

Contact: Joan Racki

REGISTER OF UNIVERSITY OF IOWA
CAPITAL IMPROVEMENT BUSINESS TRANSACTIONS

Actions Requested: Consider approval of:

1. Permission to proceed with project planning for these projects: **Utilities Distribution System: Extend Chilled Water Near West Campus Residence Halls**, including the design selection process, **and Court Street Utility Extensions**, including the selection of Shive-Hattery as the design professional.
2. The following actions for the **UIHC Levels 7 & 8 John Colloton and John Pappajohn Rooftop Pavilions Infills** project:
 - a. Acknowledge receipt of the University's initial submission of information to address the Board's capital project evaluation criteria (see Attachment A);
 - b. Accept the Board Office recommendation that the project meets the necessary criteria for Board consideration; and
 - c. Authorize permission to proceed with project planning, including the design selection process and utilization of a construction manager.
3. The following actions for the **Mayflower Hall – Permanent Flood Recovery and Mitigation, C. Maxwell Stanley Hydraulics Laboratory – Flood Mitigation and Permanent Recovery, Field House – Modify for UIHC Entry Access, Parking Lots and Ramps – Melrose Avenue – Surface Parking** projects:
 - a. Acknowledge receipt of the University's final submission of information to address the Board's capital project evaluation criteria. (See Attachment B for Mayflower, Attachment C for Hydraulics Laboratory, Attachment D for Field House, Attachment E for Melrose Surface Parking);
 - b. Accept the Board Office recommendation that the projects meet the necessary criteria for Board consideration; and
 - c. Approve the schematic designs, project descriptions and budgets (Mayflower - \$13,316,299, Hydraulics Laboratory - \$1,997,816, Field House - \$6,305,587, Melrose Surface Parking - \$3,027,476), with the understanding that approval will constitute final Board approval and authorization to proceed with construction.
4. The following actions for the **Hospital Ramp 2 Replacement** project:
 - a. Adopt A Resolution directing the demolition of the existing parking ramp 2 at the State University of Iowa;
 - b. Acknowledge receipt of the University's final submission of information to address the Board's capital project evaluation criteria; (See Attachment F)
 - c. Accept the Board Office recommendation that the project meets the necessary criteria for Board consideration;

- d. Approve the schematic design, project description and budget (\$66,153,000) with the understanding that approval will constitute final Board approval and authorization to proceed with construction;
- e. Authorize the utilization of Gilbane Building Company as construction manager for the project;
- f. Approve the financing plan for the project; and
- g. Adopt a resolution declaring an official intent under Treasury Regulation 1.150-2 to issue debt to reimburse the State University of Iowa Parking System for certain original expenditures paid in connection with various capital improvement projects.

(ROLL CALL VOTE)

5. The following actions for the **University of Iowa Children's Hospital** project:
 - a. Approve the revised schematic design and project description and budget (\$291,987,000); and
 - b. Discuss the financing plan, including the sale of Hospital Revenue Bonds.
6. Approve the project description and budget for the **Utilities Distribution System – Construct Sub L East Campus Electrical Loop** (\$5,565,422) project.

Executive Summary:

The University requests permission to proceed with project planning, including the design selection process, for the **Utilities Distribution System: Extend Chilled Water Near West Campus Residence Halls** project. The project would connect the new West Campus Residence Hall to the central campus chilled water distribution system, which will be more cost effective than developing an independent cooling system for the facility. The estimated cost of \$4.1 million would be funded by Utility System Bonds and/or the Utility System Renewal and Improvement Funds. A map showing the proposed location of the loop is included as Attachment G.

The Utilities Distribution System – Court Street Utility Extensions project would install utilities along Court Street from Madison Street to Capitol Street to support the new School of Music building, as well as potential growth in the area. (See Attachment H) The University requests permission to utilize Shive-Hattery as the design professional for the project. The proposed utilities are within a tight corridor and need to be closely coordinated with the School of Music utilities work, as well as a major electrical upgrade project; Shive-Hattery is the civil engineer for these related projects. The estimated cost of \$3.3 million would be funded by Utility System Revenue Bonds.

The University / UIHC requests permission to proceed with project planning for the **Levels 7 & 8 John Colloton and John Pappajohn Rooftop Pavilions Infills** project, which would develop approximately 56,000 gross square feet of shelled-in space by infilling existing rooftop space on levels 7 and 8 of the two pavilions. The project would provide UIHC with additional clinical

and support space in an area of the hospital where it has not been possible to meet space needs. Units to be housed in the infill space include a relocated and expanded inpatient dialysis unit, day of surgery family waiting facility, relocated and expanded house staff on-call rooms, and Graduate Medical Education Program supporting offices and educational facilities. This addition would also provide space for faculty and staff offices, clinical and support areas either needing additional space or requiring relocation to permit the expansion of the Main OR Suite, the addition of patient beds, the positioning of house staff on-call rooms and support services in closer proximity to the patient care units and replacement space for facilities displaced in developing the interconnecting corridors between the Children's Hospital and the adjoining Pappajohn Pavilion. UIHC also requests permission to initiate the search process for a construction management firm since the size and complexity of the project requires additional construction management support to support UIHC project management staff. The estimated project cost of \$12.4 million would be funded by University Hospitals Building Usage Funds. Attachment I shows the location of the infill projects.

The University requests approval of the schematic design and project description and budget (\$13,316,299) for the **Mayflower Hall – Permanent Flood Recovery and Mitigation** project, which would provide for the permanent flood recovery of the remaining portion of the first floor level that was not recovered immediately after the flood. (Mayflower Hall provides approximately 20 percent of the total University student housing inventory.) In addition, the project would construct mitigation elements to protect the facility from future floods. The schematic design booklet, showing the location of Mayflower Hall and recovery and mitigation plans, is included with the Board's agenda materials. The project would be funded by a combination of flood recovery resources - insurance proceeds, state, federal, and University resources.

The University requests approval of the schematic design and project description and budget (\$1,997,816) for the **C. Maxwell Stanley Hydraulics Laboratory – Flood Mitigation and Permanent Recovery** project, which would provide for flood mitigation and permanent recovery for the Stanley Hydraulics Laboratory. The schematic design booklet, showing the location of the Hydraulics Laboratory and mitigation and recovery plans, is included with the Board's agenda materials. The project would be funded by a combination of flood recovery resources - insurance proceeds, state, federal, and University resources.

The University requests approval of the schematic design and project description and budget (\$6,305,587) for the **Field House – Modify for UIHC Entry Access** project, which would construct a new access roadway link to connect South Grand Avenue and Hawkins Drive, thereby improving access through the UIHC area. The new roadway will be constructed between the Field House pool area (1927) and the South Gym structure (1984). The portion of the Field House that would be razed, is currently referred to as the "Mainstreet" area. The schematic design booklet for the project, including the location of the project, which would be funded by UIHC gifts and earnings, is included with the Board's agenda materials.

Presented for Board approval are the schematic design and project description and budget (\$3,027,476) for the **Parking Lots and Ramps – Melrose Avenue – Surface Parking** project, which would construct a new surface parking lot with approximately 290 spaces for faculty and staff parking. To address appropriately the proximity of established Melrose neighborhood

residences, primarily to the east of the proposed site, the University has designed physical/landscaped buffers and will modify parking lot lighting standards to minimize potential light-pollution from the site. The University has also worked closely with Melrose Neighborhood and City of Iowa City representatives in the design. The schematic design booklet showing the location of the surface parking is included with the Board's agenda materials. The project would be funded by Parking System funds.

The **Hospital Ramp 2 Replacement** project, for which the University requests approval of the schematic design, and project description and budget (\$66,153,000), would replace the existing Hospital Parking Ramp 2 (673 spaces), constructed in 1978. The project includes razing the current Hospital Ramp 2 (specific Board authorization is required – see requested actions), construction of a below-grade replacement parking facility (approximately 700 spaces) and development of interim (during construction) patient and staff parking facilities. In addition, the project provides for the establishment of a new main entrance plaza above the newly constructed underground structure. The schematic design booklet, showing the location of the replacement ramp, is included with the Board's agenda materials.

