

ISSUING DEPARTMENT INPUT DOCUMENT
CONTRACT/PROJECT MEASURE ANALYSIS AND RECOMMENDATION

☒ New ☐ OTR ☐ Sole Source ☐ Bid Waiver ☐ Emergency Previous Contract/Project No. FB-00275

☐ Contract
☐ Re-Bid ☐ Other – Access of Other Entity Contract LIVING WAGE APPLIES: ☒ YES ☐ NO

Requisition No./Project No.: FB-01580 TERM OF CONTRACT 5 YEAR(S) WITH 0 YEAR(S) OTR

Requisition /Project Title: Children's Courthouse BMS Maintenance

Description: To provide a full-service maintenance program including all necessary parts, labor, materials, equipment, and transportation to furnish an all-inclusive, comprehensive program of preventative maintenance & emergency repair services of the Johnson Controls Metasys BMS.

Issuing Department: ISD Contact Person: Jonathan Desvergunat Phone: 305-375-5312

Estimate Cost: 850,000 Funding Source: GENERAL FEDERAL OTHER

X

ANALYSIS

Commodity Codes:	<u>906-08</u>	<u>031-13</u>		
Contract/Project History of previous purchases three (3) years Check here <input type="checkbox"/> if this is a new contract/purchase with no previous history.				
	<u>EXISTING</u>	<u>2ND YEAR</u>	<u>3RD YEAR</u>	
Contractor:	<u>Johnson Controls, Inc</u>	<u>N/A</u>	<u>N/A</u>	
Small Business Enterprise:	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	
Contract Value:	<u>753,762.06</u>	<u>N/A</u>	<u>N/A</u>	
Comments: <u></u>				
Continued on another page (s): <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				

RECOMMENDATIONS

	Set-Aside	Subcontractor Goal	Bid Preference	Selection Factor
SBE	<u></u>	<u></u>	<u>X</u>	<u></u>
Basis of Recommendation: <u>Proprietary BMS. Only manufacturer and authorized vendor bid.</u>				
Signed: <u>Jonathan Desvergunat</u>		Date sent to SBD: <u>3/18/2020</u>		
		Date returned to SPD: <u></u>		

SECTION 3 – TECHNICAL SPECIFICATIONS

3.1 SCOPE OF WORK

To provide a full-service maintenance program including all necessary parts, labor, materials, equipment, and transportation to furnish an all-inclusive, comprehensive program of preventative maintenance and emergency repair services of the Johnson Controls Metasys Building Management System (BMS) at the Miami-Dade Children's Courthouse located at 155 NW Third Street, Miami, FL.

MINIMUM QUALIFICATIONS

Original Equipment Manufacturer (OEM) or Johnson Controls Authorized Building Control Specialist (ABCS) designation for Metasys products. Bidder shall provide a letter on company letterhead stating they are the OEM or provide a certificate proving ABCS status for Metasys products.

3.2 GOODS / SERVICES TO BE PROVIDED

The Awarded Bidder shall provide at a minimum the following services:

Overview

- 3.2.1** Bidder shall provide services to repair, replace and conduct critical upgrades of the Metasys system, to include hardware and software. All equipment included throughout this solicitation and all associated breakers, thermal safeties, actuators, wiring, switches, servers, integrations, etc. are the responsibility of the bidder. Bidder shall provide all materials and parts as needed to complete all services. All blue prints, operation, and maintenance manuals for the equipment can be provided upon request.
- 3.2.2** Bidder shall provide recommendations for improved system performance and cost savings recommendations after each visit.
- 3.2.3** All servicing shall be performed by qualified personnel, using procedures as recommended in the manufacturer's service manuals. The equipment shall be maintained at level necessary for optimum performance as suggested in the manufacturer's service manual and industry standards.
- 3.2.4** Bidder shall tour the facility, once a year, with the fire alarm system bidder to perform the certification of the fire alarm system. Both bidders shall coordinate the work to insure that the building fire and smoke evacuation system work in conjunction with each other as required by NFPA and local regulatory codes in combination with the fire alarm system.
- 3.2.5** Bidder shall provide the latest technical manual updates on Metasys BMS equipment as updated.
- 3.2.6** Bidder shall maintain a log of each visit to site. Log shall list all scheduled maintenance, non-scheduled maintenance, repairs, replacement parts/equipment, date work was performed, the name of the technician that performed the work, any deficiencies encountered, and actions taken to address the deficiencies. Bidder shall maintain this log on the job site and have it available for inspection at all times.
- 3.2.7** Bidder shall provide dedicated account management to coordinate delivery of service and technical assistance for the system.

