centralized Computer Management System (CMMS). Preventive routine tasks shall be generated by the CMMS on a weekly basis and submitted to the Executive Director (or Designee) of Planning & Operations.

12.2.4. Scheduling: The Contractor shall control scheduling the interval of preventive maintenance and task function to be performed by both calendar periods and operating hours as applicable to each piece of equipment. The Contractor is to supply written procedures for each piece of equipment based on equipment specifications manuals.

12.2.5. Inventory / Tools: The Contractor shall have inventory in stock for each building for general repairs. Contractor shall not wait until repair is required and procurement of materials thereafter. The Contractor shall provide tools to employees for general repairs and trade specific repairs.

12.2.6. In some cases, the best pricing for parts or materials may be obtained through the University. The aforementioned may be purchased and used for repairs by the contractor.

12.2.7. The Contractor shall adhere to all OSHA safety standards for labor, as well as storage of hazardous materials.

12.2.8. Contractor shall train and certify all site staff to NFPA 70E ARC Flash requirements.

12.2.9. Contractor will provide all site staff with all required ARC Flash PPE.

12.2.10. Contractor shall post all permits associated with any equipment or system in accordance with state, city, and federal codes/regulations.

12.3. Professional Management

12.3.1. The Contractor's site operations and maintenance resources of the Contractor shall be applied to serve the site operations and maintenance management needs of University. The Contractor shall seek to enhance departmental coordination and cooperation as it relates to site operations and maintenance.

12.3.2. The Contractor shall make initial and continuing recommendations for the site operations, maintenance and organization structure, procedures implementation and resource application. The recommendations are to be acted upon only with the concurrence and approval of the Executive Director (or Designee) of Planning & Operations.

12.3.3. The Contractor shall provide the leadership necessary for the effective coordination of site operation and maintenance efforts and skills for proper operation of equipment.

12.3.4. The Contractor shall be required to serve the entire System, which includes all campus locations.

12.4. Personnel Selection and Development

12.4.1. The Contractor and University recognizes that the most important element of a successful plant operation and maintenance program is staff or employees hired. The Contractor shall maintain a staff of capable employees thoroughly trained and qualified in the work assigned to them.

12.4.2. The Contractor's personnel policies shall be consistent with the state, city and federal laws.

12.5. Employees: Employees will be on the Contractors or subcontractor's payroll.

12.6. Criminal Background Checks: The Contractor(s) shall perform a criminal background check on each employee who services University and has reason to visit any University campus or facility. Criminal background checks must be performed on an annual basis and all information regarding the criminal background check must be maintained by the Contractor and made available to University upon request of the Executive Director (or Designee) of Planning & Operations who may share information with University HR Director.

12.7. Direction: The Contractor shall encourage employee self-development by establishing clearly defined objectives and uniformity of efforts. There shall be a current, written organizational plan, approved by University, for coordination within the department and with other departments. Job descriptions, organizational diagrams, lines of communication and standing orders shall be provided to contribute to employee understanding and teamwork.

12.8. Benefits Package: The Contractor shall submit its benefits package, including but not limited to, Holiday Schedule, Vacation and Sick Leave policies to the Facilities Director.

12.9. Training: The Contractor shall provide the University a plan necessary for (or to promote) personal and occupational growth to contracted employees. The program shall include the determination of employee qualifications and experience, on-the-job training, educational counseling. A series of self-study courses shall be made available to the employees. The Contractor must have a company-wide, in-place comprehensive technical training program to include formal skill level upgrade training, recurring training, refresher training and remedial training. The training program must include formal training courses and on-the-job training.

12.10. Contractor shall, if requested, shall align trade skills staff with University maintenance staff by mentoring, shadowing and other on-the-job methods with the goals of increasing overall campus maintenance knowledge for repairs and maintenance tasks.

12.11. Identification: All employees must be readily identifiable to the University community by uniform and other easily identifiable insignia. Identification badge must be visible.

12.12. Demeanor: Employees are expected to be the ambassadors of University and should be customer focused.

12.13. Experience: The Contractor must have experience in the provision of on-site management and operations for maintenance.

12.14. Employee Replacement: The assignment must be approved by the Executive Director (or Designee) of Planning & Operations and any replacement personnel must meet the same rigorous standards and certification requirements as contained in the Personnel Selection and Development section of this RFP.

