Position Code
1. EQPTCHSS

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

2. Employee's Name (Last, First, M.I.)	**8. Department/Agency** TECH, MGMT AND BUDGET - MB
3. Employee Identification Number	**9. Bureau (Institution, Board, or Commission)** State Facilities Administration
4. Civil Service Position Code Description Equipment Technician-SS	**10. Division** Building Operations
5. Working Title (What the agency calls the position) Building Automation Systems Specialist	**11. Section** Secondary Complex & Outstates
6. Name and Position Code Description of Direct Supervisor ; FACILITIES SUPERVISOR-5	**12. Unit** East Zone
7. Name and Position Code Description of Second Level Supervisor JENSEN, BETHANIE C; DEPARTMENTAL MANAGER-4	**13. Work Location (City and Address)/Hours of Work** Caro Psychiatric Hospital 2040 Chambers Rd. Caro MI 8:00 – 5:00 or some variation

14. General Summary of Function/Purpose of Position

Employees in this position must have a high level of expertise to perform entire building automation system analysis, programming, commissioning, and modification to ensure tenant comfort and energy efficiency in all facilities managed by the Department of Technology, Management & Budget. Serves as the lead on commissioning projects and will mentor staff. Creates and maintains partnerships with Facilities Supervisors and labor/trades staff for optimal customer service and efficiency while performing the above-mentioned duties in the East Zone.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary: **Percentage: 25**

Building Automation Systems (BAS) Analysis

Individual tasks related to the duty:

- Identify, establish and collect relevant historical trend information from installed BAS devices
- Analyze system performance to diagnose operational deficiencies
- Solicit occupant input related to system performance and comfort levels
- Review energy consumption information and trends
- Compile and analyze findings to determine necessary corrective programming, commissioning and modification measures
- Develop, compile, maintain and document configurations and diagrams of the following: databases, servers, computers, security, hardware devices, network systems, programs, utilities and communication systems

Duty 2

General Summary: **Percentage: 25**

BAS Programming

Individual tasks related to the duty:

- Design, implement and modify BAS programs using software engineering tools
- Implement control strategies in numerous vendor-specific programming languages, utilizing graphical objects and line code
- Upgrade and maintain current firmware revisions in existing building automation system controllers
- Develop and execute tests to validate accuracy of program logic
- Debug and revise programs based on test results
- Install, test and prove applications in production environment
- Establish communication within the internal network, between devices and server in preparation for integration
- Eliminate conflicts between building level and network level functionality
- Sustain systematic version control of software and data backup at all times

Cultivate library of custom programming files

Duty 3

General Summary: **Percentage: 20**

BAS Commissioning

Individual tasks related to the duty:

- Develop and execute commissioning plans in assigned area to ensure optimal HVAC system operation
- Review current design documentation
- Perform on-site, real-time system performance evaluations
- Validate proper systems operation using testing, calibrating and balancing equipment
- Provide direction to staff performing device-level testing and validation
- Identify components to be installed or replaced
- Accurately document commissioning activities
- Compile written reports communicating recommendations for system improvements
- Enter accurate data into the computerized maintenance management system

Duty 4

General Summary: **Percentage:**   **15**

BAS Modifications

Individual tasks related to the duty:

- Design specifications that meet performance objectives and system requirements
- Develop operational and installation procedures for communication systems, hardware, network, security, storage, and software
- Identify and quantify materials needed to execute system improvements
- Prepare installation plans and diagrams
- Develop cost estimates for systems development and upgrades
- Develop implementation processes in coordination with Telecom, Purchasing, building trades, IT, etc.
- Perform system upgrades and improvements
- Ensure engineering submittals and control system shop drawings comply with industry standards and best practices
- Coordinate field personnel in the networking and commissioning of building controls and intelligent metering devices
- Conduct periodic inspections of work in progress
- Advise construction project managers and contractors on interpretation of plans and specifications

Duty 5

General Summary: **Percentage:**   **10**

Service Response

Individual tasks related to the duty:

- Resolve complex tenant issues related to automated building control systems
- Provide technical support to staff
- Develop and implement effective alarm management strategies
- Follow up with tenants and other stakeholders on resolution of problems
- Maintain multiple HVAC vendor-specific workstation software applications
- Enter accurate data into the omputerized maintenance management system

Duty 6

General Summary: **Percentage:**   **5**

Perform all other duties as assigned

Individual tasks related to the duty:

Other duties as assigned.