Software Services

- 3.2.8** The Bidder shall furnish and install software updates/revisions to maintain or improve performance within the functional capabilities of the County's system. The Bidder shall provide this service on all the operating application's software packages currently comprising the system.
- 3.2.9** The Bidder shall perform database diagnostic tests and analyze the results to maintain the system database in optimum performance within the functional limits of the system.
- 3.2.10** The Bidder shall install any improved or updated versions of the system software or application issued by the manufacturer.

Hardware Services

- 3.2.11 The Bidder shall repair or replace failed or worn components to maintain system in peak operating condition with new or reconditioned components of compatible design. Components that are suspected of being faulty may be repaired or replaced in advance to prevent system failure. Labor, material, parts, and equipment costs are included in the Bidder's price as specified in Section 4 – Bid Submittal.
- 3.2.12 The Bidder shall perform preventative maintenance in accordance with a program of standard maintenance routines as determined by the County, equipment application and location, environmental factors, and manufacturer's recommendations, in conjunction with the approval from the County.
- 3.2.13 The Bidder shall conduct system integrity tests through a series of point checks, point commanding techniques, selective disabling, system wide function tests, and examination and analysis of standard report logs.
- 3.2.14 The Bidder shall furnish and install firmware updates/revisions to maintain or improve performance within the functional capabilities of the County's system.
- 3.2.15 The Awarded Bidder will be required to submit a schedule to follow of items to be inspected no less than once per month for the maintenance program to be approved by the County Project Manager. The schedule shall allow for all parts/equipment listed in section 3.3 (below) to be serviced, at minimum, two (2) times per year. A report with a list of equipment that has been serviced shall be submitted to the County Project Manager to verify services rendered after every visit.
- 3.2.16 At minimum the following tasks will be performed at each preventative maintenance visit:

3.2.16.1 Server

- 3.2.16.1.1 Check County log book for issues.
- 3.2.16.1.2 Review log book issues with County Project Manager and address as required.
- 3.2.16.1.3 Upgrade NxÉ software to latest Metasys release.
- 3.2.16.1.4 Check system time against network time.
- 3.2.16.1.5 Run error diagnostics report.
- 3.2.16.1.6 Address all errors found in logs as required.
- 3.2.16.1.7 Run communication diagnostics report.
- 3.2.16.1.8 Check server performance.
- 3.2.16.1.9 Backup databases.
 - 3.2.16.1.9.1 Two backups must be maintained on site using an external drive. Bidder must also keep a copy of all backups at local branch.
- 3.2.16.1.10 Document tasks performed during visit and report any observations to County Project Manager.

3.2.16.2 Workstation

- 3.2.16.2.1 Check County log book for issues.
- 3.2.16.2.2 Review log book issues with County Project Manager and address as required.
- 3.2.16.2.3 Check system time against network time.
- 3.2.16.2.4 Run communication diagnostics report.
- 3.2.16.2.5 Run error diagnostics report.
- 3.2.16.2.6 Check workstation performance.
- 3.2.16.2.7 Document tasks performed during visit and report any observations to County Project Manager.

3.2.16.3 Controllers

- 3.2.16.3.1 Check County log book for issues.
- 3.2.16.3.2 Review log book issues with County Project Manager and address as required.
- 3.2.16.3.3 Run error diagnostics report.
- 3.2.16.3.4 Check device logs for power outages and loss of communication.