As the project has evolved, it became apparent to the University that a construction manager would be required to ensure coordination between the Children's Hospital and the Hospital Ramp 2 Replacement project. The sites are shared and construction of structural elements including shoring, excavation and site security are conjoined. The University requests permission to utilize a construction manager for the project, specifically the firm of Gilbane Building Company; the firm is the construction manager for the Children's Hospital. Having the same construction manager for both projects will offer a number of potential synergies, including sharing employee time between projects, combining bid packages and improved coordination of construction vehicles within a very constrained site.

UIHC will contribute approximately \$25 million in cash to the University to directly fund capital project costs that are necessary for the Hospital Ramp 2 Replacement project to move forward (e.g.: Ramp 2 demolition, relocation of utility service lines, landscaping of the ground level roof that will form the front entrance to UIHC). The remaining balance of approximately \$41 million in project costs will be funded from Parking System revenue bonds to construct the actual underground garage. UIHC will provide funding to the University by contributing toward annual debt service payments on these new bonds to assure that the Parking System maintains reasonable debt service coverage ratios throughout the bond term to maintain its stable credit rating. A proforma has been provided to the Board Office.

In February 2011, the Board approved the schematic design and budget for a new Children's Hospital, including an addition and renovation of existing facilities. The new hospital will accommodate replacement and expansion of acute and critical care nursing units, specialty outpatient clinics, diagnostic and therapeutic units, and selected clinical and administrative support offices that are now located within several UIHC buildings. It would also provide for the development of dedicated operating rooms designed specifically for children, teaching, research and conference facilities, and a number of amenities for pediatric patients and families. The University / UIHC now requests approval of a revised schematic design (booklet

is included with the Board's agenda materials) and revised project description and budget (\$291,987,000, an increase of \$21,236,583 from the \$270,750,417 approved in February 2011.

Since approval of the original schematic design, it has been determined that significant improvements could be incorporated into the siting and layout of the new building and in associated parking facilities that would yield both initial and long term benefits to the hospital's operation. Subsequent to the development of the initial building design, the Federal Aviation Administration determined that increasing the height of Children's Hospital (beyond the eight stories above grade) would not adversely affect the safe and efficient utilization of air space above the building. This made it possible to revise plans for the building to add two shell floors, which can be used for future expansion of Children's Hospital services, plus a rooftop terrace.

Also, following approval of the initial schematic design, the project's design team was asked to reconsider the exterior of the Children's Hospital. The replacement of Hospital Ramp 2 with an underground parking facility in the same location will facilitate development of a visible new front entry to UIHC with a landscaped plaza entryway and a much simpler, clearer arrival experience for patients and visitors, while maintaining patient and visitor parking in a very convenient and accessible location.

This change has also made it possible to introduce two modifications in the design and orientation of the Children's Hospital. First, since a replacement parking ramp will not need to be developed in the area occupied by the Center for Disabilities and Development (CDD), it will no longer be necessary to relocate CDD programs into the Children's Hospital. Second, by replacing Ramp 2 with an underground parking facility in the same location, the entrance to the Children's Hospital can be placed on the north side of the proposed building with an entry off the landscaped plaza. The building's orientation can be adjusted in a way that creates a more welcoming entrance, improves views from patient rooms, and admits more sunlight onto the plaza and into the new Children's Hospital.

The revised project budget of \$291,987,000 would be funded from three sources of funds:

- Approximately \$174 million in Hospital Revenue Bond proceeds (In February 2011, the Board authorized the sale of up to \$190 million in Hospital Revenue Bonds; netting approximately \$174 million in proceeds after the establishment of a reserve fund and the payment of issuance costs.);
- University Hospitals Building Usage Funds; and
- Designated Children's Hospital gift funds

The University will discuss with the Board during its presentation of the capital register various options it is considering for the sale of the \$190 million in Hospital Revenue Bonds.

The University requests approval of the project description and budget (\$5,565,422) for the **Utilities Distribution System – Construct Sub L East Campus Electrical Loop** project, which would construct a new electrical duct bank from the Main Power Plant to Substation L (approximately 3,400 linear feet) to provide additional electrical generated capacity. The duct

bank will also support the increased capacity of the across campus tie which connects substations on each side of the river and the Main Power Plant to provide needed electrical service redundancy. This project would also provide the capacity and tie in location for the new School of Music Facility electrical service and connect the University Services Building to the University electrical distribution system. A map showing the proposed location of the electrical loop is included as Attachment J; the project would be funded by utility system renewal and improvement funds.

Details of the Projects:

Utilities Distribution System – Extend Chilled Water Near West Campus Residence Halls

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		June 2012	Requested

This project would develop a new 24-inch chilled water system distribution loop to provide redundant service to the new West Campus Residence Hall. The project will be constructed to connect to 24-inch chilled water lines that will run through the site of the new West Campus Residence Hall.

Utilities Distribution System – Court Street Utility Extensions

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		June 2012	Requested
Selection of Design Professional (Shive-Hattery; Iowa City, IA)		June 2012	Requested

Utility extensions include low pressure steam and condensate, chilled water, domestic water main and a segment of the electrical duct bank and associated vaults. Completion of this project would also provide for the continued support of University operations through the reliable supply of back-up power to the Pappajohn Biomedical Discovery Building and other West Campus research buildings.

UIHC – Levels 7 & 8 John Colloton and John Pappajohn Rooftop Pavilions Infills

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		June 2012	Requested
Utilization of Construction Manager		June 2012	Requested

Work to be accomplished includes the removal of existing roofing material and some existing pre-cast concrete finish wall panels and installation of structural steel, pre-cast concrete finish wall panels, windows and roofing materials. Interior work will include completing mechanical, electrical, plumbing and finishes as required by code. All work will be designed and constructed to match the exterior of the existing pavilions. Completing this project prior to construction of the Children’s Hospital will greatly facilitate the infill’s construction, making it less costly and more efficient to develop while the infill area is still relatively accessible by tower crane.

Mayflower Hall – Permanent Flood Recovery and Mitigation

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Selection of Design Professional (Rohrbach Associates, PC; Iowa City)		Aug. 2008	Not Required*
Design Professional Agreement (Schematic Design through Construction Admin.)	\$ 1,172,800	Mar. 2011	Not Required*
Amendment #1 to Agreement	507,000	May 2012	Not Required*
Schematic Design		June 2012	Requested
Project Description and Budget	\$13,316,299	June 2012	Requested

*Approved by Executive Director consistent with Board policies

The area to be recovered totals 40,043 gross square feet and provides for recovering the C-Store and lounge and vending area.

Mitigation efforts include the installation of a demountable flood wall, underground pump station and emergency generator to mitigate the building from possible future flood events.

The flood wall would protect the building to a level that is 2 feet above the 500-year flood level. Further information on mitigation efforts is included in the schematic design booklet.

Project Budget

Construction	\$ 8,939,040
Design and Supervision	3,501,790
Contingency	<u>875,469</u>
TOTAL	<u>\$13,316,299</u>

Source of Funds:

Combination of flood recovery resources – insurance proceeds, state, federal, and University resources.

Pending final approval from the Federal Emergency Management Agency (FEMA), construction is anticipated to commence in the summer of 2013. All construction is scheduled to be completed by the fall of 2014.

As reviewed with the Board at its April meeting, the city of Iowa City has plans to raise the adjacent Dubuque Street and Park Road bridge. These actions could impact this recovery project and its timing. City decisions on these projects are expected during the fall of 2012.

C. Maxwell Stanley Hydraulics Laboratory – Flood Mitigation and Permanent Recovery

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Selection of Design Professional (OPN Architects; Cedar Rapids)		Aug. 2008	Not Required*
Design Professional Agreement (Complete Design through Construction Admin.)	\$ 140,180	April 2012	Not Required*
Schematic Design		June 2012	Requested
Project Description and Budget	\$13,316,299	June 2012	Requested

*Approved by Executive Director consistent with Board policies

To develop a flood mitigation strategy, the consultants needed to determine why the building flooded during the 2008 flood. The conclusion was that the building flooded primarily because the power had to be shut down and the building evacuated. One of the major flood mitigation strategies is the compartmentalization of the transformer vault, electrical equipment and the computer server room. Other mitigation efforts include waterproofing and sealing cracks in the building's foundation walls, replacement of all windows below the flood design elevation with

watertight aquarium glass assemblies, and the sealing of conduit penetrations. A concrete / brick veneer flood wall would be constructed along the north and east sides of the tow tank and south entrance vestibule.