12.15. Safety Program

12.15.1. The Contractor and subcontractor shall have a company safety program that addresses the hazards associated with the scope of services requested. The Contractor hired must maintain compliance at all times with all local, state and federal laws and/or regulations with regard to use, storage and disposal of the chemicals or other hazardous materials used during their services performed at a University location. A copy of this safety program shall be submitted in response to this RFP.

12.15.2. All Contractors and its Subcontractor(s)/Supplier(s) are required to provide Safety Data Sheets (SDS) for all chemicals used or stored on University facilities to the Facilities Director and upon request.

12.15.3. Chemicals and/or other materials left behind by any vendor after services are completed will be required to be removed and disposed of by the Contractor. University is not responsible for the disposal of waste materials left on University properties by any contracted vendors.

12.16. Technical Library: The Contractor shall maintain a technical library consisting of all applicable records such as "as built" drawings, equipment Operating & Maintenance (O&M) manuals, manufacturers spare parts lists and warranty certificates. University Facilities shall retain all O&M manuals, drawings and other relevant data.

12.17. Warranty Administration: The Contractor shall administer and coordinate all warranties provided by construction Contractors and equipment suppliers. The Contractor shall perform all work such that all warranties are maintained in full force and effect. The Contractor shall first check the equipment for problems before calling the warranty Contractor.

12.18. Employee Turnover: The Contractor must keep an active pool of employee and subcontractor contacts. In the event of resignation of an employee or subcontractor, the Executive Director (or Designee) of Planning & Operations must be notified immediately.

12.19. Clarification of Maintenance Terminology:

12.19.1. Maintenance: The recurring day-to-day, periodic or scheduled work requirement to preserve or restore a facility or equipment to such a condition that it may be effectively utilized for its designated purpose.

12.19.2. Plant Operations: The process of carrying out the necessary procedures, including manual control, attendance and supervision, to affect the performance of the design function of a facility or equipment.

12.19.3. Requisition Materials: Maintenance actions, not part of normal plan operations and/or maintenance, shall include special construction projects, modernization, alterations and facilities improvements. The University Executive Director (or Designee) of Planning & Operations must approve all such orders in advance. Projects may be subject to the job order contracting process.

12.20. Project External

12.20.1. Certain major repairs and special maintenance may be performed by other external Contractors. The maintenance Contractor shall cooperate fully with University and its external Contractor(s) in such situations.

12.20.2. The successful Contractor may be required by University to:

- Assist in planning the desired work.
- Prepare procurement specifications as desired by University.
- Supervise entirely or assist in the supervisory of the external Contractor(s).
- Work cooperatively with other external Contractor(s) as directed by University Facilities Director.
- Coordinate operations activities under its supervision with any projects undertaken by the outside Contractor(s).
- Note: There will be no additional cost in the assistance of above requirements by the maintenance engineering service Contractor. The cost of University Facilities projects to be completed by other external Contractor(s) shall be the responsibility of University and shall not be considered part of this contract between University and the Contractor hired for Maintenance Engineering Service.

12.21. Repair and Maintenance of Equipment

12.21.1. Shall include all repair, replacement, and adjustment of equipment in response to conditions discovered during performance of preventive maintenance, equipment breakdown/improper operation, or employee complaint. Except in response to employee complaints or safety requirements, repair work orders shall be scheduled for completion depending on priority, availability of parts, workload, and convenience of occupants.

12.21.2. Repair maintenance involving safety considerations or possible damage to property shall be responded to immediately.

12.21.3. Repair maintenance involving the use of a facility shall be responded to immediately.

12.22. Financial and Materials Management

12.22.1. Objectives. The Contractor shall fulfill operations and maintenance management responsibilities with a strong and continued attention to fiscal responsibilities. The objectives of the financial and materials management program are, but not limited to:

- To strive for increased effectiveness at less costs through improved management and engineering practices.
- To disseminate written instructions necessary to the fiscal management of operations, maintenance, equipment, and supplies.
- To comply with established fiscal control systems and directives.
- To budget appropriate cost annually, the Contractor shall prepare plant operations and maintenance financial and statistical data to assist University in preparation of its budgets. The Contractor shall monitor expenditures as designated by University Facilities in accordance with Arizona/Federal law. The Contractor will prepare and submit a

monthly detailed expenditure and budget report to the Executive Director (or Designee) of Planning & Operations.

