ISSUING DEPARTMENT INPUT DOCUMENT CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

\square New \square OTR \square Se	ole Source I	Bid Waiver	Emerge	ncy Previous C	Contract/Project No.		
Contract				FB-0081	6		
	ss of Other Entity	<u>Contract</u>	_	ING WAGE APPLIES:			
Requisition No./Project No.:	QCR2000001		TERM OF	F CONTRACT 5 YEAR	AR(S) WITH 0 YEAR(S) OTR		
Requisition / Project Title: Buil	ding Management	System at TG	K .				
transportation, ma		ent to furnish a	comprehe	ntract to provide all nsive program of ins	necessary labor, spections, preventive		
Issuing Department: ISD		Contact Persor	Jonatha	n Desverguñat	Phone: 305-375-5312		
Estimate Cost: \$637,000 GENERAL FEDERAL OTHER Funding Source: X							
		ANAL	YSIS				
Commodity Codes: 03113	3						
		ct History of prev	-	· · · · ·			
	Check here if thi EXIST			th no previous history. 2ND YEAR	3 RD YEAR		
Contractor:	Design Controls, Inc.		Design Controls, Inc.		MRSE LLC		
Small Business Enterprise:	N/A		N/A		N/A		
Contract Value:	\$112,900		\$114,900		\$115,000		
Comments:							
Continued on another page (s):	☐ YES 🔽 1	NO ON					
RECOMMENDATIONS							
	Set-Aside	Subcontrac	tor Goal	Bid Preference	Selection Factor		
SBE							
Basis of Recommendation:							
Date sent to SBD: 10/7/2019							
Signed: Jonathan Desverguñat							
]	Date return	ed to SPD:			

SECTION 2 SPECIAL TERMS AND CONDITIONS

2.1 PURPOSE

The purpose of this solicitation is to establish a full service contract to provide all necessary labor, transportation, material and equipment to furnish a comprehensive program of inspections, preventive maintenance, emergency repair and routine repair services for the Johnson Controls Metasys Building Management Systems (BMS) at Turner Guilford & Knight Detention Center (TGK) for Miami-Dade Corrections Department (MDCR).

2.2 TERM OF CONTRACT

This contract shall commence on the first calendar day of the month succeeding approval of the contract by the Board of County Commissioners, or designee, unless otherwise stipulated in the Blanket Purchase Order issued by the Internal Services Department, Strategic Procurement Division. The contract shall expire on the last day of the last month of the five (5) year term.

2.3 METHOD OF AWARD

Award of this contract will be made to the lowest priced responsive, responsible Bidder in the aggregate who meets the minimum qualifications listed below. In order to be considered for award, Bidder(s) must submit an offer for all items listed. Items that will be provided to the County at no cost must show a zero (0) in the price line. If a Bidder fails to submit an offer on all items, the overall offer may be rejected. Bidder(s) shall provide the total annual cost, inclusive of all necessary parts, labor, transportation, software, material and equipment to furnish a comprehensive program of inspections, preventive maintenance, emergency repair and routine repair services for the BMS at TGK.

2.4 MINIMUM QUALIFICATIONS

- **A.** Bidder(s) shall have the manufacturer certify that the Bidder is an authorized agent to sell, warranty and service the manufacturer's product. This may be in the form of a signed letter from the manufacturer or an executed agreement.
- **B.** Bidder(s) shall have at least two (2) employees (direct hire or subcontractor) with one of the following licenses:
 - a. State of Florida Mechanical Contractor
 - **b.** Miami-Dade County General Mechanical Contractor
 - c. State of Florida Class A Air Conditioning Contractor, or
 - d. Miami-Dade County Master Air Conditioning-Unlimited

A copy of the licenses listed above for the employee (direct hire or subcontractor) shall be provided with the Submittal.

- C. Bidder(s) shall provide three (3) reference letters from customers to whom the bidder has provided BMS maintenance services for the manufacturer brand listed in the solicitation. The letters shall contain at minimum the reference phone number, job title, and email address. The County shall be able to ascertain from these references to its satisfaction that the Bidder has sufficient experience in providing BMS maintenance services relevant to this solicitation.
- **D.** Bidder(s) shall provide the contact information of a designated representative to provide the County with support and information concerning the Johnson Controls Metasys BMS. Bidder(s) shall provide the representative's name, phone number, and e-mail address.

