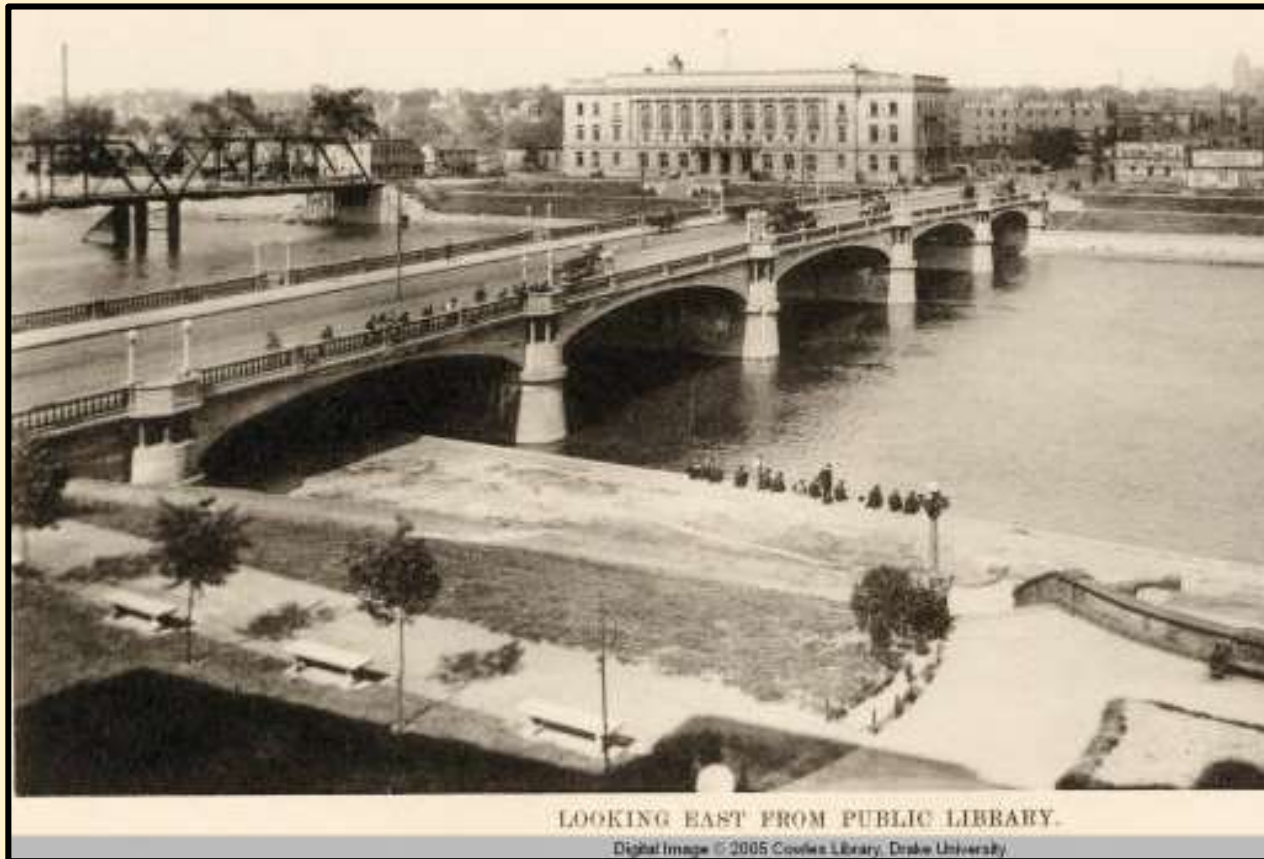


DES MOINES CITY HALL



DES MOINES CITY HALL

- Constructed in 1910
- Developed as part of City Beautiful Movement
- National Register of Historic Places in 1977



CITY HALL IMPROVEMENTS

- Heating & Cooling
- Electrical & Lighting
- Fire Protection
- Architectural

HEATING COMPONENTS

CURRENT SYSTEM

- Installed In 1963
- Steam Boiler
 - Steam to Radiators
 - Steam to Air Handling Units (AHU) in Attic