- The above mentioned financial and statistical data shall be provided via an integrated, easily accessible format as agreed upon between University and Contractor.
- To purchase appropriate material and equipment in a timely manner to ensure cost savings and competitive bidding as necessary, the Contractor shall provide written policies and instructions based on University Facilities requirements governing the purchase of plant operations and maintenance materials, supplies, equipment and utilities.
- To provide a written tool inventory and use policy.

12.23. Regulatory Requirement: The Contractor shall implement programs to ensure that University Facilities comply with local, state, federal and other regulatory agencies, as they apply, but not limited to, the regulations, codes, inspections, operation and maintenance of the system for the scope of this contract.

12.24. Technical Support. The Contractor shall have the ability to provide professional services and technical resources in support of its field management to:

12.24.1. Perform research in determination of University Facilities plant operations and maintenance management needs, resources, utilization, programs, procedures and systems.

12.24.2. Implement technical support programs for system implementations, training, control inspection and consultant services relating to system plant operations and maintenance management. Consult and make recommendations concerning the plant operations and maintenance aspects of Facility Maintenance service proposals.

12.24.3. Provide program to follow progress of major modernization and new construction projects.

12.25. Building Alterations

12.25.1. The Contractor shall provide consultation for minor rearrangement of University spaces, equipment and furniture as needed.

12.25.2. The Contractor shall consult the Executive Director (or Designee) of Planning & Operations in the planning of major structural alternations, including, but not limited to, supply estimations, etc., as requested by University facilities as needed.

12.26. Projects Internal

12.26.1. The Contractor personnel shall supervise minor building alterations in accordance with Designs originated by others and approved by the Executive Director (or Designee) of Planning & Operations. The Contractor shall make installations, fabrications, alterations and special projects in accordance with the resources of staff, finances, material, time and space allotted to the plant operations and maintenance organization and as authorized by the Executive Director (or Designee) of Planning & Operations.

12.26.2. All alteration, modification and addition to buildings, major systems, sub-systems major equipment and ground items of significance shall be approved in advance, in writing by the Executive Director (or Designee) of Planning & Operations.

12.26.3. The Executive Director (or Designee) of Planning & Operations must approve all requisitions requiring the expenditure of funds in advance, in writing and are not included in the Contractor's contract.

12.27. Projects External

12.27.1. Certain major repairs and special maintenance may, be performed by other external Contractors. The Contractor shall cooperate fully with University and its external Contractor(s) in such situations. The Executive Director (or Designee) of Planning & Operations may contract with the Contractor for such services by utilizing University Procurement Services or job order contracting process.

12.27.2. The successful proposer may be required by the System to:

- Assist in planning the desired work.
- Prepare procurement specifications as desired by University.
- Supervise entirely or assist in the supervision of the external Contractor(s).
- Work cooperatively with the other external Contractor(s) as directed by the Executive Director (or Designee) of Planning & Operations.
- Coordinate operations activities under its supervision with any projects undertaken by the outside Contractor(s). The cost of University facilities projects to be completed by other external Contractor(s) shall be the responsibility of University and shall not be considered part of this contract between University and the Contractor hired for facility maintenance services.

12.28. Quality Assurance / Quality Control of Service

12.28.1. The following quality performance review will be initiated to insure a high standard of service for the University:

- Daily activities shall be maintained in the CMMS and be available for review by University within 24-hours. Preventive maintenance schedules with notation of performance shall be maintained for management control, inspection and University's review.
- Corrective maintenance requisition actions shall be tabulated by category and included in the monthly report.
- Monthly summary of plant operations and maintenance functions, accomplishments and objectives shall be prepared and presented for comments, additions and concurrence of University Facilities and included in the monthly report.
- Monthly report shall include updates on all Key Performance Indicators as developed in collaboration with University Management.

12.28.2. The Contractor shall meet as requested with the contract administrator to discuss the contract.

12.28.3. The Contractor's manager must carry portable communications equipment for communication with the Executive Director (or Designee) of Planning & Operations. There will be a 24-hour a day phone number available to reach the Contractor.

12.29. Environmental Laws

12.29.1. Contractor shall comply with all rules, regulations, statutes or orders of, but not limited to, the Environmental Protection Agency ("EPA"), the Arizona Department of Environmental Quality ("ADEQ"), and any other local, state or federal governmental agency with the authority to promulgate environmental laws and regulations.

12.29.2. Contractor shall comply with ICRA requirements and require any contractors working on site to also comply with ICRA requirements.