If the Awarded Bidder fails to perform in accordance with the terms and conditions of the contract, they may be deemed in default of the contract. If the Awarded Bidder defaults, the County shall have the right to negotiate with the next responsive, responsible bidder.

Bidders shall submit the specified information listed above with their bid submittal form as proof of compliance with the requirements of this solicitation. However, the County may, at its sole discretion and in its best interest, allow Bidders to complete, supplement, or supply the required information during the evaluation.

2.5 PRICES

The initial contract prices resultant from this solicitation shall remain fixed and firm for the term of the contract, including the hourly rates provided in Section 4.2. The County reserves the right to negotiate lower pricing based on market research information or other factors that influence price.

2.6 METHOD OF PAYMENT

In addition to the terms and conditions stated in Section 1.0 paragraph 1.2.H- Prompt Payment Terms, the County will pay the Awarded Bidder annual price listed in Section 4 in 12 equal monthly installments. Invoices for emergency services shall list the name of the County representative that requested the emergency service and the date of the occurrence

2.7 EXAMINATION OF COUNTY FACILITIES AND COUNTY EQUIPMENT (HIGHLY RECOMMENDED)

Bidder(s) are advised to carefully examine the requirements and specifications in this solicitation, and to become thoroughly aware regarding any and all conditions and requirements that may in any manner affect the work to be performed under the contract. No additional allowances will be made because of lack of knowledge of these conditions. It shall be the responsibility of the Bidder(s) to examine the equipment and facility prior to submittal of their bid. It is highly recommended that Bidder(s) attend the pre-arranged site visit to review the current conditions of the site. Site visit will be held on _______. The 'cone of silence' is lifted during the site visit to allow for any questions to be addressed with representatives from Miami-Dade County.

Bidder(s) shall arrive promptly as the meeting will start on time. Bidder(s) are requested to bring this solicitation document to the conference, as additional copies may not be available.

Failure or omission of the Bidder(s) to review any instructions or documents, or any part of the specifications, or to visit the facility and become acquainted with the nature and location of the work, the general and local conditions and all matters which may in any way affect performance shall not relieve the Bidder(s) of any obligation to perform as specified herein.

2.8 ADDITIONAL SERVICES

During the term of this contract, the County may require additional services. In those instances, the County may at its discretion, issue a request for pricing to the Awarded Bidder. If the pricing is determined to be fair and reasonable, the services may be added to the contract. If the County determines that the prices submitted by the Award Bidder are neither fair nor reasonable, the County reserves the right to negotiate pricing or purchase services through a separate solicitation.

2.9 OBSOLESCENCE OF EQUIPMENT AND REPLACEMENT PARTS

It is hereby understood that some of the equipment associated with the BMS at TGK is obsolete and has surpassed its intended life expectancy. If repairs cannot be made due to parts not being available, the Awarded Bidder shall obtain written notification from the manufacturer stating that the part(s) have been discontinued and there are no available substitutes.

All replacement parts shall be subject to the approval of the County. The County may, at its sole discretion,

specify the parts and materials to be used to perform any work or service rendered under this contract.

All parts and materials provided under this contract shall be new or factory rebuilt, Original Equipment Manufacturer (OEM), free from defects, and guaranteed suitable for their particular designed purpose. Non-OEM parts shall not be used, unless the Awarded Bidder has prior written approval from the County Project Manager.

The Awarded Bidder, at their own expense, shall obtain parts in the most expeditious manner available, which includes overnight air shipping and special fast track ordering. The Awarded Bidder shall maintain a spare BMS parts inventory of the most common components to ensure a rapid turnaround in repair of the system.

When replacement parts are no longer available to repair equipment and the equipment needs to be replaced, a quote shall be obtained from the Awarded Bidder. If the pricing is determined to be fair and reasonable, the equipment may be purchased. If the County determines that the price submitted by the Awarded Bidder is not competitive the County reserves the right to negotiate with the Awarded Bidder or acquire the services through a separate solicitation.