NEW SYSTEM

- One High Temperature, High Efficiency Boiler
 - Hot Water to Radiators and Finned Tube
- Two Low Temperature High Efficiency Condensing Boilers
 - Central Air Handling Units in Attics
 - Chilled Beams Units
 - Fan Coil Units and VAV Units

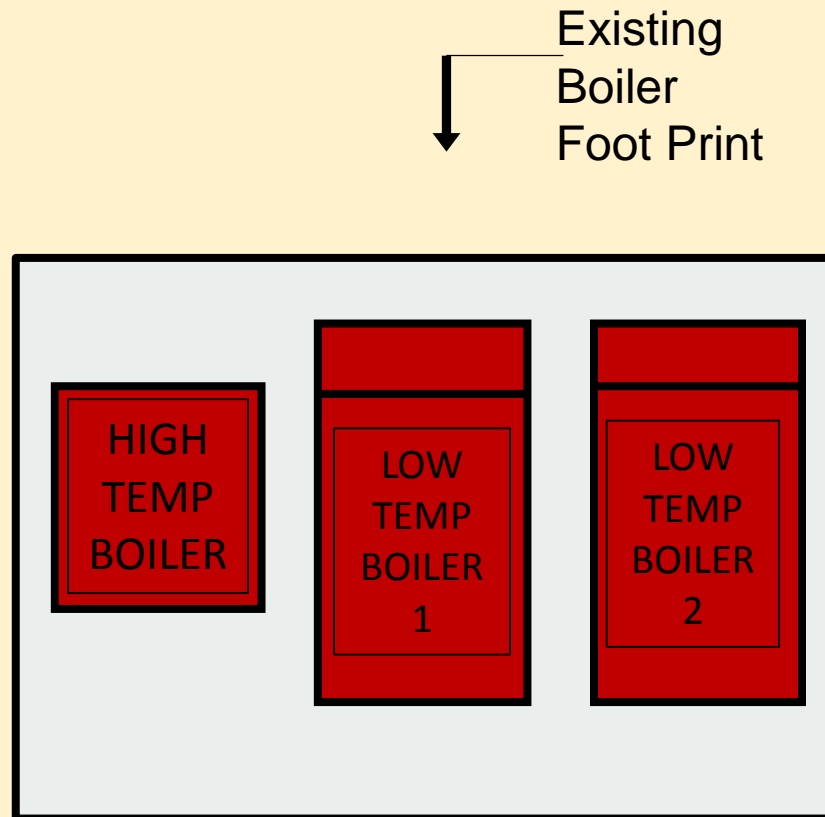
EXISTING STEAM BOILER (1963)



NEW BOILERS WITH EFFICIENCIES RANGING FROM 87% TO 95%



HIGH TEMPERATURE BOILER



NEW BOILERS RELATIVE SIZE



LOW TEMPERATURE BOILERS

COOLING COMPONENTS

CURRENT SYSTEM

- Chiller Installed In 1994
 - Provides chilled water to air handler units in attic
- Cooling Tower Installed in 2004
 - Dissipates heat generated by chiller

NEW SYSTEM

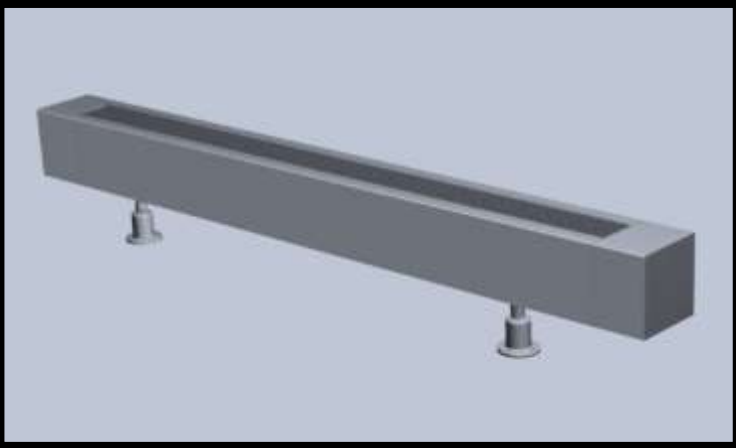
- Existing chiller to be refurbished
 - Extends life by 15 Years
 - Approximate cost \$50,000
 - New chiller approximate \$150,000 – \$200,000
- Existing cooling tower to be refurbished
 - Extends life by 15 Years
 - New pumps with variable frequency drives for greater efficiency

