



**Wheaton CUSD #200 - Phase 12  
Improvement List**  
November 4, 2022

Scope Item	Improvement Summary	Total Cost	Estimated Rebate	Annual Energy Savings	Annual Maintenance Savings	Annual Operational Savings (Cost Avoidance)	Payback
<b>Washington Elementary School</b>							
WES-1L	<b>Lighting and Ceiling Replacements</b> <i>This scope item replaces ceilings and retrofits specialty lighting and replaces the lay-in lighting throughout the building.</i> <ul style="list-style-type: none"> <li>* Replace existing 2x4 ceiling tiles with new 2x2 Armstrong Cirrus 24x24x3/4 ceilings tiles and additional required T-bar and ceiling suspension.</li> <li>* Provide new occupancy sensors within classroom spaces.</li> <li>* Retrofit existing specialty lighting with new LED kits that utilize the existing housing while providing a visibly new finish in the space.</li> <li>* Replace existing lay-in 2x4 lighting with new 2x2 LED lighting providing a visibly new finish in the space.</li> </ul>	\$787,256	\$23,820	\$5,322	\$4,680	\$93,961	7.3
<b>Lowell Elementary School</b>							
LES-1	<b>Boilers, Pumps, VCUs, AHUs, Casework, Chiller Upgrades, Lighting and Ceiling Replacements</b> <i>This scope items replaces old boilers and increases their efficiency, allows the hydronic pumping system to modulate to match the building load and save energy, adds ducted vertical classroom units which improve comfort and air distribution, upgrades all of the old AHUs, replaces and aging chiller and replaces casework. This scope item also replaces ceilings and retrofits specialty lighting and replaces the lay-in lighting throughout the building.</i> <ul style="list-style-type: none"> <li>* Replace (2) existing 1.6 million BTU input boilers with (2) new 1.6 million input BTU high efficiency condensing boilers for N+1 redundancy.</li> <li>* Demolish (2) existing boiler primary pumps. Install (2) new boiler primary pumps.</li> <li>* Replace (2) existing secondary building pumps with (2) new secondary building pumps. Install (2) new variable frequency drives (VFDs) - one per pump.</li> <li>* Replace (1) existing chiller pump with (1) new chiller pump. Install (1) new variable frequency drive (VFDs) - one per pump.</li> <li>* Replace central plant hydronic accessories including side stream filter, chemical feeder, and air separator.</li> <li>* Replace old horizontal classroom unit ventilators with (24) new vertical ducted classroom unit ventilators.</li> <li>* Refurbish (3) air handling units (AHUs) including replacing fan motors, installing VFDs, replacing coil pumps, and replacing coils. Existing ductwork to remain.</li> <li>* Replace existing fan coil units, finned tube radiation, convectors, and cabinet heaters with new.</li> <li>* Replace existing roof-mounted exhaust fans and install new AHU relief fans.</li> <li>* HVAC system will remain a 2-pipe change-over system.</li> <li>* Install new direct digital controls on new mechanical equipment listed in scope item.</li> <li>* Install new Tridium web accessible energy management system to operate controls on noted scope in the school district. Include new scheduling, trending, alarms, and graphics for the HVAC systems. Install JACE panel in</li> <li>* Replace old cabinetry along exterior walls in classrooms with new cabinetry</li> <li>* Replace existing 90 ton chiller with new chiller of approximately the same size. New chiller will be similar type and will be in the same location as existing with a remote condensing unit located outdoors.</li> <li>* Replace existing chiller primary pump with new chiller primary pump.</li> <li>* Install new direct digital controls on new mechanical equipment listed in scope item.</li> <li>* Replace existing 2x4 ceiling tiles with new 2x2 ceilings tiles and additional required T-bar and ceiling suspension.</li> <li>* Provide new occupancy sensors within classroom spaces.</li> <li>* Retrofit existing specialty lighting with new LED kits that utilize the existing housing while providing a visibly new finish in the space.</li> <li>* Replace existing lay-in 2x4 lighting with new 2x2 LED lighting providing a visibly new finish in the space.</li> </ul>	\$4,397,785	\$43,900	\$9,517	\$6,840	\$440,701	9.5
<b>TOTAL FOR ALL IMPROVEMENTS</b>		<b>\$5,185,041</b>	<b>\$67,720</b>	<b>\$14,839</b>	<b>\$11,520</b>	<b>\$534,663</b>	<b>9.12</b>

**Notes:**

- The total costs shown include all fees and are before any applicable rebates.
- The estimated rebates are based on the 2022 incentive rebate programs from ComEd and Nicor. Final values subject to change and are subject to ComEd and Nicor approval. Rebate estimates assume ComEd will approve rebates for chillers with split evaporators and condensers.
- Pricing does not include any costs for asbestos abatement, mold abatement, or other hazardous material. It is the responsibility of the owner to notify PSI of any hazardous material and perform the required abatement prior to implementing the project scope of work.
- Annual Operational Savings represent annual capital dollars that would need to be budgeted over 10 years to install the improvement item.
- Owner will be responsible for removal and replacement of loose furniture/equipment from rooms to allow installation of new systems.
- Utility savings are based upon the utility cost rates provided to PSI by the District.
- PSI is not responsible for the condition of existing ductwork or existing piping and associated valves not being replaced under this project.
- All maintenance and service shall be performed in strict accordance with the manufacturers recommendations.
- This project does not include any gas pressure service upgrades. It is assumed that the current gas pressure is adequate for current and future use.
- The school district shall provide remote access to monitor/ program the school district BAS system.
- The school shall provide IT network access to access JACE panels and PSI software.