- 3.2.16.3.5 Address all errors found in logs as required.
- 3.2.16.3.6 Reset device logs.
- 3.2.16.3.7 Check device reports for failed points.
- 3.2.16.3.8 Check device reports for disabled/deactivated points.
- 3.2.16.3.9 Check device reports for points in operator control.
- 3.2.16.3.10 Check device reports for points in alarm.
- 3.2.16.3.11 Command all dampers, valves, speed references & start/stops. Verify their operation at the end device.
- 3.2.16.3.12 Check all temperature, relative humidity and CO2 sensors using a measuring device with a valid and up to date certification stamp.
- 3.2.16.3.13 Document tasks performed during visit and report any observations to County Project Manager.

3.2.16.4 Variable Air Volume (VAV's)

- 3.2.16.4.1 Check County log book for issues.
- 3.2.16.4.2 Review log book issues with County Project Manager and address as required.
- 3.2.16.4.3 Check all room set points against actual room temperature reading and insure that there is less than a two degree difference.
- 3.2.16.4.4 Command all dampers, valves and verify operation in the field.
- 3.2.16.4.5 Check and verify that actual damper position and commanded damper positions are the same.
- 3.2.16.4.6 Check all temperature and relative humidity sensors using a measuring device with a valid and up to date certification stamp.
- 3.2.16.4.7 Check and insure that CFM readings are within minimum and maximum CFM as per VAV schedule.
- 3.2.16.4.8 Document tasks performed during visit and report any observations to County Project Manager.

3.2.16.5 Variable Frequency Drives (VFD's)

- 3.2.16.5.1 Check County log book for issues.
- 3.2.16.5.2 Review log book issues with County Project Manager and address as required.
- 3.2.16.5.3 Visual inspection of circuit boards and components; address issues as required.
- 3.2.16.5.4 Check drive error logs/fault codes.
- 3.2.16.5.5 Review error logs and fault codes with customer and address as required.
- 3.2.16.5.6 Cleaning with dry air.
- 3.2.16.5.7 Clean dust and dirt from heat sink fins with compressed dry air.
- 3.2.16.5.8 Check electrical connections and tighten with correct torque wrench/driver as required.
- 3.2.16.5.9 Check and replace cooling fans as required.
- 3.2.16.5.10 Exercise drive by commanding on and off via BMS and verify that drive is responding as expected.
- 3.2.16.5.11 Exercise drive by changing speed reference via BMS and verify that drive is responding as expected.
- 3.2.16.5.12 Check and clean air filters or replace as required.
- 3.2.16.5.13 Check for unusual noise or vibration.
- 3.2.16.5.14 Check overall condition of unit.
- 3.2.16.5.15 Check output power with oscilloscope for each drive; printout of sine wave for each drive must be provided to the County for review.
- 3.2.16.5.16 Perform an IR thermal scan of the drives input power and output power circuitry and wiring. Provide the county a report of IR scan results for each drive.

- 3.2.16.5.17 Document tasks performed during visit and report any observations to County Project Manager.

3.2.16.6 Controls (Controller/End Devices), Roof Top Unit (RTU), Johnson Controls, 0-20 points

- 3.2.16.6.1 Check County log book for issues.
3.2.16.6.2 Review log book issues with County Project Manager and address as required.
3.2.16.6.3 Create local backup of existing program and store on on-site computer and on-site media.
3.2.16.6.4 Verify unit is controlling to set points.
3.2.16.6.5 Identify and notify County Project Manager of abnormal point communications.
3.2.16.6.6 Identify and notify County Project Manager of current overrides (ex: out of service) and negative impacts.
3.2.16.6.7 Identify and notify County Project Manager of all current alarms and negative impacts.
3.2.16.6.8 Field calibrate critical sensors (as sensor type and controller operations allow).
3.2.16.6.9 Visually validate system outputs from the field controller.
3.2.16.6.10 Validate controls safety circuit and alarm verification.
3.2.16.6.11 Tighten electrical components.
3.2.16.6.12 Check overall condition of panel and perform visual inspection of the unit and surrounding area.

