

10.09.2019

UIUC PROJECT # U18083

# UIUC LIBRARY REDEVELOPMENT PLAN PROGRAMMING AND CONCEPTUAL DESIGN STUDY

## PART 2: CONCEPTUAL DESIGN, FINAL SCENARIO







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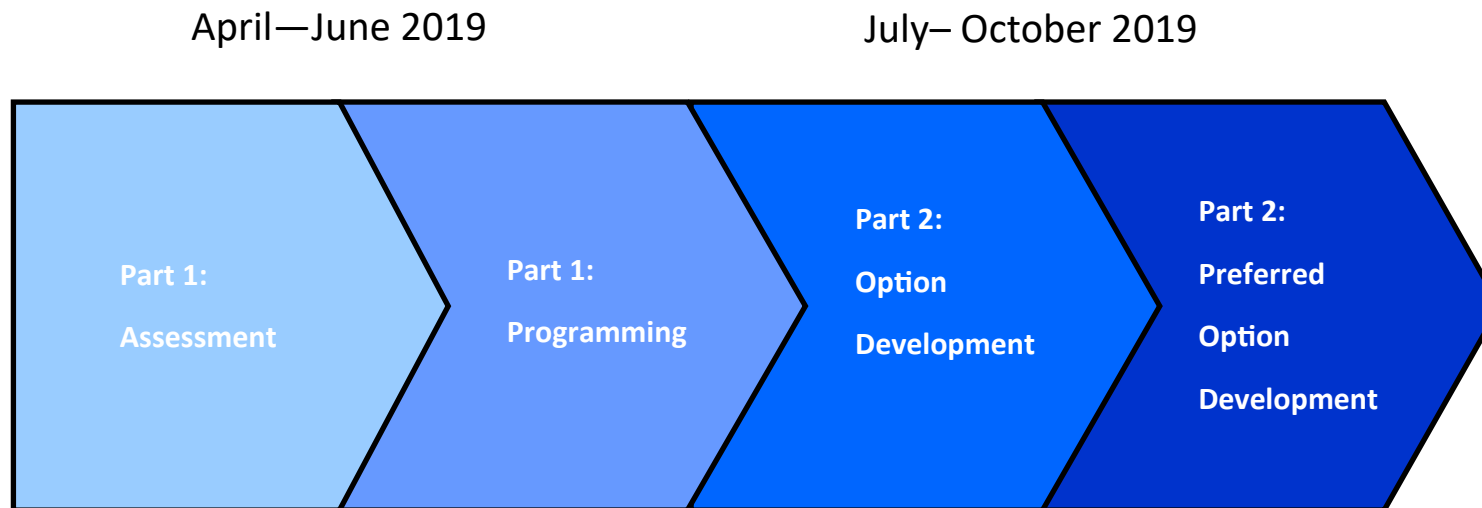
# PREFACE

This report is the fourth and final submission for the UIUC Library Redevelopment Plan Programming and Conceptual Design Study. It follows the Part 1: Programming Report and Part 2: Conceptual Design, 3 Scenarios submissions. Response and discussion of these previous submissions have guided the development of one preferred design scenario presented here. This scenario will serve as the basis for programming and space planning in the upcoming Library Redevelopment design project.

While reviewing the materials presented, please note the following:

- Drawings presented in this report are sketches intended for conceptual design use only. All measurements are approximate. Design work beyond the conceptual will fall outside the scope of this report and will require field verification of all measurements and conditions.
- Partition walls, restroom fixtures, and minimal furnishings are shown for scale and illustration of how larger programmed spaces may be arranged. They are not intended to indicate the final design of each space. Please refer to the 2009 Masterplan for additional programmatic details which will aid in the future schematic design of these spaces.
- Life safety analysis and plumbing code information is based on the 2009 Masterplan report. During design development of the building project, this analysis should be updated to meet governing codes at that time.
- Plans and sections reflect current decisions made by the University and design team. Programming, space planning, and design may be updated in the future to accommodate any desired changes hereafter.
- Review comments by UIUC and A/E responses are included in the Appendix as a reference for schematic design and design development phases.

## PROCESS DIAGRAM



- Review of previous studies
- Review of existing building conditions
- Visualization, program scenarios, and space prioritization workshops

- Category-level programming
- Adjacency studies
- Introduction of 3 options
- Blocking and stacking diagrams

- Presentation of 3 conceptual design options
- Conceptual MEP evaluation of options

- Revision and additional development of preferred option into conceptual plans and sections
- Revised MEP evaluation of preferred option