12.29.3. Contractors must supply University with a copy of the Safety Data Sheet (SDS) for all chemicals brought onto University properties and must dispose of all chemicals supplied by the Contractor after use at the Contractor's expense.

12.30. Hazardous Materials

12.30.1. The Contractor shall not possess, use, generate, release, discharge, store, dispose of or transport any Hazardous Materials on, under, in, above, to, or from the site except in strict compliance with all local, state, and federal environmental laws or regulations.

12.30.2. Gases or materials used in repairs such as argon or acetylene may be used and stored in a safe manner away from occupied areas.

12.30.3. In the event of Hazardous Materials generated by the Contractor or Subcontractor, the Contractor or Subcontractor is responsible to pay for the proper disposal of Hazardous Materials. "Hazardous Materials" means any substances, materials, or wastes that are or become regulated as hazardous or toxic substances under any applicable federal, state, or local laws, regulations, ordinances, or orders.

12.30.4. The Contractor shall not deposit paint, oil, gasoline, grease, lubricants or any ignitable or hazardous liquids, materials, or substances in the City's storm sewer system or sanitary sewer system or elsewhere on University property in violation of any local, state or federal environmental laws or regulations.

12.30.5. It is the responsibility of the Contractor and Subcontractor to remove any materials, solvents, or substances from University after a maintenance project is complete.

12.31. Maintenance Audit

12.31.1. The University Executive Director (or Designee) of Planning & Operations may conduct a maintenance audit, either alone or accompanied by the Contractor, or may request that the Contractor conduct a maintenance audit or may select a qualified third party to perform a maintenance audit. Such an audit shall include, but not limited to, inspection of the premises, equipment, inventory, records, logs, and work performance at each facility. The audit shall be conducted without prior notice to the Contractor. The audit results shall be provided to the Contractor.

12.31.2. The Contractor shall, upon mutual agreement of the discrepancy, correct any discrepancies identified and covered under the terms of this agreement within ten (10) working days after the audit results are provided to the Contractor.

12.31.3. Audits may be triggered if maintenance was not performed as required in this RFP, repair costs due to failed maintenance are incurred by the University, or general concern for the operational consistency of the MEP systems of the campus is cited.

12.31.4. The Contractor shall provide the Executive Director (or Designee) of Planning & Operations a written explanation for each discrepancy and corrective action taken within ten (10) days after the audit results are provided to the Contractor. Further, the Contractor shall provide the Director of

FE/M with an inspection and maintenance plan to prevent future occurrences of any problems identified in the audit. The Executive Director (or Designee) of Planning & Operations may use the results of the audit to terminate this Agreement, regardless of any corrective action taken by the Contractor.

12.31.5. Contractor will provide the University with a quality control program as a part of this RFP submission. Program will include all aspects and Key Performance Indicators as developed in collaboration with University management and include all executable deliverables contained within the awarded scope of work and executed as an audit by the contractor and presented to the University.

12.31.6. Audit will be performed annually or at the discretion of the Executive Director (or Designee) of Planning & Operations.

13. KEY PERFORMANCE INDICATORS (“KPI”) AND APPA LEVELS

13.1. A Key Performance Indicator is a metric considered important to measure and report. These will be mutually identified and agreed upon by the parties. A site-specific list of KPIs will be identified during the Transition Period. General KPI categories may include, but are not limited to:

- Customer service levels
- Service standards to include return calls for service on same work order issue
- Accurate invoicing and timeliness
- Adherence to QC/QA

13.1.2. Performance against each KPI will be calculated over a single calendar-month period and reported for the Service as a whole, on or about the tenth (10th) Business Day of the following month. Time calculations will also be suspended during the time period of any delay which is outside of Contractors reasonable control (e.g., severe weather, power outages, access denied by University, building evacuations or other Emergency situations at University site and third-party delays.)

13.1.3. Additionally, cancelled Service Requests (duplicates, End User cancelled, no issue found before being resolved) are not included in the KPI calculations. After missing a monthly KPI, as defined within this SOW, Contractor will promptly perform the following tasks:

- Investigate and report on the root cause
- Advise University of the remedial efforts being undertaken with respect to this failure to meet a KPI;
- Correct the problem and begin meeting the KPI; and
- Take appropriate precautionary measures to prevent recurrence.
- Maintain documentation of mitigation or remedy through the work order system

13.2. Escalation of Failure to Meet KPI's: In the event Contractor fails to meet an individual or multiple KPIs, the Incident or Incidents will be treated under three tiers.

