

**Contact: Joan Racki**

**UNIVERSITY OF IOWA FLOOD RECOVERY –  
FACILITY REPLACEMENT RECOMMENDATIONS**

**Action Requested:** Consider the University of Iowa request for authorization to pursue replacement options for both the Hancher/Voxman/Clapp complex and the Art Building East complex.

**Executive Summary:** The University of Iowa has provided the attached memorandum in support of its request for authorization to pursue replacement options for both the Hancher/Voxman/Clapp complex and the Art Building East complex.

The University is continuing its review of potential sites for replacement facilities and will present additional information to the Board at the April meeting.

UNIVERSITY OF IOWA  
FLOOD RECOVERY

FACILITIES REPLACEMENT

April 2009

**UNIVERSITY REQUESTED ACTIONS:**

- Authorization to pursue replacement options for both the Hancher/Voxman/Clapp complex and the Art Building East complex.
- Receive a report on further development of site options.

The University requested action to pursue the replacement options for both the Hancher/Voxman/Clapp complex and the Art Building East complex is based upon studies conducted by the University, assisted by its consultants, as well as the discussions with the Board of Regents at its March 2009 meeting. The University is continuing its review of potential sites for replacement facilities and will present additional information to the Board at the April meeting. It is anticipated that the University will return to the Board at the June meeting with a specific site recommendation for the replacement of the Hancher/Voxman/Clapp complex. Also at the June meeting the University intends to seek formal “permission to proceed with project planning,” as well as permission to select an architectural firm for the replacement project. The Art Building East complex replacement site recommendation and the “permission to proceed” request are likewise being pursued, but a formal request to the Board may occur subsequent to the June Board meeting.

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**BACKGROUND**

Following FEMA study and review, on January 26, 2009, the University of Iowa announced that two UI facilities extensively damaged by the 2008 flood had exceeded the FEMA “50% rule” threshold. Essentially the “50% rule” involves FEMA’s calculation of the ratio of a facility’s recovery cost to the overall value of the facility. When this ratio is exceeded, FEMA can provide financial support for either “recovery/mitigation in place” or “replacement” of the facilities. FEMA’s financial support of eligible costs would be 90% of either option, but would not, under either scenario, include funding for needed, additional program space. The two facilities exceeding this FEMA threshold are the Hancher/Voxman/Clapp complex and the Art Building East complex.

The University, in conjunction with its architect and engineering partners, reviewed the options available to it and reported to the Board at its March 2009 meeting. Materials prepared for that meeting are relevant to discussion of the University’s recommendation and can be found at the following web site:

[http://www2.state.ia.us/regents/Meetings/DocketMemos/09Memos/March/0309\\_ITEM14c.pdf](http://www2.state.ia.us/regents/Meetings/DocketMemos/09Memos/March/0309_ITEM14c.pdf)

Prior to incurring significant further expense in pursuing the replacement of these facilities, the University intends to engage FEMA and state Homeland Security officials to gain additional assurances that the projects will be reimbursed by FEMA at the levels previously discussed with the Board.

### **HANCHER/VOXMAN/CLAPP**

The Hancher/Voxman/Clapp complex is the home of the University of Iowa School of Music and the University's principal performing arts venue, Hancher Auditorium. It contains approximately 297,000 gross square feet of space: a 2,500 seat auditorium (Hancher Auditorium), a 700-seat recital hall (Clapp Recital Hall), and the Voxman Music Building (home of the UI School of Music), which includes a 200-seat performance space for recitals and a small venue for organ recitals. The Hancher/Voxman/Clapp complex was constructed 36 years ago and is inadequate in several ways for the programs currently offered by Hancher Auditorium and the School of Music. This facility was damaged extensively during the 2008 flood and remains in a precarious location subject to future flooding.

### **Rationale for Replacement**

- **Continued threat of flooding – mitigation difficulties**

The continued threat of flooding at the existing Hancher/Voxman/Clapp site is a major factor in the University recommending replacement of the facilities. The main lobby of Hancher Auditorium is on grade, main floor seating areas and the orchestra pit area are well below grade, and the exterior walls are susceptible to sub-grade hydrostatic pressure. Substantial and costly mitigation efforts would need to be undertaken if the existing facilities were to be retained.

- **Availability of commercial flood insurance**

The recovery/mitigation option at the current site offers less assurance of future flood protection and capability of insurance underwriting than a replacement building located outside the area of flood threat. The University of Iowa currently has \$120 million in commercial flood insurance and \$22 million in federal flood insurance. These are amounts attainable now. However, overall flood insurance availability for the University is fragile and could easily worsen by a change in market conditions or risk factors.

