**Building Dialogue**

11/20/2006  
Year Open: 1924  Additions: 1927/1930/1953  
Square Footage: 46851 Acreage: 356

**Date**  
**Dialogue**

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

1. Provide hand rails for 1 number of toilet (ADA) - $50

Total estimated cost - $50

10/5/2006  **Mechanical: Cost Estimate for Proposed 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 costs:

1. Install two 3000 MBH hot water boilers - $175,000.
2. Install 250 Ton chilled water systems with chiller, remote condenser, pumps and accessories - $250,000.
3. New 7.5 Ton AHU for Gymnasium and ductwork - $25,000.
4. New 20 Ton AHU for Auditorium and ductwork - $60,000.
5. Install new 4-pipe unit ventilators for other areas including piping - $450,000.
6. New Exhaust System for toilets - $5,000.
7. New DDC controls with WEB based Lonworks protocol - $150,000.
8. Demolition and removal allowance - $60,000

9/28/2006  **Mechanical: Existing HVAC System**

Two low pressure steam boilers provide heat to the building. All the rooms in the building have perimeter convection heat. Steam generated by the boilers are circulated to these steam radiators and steam condensate is collected in condensate return unit in boiler room.

Air throughout the building is provided by one fan unit in the fan room. One separate fan unit serve gymnasium and another fan unit serve auditorium. These fan units have steam coils on the return unit to provide some heat in winter also. The air is circulated all the rooms from air chase which are extended to the tunnel at the basement level. The fan units however do not have any source of outdoor air.

The building is not air conditioned. Only all the rooms in the third floor is

9/28/2006  **Mechanical: Recommendations for Renovation of HVAC System**

http://www.techaces.com/kcmsdview/dialogue.asp  
11/20/2006
The steam boilers shall be replaced with hot water boilers of matching capacity. The perimeter steam radiators shall be replaced with new unit ventilators. The unit ventilators shall be suitable for chilled water cooling and hot water heating. The existing steam and steam condensate piping shall be reused as much as possible as heating hot water supply and return piping. The fan units shall be removed.

A central chilled water system of 250 Ton is proposed to be installed to air condition the building. The chiller and chilled water pumps shall be installed in the fan room after the fan units are removed. The remote air-cooled condenser can be located on the roof. The chilled water produced by the chiller shall be circulated to all the unit ventilators to provide cooling in the building. New chilled water supply and return pipe shall be installed to circulate chilled water. The unit ventilators shall be designed to bring in required amount of outdoor air in each room.

A new AHU shall be installed for Gymnasiums and one new AHU shall serve the Auditorium. Chilled water and hot water shall be extended to these AHUs for cooling and heating.

9/25/2006 Asphalt/Concrete : Asphalt

The asphalt paved areas include the south parking lot, south playground, west playground, and north walkways. All the areas have cracks to be repaired and a seal coat added. The north walkway should be replaced.

9/25/2006 Asphalt/Concrete : Concrete

The concrete is satisfactory except for steps to be repaired or replaced.

9/25/2006 Asphalt/Concrete : Play Equipment

The play equipment is in good condition. It is located at the south playground. Wood chips should be added at this area.

9/25/2006 Doors: Exterior Entrances

The exterior entrances are hollow metal doors and frames except at the east addition they are wood. The trim and frames at all entrances should be replaced with hollow metal.


The windows are aluminum with plexiglass at the original building. The east addition has windows which are in bad condition and should be replaced to match the original building.

9/25/2006 Walls : Walls

The walls are brick with stone trim at the entrances and window sill. The wall located east of the elevator are badly damaged concrete with peeling paint on the walls. The concrete column is damaged. Brick needs to be tuckpointed. The interior walls in several rooms have peeling paint to be cleaned and repainted. Wood window stools at some windows are water damaged.

8/29/2006 Electrical :
Old Pershing is old. The electrical service is old. The lighting, possibly upgraded in "91 is now obsolete--leaving an opportunity for energy savings by retrofitting with T8 technology. There is no air conditioning.