13.2.1. Tier 1 Escalation: The issue(s) are identified and discussed by the Contractor and University designated point of contact with the intent to understand the root cause(s), identify possible solutions, and to mutually resolve the KPI miss.

13.2.2. Tier 2 Escalation: If the issue(s), or similar veined issue(s), are repeated, the situation is then brought up to the Contractors Management Team and University designated point of contact.

13.2.3. Tier 3 Escalation: If in the immediately preceding eleven (11) months there have been at least three (3) months where Contractor's performance failed to meet individual or multiple KPIs, University may, upon at least 30 days prior written notice to Contractor, seek reasonable remedies including terminate for cause all or part of the service contract resulting from this RFP to which such KPI failures apply.

13.3. KPI Failure Root Cause Analysis: Following the calculation and reporting of a KPI Failure, Contractor shall within 15 days perform and submit a KPI Failure Report/Root Cause Analysis (ARCA) to determine the reason for that failure. If Contractor determines that it caused the KPI Failure, Contractor will also concurrently provide a KPI Failure Cause and Mitigation Report (AMR) that details the base cause of the failure and document any measures that should be taken to minimize the possibility that such failures will re-occur. Such measures may include suggested changes in processes, procedures, and/or service design. University point of contact shall have 15 days to review the ARCA and AMR, and to provide Contractor with a written Response to these documents, including a statement as to whether or not University agrees with the report findings. If the university does not agree with the report findings, the Incident will be processed through the escalation tiers.

13.4. KPI Agreement Exclusions: Contractor will be relieved of responsibility if Contractor's failure to meet KPIs is due to:

13.4.1. Problems resulting from components (Hardware/software/network/maintenance or manufacturing equipment) for which the University is responsible.

13.4.2. Problems mutually determined to be caused by the actions or inaction of University personnel.

13.4.3. Project Work assigned by the University without authorizing the use of additional resources at an additional charge after Contractor has advised that such project work may impact KPIs.

13.4.4. Changes made to the environment which were not communicated to Contractor by the University if such changes directly and materially impact the delivery of services provided by Contractor.

13.4.5. University's failure to perform its obligations as set forth in the RFP to the extent such failure materially affects Contractor's ability to perform the KPI services. e.g., spare parts availability, CMMS reporting, etc.

13.4.6. Acts of God

13.4.7. Initial conditions wherein a system, equipment, component, appurtenance, or asset of the facility ("Improvements") for which Contractor is responsible does not meet the KPI levels specified in this RFP.

14. GENERAL SCOPE CONDITIONS AND CONSIDERATIONS

ALL PREVENTIVE MAINTENANCE TASKS LISTED ABOVE ARE TO BE PERFORMED IN ACCORDANCE WITH MANUFACTURER'S MAINTENANCE RECOMMENDATIONS AND GUIDELINES.

14.1. Lock out/Tag out Procedures will be used any time a protective cover, or equipment door, must be removed/opened to perform maintenance.

- 14.2.** The technician performing maintenance will notify the University building manager before performing any maintenance that will affect the comfort or safety of building occupants. The University building manager may require that certain maintenance activities be done outside of normal business hours. The on-site technician must be able to alter his/her work schedule to accommodate these occasions.
- 14.3.** The technician will use all appropriate Personal Protective Equipment (PPE) when performing any maintenance tasks. The technician will be trained in the proper use of PPE. The vendor will provide PPE for the technician's use.
- 14.4.** The Contractor will implement ICRA procedures when required.
- 14.5.** The Contractor will follow SOP's if instructed to do so.
- 14.6.** The Contractor is responsible for all Site and Hazard Assessments, employee training, etc. (i.e., Building Automation Systems, Electrical Safety, Arc Flash, CMMS, etc.)
- 14.7.** The technician will use proper tools when performing maintenance tasks. The Contractor shall provide the technician with all the tools needed to perform all maintenance and repairs.
- 14.8.** All equipment shall be kept clean and free of excess grease.
- 14.9.** All equipment shall be kept in peak running condition to maintain maximum energy efficiency.
- 14.10.** On motors with variable pitch pulleys, the pitch of the pulley will be adjusted to set fan shaft speed only. The pitch will not be used to adjust belt tension.
- 14.11.** All labor required to service, maintain all equipment listed in the equipment list addendum shall be all-inclusive in the Maintenance Contract. Consumables for PM's should be included in your pricing.
- 14.12.** All consumables (filters, belts, lubricants, cleaners, etc.) and all wearable parts including, but not limited to sheaves, bearings, flexible couplings, mechanical seals, shall be all-inclusive in the Maintenance Contract.
- 14.13.** All parts either expendable or non-expendable will be marked with an installation or replacement date. Marking shall be permanent.
- 14.14.** Manage all facility related resources and activities to ensure prompt issue resolution, work order completion, client satisfaction and compliance with processes and financial controls.
- 14.15.** Perform and document regular property inspections and coordinate associated maintenance and repairs while supporting capital plan development.
- 14.16.** Manage complex vendor contracts to ensure excellent service and value.
- 14.17.** Actively contribute to program development for energy and sustainability, Life Cycle Asset Management, Strategic Sourcing, and other key initiatives.
- 14.18.** Assist in the preparation of annual budgets, forecasts, management plans, monthly performance, and variance reports.
- 14.19.** Actively develop and manage key relationships with industry and trade associations, representatives of government, public service organizations, customers, and vendors.

