

JAMES P. FUGATE ADMINISTRATION BUILDING HVAC System Assessment



Completed for:



April 28, 2021

Site Visits, Analysis & Report by:
Metrix Engineers
Geoff Grembowski, EIT



SCOPE

Metrix Engineers was hired to perform an assessment of the existing heating, ventilation and air conditioning systems at the James P. Fugate Administration Building site in Auburn School District. The goal of the assessment was to provide an executive summary level of detail regarding the type and condition of the existing mechanical systems, determine if the systems are operating in compliance with their original design intent, and identify any areas of improvement based on site observations.

The existing facility is a two-story building of approximately 22,611 square feet. The facility was originally constructed in 1968, and the most-recent mechanical modifications were completed in 2002 and 2017.

A site walk was conducted on April 28, 2021 to review the existing mechanical systems. This report summarizes Metrix observations based on that visit.

EXECUTIVE SUMMARY

The existing facility appears to be operating per its original design intent. Generally speaking, no major operating points of concern were observed.

It did not appear that there were any spaces that have been modified or have existing space ventilation concern. In fact, some spaces, such as the Board Room, appeared to have reduced occupancy based on the current seating arrangement observed in the space.

EXISTING SYSTEM OBSERVATIONS

HVAC:

All observed equipment is original to the 2002 mechanical improvements, with the exception of some equipment installed in 2017.

The facility has a central plant consisting of two boilers. This plant is located on the lower level. There are two central system pumps distributing the heating water. A rooftop mounted chiller and two central system pumps provide chilled water to the building.

Heating and ventilation to the building is provided by fan coil units located in the ceiling above most spaces. All fan coil units appear to have heating and chilled water connections. Ventilation outside air is provided to the units via louvers on the lower floor, and via rooftop hoods on the upper floors. Relief air is transferred to the corridors, and flows through the open corridors to the top floors. Relief hoods connect the upper level corridor to the exterior. Filters are provided in the return grille for fan coils on the lower level, and provided in the outside air hood for fan coils on the upper level.

A spot check of the internals of various HVAC system components was completed during the site visit. Most systems appeared to be in good operational condition and well maintained. Filters were changed recently on all units.

Controls:

Building automation system controls are old Barber Coleman Network 8000 direct digital controls.



A review of the Building Automation System and outside air damper setpoints was conducted and all systems and spaces appear to be meeting or exceeding design outdoor airflow ventilation rates.

During control system review EF-118 was found to be in alarm.

Note 1

Two space temperature deficiencies were identified at Room 107 and Room 207. Both spaces were slightly under setpoint but this was due to the spaces being unoccupied and also as a result of the boiler plant being disabled. All other spaces were observed to be maintaining temperature control setpoint.





James P Fugate Administration Building
HVAC System Assessment Notes

Note	Additional Notes		Estimated Completion Date	Final Completion Date
1		Submit work request	5/11/21	5/11/21
	1.1	WO 1-359956		5/14/21

Revision Date 6/4/21