

Building Dialogue

Willard
5015 Garfield

11/20/2006
Year Open: Additions:
Square Footage: Acreage:

FACILITY MANAGEMENT SYSTEM

Date Dialogue**10/11/2006 Mechanical : Recommendations for HVAC renovation**

Only one of the two(2) steam boilers is operational. There is currently no OA ventilation as the three(3) house fans have been out of order for the past four years, according to the facility maintenance personnel. Two(2) 2500 MBH hot water boilers are proposed to replace the existing steam boilers, together with new hot water circulation pumps. A new two pipe system will be introduced to the existing two-pipe loop to create a four-pipe recirculation loop. A 350-ton chilled-water system is proposed for providing cooling. The system will consist of chiller(s), condenser(s), circulation pumps and associated accessories. Unit ventilators with cooling and heating capability are to be used in each classroom, administrative office area, cafeteria, and other areas to provide space heating and cooling. A MAU with cooling and heating coils is proposed to circulate tempered OA throughout the facility through the existing tunnel system. The gymnasium and auditorium are proposed to have each an AHU providing OA ventilation, heating and cooling for the areas. New exhaust fans are to replace the existing to provide building exhaust through restroom areas. A new gas-fired MAU will replace the existing unit serving the kitchen. A DDC control is proposed to provide a efficient and economical operation.

10/11/2006 Mechanical : Cost estimate for HVAC improvements

The cost estimates are based on rules of thumb for the building size, age, condition and types of usage. Any requirements of asbestos removal are not included in the following estimation:

1. Install two(2) 2500 MBH hot water boilers with two(2) recirculation pumps and accessories - \$300,000
2. Install a 350-ton chilled-water system with chillers, condensers, pumps and additional 2-pipe setup - \$350,000
3. Install new 4-pipe unit ventilators and piping - \$150,000
4. Install MAU for OA ventilation and ductwork - \$70,000
5. Install AHUs for gymnasium and auditorium - \$150,000
6. Replacement of gas-fired MAU for the kitchen - \$20,000
7. New DDC control system with WEB based Lonworks protocol - \$150,000
8. Demolition and removal allowance - \$50,000
9. Miscellaneous and architectural allowance - \$20,000
10. TOTAL COST ESTIMATE - \$1,260,000

10/6/2006 Roofing : Roof Review

In July 2006, Matt Pierce and Glen Robinson of RTI Consultants conducted a roof review on the Willard School. Many leaks were reported by the facility staff. The flat roofing is in poor condition and has exceeded its life span. We recommend roof replacement instead of spending any money on repairs or preventative maintenance. Many tiles are broken and should be replaced. The tile underlayment should be further investigated and may need to be replaced also.

9/20/2006 Asphalt/Concrete : Asphalt

Parking lots and driveway on both the south and east sides of the building these areas need to be replaced in entirety because of deterioration, alligator cracks and there are potholes as well.

9/20/2006 Asphalt/Concrete : Concrete

Concrete curb and gutters on east side of building are broken, misaligned and cracked and need to be removed and replaced. Stairs at multiple locations are cracked and need to be repaired. There is some cracks at concrete sidewalks.

9/20/2006 Asphalt/Concrete : Play Equipment

Seal cracks at asphalt plaza around building and lower playground. The upper play ground has alligator cracks and potholes and needs to be replaced. All play equipment are broken or in poor condition and need to be replaced. The soft material for play area need to be replaced after weeds, plants and soil are removed.

9/20/2006 Doors: Exterior Entrances

Hollow metal doors and wood frames are typical on this building. Wood frames need repair or replacement. These have rot and peeling paint. Hollow metal doors are damaged at some locations. There is daylight gap between frame and doors at some door openings. Weatherstripping need to be replaced. Hardware is damaged at approximately fourteen doors and need to be repaired or replaced.

9/20/2006 Windows: Windows

Replacement aluminum windows with single pane glazing. Aluminum is brown in color. Wood windows at auditorium and transom over doors have peeling paint. Note: Operable windows at auditorium need bars on them to prevent vandals from opening windows and falling 20 to 30 feet. Windows at this building are not insulated and these windows all need to be replaced. Sagging metal lintels need to be cleaned and painted. Some possibly replaced.

9/20/2006 Walls : Exterior Walls

Brick at this building has recently been repointed. There is some minor areas that still need repointing. Many areas of stone walls need to be repointed, especially at retaining walls. Lower brick retaining wall at west side of building has damage and missing brick and needs repair. Nova personnel indicated that termite swarms have occurred for the last 5 years have created major problems at the School. Overgrown trees and weeds in cracks need to be removed at multiple locations. Brick boiler stack has been repointed but cracks need to be reviewed with structural engineer.

9/20/2006 Walls : Wall

General Note: This building is suffering from neglect and multiple roof leaks which is destroying interior plaster walls and ceilings. Rain water is doing damage to wood floors as well. Damaged radiator in boys toilet has done so much damage that a person can not physically get in this room. The door will open door only enough to stick arm and camera in to the room to take pictures of damaged condition. The classroom below the boys toilet, which was recently remodeled has now received lots of water damage. This building has stairs and landings but does not have elevator lift(s) or ramps inside the building, and currently is not ADA accessible.

9/7/2006 Mechanical : Existing HVAC System

Two(2) Kewanee steam boilers provide low pressure steam for heating throughout the facility. Steam coils are located in the fan room in the basement level where three(3) house fans circulate air throughout the entire building. Additional heat are provided through cast-iron radiators located around the perimeter of the building.

Partial air-conditioning is provided for the office, and classrooms through

9/2/2006 Electrical :

Willard is a tumble down school. The roof has caved in and blocks the door in one location. Air conditioning is provided in a few rooms using window units. If a central AC unit were to be considered for this building, a new service would be required--800A, 480Y/277V with 112.5 KVA step down transformer. However, this should be considered as part of a whole school rewiring program as there are deficiencies in almost every area. There is braded wire for feeders, plug fuse panels in classrooms, overloaded or lack of circuits, antique distribution.

The lighting at Willard bad! The fixtures are so widely spaced the rooms are dark, corridors are dark, and the fixtures are bad as well. There is no fluorescent fixture that is in good working order due to lamps or ballasts being out, all lenses are either broken or yellowed, and these fixtures are the old T12 technology. The Auditorium has six chandeliers--2 are missing parts--none light. The theatrical lights, however, are in excellent condition. (The thought of these being salvaged for one of the districts other