14.20. Requisitions materials and supplies using established guidelines and procedures.

14.21. Facilitate safety training and meetings and always uses safe working practices.

14.22. Respond to emergencies as requested and coordinates after-hours work activities and repairs.

14.23. Executes additional duties, projects and responsibilities as assigned.

15. ADDITIONAL CONTRACTOR SUPPORT SERVICES

15.1. Campus Operations, Faculty, and Staff Support:

- Consultation for space usage feasibility and systems capacity
- Large package delivery support (as appropriate)
- Large equipment move support as appropriate (lab equipment, freezers, etc.)
- ASU/NAU tenant support for furniture and equipment repair/relocation
- Vendor escorts when needed
- Campus special events support as required
- Vendor provided truck usage for pick up and deliveries
- Support for Emergency Response such as floods, roof leaks, power outage, etc.

16. ADDITIONAL CONTRACTOR REQUIREMENTS

16.1. Contractor will develop and provide a Systems Integration Manual to the University within the first quarter of the first year.

16.1.1. Lighting Systems Integration Mapping shall include equipment list, schematic or equivalent drawing of exterior lighting.

16.1.2. Domestic water systems for each building will have main and secondary shut off valves on a list as well as a schematic or drawing of main shut off locations for each floor of each building.

16.1.3. Leak detection and prevention areas will be provided on a list as well as a schematic or drawing for each area requiring mitigation. Costs shall be inclusive in this scope.

16.1.4. All costs for this shall be inclusive to the scope of this contract

16.2. Annual Roofing Inspections

16.2.1. Contractor will utilize a licensed roofing contractor certified in Membrane style roof to provide an annual roofing inspection to include, but not limited to, the following criteria:

- Gutters, Scuppers and Drain functionality
- Caulking and Weather stripping for wear/aging/gapping
- Roof edges and fascia for evidence of rusting, splitting and physical damage
- Condition of roof membrane, evidence of physical damage, splits. open lap/seams and unusual surface conditions.
- Condition
- Remove debris

- Contractor will provide a written report with photo documentation of roof condition, noted discrepancies, and potential issues.

16.3. Annual Electrical Thermal Imaging Electrical Systems Energized Non-Shutdown Maintenance

16.3.1. The following scope of work will be included in this contract and performed at the intervals and specific building locations according to this RFP and Proposal.

16.3.2. Contractor will perform ENERGIZED (Infrared Inspection) preventive maintenance annually at the following locations:

- ABC 1 Building – 213 items
- COM, 1, 2, 3 and 4 Buildings – 96 items
- HSEB Building – 364 items
- Vivarium Building – 82 items
- Cancer Center Building – 163 items
- BSPB Building – 251 items
- Additional buildings as requested

16.3.3. The service will be performed on the following electrical components:

- Draw-out Vacuum Breakers
- 15kV Switch
- Bus Ducts
- Bus Disconnects
- Dry Type Transformers (= or >112.5 kVA)
- Dry Type Transformers (< 112.5 kVA)
- Molded Case Breakers (= or > 400 amp)
- Branch Circuit Panels
- Distribution Panels