Project Budget

Construction	\$1,377,975
Design and Supervision	482,441
Contingency	<u>137,400</u>
TOTAL	<u>\$1,997,816</u>

Source of Funds:

Combination of flood recovery resources – insurance proceeds, state, federal, and University resources.

Pending final approval from the Federal Emergency Management Agency (FEMA), construction is anticipated to commence in the Fall of 2012. All construction is scheduled to be completed in the Summer of 2013.

Field House – Modify for UIHC Entry Access

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Mar. 2012	Approved
Selection of Design Professional(s) Consultants from UIHC Children's Hospital Project Team (Shive-Hattery and Heery/HLM)		Mar. 2012	Approved
Initial Review and Consideration of Capital Project Evaluation Criteria		Mar. 2012	Received Report
Design Professional Agreement (Shive-Hattery, Iowa City)	\$ 470,000	April 2012	Not Required*
Schematic Design		June 2012	Requested
Project Description and Budget	\$6,305,587	June 2012	Requested
Final Review and Consideration of Capital Project Evaluation Criteria		June 2012	Receive Report

The proposed new roadway is wide enough to accommodate two lanes of traffic and a sidewalk. Work related to the project will include relocation of existing restrooms, storage areas, and rooftop mechanical equipment, access control to the Field House, modifications to the entry/exit to Parking Ramp 4, electrical substation and other utilities relocations.

The following summarizes the building program as included in the schematic design:

<u>New Construction Total Net Area</u>	<u>1,477</u>
Exit Stair	204
Equipment Storage	263
Housekeeping	163
Restrooms	532
Fire Sprinkler Room	247
Vending	68
<u>Renovated Space Total Net Area</u>	<u>2,283</u>
Information / Cashier	129
Check-In	269
Equipment Storage	119
Supervisor Office	119
Human Physiology Lab & Storage	1,149
Health Promotion Research	498
TOTAL NET AREA	<u>3,760</u>

The exit stair, equipment storage, restrooms and housekeeping are located in an elevated structure above the new roadway connecting Grand Avenue with South Hospital Drive.

The new main entrance control area would be relocated to the southeast entrance lobby in the Field House (former main entrance). The new access control area will require the relocation of the Health & Human Physiology lab to immediately north of its current location on the ground level of the Fieldhouse. The existing Health Promotion Research area will also be relocated further south on the ground floor of the Field House.

Principal exterior materials include aluminum curtain wall, translucent glass screen wall and red ceramic wall tile. The red ceramic wall tile and translucent screen wall recall the Parking Ramp 90 stair exterior wall located south of the Field House Addition. The use of glass as a principal material for the new elevated structure above the roadway is similar to other UIHC elevated walkways including the walkway connecting the Pomerantz and Pappajohn Pavilions located west of the Fieldhouse. The red ceramic wall tile also references the red brick of the Field House.

Project Budget

Construction	\$4,955,783
Design and Supervision	856,979
Contingency	<u>492,825</u>
TOTAL	<u>\$6,305,587</u>

Source of Funds: University Hospitals Building Usage Funds

Construction is scheduled to commence in the month of September of 2012. All construction is scheduled to be completed during the month of June of 2013.

Parking Lots and Ramps – Melrose Avenue – Surface Parking

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Dec. 2011	Approved
Design Professional Selection (Anderson Bogert; Cedar Rapids)		Jan. 2012	Not Required*
Design Professional Agreement (Full Design Services)	\$ 240,500	April 2012	Not Required*
Schematic Design		June 2012	Requested
Project Description and Budget	\$3,027,476	June 2012	Requested
Final Review and Consideration of Capital Project Evaluation Criteria		June 2012	Receive Report

*Approved by Executive Director consistent with Board policies

The project budget includes the razing of nine University owned properties. (The Board previously approved the demolition of these structures.)

<u>Project Budget</u>	
Construction	\$2,335,690
Design and Supervision	460,819
Contingency	<u>230,967</u>
TOTAL	<u>\$3,027,476</u>

Source of Funds: Parking System Improvement and Replacement Funds

It is anticipated that construction will begin in late July 2012 and will be substantially complete by November 2012.

Hospital Ramp 2 Replacement

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Dec. 2011	Approved
Overall Design Leadership (Heery International; Iowa City)		Dec. 2011	Approved
Initial Review and Consideration of Capital Project Evaluation Criteria		Dec. 2011	Received Report
Design Professional Agreement	\$ 4,732,175	Apr. 2012	Not Required*
Schematic Design		June 2012	Requested
Project Description and Budget	66,153,000	June 2012	Requested
Final Review and Consideration of Capital Project Evaluation Criteria		June 2012	Receive Report

*Approved by Executive Director consistent with Board policies

The Hospital Ramp 2 Replacement would be designed to support future UIHC master plan initiatives, including development of an adult critical care bed tower (Tower 2) above the eastern-most section of the new parking ramp. The structure would also be designed to accommodate a horizontal expansion to the north to provide additional underground parking as needed.

The ramp replacement includes a four-level underground parking structure of approximately 700 spaces and a landscaped plaza at street level above this structure. The parking ramp is designed to provide convenient access from Hawkins Drive and the plaza level while maintaining a majority of the plaza as useable green space, with a goal of creating a peaceful, serene and welcoming experience. Within this larger landscape, outdoor seating areas will be located adjacent to the building facades and a network of secondary pathways will create a landscape circuit that gives users options of short and long walks.

The parking space size and aisle widths will be designed to balance cost and comfort. The parking areas will be flat to promote openness and visibility and to better accommodate individuals requiring use of a wheelchair or who have difficulty walking. The facility will be well illuminated to enhance way finding, safety and security. Convenient stair and elevator access will be provided to the Children’s Hospital, with on-grade access to serve the existing hospital facilities and future Tower 2. A small office area would accommodate University Parking & Transportation staff having oversight of the parking structure.

The following table summarizes the building program as included in the schematic design:

<u>Function</u>	<u>Net Square Footage</u>
Parking	277,410
Staff Offices	650
Mechanical	23,188
Telecommunications	512
Vertical Circulation	9,750
TOTAL NET SQUARE FOOTAGE	311,510
GROSS SQUARE FOOTAGE	378,685

Project Budget

Construction	\$52,923,000
Design and Supervision	7,938,000
Contingency	<u>5,292,000</u>
TOTAL	<u>\$66,153,000</u>

Source of Funds: Parking System Improvement and Replacement Funds and Revenue Bonds with a cash contribution and / or annual payments from UIHC to the Parking System to cover a portion of the debt service payments on the bonds to assure the Parking System retains reasonable coverage ratios.

Construction is scheduled to commence in 2013. All construction is anticipated to be completed in the summer of 2015.

University of Iowa Children's Hospital

<u>Project Summary</u>			
	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed – UIHC Strategic Facilities Master Plan		Mar. 2008	Approved
Initial Review and Consideration of Capital Project Evaluation Criteria		Mar. 2008	Received Report
Selection of Design Professional (Heery International; Iowa City, IA)		May 2008	Not Required*
Selection of Construction Manager (Gilbane Building Company)		Aug. 2008	Not Required*
Design Professional Agreement (Master Planning, Programming and Schematic Design)	\$ 5,128,000	Oct. 2008	Not Required*
Construction Manager Agreement (Pre-Construction Services through Schematic Design)	60,000	Aug. 2009	Not Required*
Program Statement – Children's Hospital Schematic Design – Children's Hospital		Dec. 2010	Not Required*
Project Description and Budget - CH	270,750,417	Feb. 2011	Approved
Final Review and Consideration of Capital Project Evaluation Criteria		Feb. 2011	Approved
Construction Contract – Site Utility BP #1 – Utilities Relocation - Electrical Ductbank (Calacci Const; Iowa City)	1,864,200	June 2011	Not Required*
Change Orders to Date	-300,323		
Construction Contract – Site Utility Bid Package #2 – Telecom Hub Room (Gerard Electric; Iowa City)	182,000	Aug. 2011	Not Required*
Change Orders to Date	17,650		
Construction Contract – Site Utility BP #3 – Utilities Relocation – Chilled and Domestic Water (Iowa Bridge & Culvert; Washington, IA)	8,860,000	Aug. 2011	Not Required*
Change Orders to Date	96,665		
Design Professional Agreement (Design Development through Record Documents)	21,917,042	Dec. 2011	Not Required*
Construction Manager Agreement (Pre-Construction & Construction Phases)	11,181,973	Dec. 2011	Not Required*
Revised Program Statement		May 2012	Not Required*
Revised Schematic Design		June 2012	Requested
Revised Project Description and Budget	\$291,987,000	June 2012	Requested