HEATING & COOLING DELIVERY UNITS

HEATING ONLY UNITS



Existing Radiator



Proposed Finned Tube

HEATING & COOLING UNITS



Chilled Beam at Franklin Library



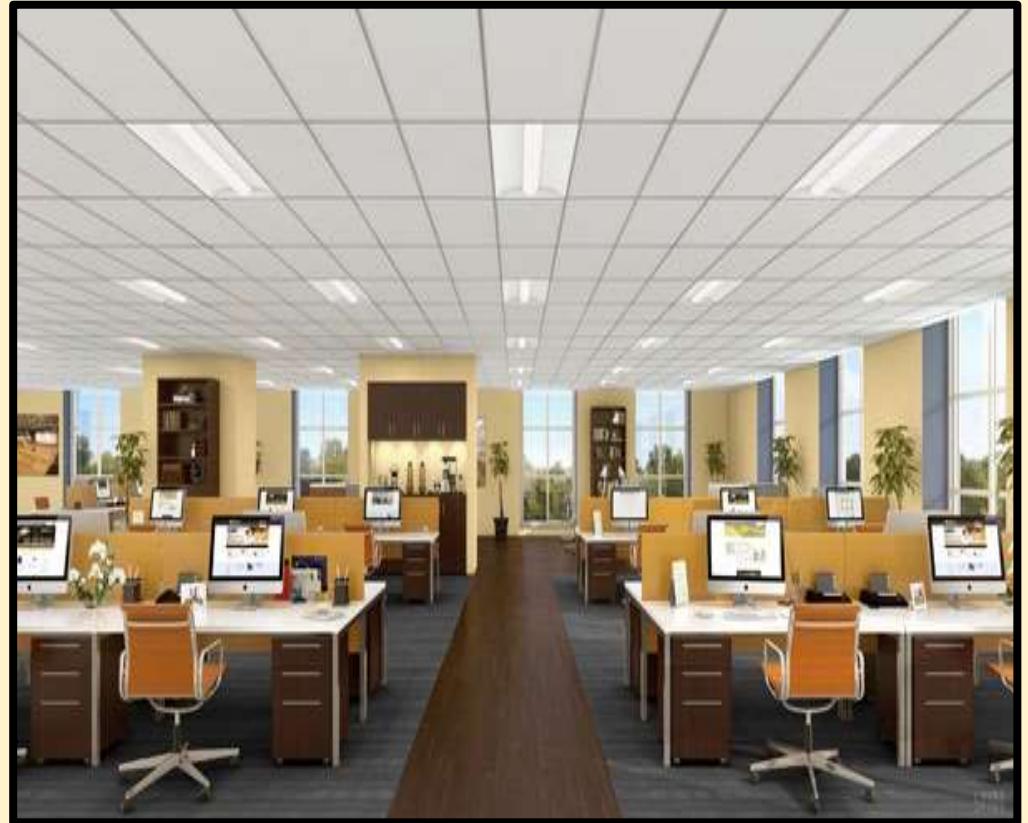
Fan Coil Units and VAV Units in the City Manager's Office

CHILLED BEAM SYSTEM

- Extremely Low Maintenance
- Energy Savings
- Small Duct Size
- Improve Indoor Air Quality

EXTERIOR AND INTERIOR LIGHTING

- Lighting will be upgraded to LED
- The historic fixtures will be restored and fitted with new sockets to accept LED lamps
- Basement Storage & Attic Lighting will be upgraded at a later date
- Technology/Data Includes:
 - Reorganization of data equipment in main data room
 - Adding cable trays above ceilings
 - Removal of all unused data, phone cable, & cabinets
 - New data jacks for remodeled areas