2.10 REPAIRS DUE TO FORCE MAJEURE AND VANDALISM

Although this contract covers a comprehensive program of inspections, preventative maintenance, emergency repairs and routine repair services for the TGK BMS, it is hereby agreed and understood that the County may require additional repairs due to force majeure and acts of vandalism. Force majeure and acts of vandalism include: an act of nature, war, hurricane, riot, sovereign conduct, or conduct of third parties.

When a repair is required under these circumstances, the County shall pay the Awarded Bidder the hourly rate(s) provided in Section 4, the hourly rate(s) quoted shall be deemed to provide full compensation to the Awarded Bidder's for labor, equipment use, and travel time. The cost of parts and materials shall be paid on a cost "pass-thru" basis. The Awarded Bidder shall charge the County the same invoice prices he or she is charged by his or her supplier. A copy of the Awarded Bidder's invoice from the supplier for parts shall be submitted with the Awarded Bidder's invoice for payment. In cases where the Awarded Bidder manufactures its own parts, the Bidder will charge the County a price no higher than he or she charges his or her most favored customer. The County reserves the right to request verification.

2.11 PERFORMANCE GUARANTEES

In order to assure that Miami-Dade County receives the quality and response necessary to insure the safety of the inmates and County employees at TGK and achieve optimal maintenance of equipment, the County may impose administrative charges in the amount listed below. These administrative charges are deducted against the monthly invoices from the Awarded Bidder. When the outstanding invoices are insufficient, the County may invoice the awarded bidder for failure to perform in accordance with the contract.

The deduction may be based upon the following schedule:

Incident Type	Administrative Charges		
Failure to respond to an emergency repair service call:	10% of the monthly charge, per		
• Within two (2) hours during the regular work week (Monday thru Friday 7:00 a.m. to 3:00 p.m.)	occurrence		
Within four (4) hours after working hours or on weekends and Holidays (Monday thru Friday 3:00 p.m. to 7:00 a.m. and anytime on Saturday & Sunday).			
Failure to complete a repair within twenty-four (24) hours from the	5% of the monthly charge, per		
time a call is received.	occurrence		

Shut down due to lack of p	parts	100%	per diem
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Repeated failures to comply with the Contract requirements may result in the Awarded Bidder being placed in default of the contract for failure to perform whether deductions have been taken or not.

2.12 BUSINESS HOURS OF OPERATION

Services shall be performed Monday thru Friday, between the hours of 7:00 AM and 3:00 PM; except when such work is necessary and prior permission to do such work is secured from the Miami-Dade County Department representative. All repairs must be completed within twenty-four (24) hours from the time a call or notification is received. All travel time expenses shall be borne by the bidder and will not be reimbursed by the County. The holidays currently observed by Miami-Dade County are: New Year's Day, Martin Luther King, Jr.'s Birthday, George Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, Friday after Thanksgiving, and Christmas.

The Awarded Bidder will coordinate directly with the County Project Manager in scheduling all jobs, repairs, preventive maintenance, materials deliveries and other actions.

2.13 ADDITION / DELETION OF EQUIPMENT AND FACILITIES

A. Additional Equipment and/or Facilities

Although this contract identifies specific facilities and equipment to be serviced, it is hereby agreed and understood that the County may add additional facilities and/or equipment. If an additional equipment and/or facilities needs to be added to the contract, price quotes will be obtained from the Awarded Bidder. The County may obtain price quotes for the additional equipment and/or facilities from other Bidders in the event that fair and reasonable pricing is not obtained from the Awarded Bidder, or for other reasons at the County's discretion.

B. Facility Modification

Although this contract identifies specific facilities and equipment to be serviced, it is hereby agreed and understood that any County department or agency facility may replace any equipment requiring service under this contract as needed. Should the equipment be replaced, a price quote shall be obtained for the modification from the Awarded Bidder. If the County determines that the price submitted by the Awarded Bidder is not competitive the County reserves the right to negotiate with the Awarded Bidder or acquire the services through a separate solicitation.