*Approved by Executive Director, consistent with Board policies

The following summarizes the original and revised University of Iowa Children's Hospital program:

<u>Function</u>	<u>Original</u>	<u>Revised</u>
Inpatient Care:		
Acute Care Unit A – 28 Beds	16,895	20,610
Acute Care Unit B – 28 Beds	17,145	20,056
Acute Care Unit C – 22 Beds	13,732	
Blood & Marrow Transplant Unit – 6 Beds	4,292	
Acute Care Unit C / Blood & Marrow Transplant Unit		20,516
Pediatric Intensive Care Unit – 28 Beds	16,875	21,444
Neonatal Intensive Care Unit – 28 Beds	17,346	20,885
PICU and NICU Divisional Offices	<u>3,340</u>	-----
Subtotal	89,625	103,511
Outpatient Care:		
Center for Disabilities and Development	31,715	
Pediatric Subspecialty Clinics	14,934	
Pediatric Infusion Center	1,830	
Pediatric Dentistry	<u>2,130</u>	
Pediatric Subspecialty Clinic including Pre-Admission Testing		32,141
Pediatric Infusion Center		<u>2,788</u>
Subtotal	50,609	34,929
Diagnostic and Therapeutic:		
Pre-admission Testing Area / Lab	1,377	
Surgical Suite – 8 Operating Rooms & Support	20,560	
Imaging, Cardiac Catheterization & Special Procedures	9,603	
Surgical Suite – 8 Operating Rooms & Support	-----	24,554
Imaging and Special Procedures	<u>-----</u>	<u>17,961</u>
Subtotal	31,540	42,515
Patient, Family & Staff Amenities:		
Main Entry & Public Spaces	9,780	9,752
Concierge and Transportation Services	560	739
Meditation Room	400	562
Patient, Family and Staff Support Facilities	<u>11,858</u>	<u>20,797</u>
Subtotal	22,598	31,850
Research and Education:		
Translational & Outcomes Research Center	1,550	407
Tele-Health Community Outreach & Con Ctr	<u>6,971</u>	<u>5,769</u>
Subtotal	8,521	6,176
Support for Building and Patient Care Services:		
Environmental Services	2,200	5,922
Engineering Services, Maintenance & Storage	40,500	54,708
Central Sterile Processing & Storage	<u>5,118</u>	<u>6,482</u>
Subtotal	47,818	67,112
TOTAL SQUARE FEET (new and renovated)	250,711	286,093
ANTICIPATED GROSS SQUARE FEET	427,850	544,226

The following describes the major changes to individual components:

Inpatient Care Facilities: Nursing workstations are now located closer to patients rather than concentrated in a central location, with the addition of nursing support spaces. Given the rise of multiple births, six NICU rooms will have the capacity to accommodate multiple neonates.

Outpatient Care Facilities: The space has been reduced since Center for Disabilities and Development programs are no longer included in the Children's Hospital project. However, the Pediatric Specialty clinic program has been increased to provide additional exam rooms to meet projected volume increases.

Diagnostic and Therapeutic Facilities: Four additional procedure rooms have been added to accommodate the expected increase in patient volumes. Additional changes include shelling one MRI-ready room to facilitate future expansion of MRI services, adding two fluoroscopy rooms, and increasing the number of ultrasound rooms.

Patient, Family & Staff Amenities: Patient and family amenity space has been increased by adding a rooftop terrace and enlarging the patient library and chapel/meditation spaces.

Education and Research: The space required for education and research has been reduced due to efficiencies that will be gained through combining facilities and using those research facilities as a shared resource.

Support for Building and Patient Care Services: The increase in building floors and other design changes will increase the building's height and gross square feet. It also will necessitate use of a modified HVAC distribution system and infrastructure, with the HVAC provided in zones. The upper floors will be fed from a rooftop penthouse, the lower floors from Lower Level 2, and the operating rooms on Level 5 will be supplied with a dedicated HVAC system on level four.

The building will include two floors below grade and twelve floors above grade compared to the original plan of three floors below grade and eight floors above grade. The location of various functions can be found on pages 7 and 8 of the schematic design booklet, with details of each floor plan following.

The design of the exterior breaks down the scale of the building and maximizes views and light into the hospital. The soft curved form is broken down by vertical segments of four patient rooms; this has the appearance of dividing the building into different tower sections. Further information on the exterior design can be found on page 23 of the schematic design booklet.

Project Budget

	Initial Budget (Feb 2011)	Revised Budget (June 2012)
Construction	\$181,945,533	\$219,389,000
Professional Fees	23,334,975	26,123,000
Equipment	38,524,000	19,400,000
Contingency	18,889,564	18,900,000
Planning and Supervision	<u>8,056,345</u>	<u>8,175,000</u>
TOTAL	<u>\$270,750,417</u>	<u>\$291,987,000</u>

Source of Funds: Hospital Revenue Bond proceeds, University Hospitals Building Usage Fund, Designated Children's Hospital gift funds

Construction of the hospital is anticipated to begin in November 2012, with a completion date of March 2016.

Utilities Distribution System – Construct Sub L East Campus Electrical Loop

Project Summary

	<u>Amount</u>	<u>Date</u>	<u>Board Action</u>
Permission to Proceed		Dec. 2011	Approved
Design Professional Selection (Shive-Hattery, Iowa City)		Mar. 2012	Approved
Design Professional Agreement - Full Design Services	\$ 335,000	May 2012	Not Required*
 Project Description and Budget	 5,565,422	 June 2012	 Requested

*Approved by Executive Director consistent with Board policies

This new loop will support the planned additional 8 megawatts of Power Plant electrical generating capacity to Substation L and the across campus tie. (Four, 2 megawatt each gas-powered burners are soon to be installed at the Power Plant.) It will also tie into the existing electrical distribution system at the Lindquist Center which will create needed redundancy on the east campus. In addition, this project would provide the capacity and tie in location for the new School of Music Facility electrical service and connect the University Services Building, which houses the vital energy control center, to the University electrical distribution system.

Project Budget

Construction	\$4,388,961
Design and Supervision	738,671
Contingency	<u>437,790</u>
TOTAL	<u>\$5,565,422</u>

Source of Funds: Utility System Renewal and Improvement Funds

UIHC Levels 7 & 8 John Colloton and John Pappajohn Rooftop Pavilions Infills
Evaluation Criteria

Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.

Institutional Mission / Strategic Plan: Completion of this project will contribute to UI Hospitals and Clinics' efforts in meeting all elements of the UI Health Care mission, "Changing Medicine, Changing Lives." It will help to maintain the UI Hospitals' capabilities for delivering superb patient care, innovative educational programs and facilitating pioneering discoveries. The project is supportive of each of the six major goals that have been established in UI Health Care's Strategic Plan by providing the facilities that are required to assist UI Health Care's efforts 1) to provide world class healthcare services to optimize health for everyone, 2) to advance world class discovery through excellence and innovation in health services research, 3) to develop world class health professionals and scientists through excellent, innovative and humanistic educational curricula for learners at every stage, 4) to foster a culture of excellence that values, engages and enables our workforce, 5) to create an environment of inclusion where individual differences are respected and all feel welcome, and 6) to optimize a performance-driven business model that assures financial success.