16.3.4. Scope of Work: ENERGIZED Preventive Maintenance & Testing

- Conduct Infrared, Visual, and Mechanical inspections on electrical equipment at the campus (approximately 1,169 electrical components) ANNUALLY
- Perform current and voltage harmonic service, voltage drop service, phase balance service and RMS Voltage and Current Service for any anomalies found during the service
- Provide infrared and digital picture of each electrical component being tested
- Wipe down exterior and clean interior (where it can be performed safely) of all electrical equipment tested

16.3.5. Perform minor repairs, upon customers approval, that take 15 minutes or less (i.e., knock- out seals, cable ties, breaker replacement when provided by customer, torquing of loose connections replacing missing screws, conductor identification) and within a reasonable overall quantity

16.3.6. Perform Electrical Asset Inventory Service to be included in the final report

16.3.7. Remove all panel covers and dead fronts so joints and connections are accessible to Infrared Camera.

16.3.8. All work will be performed by Journeyman Electrician certified and/or trained in the following: TEGG Service, NFPA 70E, Infrared, and First Aid / CPR

16.3.9. Provide one year of on-line access to TEGG Pro (equipment data and report information)

16.4. Annual Boiler Inspection and Maintenance: Scope will be based on existing SOP or at the direction of the Executive Director (or Designee) of Planning & Operations.

16.5. Water Treatment

16.5.1. Contractor will be required to provide a water treatment program to include:

16.5.2. Supply an environmentally accepted closed system treatment for the campus closed systems. In order to maintain corrosion within ranges as compared to standards published by the CTI for protecting metal surfaces at a pH buffered range of 9.0 – 10.0. Corrosion coupon results are expected to be less than 0.2 mils per year loss for mild steel and less than 0.05 MPY for copper in closed water systems. Closed loop samples will be taken at a minimum of once per quarter (90 days). This sampling would include but is not limited to the following testing:

- Closed Loop Testes Performed
- Ferrous Iron
- Total Iron
- Copper
- Azole
- Nitrite
- pH
- Conductivity
- ATP/Dip Bacterial Dip Slides

16.5.3. All necessary chemical additions will be made at no additional charge.

16.6. Softener Systems

16.6.1. Monthly: Samples of each softener system will be taken and processed. Hardness of city water will be compared with past samples and adjustments will be made to the softener head. Recommendations will be made if additional maintenance above and beyond typical PM is needed.

16.6.2. Samples will be collected, and the following tests will be run:

- Hardness
- Calcium
- Magnesium
- P and M alkalinity
- Chlorides
- Conductivity
- TDS
- Iron
- Copper

- 16.6.3.** Annually: Each brine tank will be cleaned. Resin cleaner will be replaced or added, and regeneration forced

16.7. RO/DI Systems

- 16.7.1.** Repairs will be performed by contractors that specialize in that equipment when possible. The University reserves the right to utilize Contractor if deemed necessary by the Executive Director (or Designee) of Planning & Operations.
- 16.7.2.** Third party engineering may be required and may be solicited by Contractor for major repairs or replacements.

16.8. Medical Air and Vacuum Systems

- 16.8.1.** Will be maintained by medical gas specialty contractors when possible. Contractor may be asked to perform repairs at the direction of the Executive Director (or Designee) of Planning & Operations.
- 16.8.2.** Work Scope will be based on existing SOP or at the direction of the Executive Director (or Designee) of Planning & Operations.

16.9. Backflow Preventers

- 16.9.1.** All Campus backflow preventers (BFP) will be inspected by certified technicians annually. All BFP repairs must be executed by a certified repair technician. BFP's can be found in the Exhibits Asset List.
- 16.9.2.** BFP work requiring permits is the responsibility of the Contractor; as well as BFP compliance inspections and certification.

16.10. Sewage Ejector Pumps and Pits

- 16.10.1.** Annual inspection of pumps and system components to include "pulling the pumps"
- 16.10.2.** Annual pit clean-out of all debris to include sewage vacuum truck service
- 16.10.3.** Work Scope will be based on existing SOP or at the direction of the Executive Director (or Designee) of Planning & Operations.

16.11. EXCLUSIONS

- 16.11.1.** Cafeteria and food service equipment repair and/or maintenance will be performed by Contractors who specialize in such work. MEP Contractor may assist if at the direction of Work Scope will be based on existing SOP or at the direction of the Executive Director (or Designee) of Planning & Operations.
- 16.11.2.** The Contractor may assist University teams and/or other contractors at the direction of the Executive Director (or Designee) of Planning & Operations during repairs or replacements of audio/visual related equipment or modifications to infrastructure.