C. Deletion

Facilities or equipment may be deleted when such services are no longer required during the contract period upon written notice to the Bidder.

Any changes shall be added to this contract by a formal modification of the award sheet.

2.14 NO PRE-EXISTING WARRANTY

The majority of the equipment covered under this contract is not covered under any type of warranty. The Awarded Bidder is solely responsible for all covered equipment from the date of award. The Awarded Bidder shall be fully responsible for all of the equipment "as is".

2.15 WARRANTY REQUIREMENTS

In addition to all other warranties that may be supplied for goods purchased from the OEM, the Awarded Bidder shall warrant its services against faulty labor for a minimum period of one (1) full year after the date of acceptance of the labor, materials and/or equipment by the County. This warranty requirement shall remain in force for the full one (1) year period; regardless of whether the Awarded Bidder is under contract with the

County at the time of defect. Any payment by the County for goods or services does not constitute a waiver of these warranty provisions.

All repair and/or replacement parts supplied by the Awarded Bidder shall be warranted for a minimum period of one (1) full year after the parts have been installed in County equipment.

2.16 DEFICIENCIES IN WORK TO BE CORRECTED BY THE BIDDER

Work shall be continually subject to oversight and approval by the County's Project Manager. In the event workmanship is found incomplete, unsafe, otherwise unsatisfactory in the judgment of a designated County representative, the Awarded Bidder shall, upon notice, immediately correct any such discrepancies or deficiencies. The Awarded Bidder shall adhere to OEM's suggested maintenance procedures to ensure the equipment is working in full OEM compliance.

The bidder shall promptly correct all apparent and latent deficiencies and/or defects in work, and/or any work that fails to conform to the contract documents regardless of project completion status. All corrections shall be made within twenty-four (24) hours from the point when such rejected defects, deficiencies, and/or non-conformances are reported to the bidder by the County. The bidder shall bear all costs of correcting such rejected work. If the bidder fails to correct the work within the period specified, the County may, at its discretion, notify the bidder, in writing, that the bidder is subject to contractual default provisions if the corrections are not completed to the satisfaction of the County within twenty-four (24) hours from receipt of notice. If the bidder fails to correct the work within the period specified in the notice, the County shall place the bidder in default, obtain the services of another bidder to correct deficiencies, and charge the incumbent bidder for these costs; either through a deduction from the final payment owed to the bidder or through invoicing. If the bidder fails to honor this invoice or credit memo, the County may terminate the contract for default.

2.17 CLEAN-UP

All unusable materials and debris shall be removed from the premises at the end of each workday, and disposed of in an appropriate manner. Upon final completion, the bidder shall thoroughly clean up all areas where work has been involved as mutually agreed with the County Project Manager.

2.18 COMPLIANCE AND REGULATIONS

A. Standards

All goods and services provided under this contract shall be in accordance with current governmental standards to including but not be limited to Occupational Safety and Health Administration (OSHA), National Institute of Occupational Safety Hazards (NIOSH), the Environmental Protection Agency (EPA), and National Fire Protection Association (NFPA).

Bidder(s) shall ensure that employees providing maintenance and repair services under this contract have sufficient knowledge and understanding of applicable federal standards.

B. Legal Requirement for Pollution Control

It is the intent of these specifications to comply with the Miami-Dade County Pollution Control Ordinance as stated in Chapter 24 of the Miami-Dade Code. This ordinance is made a part of these specifications by reference and may be obtained, if necessary, by the Bidder through Regulatory and Economic Resources, 701 NW 1 Court, Miami, Florida 33130, Telephone (305) 372-6789.

C. Accident Prevention, Barricades and Safety

Precautions shall be exercised at all times for the protection of persons and property. All Bidders performing services under this contract shall conform to all relevant OSHA, EPA, State and County regulations during the course of such effort. Any fines levied by the above mentioned authorities for failure to comply with these requirements shall be borne solely by the responsible Awarded Bidder. Barricades shall be provided by the

Awarded Bidder when work is performed in areas traversed by persons, or when deemed necessary by the County.