- **FEMA assistance in event of future flood event**

Currently, there is a FEMA directive that indicates FEMA will only pay for the increase loss amount above the previous loss. Additionally, the University is expected to be able to provide insurance in the amount of the previous loss. For example: Assume a loss of \$250 million. If the next loss was \$300 million, then FEMA would pay no more than 75% of \$50 million. FEMA's assumption with this directive is that the insurance market would provide insurance equal to the amount of the previous loss. Therefore, there could be a considerable financial exposure in rebuilding Hancher/Voxman/Clapp at its current location.

- **Need to expand program space**

The pre-flood, 1973 Voxman Music Building classrooms are too small to accommodate contemporary technology and the necessary number of seats. The School of Music has experienced a substantial growth (25%) in the number of credit hours taught since 1999 and many more non-majors are taking private music lessons with members of the School's faculty. Likewise, the recording studio is too small for new technology. Both Harper Hall (student and faculty recitals) and Clapp Recital Hall were so in demand that on-site rehearsals were not often possible.

An expansion of the footprint to achieve mitigation strategies and to accommodate School of Music programs would be difficult to achieve given FEMA regulations and the potential difficulty in acquiring commercial insurance coverage. Expansion for program growth on the current Voxman site along the Iowa River would therefore, for all practical purposes, be impossible. Thus, a restoration/mitigation option would need to include the housing of certain displaced program functions in a facility away from the current site.

In a replacement building, Hancher could gain more flexibility in its programming and more synergistic relationships with the School of Music. Hancher would be better able to serve its patrons and visiting artists if it could present larger productions in a 2,000-seat space (slightly smaller than current capacity) especially designed to provide the entire audience with clear lines of sight to the stage. A replacement facility could also provide more back-of-stage space for performers for rehearsals, as well as space for workshops for students in the School of Music.

In a replacement option, the School could better align its performance venues with its current performance needs. Such would be the case with a 700-seat hall especially designed for its multiple needs including uses by Hancher for public performances more suited to a hall of this size. This plan would also include a separate small organ recital hall, and, if possible, a 400-seat recital hall. Additionally, a replacement option could provide the opportunity to incorporate space needs of the Museum of Art.

- **Adjacency consideration – Hancher Auditorium and School of Music**

Investigation of basic program needs has concluded that direct adjacencies between a new performing arts center and the academic programs of the School of Music are critical. Furthermore, the existing consolidation of the varied UI arts programs remains a priority of the institution. This co-location results in programmatic synergies and a shared and vibrant learning community for the arts. Additionally, as the complex will serve many undergraduates, both majors and non-majors, proximity to the undergraduate core of the main campus and student pedestrian access to the site are key considerations.

- **Sustainability**

The replacement option is designed to provide the latest in sustainability and energy conservation design. This would be a sustainability showcase not possible within the current facility.

- **Cost**

The University's share of the cost of the recover/mitigate option is \$65 million vs. \$114 million for the replacement option. However, of the \$114 million (the University's cost for replacement), \$52 million is attributable to a parking structure and added "sustainability" features. Thus, the University's exposure for the base facility costs for either option is very comparable - \$65 million versus \$62 million.

*Repair in Place* – Preliminary estimates provided by the study team indicate that a fully recovered Hancher/Voxman/Clapp complex, with appropriate flood mitigation will cost \$53 million. This cost assumes full recovery of existing spaces, protection or relocation of all mechanical/electrical systems, and code requirement upgrades. Due to regulatory restrictions related to adding space on the existing site, approximately \$55 million in new space for displaced functions and essential programming upgrades would also have to be constructed off site at a higher elevation. Thus, the total cost of this option is estimated at \$108 million.

*Replacement* – The replacement of the entire Hancher/Voxman/Clapp complex at a new site, on a square-foot-for-square-foot basis (297,000 gross square feet plus modern code requirement space needs), and demolition of the existing building, is estimated at \$180 million. Additionally, the plan assumes the inclusion of program space additions that meet current and basic program requirements, a needed new parking structure, and "sustainability" features anticipated to be designed into the new facility. It is estimated that additional needs would cost \$96 million. The total cost is \$276 million with some of the additional needs to be designed as components that could be bid separately.

See attached table on cost. Assistance on assessment and cost was provided by Neumann Monson Architects.

### **ART BUILDING EAST COMPLEX**

The Art Building East complex is a collection of buildings including the original, historic School of Art & Art History Building which was completed in 1936. The buildings, the last of which was constructed in the 1970s, contain 92,000 square feet. The complex is located south of the Museum of Art Building and is directly across Riverside Drive from the Art Building West. This facility remains in a precarious location subject to future flooding. Immediately prior to the flood, a major renovation project involving the Art Building East complex had just begun. Due to the flood, the construction contract was suspended and ultimately terminated.