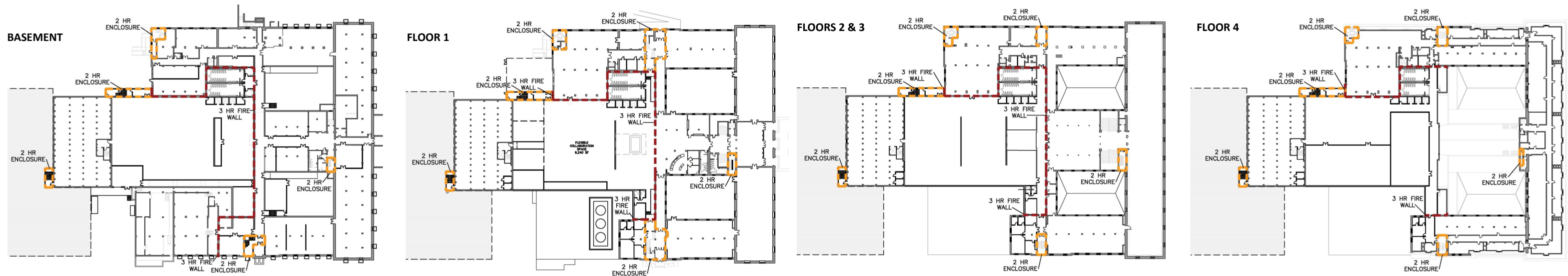
# BACKGROUND INFORMATION

## Summary of Conclusions from the 3 Scenarios

Review and discussion of the previously submitted design scenarios resulted in a series of conclusions and led to the development of the final scenario presented here. Other adjustments were made to accommodate the concurrent South Campus Instructional Facility design project. Major conclusions and adjustments included:

- The loading dock is to be located near the southwest corner of the infill addition and will serve the Library as well as the adjacent instructional facility.
- The courtyards will be infilled at the first floor level and made accessible to the public. It is preferred that these be enclosed by an atrium roof system at the first floor. A second pricing option will be provided for leaving them open-air. On the basement level, these spaces will be excavated to provide additional space for MEP equipment.
- The preferred location for cooling towers is on top of the Air-Conditioning Center roof. This will require structural analysis and likely some structural reinforcement. A screening wall will surround the towers to block view of these structures as well as associated noise.
- Main points of public access to the stacks will be adjacent to the central Hub and the Departmental Libraries. These points are located at the base of the wall of books (basement level) and at the west wall of the infill on the second floor. Additional access to the stacks will be available at other locations but may be limited to staff use or other levels of security as determined during schematic design.
- While visual connection between floors is desired, an atrium space (open to more than 2 floors) typically requires a smoke evacuation system at a high cost and would require additional footprint to house associated equipment. The atrium itself would also occupy space that could be used for other program. Therefore, the scenario presented limits openings between floors to that above the main circulation area between first to second floors. Further consideration of an atrium space using alternate fire-protection devices to meet code and life safety requirements may be examined during schematic design.
- Departmental Libraries were relocated to the second floor due to concerns that these services were too remote from the broader undergraduate population while located on the third floor. Placement of individual Departmental Libraries within this floor as shown in plan is tentative and may be adjusted upon further evaluation of the programmatic and spatial needs of each.
- Designated Flexible Instruction Spaces will be located at the first and third floors and will double as study/collaboration space when not being used for instruction. Additional instructional spaces may be accommodated within Departmental Libraries.
- Additional Reservable Meeting Space should be provided within Departmental Libraries and/or among the offices at the fourth floor.
- The fourth floor is a mix of staff, graduate student, and individual study spaces. These spaces may vary in acceptable noise levels and should be separated acoustically using slab-to-slab partition walls and appropriate acoustical finishes.
- Reflection Rooms and Lactation Rooms would benefit from being close to water sources. Size, number, and configuration of these rooms is to be determined, but location has been suggested on plans near the Gender-Neutral Restrooms on the first, second, and third floors.
- Due to the current conceptual level of planning, individual offices will not be shown in plan. It is important to note that staff offices for Departmental Library staff should be provided within or adjacent to their corresponding library departments in lieu of being located at the fourth floor.
- It is also important that portions of the building be securable during evenings and weekends while other areas are accessible at all (or extended) hours. This has been preliminarily addressed through the grouping of activities that may generally remain open on the first floor and portions of the upper floors that can be secured by locking existing or new doors. For example, on the fourth floor, extended-hour spaces (the Graduate Commons and Individual Research Space) are grouped within the infill addition and may remain open while corridors leading to the office areas may be largely secured. Elevator locks and other automated controls may also be employed for these purposes. A full security plan should be developed in following design phases.
- An option for a new 200 seat General Assignment Classroom / Lecture Hall is provided at the northwest corner of the plan. At this time, it has not been determined if this program element will be required at this location.
- Site design and reconfiguration of the north, south, and east entrances into to the building should include universal access. These will be developed during schematic design and may overlap with adjacent projects. For this conceptual-level scenario, ADA access is specified as a placeholder at these locations.
- A book drop shall be located at the northwest corner of the building, adjacent to the remaining parking area.





### Life Safety

A 3 hour fire wall must separate the existing building from the new addition. This wall must be continuous from foundation to the roof without horizontal offsets. In the final conceptual design scenario, this wall is located near the west edge of the original building to remain. At the first floor and basement, the main north-south corridor is located east of this line. At upper floors, the main north-south corridor is located west of this line. In order to open up this fire wall and allow views and passage between the original building and addition, overhead and oversized fire-rated doors may be utilized.

Existing stairways intended for egress must be enclosed with fire-rated enclosures and areas of rescue assistance provided at each. This includes all existing stairs except for the historic main stair between floors 1 and 2 and the existing communicating stairs within the 6th stacks. Additional egress stairs have also been added at the west end of the plan to meet egress and life safety requirements.