The Awarded Bidder) agree to perform all work in a manner that meets all accepted standards for safe practice, and to safely maintain and operate all the equipment used in the performance of this contract. Bidder(s) employees shall wear a safety vest or bright orange tee shirts at all times while performing the service. The County, reserves the right to issue immediate restrain or cease and desist to the Awarded Bidder(s), when unsafe or harmful acts are observed or reported while performing under the contract. Hazardous conditions shall be immediately reported to the County.

D. Protection of Property

All existing structures, utilities, services, roads, trees, shrubbery, etc. shall be protected against damage or interrupted services at all times by the Awarded Bidder during the term of this contract. The Awarded Bidder shall be held responsible for repairing or replacing property to the satisfaction of the County should it be damaged by reason of the Awarded Bidder operation on the property. Failure to comply with any of these requirements may result in immediate suspension of work.

2.19 BIDDER BACKGROUND CHECK AND SECURITY REQUIREMENTS

The Awarded Bidder must provide a legible copy of the "Application for Contractor Pass" Corrections and Rehabilitations Form R6-25-12, and a copy of a current Florida Driver License, or Florida Identification Card, for all employees assigned to the work in support of this contract. Upon submission of each of the required documents, the Awarded Bidder will be notified approximately 4 to 8 weeks following submission on whether their employee(s) have passed the background check. The background check will be paid by the County and will be at no additional cost to the Awarded Bidder.

Employees that pass will report to Dr. Martin Luther King (MLK) Plaza, Corrections and Rehabilitations Department Headquarters, Program Services, 2525 NW 62 Street, Suite 1166A, Miami, Fl. 33147 for a required photo and completion of mandatory training video prior to entrance into any Correctional facility. Employees shall wear a company shirt with company logo and ID during all working hours.

All tools transported to the work area must be in tool box or enclosed during transport. No hanging tools from the waist or other areas will be permitted unless previously approved. The Awarded Bidder shall have a pretyped inventory check list of all the tools that will be brought into the work site on a company letterhead for the correctional officer inventorying of tools entering and exiting the facility.

The inventory check list will be turned in daily to the control booth upon arrival and tool check will be performed. Strict tool control will be required due to the Correctional setting which will require full adherence to tool control standards.

Failure of the Awarded Bidder to complete the necessary background checks successfully for his or her staff and other security requirements may lead to the cancellation of this contract.

SECTION 3

SCOPE OF WORK/TECHNICAL SPECIFICATIONS

3.1 SCOPE OF WORK

Provide all-inclusive services not limited to parts, labor, transportation, material and equipment to furnish a comprehensive program of, inspections, preventive maintenance, software upgrades, emergency repair and routine repair services for the BMS from Johnson Controls located at TGK.

3.2 QUALITY ASSURANCE

A. Initial Inspection

The Awarded Bidder within the first thirty (30) days of the contract shall report back MDCR all deficiencies found after the initial inspection. If the Awarded Bidder is also the incumbent Bidder servicing the equipment on the previous contract, all deficiencies shall be repaired at the Awarded Bidder's expense. If the Awarded Bidder is not the previous Bidder servicing the equipment on the previous contract, the County will contact the incumbent Bidder to bring the equipment to OEM standards. If the facility and/or equipment were not included in the previous contract, the County shall pay the Awarded Bidder the hourly rate(s) provided in Section 4, the hourly rate(s) quoted shall be deemed to provide full compensation to the Bidder for labor, equipment use, and travel time. The cost of parts and materials shall be paid on a cost "pass-thru" basis. The Awarded Bidder(s) shall charge the County the same invoice prices he or she is charged by his or her supplier. A copy of the Awarded Bidder's invoice from the supplier for parts shall be submitted with the Awarded Bidder's invoice for payment. In cases where the Awarded Bidder(s) manufactures its own parts, the Bidder will charge the County a price no higher than he or she charges his or her most favored customer. The County reserves the right to request verification.

