

The University of Iowa sustained unprecedented damage in the 2008 flood. Design Engineers was selected as mechanical/electrical consultants for flood recovery and mitigation for ten out of fourteen buildings. The following two pages provide an overview of these projects. All projects required extensive coordination with FEMA personnel and procedures.


Hancher Auditorium – 134,000 sq-ft

- Damage: Water 18" above main level, lower level entirely submerged.
- Recovery: Temporary recovery of electrical service for stabilization of building completed.
- Mitigation: Study evaluating \$34,000,000 mitigation project completed. Mitigation strategies included relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system. University has elected to pursue a new facility.


Voxman Music Building – 143,000 sq-ft

- Damage: Water 18" above main level, lower level entirely submerged.
- Recovery: Temporary recovery of electrical service for stabilization of building completed.
- Mitigation: Study evaluating \$36,000,000 mitigation project completed. Mitigation strategies included relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system. University has elected to pursue a new facility.


Clapp Auditorium – 39,000 sq-ft

- Damage: Water 4 ft above main level.
- Recovery: Temporary recovery of electrical service for stabilization of building completed.
- Mitigation: Study evaluating \$10,000,000 mitigation project completed. Mitigation strategies included relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system. University has elected to pursue a new facility.


Theatre Building – 85,000 sq-ft

- Damage: Lower level entirely submerged.
- Recovery: Temporary recovery completed of building systems (\$3,100,000). Main and upper levels reoccupied, lower level unoccupied.
- Mitigation: Planning and design underway for \$18,500,000 mitigation project. Mitigation strategies include relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system.


Museum of Art – 67,000 sq-ft

- Damage: Water level 2 ft above main floor, lower level entirely submerged.
- Recovery: Temporary recovery completed of building systems to allow partial reoccupancy of building for temporary accommodation of Music
- Mitigation: Planning and evaluation underway. Mitigation strategies include relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system.



Art Building – 92,000 sq-ft

- Damage: Water 2 ft above main level, lower level entirely submerged.
- Recovery: Temporary recovery of electrical service for stabilization of building completed.
- Mitigation: Study evaluating mitigation options completed. Mitigation strategies included relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system. University has elected to pursue a new facility.



Iowa Advanced Technology Laboratories – 136,000 sq-ft

- Damage: Water level 2.5 ft above main floor, lower level entirely submerged.
- Recovery: Temporary recovery completed of building systems (\$2,000,000). Building is reoccupied.
- Mitigation: Planning and design underway for \$22,000,000 mitigation project. Mitigation strategies include relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system.



Danforth Chapel – 1,000 sq-ft

- Damage: Water level 2 ft above main floor, crawl space entirely submerged.
- Recovery: Recovery completed (\$70,000). Building is reoccupied.
- Mitigation: No work to date.



English Philosophy Building – 88,000 sq-ft

- Damage: Water level 2 ft above main floor, lower level entirely submerged.
- Recovery: Temporary recovery completed of building systems and lower level (\$900,000). Building is reoccupied.
- Mitigation: Planning and evaluation is underway. Mitigation strategies include relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system.



Mayflower Residence Hall – 248,000 sq-ft

- Damage: Water level 2.5 ft above main floor, lower level entirely submerged.
- Recovery: Temporary recovery completed of building systems (\$1,700,000). Building is reoccupied.
- Mitigation: Planning and evaluation is underway. Mitigation strategies include relocating all mechanical/electrical systems a minimum of 3 feet above high water mark, installation of floor barrier wall at building perimeter with high capacity pumping system.