Other Alternatives Explored: The on-going need to accommodate new or expanding inpatient, diagnostic, therapeutic and clinical support service facilities in the Carver, Colloton and Pappajohn Pavilions is limited by the lack of available and accessible space. Relocation of support services functions to other, non-clinical areas of the hospital and off-site locations has not resulted in the freeing-up of any significant level of usable space within the aforementioned pavilions. Although there is no available rooftop space to infill above the Carver Pavilion, there is a significant amount (56,000 gsf) of rooftop space above Colloton and Pappajohn Pavilions that is practical and cost effective to infill if the project is undertaken at this time. The anticipated cost of approximately \$220/gsf to construct this shell space is considered reasonable. On completion of the Children's Hospital, due to its location, the infilling of these rooftop locations will be considerably more costly and may not be practical. There are no other viable alternatives available that will meet the needs for this project.

Impact on Other Facilities and Square Footage: No space will be abandoned, transferred or demolished.

Financial Resources for Construction Project: This project will be funded through University Hospitals Building Usage Funds acquired from depreciation allowances of third parties underwriting the cost of patient care plus hospital net earnings from paying patients. No state capital appropriated dollars will be involved.

Financial Resources for Operations and Maintenance: The source of funds to cover the associated operating and maintenance costs will be hospital operating revenues derived from providing patient care services.

External Forces Justifying Approval: The project's design will meet all building codes and standards, as well as the 2010 Edition of the Guidelines for Design and Construction of Hospital and Healthcare Facilities, published by the Facility Guidelines Institute. These

guidelines regulate hospital licensing and construction in Iowa and most other states and are used by Medicare and the Joint Commission to develop new regulations and standards. The design will also meet Health Insurance Portability and Accountability Act (HIPAA) requirements for patient privacy and confidentiality.

Mayflower Residence Hall – Permanent Flood Recovery and Mitigation
Evaluation Criteria

Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.

Institutional Mission / Strategic Plan: The flood waters of June 2008 completely inundated the two basement levels and rose to approximately 30 inches above the first floor. This project will recover the remaining portion of the first floor that was not done immediately after the flood event. The recovery effort will restore the building to its pre-flood condition. The project will also provide a concrete flood wall with a demountable wall system on top of it for future flood protection. The demountable wall is being used to maintain a more visible aspect of the facility except during a flood event where the demountable wall system can be quickly installed.

Other Alternatives Explored: Due to the small site, mitigation options for Mayflower were very limited. A mitigation option that was explored was the construction of a mechanical annex in the east parking lot. This would allow the existing mechanical systems to be relocated out of the basement into a facility that was above the 500 year flood plus 2 feet elevation. This strategy was not supported by FEMA.

Impact on Other Facilities and Square Footage: This project will not result in the abandonment, transfer or demolition of existing facilities.

Financial Resources for Construction Project: The project will be funded by a combination of flood recovery resources - insurance proceeds, state, federal, and University resources.

Financial Resources for Operations and Maintenance: The source of funds to cover the operating and maintenance requirements will be existing Housing funds.

External Forces Justifying Approval: Mayflower is the largest housing facility on the University of Iowa campus. It would be very difficult to relocate the 1050 students during a flood event without having a severe impact on the daily operations of the University and the students' educational experience.

C. Maxwell Stanley Hydraulics Laboratory - Recovery and Mitigation
Evaluation Criteria

Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.

Institutional Mission / Strategic Plan: Completion of this project will provide for the permanent recovery from the 2008 flood, and mitigation of future flood related impacts to the C. Maxwell Stanley Hydraulics Laboratory (SHL). The SHL houses the central administration and primary offices for over 100 IIHR-Hydroscience & Engineering (IIHR) faculty, staff, and graduate students. They conduct a broad range of hydraulic and hydrologic applications in SHL representing several top programs in Iowa, the country, and abroad. The SHL also houses resources such as the archives of the history of IIHR-Hydroscience & Engineering. The IIHR archives contain original glass plate negatives, photographs, professional letters, correspondence and scrapbooks significant to the history of the development of advanced theories in fluid mechanics through the 20th century. One of the most recent programs to be housed in the SHL is the Iowa Flood Center. This Center performs advanced research and education specifically related to floods, and monitors the current river flood elevations. Stations associated with the Center are located around the state providing up to date flood stage information to all of Iowa. This program is the only one of its kind in the nation. It is critical to the safety of Iowa communities that this facility maintains operation during a flood.

Other Alternatives Explored: There are no viable alternatives available to repairing the existing facility and making preparation for future flood events to keep facility operational. The Federal Emergency Management Agency has determined that the SHL should be mitigated from future flood hazards. Without flood mitigation upgrades to the building, it will not be possible for the SHL to perform the hydraulics and hydrological research for its clients as well as flood research and education for the Iowa Flood Center.

Impact on Other Facilities and Square Footage: This project will not result in the abandonment, transfer or demolition of existing facilities.

Financial Resources for Construction Project: The project will be funded by a combination of flood recovery resources - insurance proceeds, state, federal, and University resources.

Financial Resources for Operations and Maintenance: The source of funds to cover the associated operating and maintenance costs will continue to be existing General Education (Building and Landscape Services) funds.

External Forces Justifying Approval: SHL conducts a broad range of hydraulic and hydrologic applications representing several top programs in Iowa, the country, and abroad. In addition to the Iowa Flood Center, other notable programs include:

- Ship Hydrodynamics Program: IIHR has contributed to Naval ship hydrodynamics technological applications continuously since the establishment of the Office of Naval Research (ONR) in 1948. Laboratory experiments are conducted in IIHR's state-of-the-art 100 meter towing tank; the tow tank is also a hands-on learning laboratory for undergraduate and graduate students.

- Fish Passage Program: IIHR's research in river hydraulics and fish passage dates back to the 1930s with the development of fish ladders for rivers and streams in the Midwest. For the past 25 years, IIHR has been a close collaborator with US Army Corps of Engineers and other major partners in the Pacific Northwest. The simulations provided by SHL are some of the most advanced in the world for modeling river hydraulics temperature.

Field House – Modify for UIHC Entry Access
Evaluation Criteria

Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.

Institutional Mission / Strategic Plan: As part of the University of Iowa Hospitals and Clinics' Master Plan, one of the primary goals is to increase east-west connection within the complex, for both vehicles and pedestrians. Additionally, the plan identifies a need to establish a second/south main entrance to UIHC for the duration of the upcoming Children's Hospital construction. To address these needs, it was identified that a drive allowing vehicles and pedestrians to move from South Grand Avenue (east of the UIHC complex) to Hawkins Drive should be created. As part of the longer-term Master Plan, a future northern drive allowing vehicles, pedestrians and potential service access would be created, linking Hawkins Drive to the north leg of South Grand Avenue. This would create a completely internal (to UIHC) circulation system, alleviating traffic concerns on Melrose Avenue.

Effective and clear circulation and way finding are critical to the success of the UIHC objectives and to the success of the new Children's Hospital. This project will help to accomplish these needs.

Other Alternatives Explored: The University and UIHC, in coordination with its expert consultants studied, the traffic and traffic patterns in the areas surrounding the UIHC complex. Given the urban and compact site, the options to address effective and safe entrance and exit from the UIHC complex for the duration of the upcoming Children's Hospital construction are few. Access for many patients will be maintained toward the north end of the complex, at its current main entrance area. However, disruptions between this area and the many hospital functions toward the south end of the complex require a second interim main entrance. This project accomplishes this. It is the only location within the complex that offers vehicular access from Hawkins Drive and immediate access to clinics and UIHC functions to both the north and south of this single drive.

Without removal of the Field House Mainstreet structure, this new/interim main entrance would be served by a dead-end driveway. Given the traffic expected at this entrance, not allowing through-traffic would be untenable. In addition to allowing a direct connection to South Grand Avenue and roadways heading east from the UIHC complex, the Mainstreet structure can be removed without detrimental impact to the Field House. Access to the various functions within the Field House will be maintained as part of this project.

Impact on Other Facilities and Square Footage: Mainstreet serves as an east-west entrance point for the Field House. From this portion of the building, visitors are routed to the various recreational activities offered by the facility. Apart from an entry and information desk, the structure to be removed has no programmed space. The main entry will be relocated to another, existing location within the Field House.

Financial Resources for Construction Project: University Hospitals Building Usage Funds

Financial Resources for Operations and Maintenance: The Field House structure is a general fund building and will be operated as was the case prior to this project. The result of this project will be fewer square feet of conditioned space.

