

**EDUCATIONAL SPECIFICATIONS FOR
STAMFORD HIGH SCHOOL
BOILER PLANT UPGRADE AND VALVE REPLACEMENT PROJECT**

NOVEMBER 11, 2022

1. RATIONALE

Stamford High School was originally constructed in the 1920s with building additions constructed in 1971 and 2005.

The Boiler Plant Upgrade and Valve Replacement Project was a single phased project conducted to replace end of useful life boiler equipment including steam boilers, pumps, steam to hot water converter, domestic hot water heaters, and water storage tanks with high efficiency equipment and eliminated steam heat generation and hot water conversion in the building. Additional work included replacement of hot water actuator valves as well as Building Management System controls work to integrate new equipment.

2. LONG RANGE PLAN

The district's facilities plan calls for safe environments appropriate for learning. Stamford Public Schools participates in the Connecticut Green LEAF Schools program for which there are three tenets of this program:

- Provide Effective Environmental and Sustainability Education
- Improve the Health and Wellness of Students and Staff
- Reduce Environmental Impact and Cost

To provide a facility that meets these goals, the Boiler Plant Upgrade and Valve Replacement Project was conducted in 2020.

3. THE PROJECT

The Boiler Plant Upgrade and Valve Replacement Project included the following components:

- Demolition of existing boilers, pumps, steam to hot water converter, domestic hot water heaters, and storage tanks
- Installation of high efficiency boilers, variable frequency drive (VFDs) and pumps, high efficiency domestic hot water tanks, and storage tanks.
- Replacement of hot water actuators.
- Building Management System controls and integration into the Building Specific Alerton system.
- Building Alarm System controls and integration of leak detection, gas detection, phase monitoring, and associated security alarms.
- Ancillary work to selectively demolish and rebuild interior finishes and exterior envelope and roofing to accommodate and complete mechanical work.
- The project did not involve land disturbance.

The work was conducted in Spring/Summer 2020.

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4. BUILDING SYSTEMS

- Security: Security equipment and components impacted by selective demolition to install mechanical components were repaired and/or replaced to a finished state as part of the Project.
- Public Address: Public Address equipment and components impacted by selective demolition to install mechanical components were repaired and/or replaced to a finished state as part of the Project.
- Technology: Technology equipment and components impacted by selective demolition to install mechanical components were repaired and/or replaced to a finished state as part of the Project.
- Phone Systems: Phone System equipment and components impacted by selective demolition to install mechanical components were repaired and/or replaced to a finished state as part of the Project.
- Clocks: Clock System equipment and components impacted by selective demolition to install mechanical components were repaired and/or replaced to a finished state as part of the Project.

5. INTERIOR BUILDING ENVIRONMENT

- Acoustics: Mechanical components installed were insulated and sound proofed as required by Building Code as part of the Project.
- Ceilings and Walls: Ceilings and walls impacted by selective demolition to install mechanical components were repaired and/or replaced to a finished state as part of the Project.
- Lighting: Lighting impacted by selective demolition to install mechanical components were repaired and/or replaced to a finished state as part of the Project.
- HVAC: Mechanical components installed met the latest Energy Code, Building Code, and Fire Code as well as requirements of Connecticut General Statutes Section 10-291.
- Plumbing: Plumbing equipment and components impacted by selective demolition to install mechanical components were repaired and/or replaced to a finished state as part of the Project.
- Windows and Doors: N/A

6. SITE DEVELOPMENT

- Site Acquisition: N/A
- Parking: N/A
- Drives: N/A
- Walkways: N/A
- Outdoor Athletic Facilities: N/A
- Landscaping: N/A
- Site Improvements: N/A

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7. CONSTRUCTION BONUS REQUESTS

Not Applicable.

8. COMMUNITY USES

Rippowam Middle School is designed to accommodate community uses after school hours and on weekends, throughout the school year and in the summer. There is no space in the school that is not dedicated to student use during school hours. Community uses of the facility include, but are not limited to, before and after-school programming, and community use of the buildings and grounds during non-school hours.