---

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

- Organization of tasks to satisfactorily deliver required results and meet schedule.
- Decide when and how to verify accuracy of work and automated results.
- If and when equipment can be shut down and the consequences of such action.
- Building or space occupant comfort as affected by maintenance activity.
- Communicating changes to other trades, including supervisors and building managers.
- Multiple energy source lockout and communication.

---

17. Describe the types of decisions that require the supervisor's review.

- Changes in process or procedure.
- Decisions having significant or widespread effects on others.
- The organization and content of the master plans.
- Leaving equipment offline.
- Significant program or software changes.
- Decisions requiring the use of un-allocated time or resources.
- Changes in policy or procedure.

---

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

High percentage of time spent working with computer equipment in typical office environment. There are times when the work is in the field, mechanical spaces, rooftops, basements, penthouses, in and/or near operating rotating machinery and other automatic equipment. May need to stand, climb, stoop, kneel, crawl, lift and bend. May need to operate hand and power tools. May occasionally be exposed to cold, wet, windy and dark conditions. Penthouses, tunnels, scaffolding and ladders, power hoists, noise, dust and smoke could be frequent work areas or conditions depending on the project.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

N	Complete and sign service ratings.	N	Assign work.
N	Provide formal written counseling.	N	Approve work.
N	Approve leave requests.	N	Review work.
N	Approve time and attendance.	N	Provide guidance on work methods.
N	Orally reprimand.	N	Train employees in the work.

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes.

23. What are the essential functions of this position?

To ensure all building automation systems are serviced and maintained in optimal operating condition for all facilities managed by the DTMB.

Work with other divisions, agencies and/or contractors to deliver and enhance system functionality.

Maintain energy metering and monitoring capabilities.

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

New.

25. What is the function of the work area and how does this position fit into that function?

The function of the work unit is to provide safe, comfortable and cost effective facilities that allow our customers to provide their designated services to the people of the State of Michigan, and to provide maintenance and construction services on buildings to preserve the investment of the State of Michigan, DTMB. This position maintains energy metering and building automation controls for all facilities managed by the DTMB. This position is responsible for such things as data communications, system functionality, efficient operation and data integrity of the Michigan Building Intelligence System (MI-BIS). This individual will also have full access to energy consumption information, trends and efficiencies, and critical system servers.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of an associate's degree in electrical, electromechanical, electronics engineering, or electronics technology.

EXPERIENCE:

Equipment Technician 12
Four years of experience in the installation, maintenance, troubleshooting, and repair of electrical and electronic equipment equivalent to an Equipment Technician, including two years equivalent to an Equipment Technician E10 or one year equivalent to an Equipment Technician 11.

Alternate Education and Experience

Equipment Technician 8 - 12
Four years of experience in the installation, maintenance, troubleshooting, and repair of electrical and electronic equipment may be substituted for the education requirement. This is in addition to the experience requirements for the specific levels.

A certificate from a two year, post-secondary, technical program in electrical, electromechanical, or electronics technology may be substituted for the education requirement.

KNOWLEDGE, SKILLS, AND ABILITIES:

Network communication, computerized controls, computer software systems, application programming, building mechanical systems, electrical, electronic, HVAC and pneumatics.

Knowledge and experience with the application and use of a CMMS system

CERTIFICATES, LICENSES, REGISTRATIONS:

This position requires technical certification from any of the five following companies: Honeywell, Johnson Controls, Siemens, Trane and Tridium

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor	**Date**

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

N/A

I certify that the entries on these pages are accurate and complete.

MICHAELA FABUS-MAIN	10/20/2023
Appointing Authority	**Date**

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee	**Date**