### **Rationale for Replacement**

- **Continued threat of flooding – mitigation difficulties**

The original Art Building was constructed in 1936. The addition of the 1969 print-making wing brought the edge of the complex directly adjacent to the river bank. The location of this wing limits the ways in which landscape-based mitigation strategies can be incorporated, thereby hampering opportunities to better protect the 1936 structure. The main floor of the original Art Building did not receive water during the 2008 flood and damage was limited to the lower level. If the lower level is isolated and the mechanical/electrical systems are relocated to higher ground, appropriate protection of the building is possible. However, the building's design of

small intricate spaces limits the flexibility of re-routing ducts and cabling. Moving the building systems would be a challenge and would likely displace a substantial amount of first floor space designed for programmatic uses.

- **Availability of commercial flood insurance**

The recovery/mitigation option at the current site offers less assurance of future flood protection and capability of insurance underwriting than a replacement building located outside the area of flood threat. The University of Iowa currently has \$120 million in commercial flood insurance and \$22 million in federal flood insurance. These are amounts attainable now. However, overall flood insurance availability for the University is fragile and could easily worsen by a change in market conditions or risk factors.

- **FEMA assistance in event of future flood event**

Currently, there is a FEMA directive that indicates FEMA will only pay for the increase loss amount above the previous loss. Additionally, the University is expected to be able to provide insurance in the amount of the previous loss. For example: Assume a loss of \$250 million. If the next loss was \$300 million, then FEMA would pay no more than 75% of \$50 million. FEMA's assumption with this directive is that the insurance market would provide insurance equal to the amount of the previous loss. Therefore, there could be a considerable financial exposure in rebuilding the Art Building East complex at its current location.

- **Need to expand program space**

Whether in a restored structure or a replacement, the studio arts need access to natural light. In the case of the more industrial art forms, space for large equipment as well as kilns and exhaust is also necessary. Much of this equipment is of a size that it cannot be moved in the event of threatened flooding. Necessary mitigation strategies would further reduce the number of programmable square feet in the Art Building.

- **Adjacency considerations – Art Building West**

Early investigation of basic program needs have revealed that direct adjacencies between a new studio arts facility and the existing Art Building West (to be recovered and protected) are critical. The close and synergistic relationship between studio arts and art history requires that students and faculty frequent both facilities, as was the case prior to the 2008 flood. Additionally, as the complex will house functions for many undergraduate students, both majors and non-majors, proximity to the undergraduate core of the main campus and student pedestrian access to the site is a key consideration. Various sites are currently being investigated.

- **Cost**

The cost to recover and mitigate future flooding at the current location is greater than the cost to replace this arts complex entirely. The University's portion of cost is also magnified if the facility is recovered on its present site (\$59 million recover/mitigate option vs. \$20 million replacement option).

*Repair in Place* – Preliminary estimates provided by the study team indicate that a fully recovered Art Building East complex, with appropriate flood mitigation will cost \$58 million. This cost assumes full recovery of existing spaces, protection or relocation of all mechanical/electrical systems, treatment of the lower level foundation system, and code

requirement upgrades. Due to regulatory restrictions related to adding space on the existing site, approximately \$17 million in new space for displaced functions would also have to be constructed off site at a higher elevation. Thus, the total cost is estimated at \$75 million.

*Replacement* – The replacement of the entire Art Building East complex at a new site, on a square-foot-for-square-foot (92,000 gross square feet plus modern code requirement space needs) basis, and demolition of the existing building, is estimated at \$45 million. Additionally, the plan assumes the inclusion of program space additions that meet current and basic program requirements. It is estimated that this additional program-based space would cost \$15 million. The total cost is \$60 million with some of the program needs to be designed as components that could be bid separately.

See attached table on costs. Assistance on assessment and cost was provided by Invision Architects.

**COST COMPARISON**

<b><u>HANCHER/VOXMAN/CLAPP</u></b>	<b><u>Total Estimated Cost</u></b>	<b><u>UI Share</u></b>
Recovery/Mitigation in place	\$108 million	\$65 million
Rebuild/Replace	\$276 million	\$114 million*
 <b><u>ART BUILDING EAST</u></b>		
Recovery/Mitigation in place	\$75 million	\$59 million
Rebuild/Replace	\$60 million	\$20 million

\*Includes \$52 million for new parking structure and the latest sustainability design features.