B. Bidder Accessibility and Communications

Awarded Bidder shall be accessible by phone, during regular business hours. Service for emergencies shall be available twenty-four (24) hours a day, seven (7) days per week. An e-mail address also needs to be provided to all County Project Managers. The Awarded Bidder shall make every effort to communicate with authorized County representative via e-mail, phone, or any other means of communication as often as needed, to keep the County fully updated on the status of any ongoing repairs, maintenance or service.

C. System Condition

Any time services are provided, the Awarded Bidder shall document the condition of the system and all performed services. These documents shall be provided with any submitted invoice. The Awarded Bidder shall ensure that the equipment is left in an operable condition.

D. System Failure

The Awarded Bidder shall make every effort to expedite the service and minimize the disruption to the location(s) being serviced and shall employ every ordinary and extraordinary effort to minimize system failures.

The Awarded Bidder is required to immediately inform the County and follow up with a written notification within 24 hours. The written notification shall state the reason the equipment is not in service, when repairs will be completed and when will the system be back in full operation.

Prior to the Awarded Bidder's arrival, County personnel may secure/contain the system in order to ensure the safety of the facility patrons and workers; and to minimize the disruption of the facility operations. The Awarded Bidder shall hold harmless the County and shall bear any cost associated with securing the system. Any issues that may arise in securing the system shall not be the responsibility of the County.

3.3 EMERGENCY SERVICES

An emergency is an unexpected situation or occurrence that develops due to system failure, power loss or any life threatening situation for building occupancy, or as declared at the sole discretion of a County Project Manager. Where an emergency is deemed to exist by the County, the Awarded Bidder shall be required to respond upon a verbal or written notification, seven (7) days a week, 365 days a year, all year. This response must result in the arrival of technicians at the affected facility within two (2) hours of notification for calls Monday to Friday between 7:00 a.m. to 3:00 p.m. and within four (4) hours of notification for calls on Monday to Friday between the hours of 3:00 p.m. to 7:00 a.m. For weekends and holidays, response time is within four (4) hours.

When a repair is required under these circumstances, the County shall pay the Awarded Bidder the hourly rate(s) provided in Section 4, the hourly rate(s) quoted shall be deemed to provide full compensation to the Awarded Bidder's for labor, equipment use, and travel time. The cost of parts and materials shall be paid on a cost "pass-thru" basis. The Awarded Bidder shall charge the County the same invoice prices he or she is charged by his or her supplier. A copy of the Awarded Bidder's invoice from the supplier for parts shall be submitted with the Awarded Bidder's invoice for payment. In cases where the Awarded Bidder manufactures its own parts, the Bidder will charge the County a price no higher than he or she charges his or her most favored customer. The County reserves the right to request verification.

3.4 SERVICES TO BE PROVIDED

At minimum the Awarded Bidder shall provide preventive maintenance including all repairs, labor, and parts per year:

- A. Services shall include but are not limited to repair, replace and conduct critical upgrades of the Metasys software and all equipment included throughout this solicitation, all associated breakers, wiring, switches, etc. are the responsibility of the Awarded Bidder. The bidder will be required to provide all materials and parts as needed to complete all repairs. All blue prints, operation and maintenance manuals for the equipment are available.
- **B.** The Awarded Bidder shall install any improved or updated versions of the system software or application issued by the manufacturer. The County shall be notified of all applicable software changes or new releases within sixty (60) days of change or release.
- C. All servicing shall be performed by qualified personnel, using procedures as recommended in the manufacturer's service manuals. The equipment shall be maintained at a level necessary for optimum performance as suggested in the manufacturer's service manual and industry standards.
- **D.** The Awarded Bidder will be required to label all items on the equipment list included within this solicitation with a bar code label or other type of inventory system to indicate through a quarterly report, that proper inspections equal to one circuit (circuit-inspection of equipment list) were completed. Every piece of equipment must be checked no less than every three months.
- E. The Awarded Bidder shall tour the facility, once a year, with the fire alarm system Awarded Bidder to perform the certification of the fire alarm system. Both Awarded Bidders shall coordinate the work to insure that the building fire and smoke evacuation system work in conjunction with each other and in accordance with National Electrical Code (NEC), the National Fire Protection Association (NFPA) standards, the Florida Fire Prevention Code (FFPC), Florida Administrative Code (FAC) Chapter 69A-48, the manufacturer's specification, and in accordance with all applicable Federal, State, and Local regulatory requirements.

