



# Henderson County Schools Guaranteed Energy Savings Contract

February 19, 2019



# Project Summary

FACILITY	Henderson County High School	Henderson County North Middle School	Henderson County South Middle School	Bend Gate Elementary School	South Heights Elementary School	A.B. Chandler ES Cairo ES Niagara ES	Bus Garage / Maintenance Building	Board Office	East Heights ES / Learning Center
New HVAC at Main Gym	✓								
New Rooftop Units at Band, Choir and Auditorium	✓								
Replacement of (6) Rooftop Units	✓								
Replacement of (4) Rooftop Units at CTE wing	✓								
New Chiller				✓					
Domestic Hot Water Tank Insulation	✓								
Variable Frequency Drives (VFDs)		✓	✓						
Building Automation System (Controls) Upgrade	✓								
Interior LED Lighting	✓						✓	✓	
Exterior LED Lighting	✓	✓	✓	✓	✓		✓	✓	
Water Conservation	✓	✓		✓	✓	✓		✓	✓

# High School Gym Rooftop Units



**Previous Gym Units**



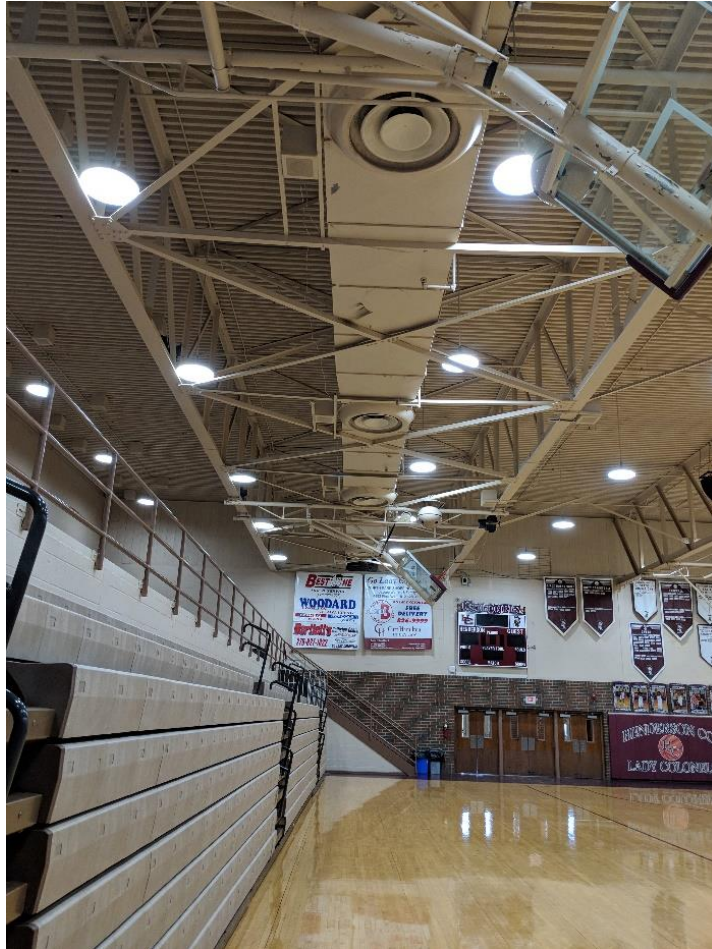
**New Location for Rooftop Units**



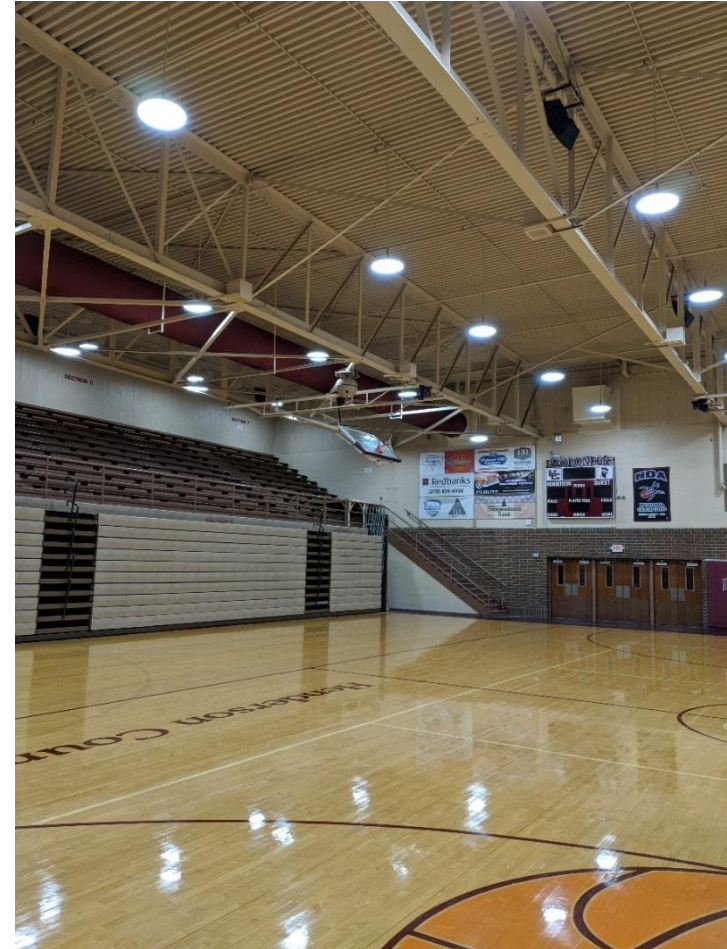
**New Gym Rooftop Units**



# High School Gym Duct Replacement



**Previous Gym Duct**



**New Gym Duct**

# High School Auditorium Rooftop Unit



**Previous Auditorium Rooftop Unit**

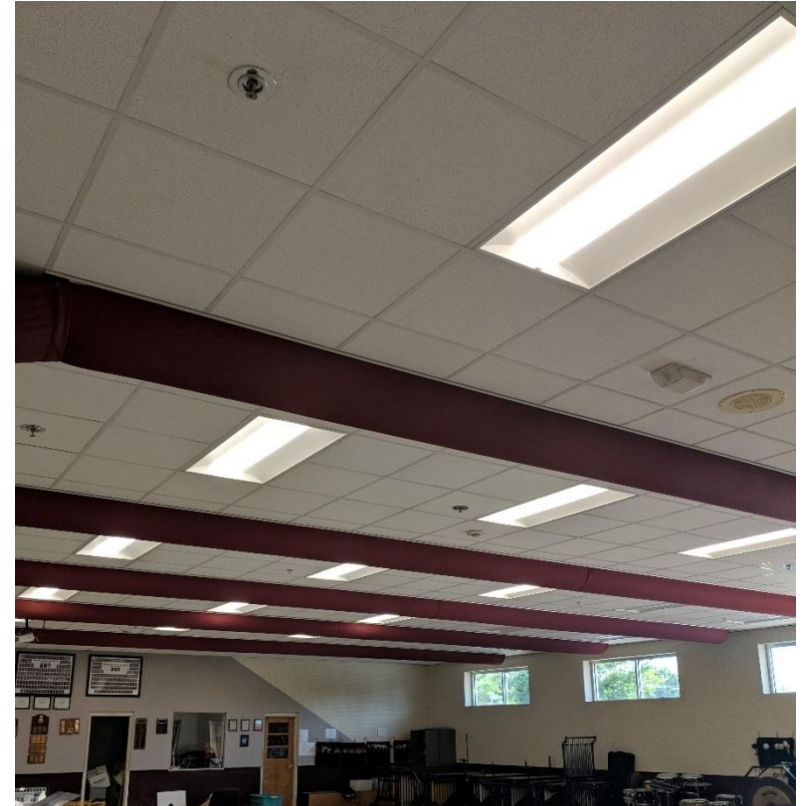


**New Auditorium Rooftop Unit**





**Band Room – Before**

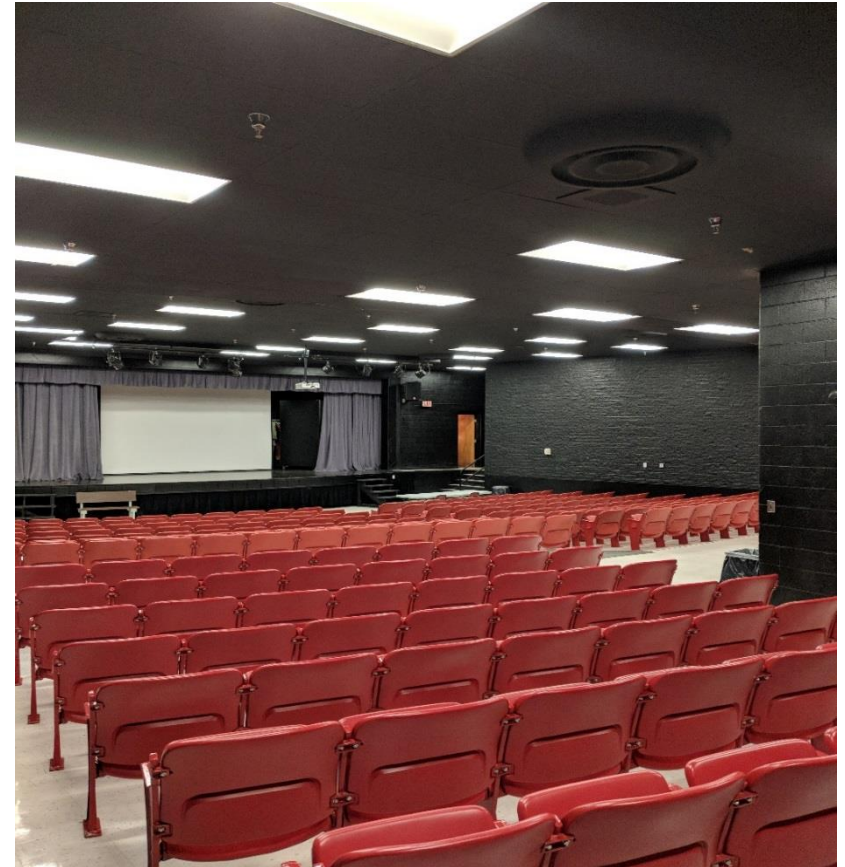


**Band Room – After**

# High School Lighting



**Library**



**Auditorium**



# Bend Gate ES Chiller Replacement



**Old Chiller**



**New Chiller**



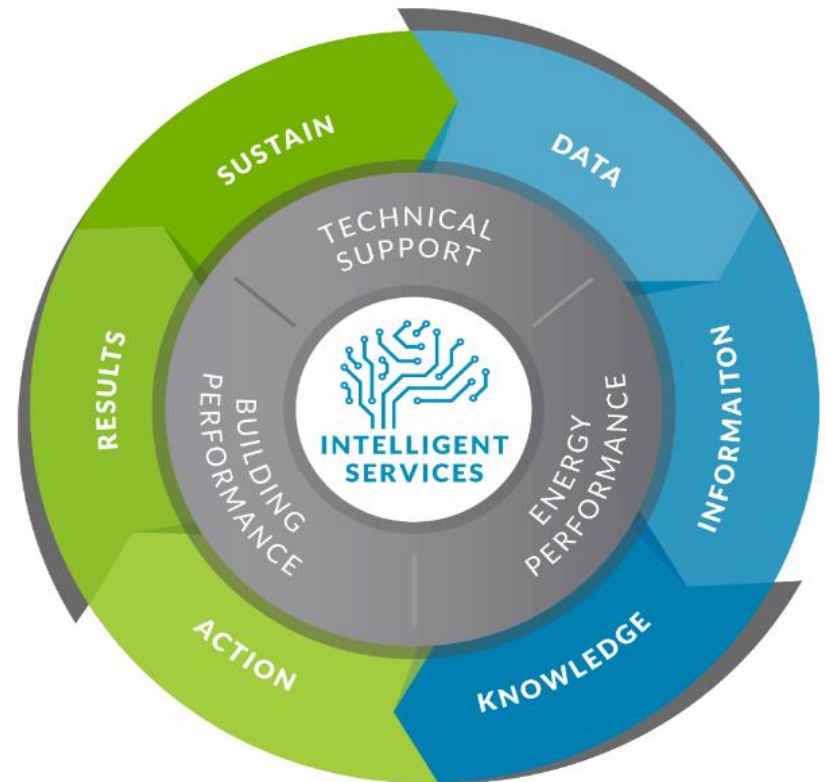
# Project Financial Summary

	Financial Summary
Project Cost	\$3,920,000
Energy Savings	\$129,161
Operational Savings	\$15,475
Energy Guarantee / Bond Term	20 years
Estimated Bonding Potential Used	\$0
Estimated First-Year Excess Savings	\$82,762

*Plan of financing developed by Ross, Sinclair & Associates, LLC*

# What is Intelligent Services?

- HVAC Performance Monitoring
- Technical Support “Help Desk”
- Training for Operations Staff
- Live Gas & Electric Metering
- Remote Troubleshooting
- Consultations
- Data Review
- Avoided Truck Rolls
- Problem Resolution
- Financial Performance
- Facility/Budget Planning
- Critical System Alarming
- Web-based Energy Dashboards
- Reduced M&V Costs
- Recommendations for Improvement (“ECMs”)



## Carbon Footprint