### Plumbing Code

The proposed plans accommodate current deficiencies in plumbing fixture counts with additional large restrooms located in the new addition. Gender-neutral restrooms have also been designated at each floor. Several existing restrooms that are not ADA-compliant have been replaced with other programmed areas.





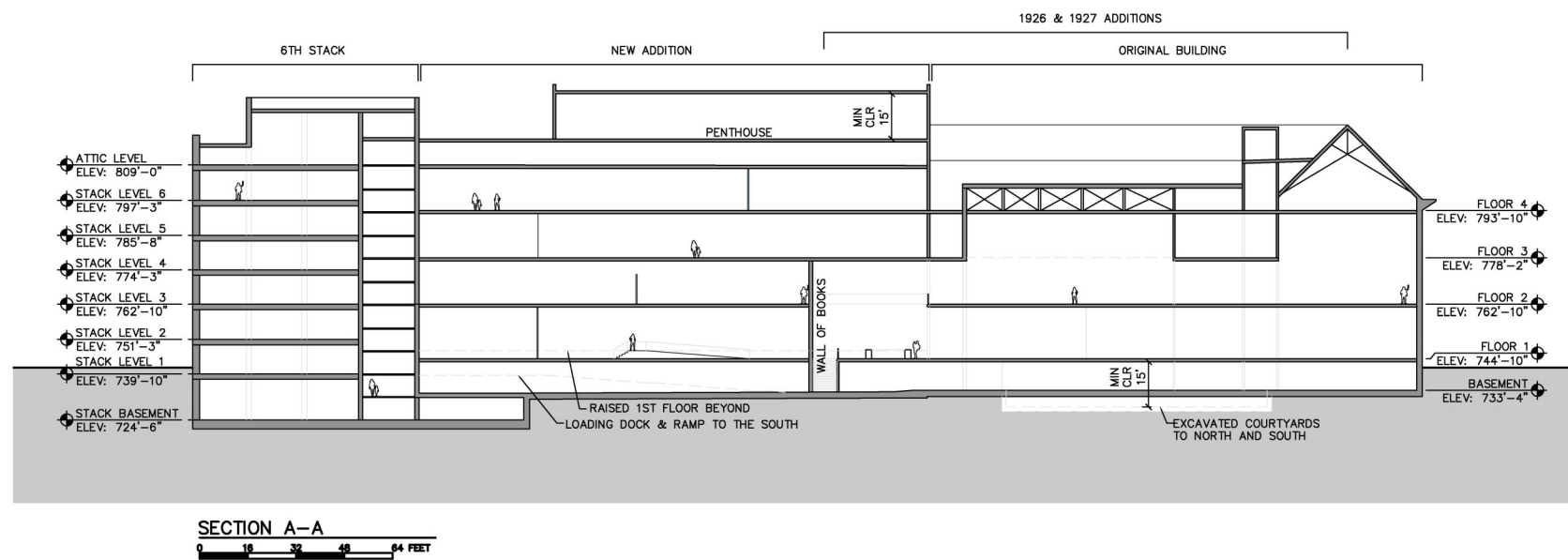
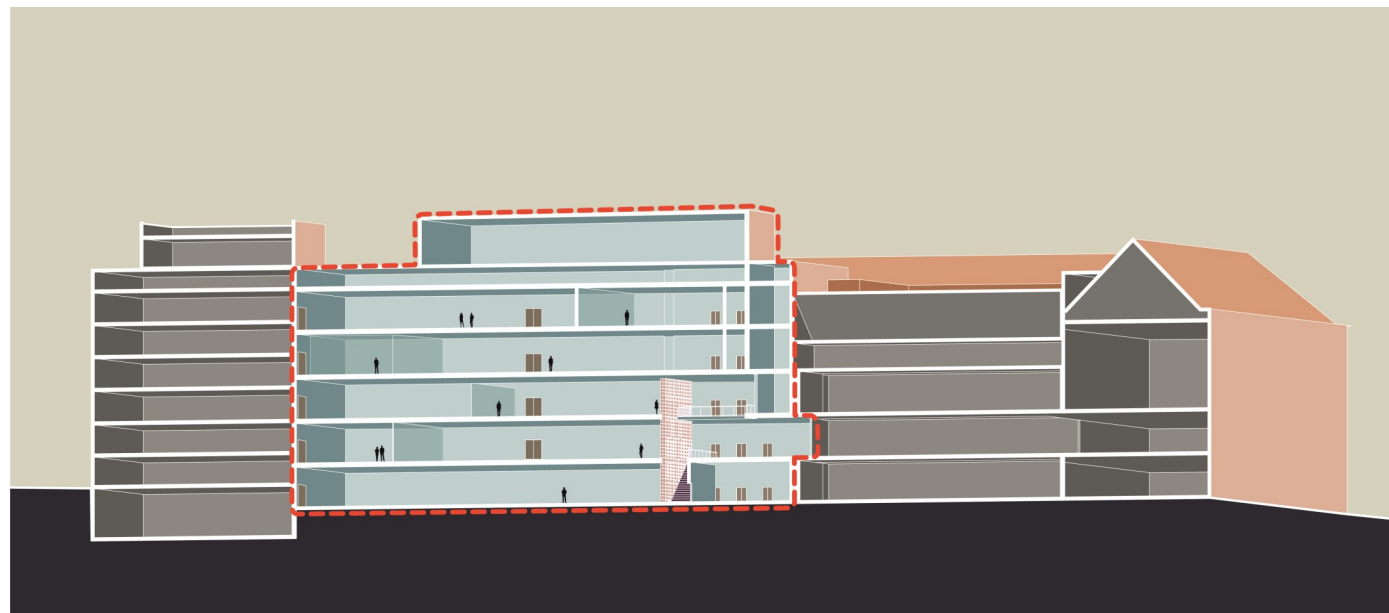
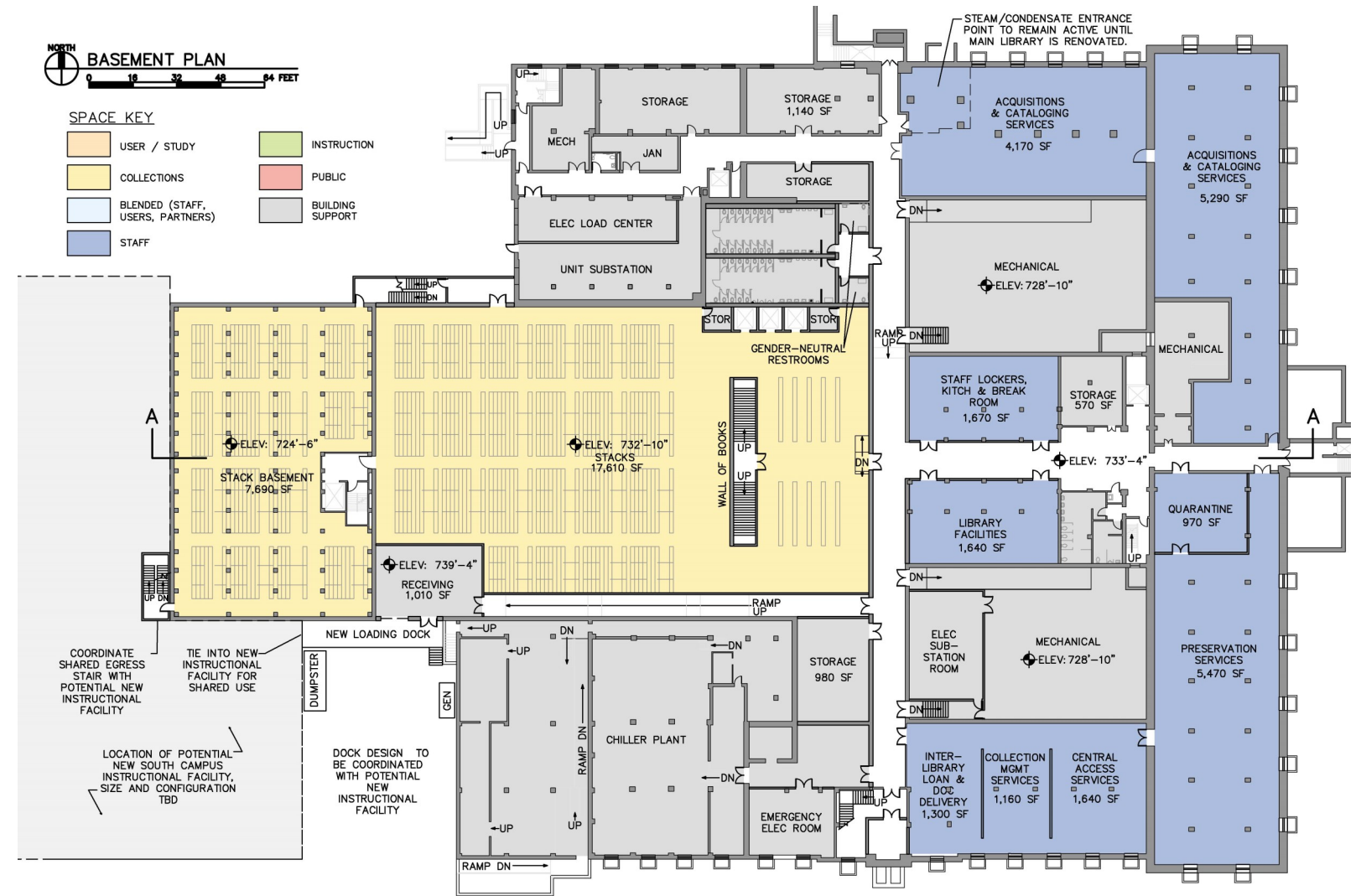
Conceptual sketch, south elevation of the new infill addition.



