



## IMPROVEMENT LIST - Project 2

### Griffith Public Schools

February 17, 2021

Bldg.	Improvements	Cost
<b>Wadsworth Elementary</b>		
	<b>Classroom HVAC Unit Replacement</b> <ul style="list-style-type: none"> <li>* Disconnect existing wiring, piping, controls and duct from existing corridor ceiling mounted units.</li> <li>* Demo units and make safe electrical and piping connections.</li> <li>* Install twenty-four (24) vertical classroom units with variable speed fans, stainless steel drain pans and institutional dampers.</li> <li>* Install new supply duct above existing ceiling and connect to diffusers in each classroom.</li> <li>* Flush all water piping before connecting to new units.</li> <li>* Connect water piping to new units and provide access to valves.</li> <li>* Connect units to new control system and integrate into school's network.</li> </ul>	<b>\$2,289,354</b>
	<b>Boiler Replacement</b> <ul style="list-style-type: none"> <li>* Demo two (2) existing low efficiency boilers and install two (2) high efficiency boilers.</li> <li>* Replace all heating pumps with new pumps and install VFD's on building distribution pumps.</li> <li>* Pipe and wire new equipment.</li> <li>* Install new controls that will interface with new front end and pulling data from new boilers.</li> <li>* Provide on site training for maintenance staff.</li> </ul>	
	<b>Temperature Controls</b> <ul style="list-style-type: none"> <li>* Replace Johnson Controls equipment with new open products on all existing equipment.</li> <li>* Install new controllers, sensors, water control valves, actuators and low limits. Will have CO2 sensors in classrooms and large spaces.</li> <li>* Install new front end devices where efficient/logical.</li> <li>* Provide on site training for maintenance staff.</li> </ul>	
<b>Total for Improvements</b>		
<b>Griffith Middle School / High School</b>		
	<b>Boiler Replacement</b> <ul style="list-style-type: none"> <li>* Demo six (6) existing low efficiency boilers and install three (3) high efficiency boilers on same housekeeping pads.</li> <li>* Replace all heating pumps with new pumps and replace VFD's on building distribution pumps.</li> <li>* Pipe and wire new equipment.</li> <li>* Install new controls that will interface with new front end providing web-based monitoring including data from new boilers.</li> <li>* Install new high efficiency heat exchanger to heat swimming pool.</li> </ul>	<b>\$917,345</b>
	<b>Domestic Water Tank Replacement</b> <ul style="list-style-type: none"> <li>* Demo two (2) existing domestic water storage tanks and boiler water system piping..</li> <li>* Install new high efficiency domestic water heater system to replace old tank/heat exchanger system.</li> <li>* Install new mixing valve for showers/sinks/etc.</li> </ul>	
	<b>Pool Dehumidification Unit Replacement</b> <ul style="list-style-type: none"> <li>* Demo two (2) existing PoolPak rooftop units including the units, roof curbs, condensers, controls and piping.</li> <li>* Install two (2) new units in similar locations (new units are larger than existing).</li> <li>* Pipe and wire new equipment.</li> <li>* Install new controls that will interface with new front end providing web-based monitoring.</li> <li>* Re-configure ductwork to accommodate larger units and exhaust fan interference.</li> <li>* Connect the heating water piping from the boiler room to the new units.</li> <li>* Install glycol/chilled water heat exchanger in boiler room for the new dehumidification units (no compressors in new units).</li> <li>* Install chilled glycol piping from the boiler room to the new units.</li> <li>* Provide two (2) year parts and labor warranty for Griffith</li> </ul>	<b>\$803,197</b>
	<b>Pool Filter, Valve Replacement and Sanitation Upgrades</b> <ul style="list-style-type: none"> <li>* Replace defective valves and controls for pool level control.</li> <li>* Replace existing flow meter and pH meter with new devices and controls.</li> <li>* Install new UV system for reduction in chloramines and improve swimmers health and safety.</li> <li>* Install cover over balance tank to reduce chemical concentration in equipment room.</li> </ul>	
	<b>Temperature Controls</b> <ul style="list-style-type: none"> <li>* Replace Johnson Controls equipment with new open products on all existing air handling units and VAV boxes.</li> <li>* Install new controllers, sensors, water control valves, actuators and low limits. Will have CO<sup>2</sup> sensors in classrooms and large spaces.</li> <li>* Install new controls on the existing chilled water plant including control for pumps and pulling data from new chillers.</li> <li>* Install new front end devices where efficient/logical.</li> <li>* Provide on site training for maintenance staff.</li> </ul>	<b>\$555,503</b>
	<b>Gymnasium Wall</b> <ul style="list-style-type: none"> <li>* Repair existing "bulging" brick wall on auxiliary gym on east and west sides.</li> <li>* Install masonry through-wall flashing.</li> <li>* Install new roof metal trim and extend roof membrane flashing over existing steel to reduce water infiltration to the brick walls.</li> <li>* Provide additional moisture resistance on existing partition wall between the gym and pool.</li> </ul>	<b>\$298,861</b>
<b>Total for Improvements</b>		<b>\$2,574,906</b>
<b>Beiriger Elementary School</b>		
	<b>Temperature Controls</b> <ul style="list-style-type: none"> <li>* Replace Johnson Controls equipment with new open products.</li> <li>* Install new controllers, sensors, actuators and low limits. Not replacing control valves in this building because of age. Will have CO<sup>2</sup> sensors in classrooms and large spaces.</li> <li>* Install new front end devices where efficient/logical.</li> <li>* Provide on site training for maintenance staff.</li> </ul>	<b>\$535,024</b>
<b>Total for Improvements</b>		<b>\$535,024</b>
<b>Total</b>		<b>\$5,399,285</b>