External Forces Justifying Approval: This project will address both immediate/interim circulation needs for UIHC and long-term circulation improvements impacting the entire complex.

Parking Lots and Ramps – Melrose Avenue – Surface Parking
Evaluation Criteria

Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.

Institutional Mission / Strategic Plan: The University of Iowa Hospitals and Clinics annually serves some 31,000 patients who are admitted to the hospital (31,447 in FY 2011); and there are over three quarters of a million visits (778,789 in FY 2011) to the UIHC's on-site specialty and subspecialty clinics. Almost 94% of these patients are Iowan's. Also, in FY 2011, 3,865 health science students, medical and dental residents and fellows and other learners received all or part of their clinical training at the UIHC. Caring for the UIHC's very complex patient population and training the health care professionals who will serve in Iowa's community based health care delivery systems in the future, requires a large and highly skilled staff from the full range of medical and health care specialties as well as support staff who function in numerous roles within the hospital. Altogether, approximately 7,500 individuals (7,482 in FY 2011) are employed at the UIHC.

Among the many critical elements of service and care that define the experience of engaging the UIHC complex, are getting to, parking and entering the complex. Both during upcoming construction activities and beyond, the immediate availability of patient parking, combined with effective way-finding, will define service and care success for many of the visitors to UIHC.

The University and UI Health Care administrations are currently in planning, and in some cases, in early construction stages for several important projects in the immediate area. The most impactful of these is the new Children's Hospital. The combination of the Children's Hospital, its many enabling projects, and other facilities development projects in the area will have significant impacts on the parking that serves the UIHC complex. Primary to these is maintaining and developing immediately accessible patient and visitor parking.

As planning continues on the Children's Hospital and its surroundings, considerable study and effort have been put into accounting for critical parking needs for the duration of the construction in this densely-programmed area. Current parking use models and timing of various construction packages highlight the need to establish approximately 250 dedicated parking spaces adjacent to UIHC. Construction of these spaces will enable other existing and nearby parking to appropriately satisfy patient and visitor parking needs that will be disrupted or eliminated during the construction of the Children's Hospital.

Master planning of the UIHC complex and the Children's Hospital account for long-term parking plans that will optimally satisfy patient and staff parking requirements, but the need for this project is based on the more immediate parking requirements during several years of major construction in the area.

Other Alternatives Explored: The University and UIHC have engaged planning experts in evaluating both short and long-term options for the development that will most effectively serve the many patients visiting UIHC, and prepare the hospital for success in the years and

decades to come. In advancing the Children's Hospital project, master planning of the complex was re-visited to account for the upcoming impacts due to construction, as well as potential future phases of development within the area.

The current and long-standing parking that serves the immediate area negatively impacts both short and long-term objectives and needs. Refinement of parking and how it serves visitors to UIHC is critically needed, both for the Children's Hospital project and to enable sensible and efficient development of the complex in future years.

To address this critical planning need, impact to current and much-used parking will be necessary. While utilizing all available and existing parking in the area, parking models indicates that there simply is not enough parking, during the upcoming construction phases, to account for appropriate parking needs of the patients and visitors to the hospital.

Long-distance (Finkbine and Hawkeye Campus commuter lots) shuttling of hospital staff is already utilized and maximized while still attending to parking needs of those who require more immediate adjacency to the complex. Additionally, parking spaces currently used for staff and general campus visitors will need to be re-assigned to address patient parking, which must be directly adjacent and fully accessible.

Options do not exist to move patients to remote parking. In order to maintain the minimally appropriate parking service to UIHC, this project, completed on UI-owned property, is the most cost-effective and expedient solution.

The Melrose neighborhood established a historic district in the area east of the proposed site and this project will include provisions to buffer the impact of the parking from the more established neighborhood setting to the east.

Impact on other Facilities and Square Footage: The Board has previously approved the University's request to raze the following UI-owned structures:

- 1 Melrose Place
- 2 Melrose Place
- 3 Melrose Place
- 4 Melrose Place
- 5 Melrose Place
- 6 Melrose Place
- 7 Melrose Place
- 8 Melrose Place
- 711 Melrose Avenue

Each is currently used as temporary/rental housing and the condition of these aging wood frame structures is increasingly difficult and costly to address. Only 711 Melrose Avenue is included within the already-established Melrose Neighborhood Historic District, and it is not listed as a key contributing property. The small barn that also sits on the property will be retained, for heritage purposes, as a part of this project.

Financial Resources for Construction Project: Funding for this project is from Parking System earnings.

Financial Resources for Operations and Maintenance: The new parking surface and surrounding landscaping will be maintained as part of the Parking & Transportation system of parking spaces on campus, and will be funded through revenues of the Parking enterprise.

External Forces Justifying Approval: Current planning, and upcoming construction will not only account for care of children and families served by the UIHC Children's Hospital, but will advance impactful improvements to the parking, entrance and way-finding components that serve the entire UIHC complex. These first stage improvements, while requiring significant interim solutions, will ensure well planned and prepared-for development and modernization of the UIHC complex for decades to come.

Hospital Ramp 2 Replacement
Evaluation Criteria

Since the project meets the Board's definition of a major capital project, the University has provided the following information in response to the Board's evaluation criteria.

Institutional Mission / Strategic Plan: The removal of Hospital Ramp 2 and the subsequent replacement of parking in a close, convenient location creating a simple, clear arrival, wayfinding and departure experience for patients and visitors is essential to the success of the Children's Hospital project and the execution of the UIHC Strategic Facilities Master Plan. Removing the ramp will allow for the construction of an underground parking structure, with the eventual development of a critical care tower above to facilitate the switch to private patient rooms, permit the needed flexibility for future expansion of Hospital programs and help develop a clear and logical visitor entrance experience.

The implementation of the Strategic Facilities Master Plan will greatly enhance the UIHC's capabilities for fulfilling its patient care mission by providing the necessary space to accommodate the projected growth in patient volume in pediatric inpatient, adult critical care and outpatient clinical and support services. UIHC's educational and research missions will also be enhanced through development of the necessary space to enable students, residents and fellows to gain necessary clinical experience in accord with accrediting body standards; and by providing the type of facilities required to conduct innovative research directed toward more clinically efficacious diagnosis and treatment of disease. The implementation of the Master Plan will support several of the UIHC's Strategic Plan goals, most notably identification of Children's Hospital Services as one of UIHC's clinical programs that will be a leader in the state and national market by offering cutting edge patient care, robust clinical research and strong training opportunities; by providing facilities that promote a multidisciplinary model of evidence-based medical and nursing care, enhance patient/family-centered experiences, and serve to facilitate and strengthen referring physician relationships; by providing design features required to streamline patient throughput and to improve the patient's health care experience and outcomes; and, by providing a continuously improving, safe environment for all patients and staff at all times.