# FINAL SCENARIO

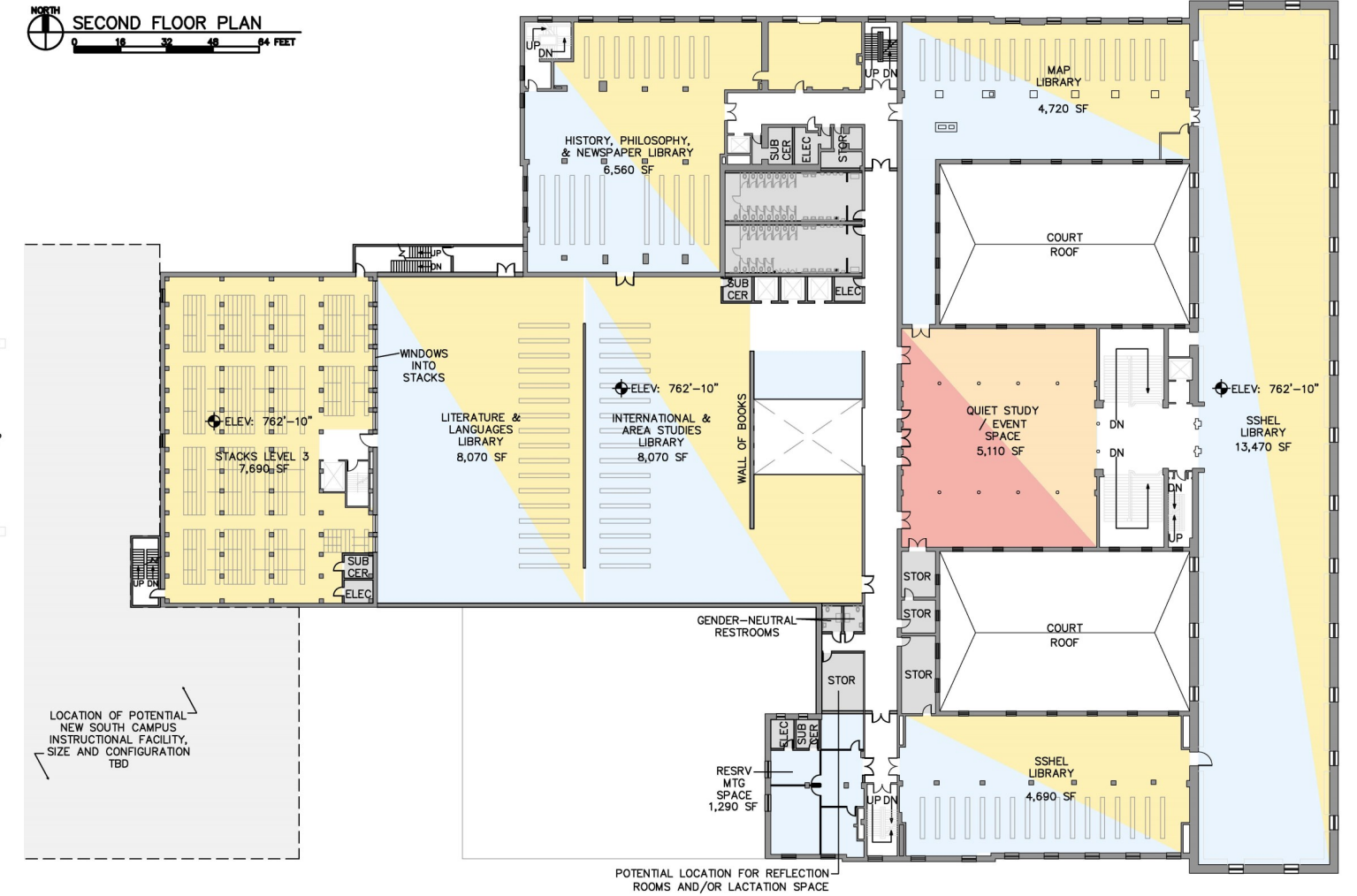
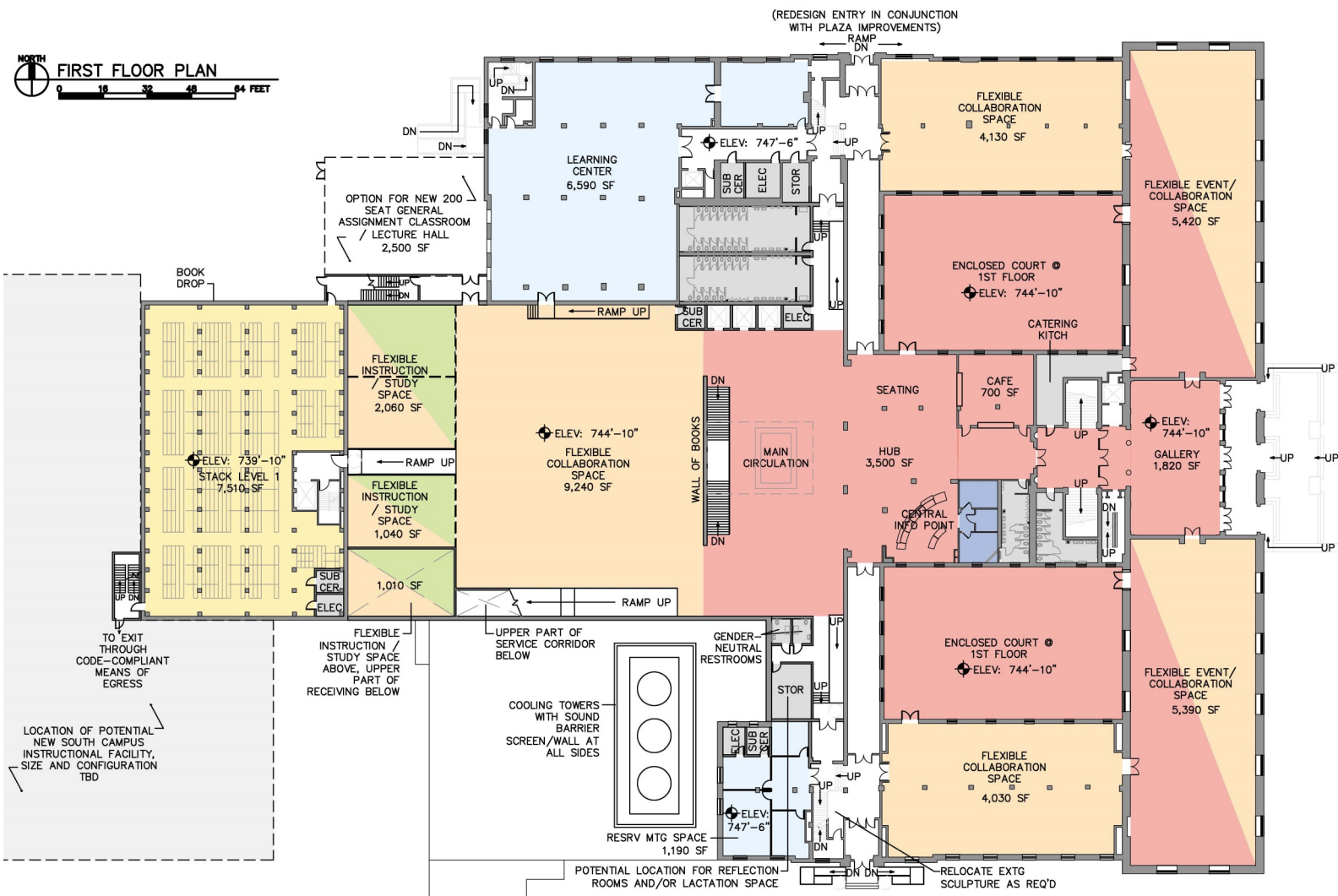
In this scenario, the first floor is reserved primarily for lively collaboration, group study, and public event functions. Courtyards are enclosed at the first floor for spill over space from adjacent areas and allow more direct circulation between spaces that are otherwise disconnected. Within the Hub, the first and second floors are connected via a 2-story space that surrounds the main circulation area. Along the west side of this space, a wall of books stretches from the basement through second floors, acting as a central feature of the Library and as a backdrop for the Hub. This wall will contain browsable collections and should be constructed using salvaged historic stacks from the original building. Departmental Libraries are collocated at the second floor, allowing adjacency and ease of access to users on first and third floors. The Media Center, Scholarly Commons, and Cooperative Research Commons are located on the third floor while quiet study areas and staff offices are on the fourth, isolated from noise on lower levels. Main access points to the stacks will be from the first and second floors while secured access is available at all floors. The loading dock has been moved to the southwest corner of the building with the intention of sharing this space with the future instructional facility. Relocation of this service area to the south elevation of the building will allow the north elevation to be further beautified and become a more prominent entrance to the library.