F. The Awarder Bidder may be required to work in populated areas of the corrections facility. An officer will escort the staff at all times as work is performed.

3.5 PREVENTATIVE MAINTENANCE SCHEDULE

The Awarded Bidder will be required to submit for approval a schedule of items to be inspected no less than once per month for the preventive maintenance program. The schedule shall allow for all items listed in Section 3.0 Paragraph 3.7 to be inspected at minimum four (4) times per year. The Awarded Bidder shall be responsible for increasing the frequency of services proactively in order to mitigate against any system downtime. The Awarded Bidder shall make every effort to schedule the work, in order to avoid disruption of the site operations. A report with a list of equipment that has been inspected shall be submitted to the County to verify the inspections every quarter.

3.6 <u>INSPECTIONS</u>

At minimum the following services will be performed at each inspection:

A. <u>Air Handling Unit (AHU) Control Working Function</u>

- 1. Verify communication from the supervisory controller to the field controller.
- 2. Verification of fan start-stop control and fan status reporting.
- 3. Performance verification of control algorithms as applicable i.e. cooling, static pressure, cubic feet per minute.
- 4. Verification and calibration of temperature and pressure sensors.
- 5. Inspect and clean enclosure and sensors.
- 6. Verification and calibration of outside air dampers, return dampers and their associated actuators.

B. Fan Coil Unit (FCU) Control Working Function

- 1. Verify communications from the supervisory controller to the field controller.
- 2. Verification of fan start-stop control and fan status reporting.
- 3. Performance verification of control algorithms as applicable i.e. cooling, static pressure, cubic feet per minute.
- 4. Verification and calibration of temperature and pressure sensors.
- 5. Inspect and clean enclosure and sensors.
- 6. Verification and calibration of outside air dampers return dampers and their associated actuators.

C. Variable Frequency Drive (VFD) Working Function

- 1. Verify communications from the supervisory controller to the variable frequency drive.
- 2. Verify all variable frequency drive programmed settings per manufacturer specifications.
- 3. Test low and high programmed limits.

D. <u>Variable Air Volume (VAV) Control Working Function</u>

- 1. Verify communication from the supervisor controller to the field controller.
- 2. Performance verification of control algorithms as applicable, i.e. cooling, static pressure, cubic feet per minute volume to set point.
- 3. Verification of zone thermostat communication bus.
- 4. Verification of proper operation of VAV dampers and associated actuators.

E. Chiller Plant Control Working Function

- 1. Verify communications from the supervisory controller to the field controller.
- 2. Verification of pump start-stop control and pump status reporting.
- 3. Performance verification of control algorithms as applicable, i.e., chill water pressure and condenser water temperature.
- 4. Verification and calibration of temperature and pressure sensors.

- 5. Inspect and clean enclosure and sensors.
- 6. Verification of cooling tower fan start-stop control and cooling tower fan status reporting.
- 7. Verification of chiller start-up and chiller status reporting.
- 8. Verify labeling and inspect for electrical impedance.
- 9. Verification of rotation sequence for the chillers, pumps, and cooling tower as dictated by the rotation schedules.

F. Supervisory Controller Working Function

- 1. Verify communications from the building supervisory controller to the workstation.
- 2. Verify communications from the medical housing controller to the workstation.
- 3. Test battery backup for the Network Control Modules.
- 4. Inspect and clean enclosures.

G. Operator Workstation Working Function

- 1. Verify communications from the building supervisor controller to the workstation.
- 2. Verify communications from the medical housing supervisory controller to the workstation.
- 3. Upload database to the archive workstation from the supervisory controllers and perform a database back-up of the Building Management Systems test remote dialup.
- 4. Test remote dialup.
- 5. Test auto-paging on an alarm.
- 6. Perform file housekeeping on the hard drive.
- 7. Review Building Management System graphical displays.
- 8. Review Building Management GPL database.
- 9. Inspect and clean all interior components of the workstation to include the key board and printer every quarter.
- 10. Consultation with the County Project Manager upon completion of the preventive maintenance.