Emergency Services as Determined by the County

- 3.2.17 An emergency is an unexpected situation that develops due to system failure, power loss, force majeure, or any life threatening situation for occupants of the facility, or as declared at the sole discretion of the County Project Manager, as-needed. When an emergency is deemed to exist by the County due to poor maintenance by the Bidder, emergency services shall be performed at no additional cost to the County. When an emergency is due to force majeure, the Bidder shall bill for emergency services in accordance with hourly rates defined in Section 4 – Bid Submittal.
- 3.2.18 The Bidder shall provide emergency services to the County by telephone for consultation and troubleshooting of hardware and software components within one (1) hour of notification by the County, twenty-four (24) hours per day, seven (7) days per week, three hundred sixty-five (365) days per year.
- 3.2.19 The Bidder shall provide emergency services to the county by Internet for software troubleshooting and diagnostics to address software malfunctions or make necessary revisions within two (2) hours of notification by the County, twenty-four (24) hours per day, seven (7) days per week, three hundred sixty-five (365) days per year.
- 3.2.20 The Bidder shall provide emergency services to the County by on-site qualified technician personnel to provide all parts, equipment, and labor to make emergency repairs within four (4) hours of notification by the County, twenty-four (24) hours per day, seven (7) days per week, three hundred sixty-five (365) days per year. Bidder shall maintain an up-to-date copy of the software/program at all times in case it becomes necessary to reload the software/program on-site.

3.3

EQUIPMENT TO BE SERVICED

- 3.3.1 1 Controls Software, Supervisory/Server/UI, Johnson Controls, ADX
3.3.2 1 Controls (Controller/End Devices), Central Cooling Plant, 3rd Party, 51-100 points
3.3.3 27 Controls (Controller/End Devices), Air Handling Unit (AHU), 3rd Party, 21-60 points
3.3.4 2 Controls (Controller/End Devices), Air Handling Unit (AHU), 3rd Party, 0-20 points
3.3.5 484 Controls (Controller/End Devices), Variable Air Volume (VAV), Johnson Controls, 0-25 points
3.3.6 1 Controls (Controller/End Devices), Roof Top Unit (RTU), Johnson Controls, 0-20 points
3.3.7 5 Controls (Controller/End Devices), Generic Input/Output, 3rd Party, 0-20 points
3.3.8 26 Air Handling Unit (AHU), Variable Frequency Drive (VFD), 10-60 HP

- 3.3.9 1 Integration Functionality Verification – Control
- 3.3.10 11 Controls (Controller/End Devices) Spot Leak Detectors, Johnson Controls
- 3.3.11 11 Controls (Controller/End Devices) Tape Type Leak Detectors, Johnson Controls
- 3.3.12 2 Controls (Controller/End Devices) Spot Leak Detectors, Johnson Controls

3.4 INTEGRATIONS

Bidder is responsible for ensuring all integrations listed below are operating in accordance with OEM standards:

<u>Device</u>	<u>Device Description</u>	<u>Object ID</u>	<u>Instance Number</u>	<u>Manufacturer</u>	<u>IP Address</u>
GEN-1	Generator	3001671		KOHLER-GEN	1 10.97.100.231
ATS-EDPA	Automatic Transfer	3001679		ATS-EDPA Kohler	3 10.97.100.224
ATS-EDPB	Automatic Transfer	3001680		ATS-EDPB Kohler	2 10.97.100.223
ATS-CB	Automatic Transfer	3001681		ATS-CB Kohler	5 10.97.100.226
ATS-LS	Automatic Transfer	3001682		ATS-LS Kohler	4 10.97.100.225
UPS-1	UPS	3001972		UPS-1 Eaton	1 10.97.103.245
MSB1	Meter	3002862		MSB1 Eaton	1 10.97.100.228
MSB2	Meter	3002863		MSB2 Eaton	1 10.97.100.229
GEN-FUEL	Generator Fuel	3002321	3	Pneumercator	
Lighting	Lighting	3003775	8002	Cooper	
MN-LP1	Meter	3009063	10011	Eaton	
MN-HL1	Meter	3009064	10012	Eaton	
MN-LP2	Meter	3009065	10014	Eaton	
MN-HL2	Meter	3009066	10015	Eaton	
MN-HAC2	Meter	3009067	10016	Eaton	
MN-LP3A	Meter	3009068	10017	Eaton	
MN-HL3	Meter	3009069	10018	Eaton	
MN-HAC3	Meter	3009070	10019	Eaton	
MN-LP4A	Meter	3009071	10032	Eaton	
MN-HL4	Meter	3009072	10033	Eaton	
MN-HAC4	Meter	3009073	10034	Eaton	
MN-LP5A	Meter	3009074	10035	Eaton	
MN-HL5	Meter	3009075	10036	Eaton	
MN-HAC5	Meter	3009076	10037	Eaton	
MN-LP6	Meter	3009077	10038	Eaton	
MN-HL6	Meter	3009078	10039	Eaton	
MN-HAC6	Meter	3009079	10040	Eaton	
MN-LP7	Meter	3009080	10051	Eaton	
MN-HL7	Meter	3009081	10052	Eaton	
MN-HAC7	Meter	3009082	10053	Eaton	
MN-LP8	Meter	3009083	10054	Eaton	
MN-HL8	Meter	3009084	10055	Eaton	