**Please Note:** Not all floors of the 6th stack are shown in plan, but generally repeat from basement through 6th level.





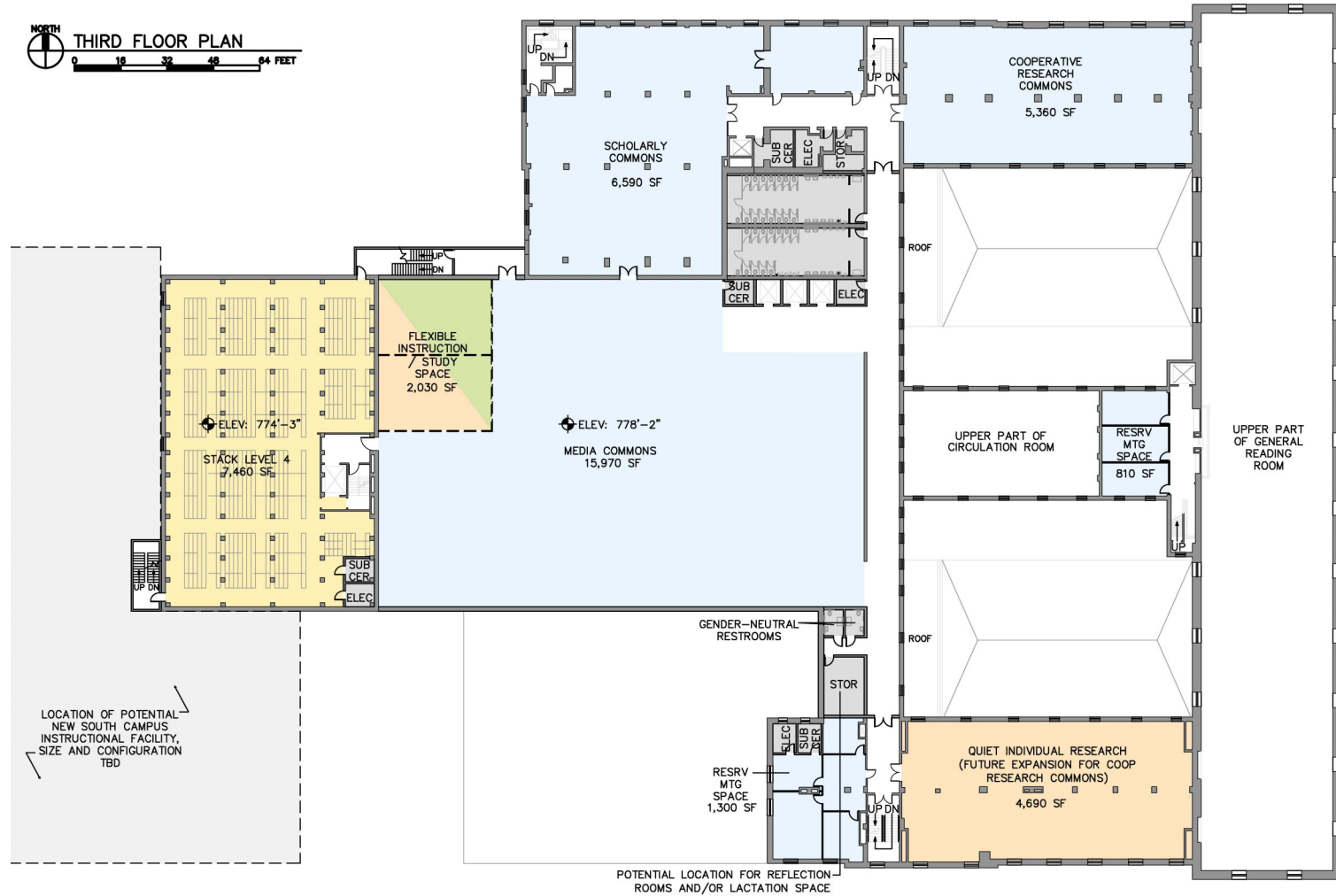
# FINAL SCENARIO



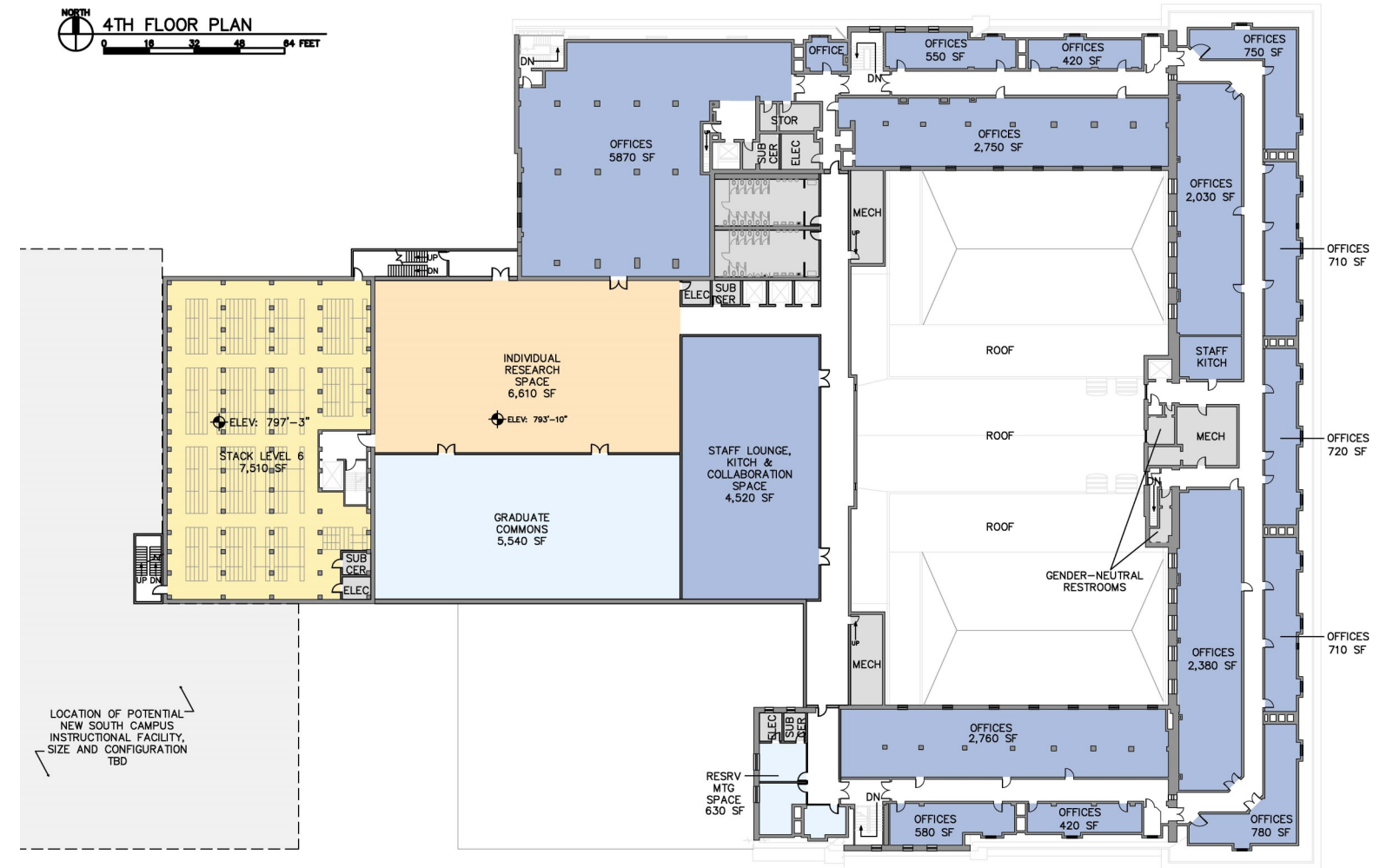
**SPACE KEY**

<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> USER / STUDY	<span style="display:inline-block; width:15px; height:15px; background-color:lightgreen; border:1px solid black;"></span> INSTRUCTION
<span style="display:inline-block; width:15px; height:15px; background-color:yellow; border:1px solid black;"></span> COLLECTIONS	<span