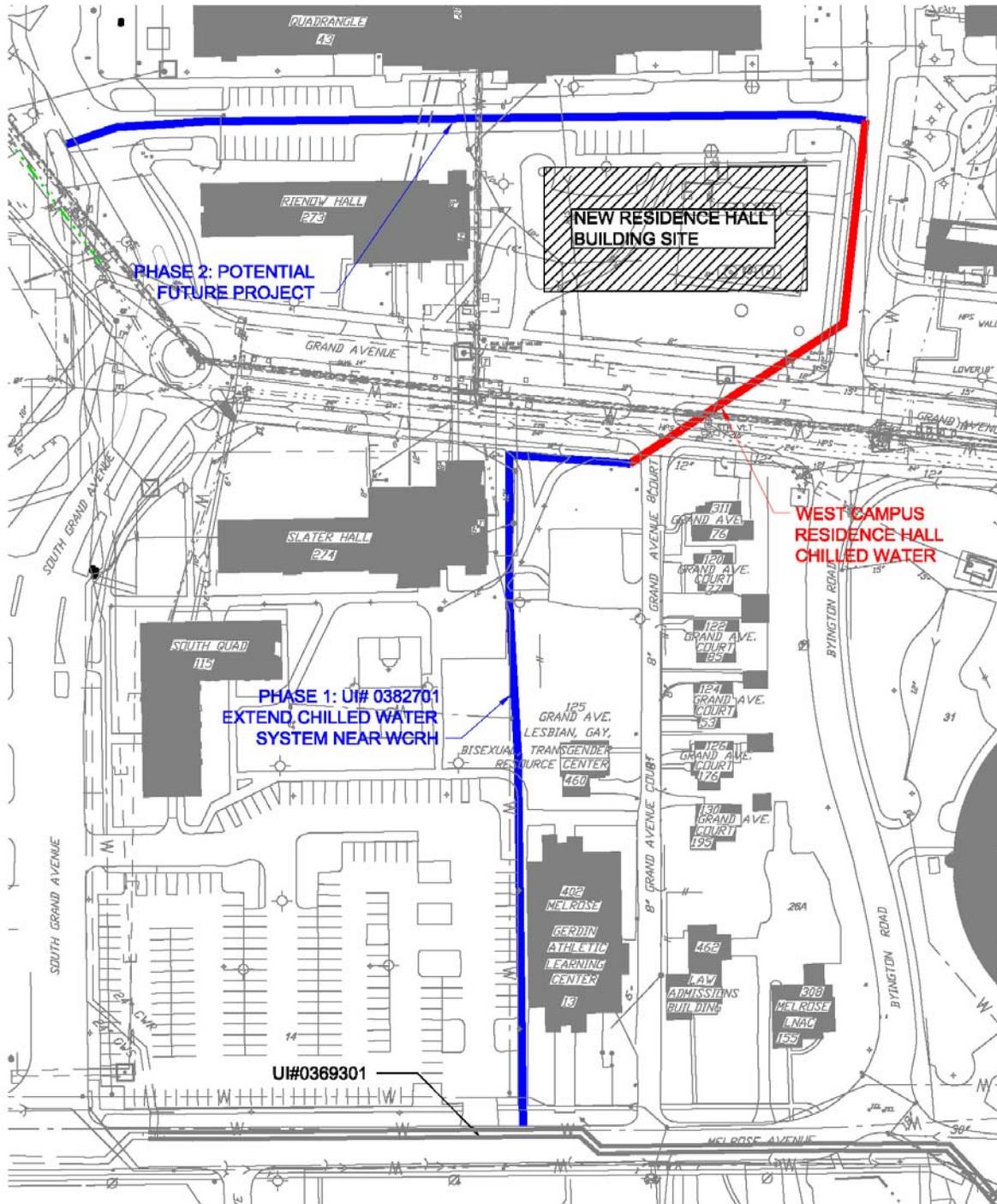
Other Alternatives Explored: Current and past UIHC Master Plans have reviewed a host of needs and other factors that indicated a significant facilities response would be required to improve parking in the years ahead. Parking-related master planning options included building a large new parking structure to the north of the current Hospital complex. This would require removal of current facilities including the Center for Disabilities and Development and the Wendell Johnson Speech and Hearing Center building. Ultimately it was determined the parking structure would be built in a location too far removed from patient care areas and would thus complicate patient wayfinding and require patients to travel much longer distances to reach clinics, diagnostic and treatment and inpatient units.

Impact on other Facilities and Square Footage: To effectively position the Children's Hospital and other future patient towers on the planned site requires the removal and replacement of Hospital Parking Ramp 2. The existing, above grade parking structure includes 673 parking stalls. The below grade replacement structure will include approximately 700 parking stalls and be designed for future horizontal expansion to the north as required to meet future parking needs.

Financial Resources for Construction Project: Funding for this project is from Parking System earnings and revenue bonds with a cash contribution or annual payments from UIHC to the Parking System to cover a portion of the debt service payments on the bonds.

Financial Resources for Operations and Maintenance: The source of funds to cover the associated operating and maintenance costs will be revenue from Parking operations earned through parking charges.

External Forces Justifying Approval: The implementation of the future master plan including the addition of the Children's Hospital, which involves replacement of Hospital Parking Ramp 2, clearly responds to societal forces, standards and regulations requiring greater patient privacy, providing adequately sized single-bed patient rooms that conform to standards promulgated in the 2010 Edition of the Guidelines for Design and Construction of Hospital and Healthcare Facilities, published by the Facility Guidelines Institute. These guidelines regulate hospital licensing and construction in Iowa and most other states and are used by Medicare and the Joint Commission to develop new regulations and standards. The design will also meet Health Insurance Portability and Accountability Act (HIPAA) requirements for patient privacy and confidentiality.