H. <u>Smoke Evacuation Working Function</u>

Inspection and maintenance of the Smoke Evacuation System shall be provided and be in compliance with NFPA 92A Standards, including but not limited to:

- 1. Verify communications from the supervisory controller to the field controller.
- 2. Inspect and clean enclosure and sensors.
- 3. Verify operations of the Fireman's Override Panel.
- 4. Verify and exercise control of the smoke dampers.
- 5. Inspect and lubricate smoke damper linkages and verify all blades and seals.
- 6. Verify and exercise control of Smoke Exhaust Fans (Annual Inspections required).
- 7. Inspect all fusible link operated dampers every 2 years.
- 8. Operate all fusible link dampers every 2 years.
- 9. Dedicated systems shall be tested at least semi annually
- 10. Non-dedicated systems shall be tested at least annually.

I. Motor Working Function

- 1. Check ventilation ports, motor windings for soil accumulation and clean.
- 2. Lubricate motor bearings and check hold down bolts.
- 3. Record motor amps at full load and compare to rated name plate.
- 4. Record line voltage to motors and compare to name plate.
- 5. Use laser test meter and record motor casing temps.
- 6. Check pulley alignment.
- 7. Check motor shaft and bearings for binding or movement.
- 8. Replace motor drive belts.

9. Record any visual discrepancies and advise the County Project Manager.

3.7 EQUIPMENT LIST TO BE SERVICED

A. Building Management System

- 1. 198 VAV boxes
- 2. 24 VAV CHW AHU's
- 24 AHU VFD'S
- 4. 2 Paired AHU's at MHU.
- 5. 2 Main Chillers (Trane)
- 6. 2 Cooling Towers (Main)
- 7. 4 Pumps (Main)
- 8. 1 Chiller, Air Cooled (York)
- 9. 2 Chiller Water Pumps (York)
- 10. 7 FCU's (Kitchen, Office, UPS room, Maintenance office, Roof Radio room and (3) Elevator equipment rooms)
- 11. 1 Ventilation Unit
- 12. BMS System & Workstation

B. <u>Smoke Evacuation System</u>

- 1. Smoke Exhaust System
- 2. 535 Smoke Damper Operators
- 3. 777 Cell Smoke Dampers
- 4. 146 Motorized Damper Operators
- 5. 1,152 Motorized Cell Dampers
- 6. 1 Fireman's Override Panel
- 7. Motors:
 - a) 11 Serf Fan Motors:
 - a. $\frac{3}{4}$ HP 2 fans
 - b. 1 & ½ HP 1 fan
 - c. 3 HP 5 fans
 - d. 5 HP 3 fans
 - b) 40 Exhaust Fan (EF) Fan Motors
 - a. $\frac{3}{4}$ HP 16 fans
 - b. 1.5HP 24 fans
 - c) 44 Smoke Suppression Fan (SSF) Fan Motors
 - a. 1/20 HP 1 fan
 - b. $\frac{1}{2}$ HP 8 fans
 - c. $^{3}4$ HP 8 fans
 - d. 2 HP 3 fans
 - e. 3 HP 7 fans
 - f. 10 HP 1 fan
 - g. 15 HP 1 fan
 - h. 20 HP 4 fans
 - i. 25 HP 1 fan
 - i. 30 HP 2 fans
 - k. 50 HP 1 fan
 - I. 60 HP 1 fan
 - m. 125 HP 1 fan
 - n. 200 HP 1 fan
 - d) 55 Smoke Exhaust Fan (SEF) Fan Motors

- a. 1/20 HP 1 fan
- b. $\frac{1}{4}$ HP 3 fans
- c. 1/3 HP 2 fans
- d. $\frac{1}{2}$ HP 4 fans
- e. 1 HP- 3 fans
- f. 2 HP 9 fans
- g. 3 HP 3 fans
- h. 5 HP- 6 fans
- i. 7 ½ HP 5 fans
- j. 10 HP 11 fans
- k. 40 HP 4 fans
- I. 125 HP 4 fans