

Building Dialogue

Douglas Early Childhood

11/20/2006

Year Open: 1952 Additions:

Square Footage: 36466 Acreage: 187

FACILITY MANAGEMENT SYSTEM

Date Dialogue**10/16/2006 Plumbing: Plumbing improvements**

1. Provide drain piping covers for 13 number of lavatories (ADA) - \$700
2. Provide hand rails for 2 number of toilets (ADA) - \$100

Total estimated cost - \$800

10/13/2006 Mechanical : Recommendations for HVAC renovation

Two(2) 2000 MBH hot water boilers with circulation pumping system are proposed to replace the existing steam-heating system in the building. A 300-ton chilled-water cooling system is also proposed. The system consists of chiller (s), condenser(s), pumps and other associated elements. A AHU with cooling, pre-heating coils and OA ventilation, paired with VAV boxes are proposed to serve the administrative office area. The existing wall-hung split type A/C units shall be removed. Unit ventilators with heating, cooling and OA ventilation located on the perimeter wall are proposed to provide air-conditioning in all classrooms, the library, computer room, cafeteria, teachers resource center, etc. Louvers located on the perimeter wall shall serve as OA inlets for the unit ventilators. Since the first floor is partially underground, unit ventilators serving areas on the first floor are proposed to be hung from the structure, within a recessed ceiling system. AHU (s) with heating, cooling and OA ventilating capabilities are proposed to serve the gymnasium. New exhaust-air system is to be provided throughout the building through restroom areas. A DDC should operate the HVAC system efficiently and economically.

10/13/2006 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) 2000 MBH hot water boilers with recirculation pumping system - \$300,000
2. Install 300-ton chilled-water system with chillers, condensers, pumps and additional two-pipe setup - \$350,000
3. Install new AHU and VAV boxes for Admin. Office - \$60,000
4. Install new 4-pipe unit ventilators - \$200,000
5. Install AHUs with heating, cooling and OA ventilation for gymnasium - \$100,000
6. Install gas-fired MAU for kitchen ventilation - \$40,000
7. Install new exhaust system for all restrooms - \$20,000
8. New DDC control system with WEB based Lonworks protocol - \$200,000
9. Demolition and removal allowance - \$50,000
10. Miscellaneous and architectural allowance - \$20,000

10/4/2006 Mechanical : Existing HVAC System

Two(2) Kewanee boilers generate low pressure steam for heating throughout the building. Unit ventilators with heating and ventilation capability are located in each classroom providing space heating, in addition to the fin-tube radiator in the hallways.

Partial air-conditioning is available in the administrative office area through split type A/C units on the wall with DX-cooling. Two classrooms in the ground floor and two in the first floor have window type A/C units providing air-conditioning in the space. A storage room in the first floor, the cafeteria, an office, a storage room and the teachers resource center in the ground floor have AHUs with DX-cooling hung from the ceiling providing air-

8/30/2006 Asphalt/Concrete : Asphalt

Parking areas are deteriorated. Upper lot is completely alligatored and spalled. Lower lot surface has missing paving, pot holes and an uneven surface. Observed 26 parking spaces at lower lot, 13 in upper lot. 2 handicapped spaces with signs at lower lot. All stall markings faded.

8/30/2006 Asphalt/Concrete : Concrete

Retaining wall between parking lots is cracked in 3 locations.

8/30/2006 Asphalt/Concrete : Play Equipment

Asphalt surface is badly cracked and weathered. Jungle gym equipment is good, on wood chips with concrete curb.

8/30/2006 Doors: Doors

Hollow metal doors and frames. Single glazing. Several doors and frames show rusting. Water leaks through and under threshold is common on lower level.

8/30/2006 Windows: Windows

Hollow metal windows wall with lower vents. Typically the ground floor does not have insulated glass, upper level does. Window wall shows rusting. Lower level leaking at stone sills, two are broken at library.

8/30/2006 Walls : Exterior wall

The building brick appearance is generally fair with minimal deterioration. Some efflorescence at gym and graffiti at elevator tower. Interior side of exterior walls there is evidence of water leaks at lower level stone window sills with carpet, ceiling stains and peeling paint were minimal (kitchen and toilets). Ceiling types: 2X4 accoustical tile (corridor) 1X1 glue-on (typical) plaster at kitchen, toilets, and boiler room.

8/29/2006 Electrical :

Douglas is not air conditioned except for a few rooms. The electrical service consists of an antique combination of 3 phase 240 and single phase 240/120V. The school is lighted, not well, with widely spaced acrylic wrap pendant fixtures 1st and 2nd floor and surface mounted acrylic wrap fixture on the ground floor. Air conditioning may not dictate the addition of a new drop ceiling. Since the existing pendant fixtures are T8 technology they should remain. However, 4 lamp fixtures are spaced at about 12 x 12 providing about half the recommended light for the classrooms. We recommend an additional row of fixtures be added between the existing. In addition a 2 light T8 fixture is spaced at 16 ft c.c. for proper illumination, corridors should receive an additional fixture between existing.

7/20/2006 Roofing :

This school's roof system is consistent throughout, with granulated, reflective coated, pitch applied with aggregate. Debris on canopy by gym is excessive. One roof hatch and ladder will be needed to access B,C, D, and E.