1. Position Code

State of Michigan Civil Service Commission

Capitol Commons Center, P.O. Box 30002 Lansing, MI 48909

Federal privacy laws and/or state confidentiality requirements protect a portion of this information.

POSITION DESCRIPTION

This form is to be completed by the person that occupies the position being described and reviewed by the supervisor and appointing authority to ensure its accuracy. It is important that each of the parties sign and date the form. If the position is vacant, the supervisor and appointing authority should complete the form.

This form will serve as the official classification document of record for this position. Please take the time to complete this form as accurately as you can since the information in this form is used to determine the proper classification of the position. **THE SUPERVISOR AND/OR APPOINTING AUTHORITY SHOULD COMPLETE THIS PAGE.**

4			
2.	Employee's Name (Last, First, M.I.)	8.	Department/Agency Technology, Management & Budget
3.	Employee Identification Number	9.	Bureau (Institution, Board, or Commission) State Facilities Administration
4.	Civil Service Classification of Position Equipment Technician 8-E10	10.	Division Building Operations
5.	Working Title of Position (What the agency titles the position) HVAC Controls Automation Technician	11.	Section Bldg. Automation and Specialty Services
6.	Name and Classification of Direct Supervisor Larry Kusnier, Elect. Tech Supervisor, 13	12.	Unit Building Intelligence Systems
7.	Name and Classification of Next Higher-Level Supervisor Robert Weller, Departmental Manager 14	13.	Work Location (City and Address)/Hours of Work Stevens T. Mason Building 530 W. Allegan St., Lansing, MI 8:00 – 5:00 or some variation
	44 October 1 Oct		

14. General Summary of Function/Purpose of Position

To install, maintain, troubleshoot, repair, and replace building automation systems (BAS) and utility metering systems for state-owned and/or operated buildings. Includes system components such as thermostats, valves, pneumatic controls, direct digital controls, variable air volume controls, and hydronic and steam systems associated with heating, cooling, and ventilation.

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15. Please describe your <u>assigned</u> duties, percent of time spent performing each duty, and explain what is done to complete each duty.

List your duties in the order of importance, from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary of Duty 1

% of Time

30

Provide response to tenant service requests (i.e. hot/cold calls) and BAS malfunctions

Individual tasks related to the duty.

- Make on-site inspections when problems arise
- Identify, recommend, and implement solutions
- Work in partnership with zone management and maintenance staff to deliver resolution
- Test and check/verify proper system device responses
- Use meters and test equipment to assess electric, electronic, and pneumatic controls and circuitry
- Use various BAS service software to identify equipment malfunctions and failures, as well as operating deficiencies
- Modify program variables and data to produce desired, proper, and repeatable results in a space or building
- · Work with others in the operation, installation, and inspection of equipment according to industry best practices

Duty 2

General Summary of Duty 2

% of Time

30

Perform preventive maintenance and commissioning inspections to proactively reduce service calls by ensuring proper systems operation

Individual tasks related to the duty.

- · Test and check device-level functionality for all BAS components within a facility
- Test and calibrate thermostats and other sensors
- Measure and adjust air balance according to commissioning standards
- Test all electric, electronic, and pneumatic actuators
- Test and calibrate safety devices such as freeze stats, high- and low-pressure cut-out switches, fire alarm interlocks, etc.

Duty 3

General Summary of Duty 3

% of Time

25

Install, replace, or upgrade systems/components to establish, maintain, restore, or improve automated control and metering of building systems

Individual tasks related to the duty.

- Install controls, sensors, transmitters, and actuators
- Replace non-functioning controls, sensors, transmitters, and actuators
- Upgrade controls, sensors, transmitters, and actuators with similar or improved components
- Assist with specifications, upgrade and improvement details and projects
- Identify materials needed to complete a project

Duty 4

General Summary of Duty 4

% of Time

10

Maintain consistent, standardized documentation related to programs, data, settings, and values

Individual tasks related to the duty.