MN-HAC8	Meter	3009085	10056	Eaton	
MN-LP9	Meter	3009086	10057	Eaton	
MN-HL9	Meter	3009087	10058	Eaton	
MN-HAC9	Meter	3009088	10059	Eaton	
MN-LP10	Meter	3009089	10060	Eaton	
MN-HL10	Meter	3009090	10061	Eaton	
MN-HAC10	Meter	3009091	10062	Eaton	
MN-LP11	Meter	3009092	10063	Eaton	
MN-HL11	Meter	3009093	10064	Eaton	
MN-HAC11	Meter	3009094	10065	Eaton	
MN-LP12	Meter	3009095	10066	Eaton	
MN-HL12	Meter	3009096	10067	Eaton	
MN-HAC12	Meter	3009097	10068	Eaton	
MN-LP13A	Meter	3009098	10069	Eaton	
MN-HL13	Meter	3009099	10070	Eaton	
MN-HAC13	Meter	3009100	10071	Eaton	
MN-LP14A	Meter	3009101	10072	Eaton	
MN-HL14	Meter	3009102	10073	Eaton	
MN-HAC14	Meter	3009103	10074	Eaton	
ME-HLS1	Meter	3009105	9012	Eaton	
ME-LLS1	Meter	3009106	9013	Eaton	
ME-HNE2	Meter	3009107	9014	Eaton	
ME-LNE2	Meter	3009108	9015	Eaton	
ME-LNE2A	Meter	3009109	9016	Eaton	
ME-HNE3	Meter	3009110	9027	Eaton	
ME-HLS3	Meter	3009111	9028	Eaton	
ME-LLS3	Meter	3009112	9029	Eaton	
ME-HNE4	Meter	3009113	9030	Eaton	
ME-HNE5	Meter	3009114	9031	Eaton	
ME-LNE5	Meter	3009115	9032	Eaton	
ME-HNE6	Meter	3009116	9033	Eaton	
ME-HLS6	Meter	3009117	9034	Eaton	
ME-LLS6	Meter	3009118	9035	Eaton	
ME-HNE7	Meter	3009119	9051	Eaton	
ME-HNE8	Meter	3009120	9052	Eaton	
ME-LNE8	Meter	3009121	9053	Eaton	
ME-HNE9	Meter	3009122	9054	Eaton	
ME-HLS9	Meter	3009123	9055	Eaton	
ME-LLS9	Meter	3009124	9056	Eaton	
ME-HNE10	Meter	3009125	9057	Eaton	
ME-LNE11	Meter	3009126	9058	Eaton	

ME-HNE11	Meter	3009127	9059	Eaton	
ME-HNE12	Meter	3009128	9060	Eaton	
ME-HLS12	Meter	3009129	9061	Eaton	
ME-LLS12	Meter	3009130	9062	Eaton	
ME-HNE13	Meter	3009131	9063	Eaton	
ME-DPELA	Meter	3009132	9064	Eaton	
ME-DPELC	Meter	3009133	9065	Eaton	
ME-DPELB	Meter	3009134	10066	Eaton	
MN-HAC1	Meter	3009135	10013	Eaton	
Fire Alarm System	-	3018923	11	Siemens	
Elevators		3030602		Kone	
AC Units				Daiken	
Weather Station					