FIRE PROTECTION

CUSTOM COLOR CONCEALED HEAD, TYP.
FOR EACH BAY



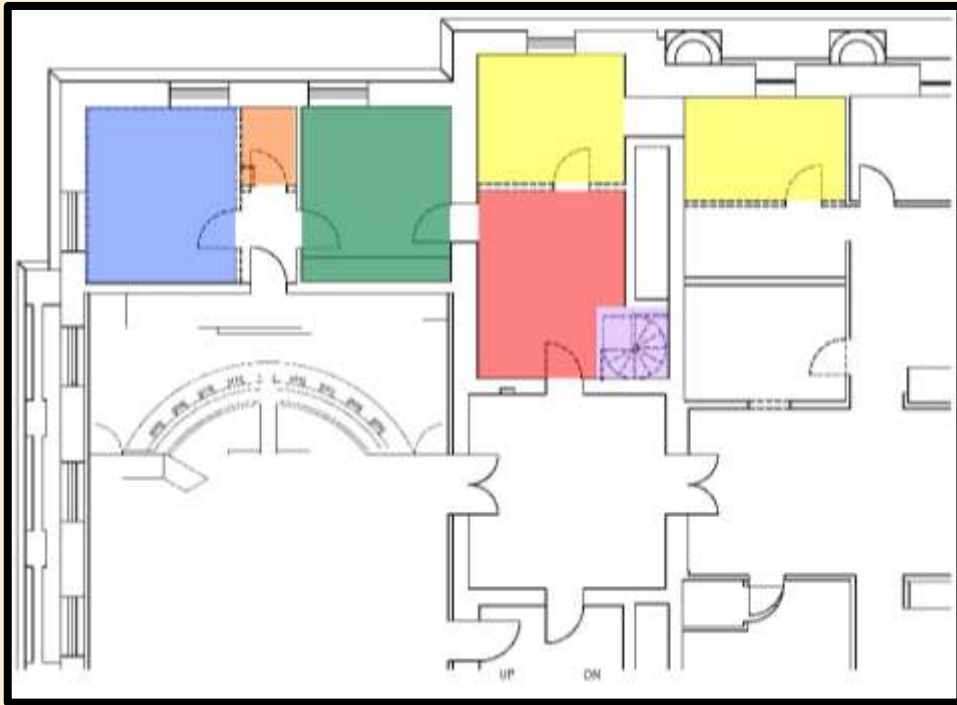
Example of sprinkler pipes
& valves exposed in north
& south stairwells; main
vestibule, and unoccupied
spaces

ARCHITECTURAL IMPROVEMENTS

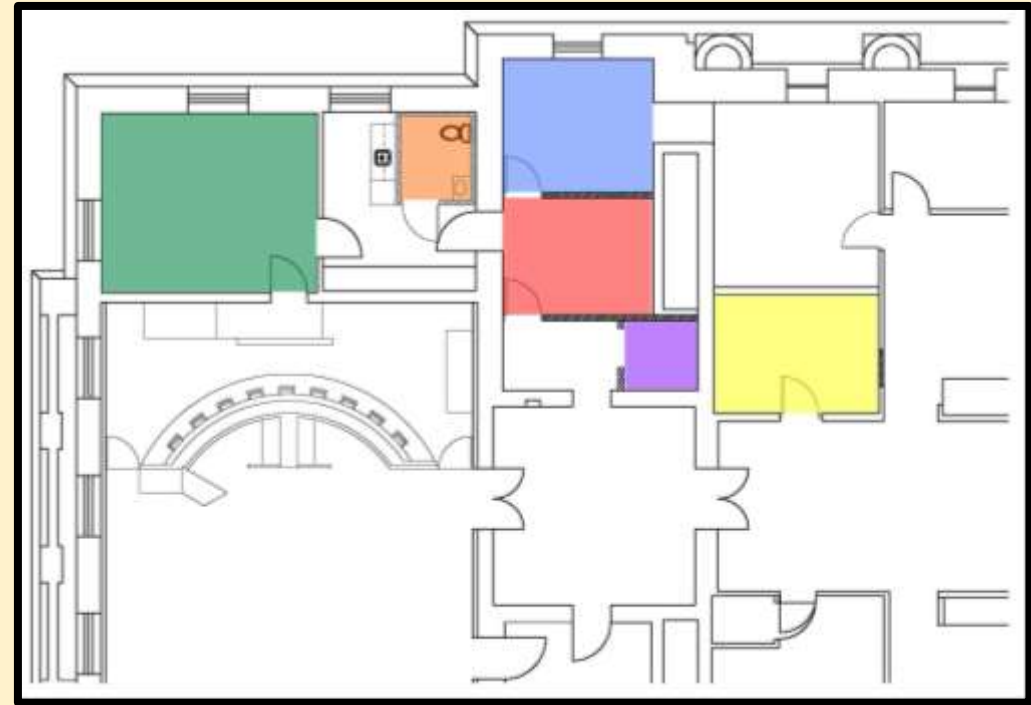
- Remodeling
- New ceilings in the majority of spaces
- New carpet
- Restroom refurbish & accessibility upgrades
- Reroofing: Spray polyurethane foam with urethane coating over existing 1991 roof