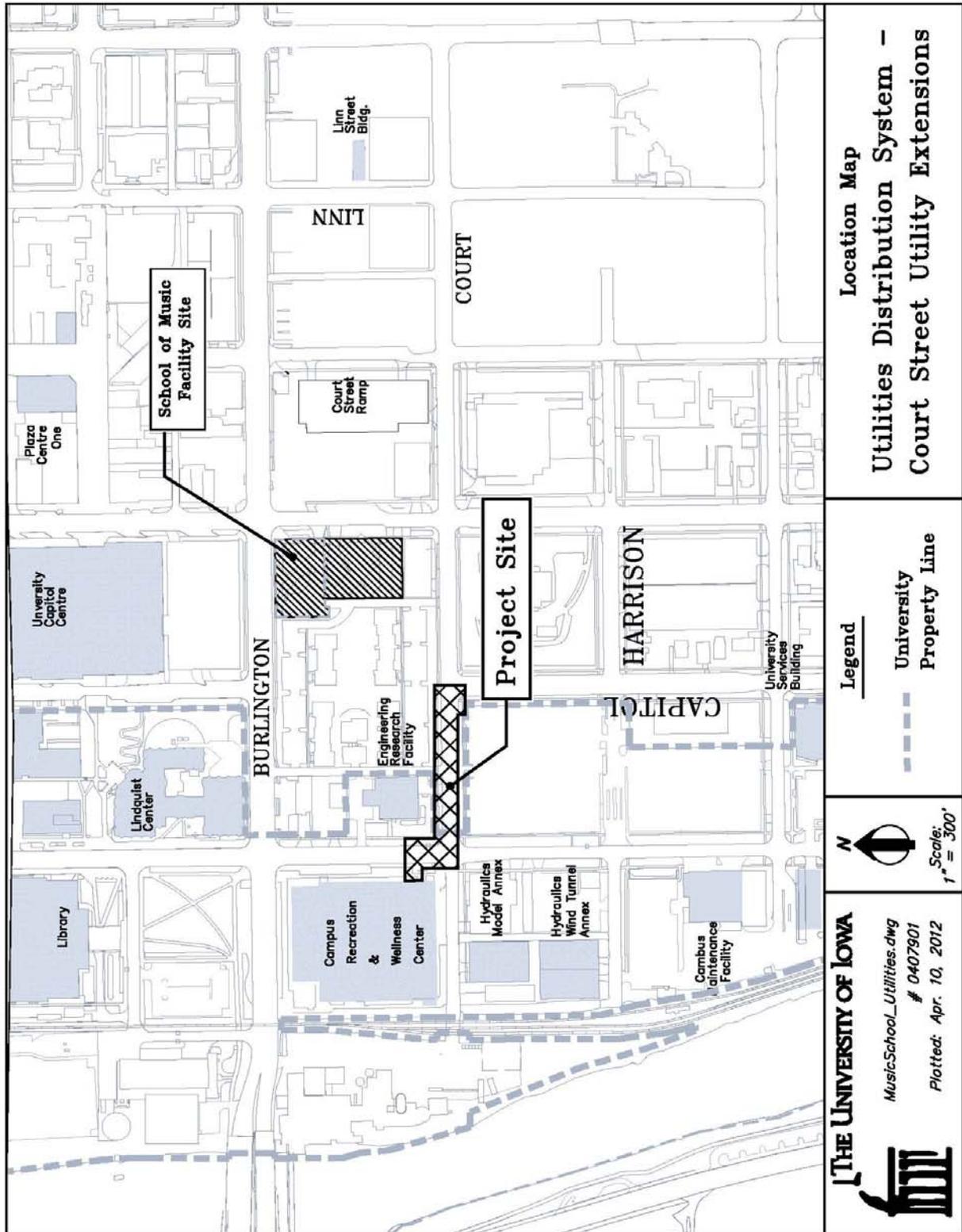


SHIVEHATTERY
ARCHITECTURE+ENGINEERING



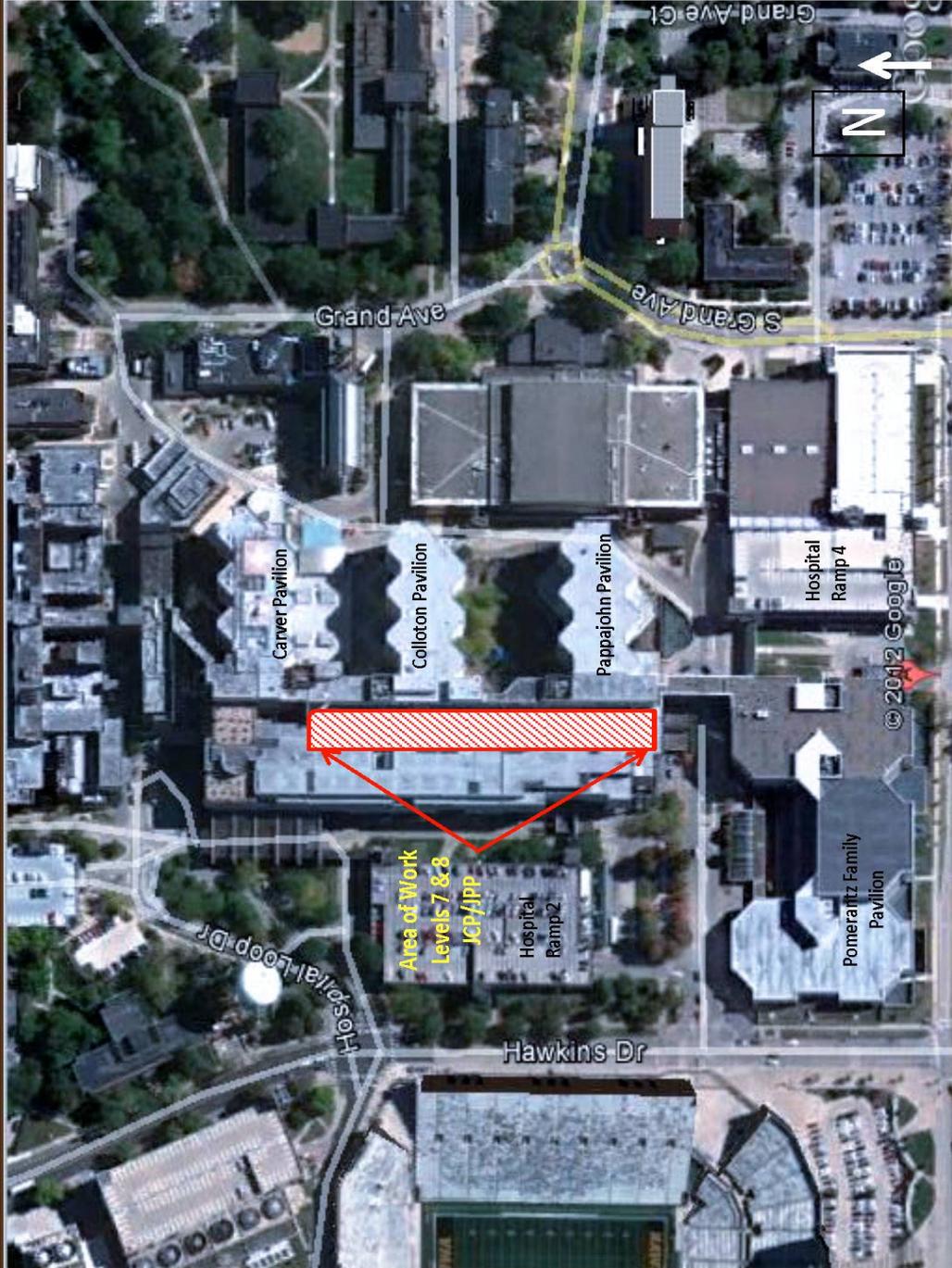
EXTEND CHILLED WATER SYSTEM NEAR WEST CAMPUS RESIDENCE HALLS

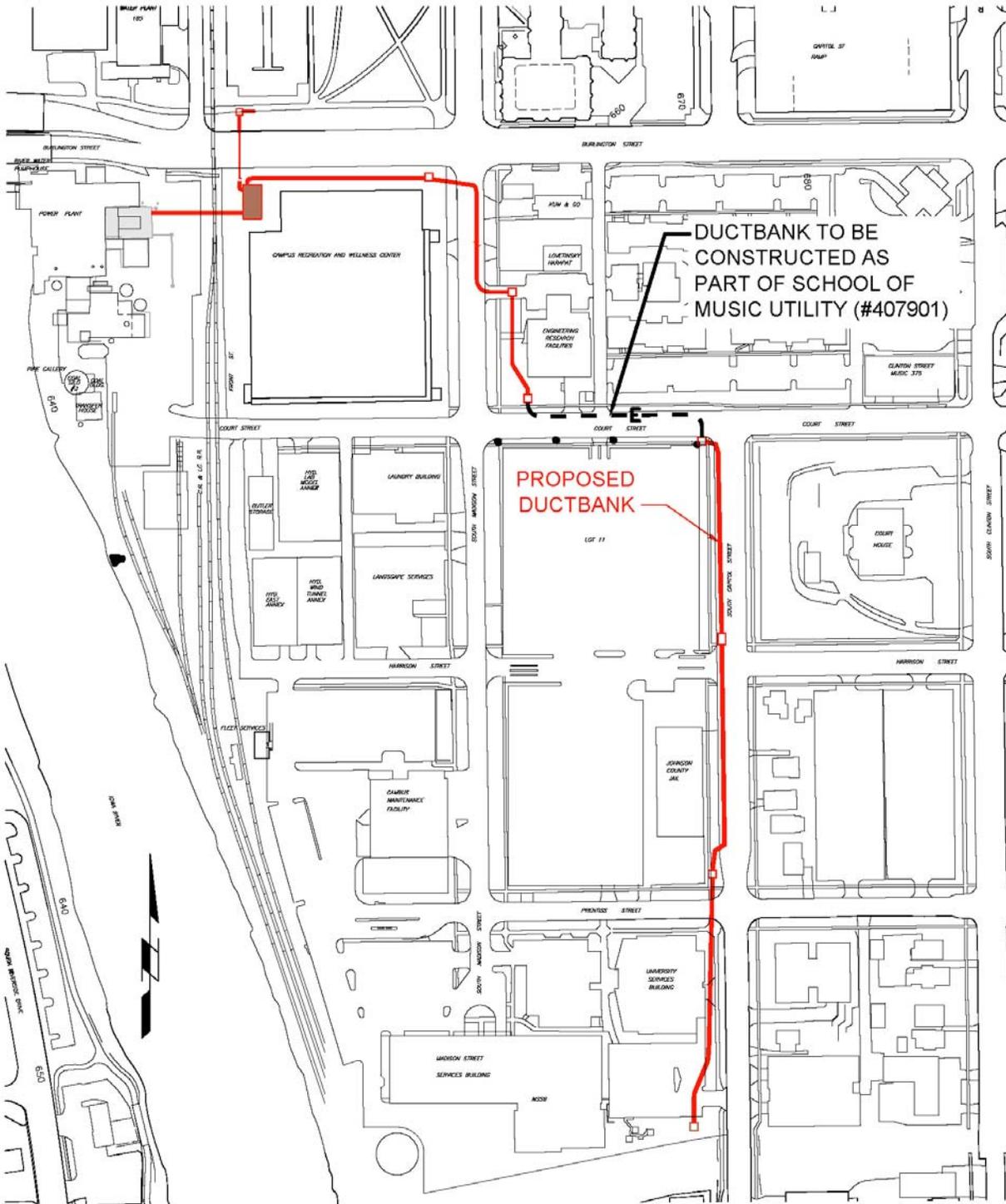
1" = 100'





**Levels 7 & 8 John Colloton and John Pappajohn Pavilion
Rooftop Infills**





UI # 0353201 - UTILITIES DISTRIBUTION SYSTEM

CONSTRUCT SUB L EAST CAMPUS ELECTRICAL LOOP

NOT TO SCALE