- Record maintenance activities and enter/route work orders in the Computerized Maintenance Management System (CMMS)
- Submit commissioning reports to document ongoing system status
- Complete CMMS equipment change forms
- File all manufacturer information, shop drawings and as-builts associated with component replacement or new system installation
- Provide all other information and reports as requested by supervisor

16.	Describe the types of decisions you make independently in your position and tell who and/or what is affected by those decisions.						
	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 your s	supervisor's review.				
	Leaving equipment	offline.					
		or software changes.					
	 Decisions requiring the use of un-allocated time or resources. Changes in policy or procedure. 						
18.	What kind of physical effort do you use in your position?						
	May need to stand, climb, stoop, kneel, crawl, lift, bend, or operate power tools for extended periods daily.						
	Outside work, may occasionally be exposed to cold, wet, windy, and dark conditions. Penthouses, tunnels,						
			d smoke could be frequent cond	ditions and work areas			
19.	depending on the project. List the names and classification titles of classified employees whom you immediately supervise or						
			an 10, list only classification				
	<u>NAME</u>	CLASS TITLE	<u>NAME</u>	CLASS TITLE			
		N/A					
20.	My responsibility for the above-listed employees includes the following (check as many as apply):						
	Complete and sign	n service ratings.	Assign work.				
	Provide formal wri	_	Approve work.				
	Approve leave req	•	Review work.				
	Approve time and		Provide guidance on wor	k methods.			
	Orally reprimand.		Train employees in the work.				
21.	I certify that the above answers are my own and are accurate and complete.						
	Signature Date						
	NOTE: Make a copy of this form for your records.						
	TO BE COMPLETED BY DIRECT SUPERVISOR						
22.	Do you agree with the responses from the employee for Items 1 through 20? If not, which items do you disagree with and why?						
	Yes						
23.	What are the essential duties of this position?						
	To ensure all HVAC controls and BAS in the physical plant are serviced and maintained in good operating						
	condition for all facilities managed by the DTMB.						
24.	Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.						
	No changes / filling vaca	ancy.					

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. The BAS team is responsible for all comfort heating, cooling and ventilation in buildings operated by the Department of Technology, Management & Budget. This position is a vital technician function providing hands-on, in the field maintenance.

26. In your opinion, what are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

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

Alternative Education & Experience:

Four years of experience in the installation, maintenance, troubleshooting, and repair of electrical and electronic equipment may be substituted for the required education. This is in addition to the experience requirements of the specific level.

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

EXPERIENCE:

Equipment Technician 8: No specific type or amount is required.

Equipment Technician 9: One year of experience in the installation, maintenance, troubleshooting, and repair of electrical and electronic equipment equivalent to an Equipment Technician 8.

Equipment Technician E10: Two years of experience in the installation, maintenance, troubleshooting and repair of electrical and electronic equipment equivalent to an Equipment Technician, including one year equivalent to an Equipment Technician 9.

Previous general experience in the HVAC, electrical trade or electronic controls fields desired.

KNOWLEDGE, SKILLS, AND ABILITIES:

Knowledge of:

- electrical and electro-mechanical principles
- analog and digital electronics. Knowledge of electrical wiring
- electrical control and relay systems
- theory and characteristics of solid state devices
- current developments in electronic equipment
- fire alarm systems.
- basic mathematics
- occupational hazards and safety precautions applicable to the work.

Skill in:

- the use of electrical and electronic testing equipment such as volt-ohmmeter, oscilloscope, integrated circuit tester, signal tracing equipment, logic probe, and soldering equipment
- electronic and electro-mechanical equipment repair and maintenance

Ability to:

- inspect and evaluate electrical and electronic equipment for proper operation and perform routine maintenance, cleaning, and adjustment
- conduct electronic tests on equipment and to analyze and troubleshoot problems in equipment operation
- disassemble and repair electrical and electronic equipment
- calibrate electronic measuring instruments
- interpret and follow plans, specifications, and instructions
- prepare and maintain records related to the work
- install and modify equipment
- · construct equipment designed by engineers
- assist engineers in designing equipment

- prepare specifications for equipment
- communicate effectively

Additional Knowledge, Skills, and Abilities related to HVAC, electrical or electronic controls.

•	 Ability to use computerized systems and software. 					
•	 Ability to learn various industry specific building automation comp Tridium, Honeywell, TRANE, Siemens, and Johnson Controls. 	uter applications from manufacturers such as				
CER	TIFICATES, LICENSES, REGISTRATIONS:					
	None					
NOT	E: Civil Service approval of this position does not constitute agreemen qualifications for this position.	t with or acceptance of the desirable				
27.	7. 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's Signature	Date				
	TO BE FILLED OUT BY APPOINTING AUTHORITY					
28.	Indicate any exceptions or additions to the statements of the employee(s) or supervisor.					
N/A						
29.	I certify that the entries on these pages are accurate and complete.					
	Appointing Authority's Signature	 Date				