MAYOR & COUNCIL AREA 2ND FLOOR

Demo Plan



Remodel Plan



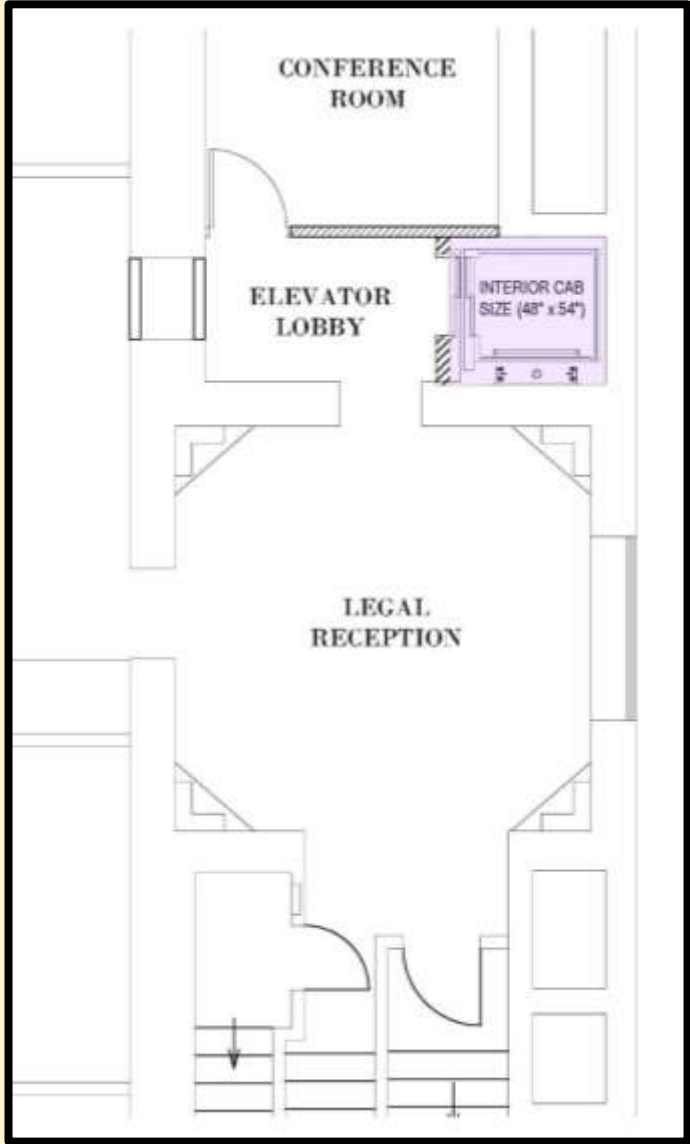
LIMITED USE/LIMITED APPLICATION ELEVATOR FROM SECOND FLOOR TO THIRD FLOOR



Example of Elevator Door



Example of Elevator Cab



Third Floor Legal Plan

SUMMARY

CONSTRUCTION COST ESTIMATED AT \$6.3 MILLION

- Heating & Cooling \$3,700,000
- Electrical & Lighting \$1,000,000
- Fire Protection \$ 400,000
- Architectural \$1,200,000

QUESTIONS?