style="display:inline-block; width:15px; height:15px; background-color:lightcoral; border:1px solid black;"></span> PUBLIC
<span style="display:inline-block; width:15px; height:15px; background-color:lightblue; border:1px solid black;"></span> BLENDED (STAFF, USERS, PARTNERS)	<span style="display:inline-block; width:15px; height:15px; background-color:lightgrey; border:1px solid black;"></span> BUILDING SUPPORT
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**THIRD FLOOR PLAN**

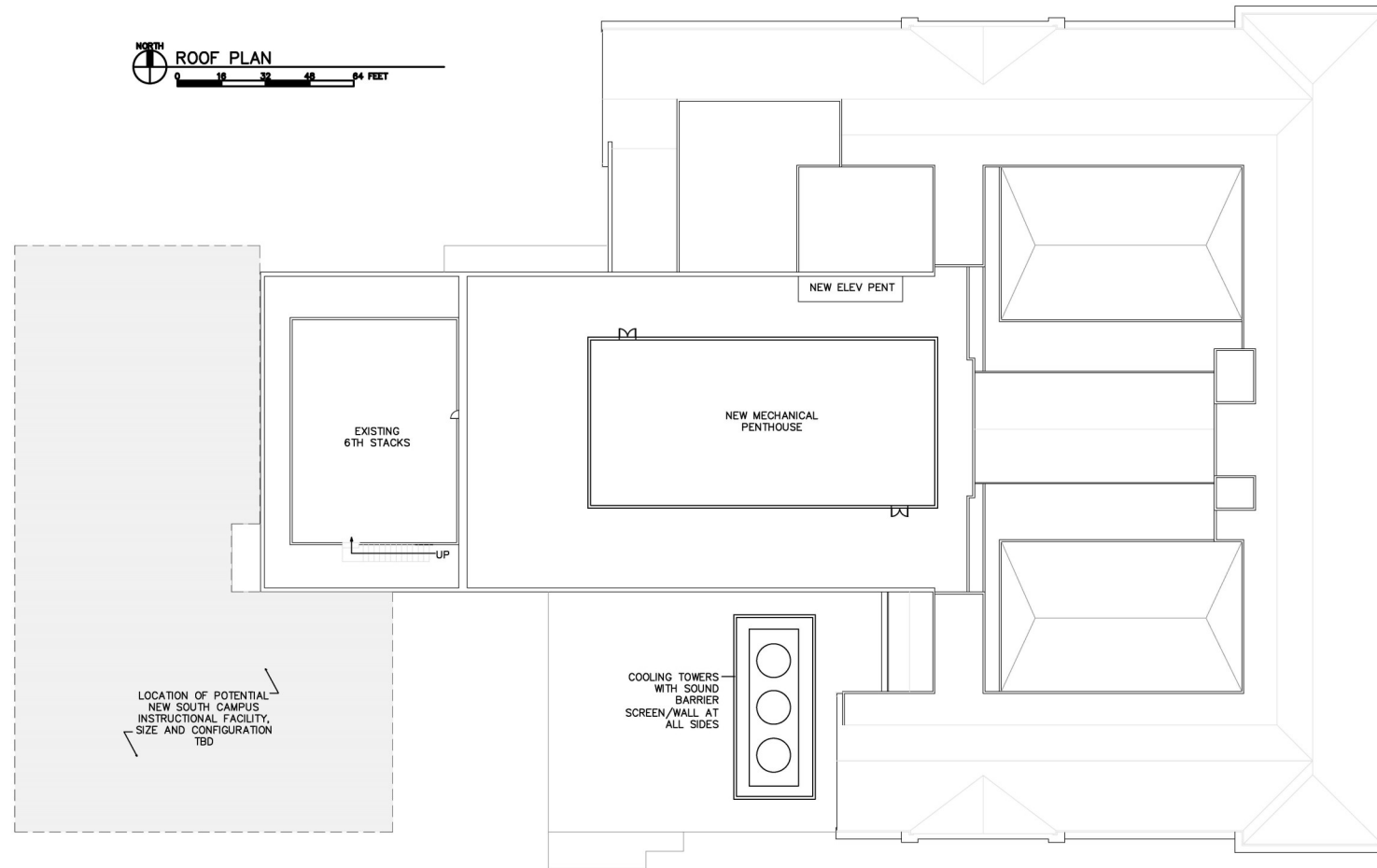


**4TH FLOOR PLAN**





# ROOF AND SITE PLANS



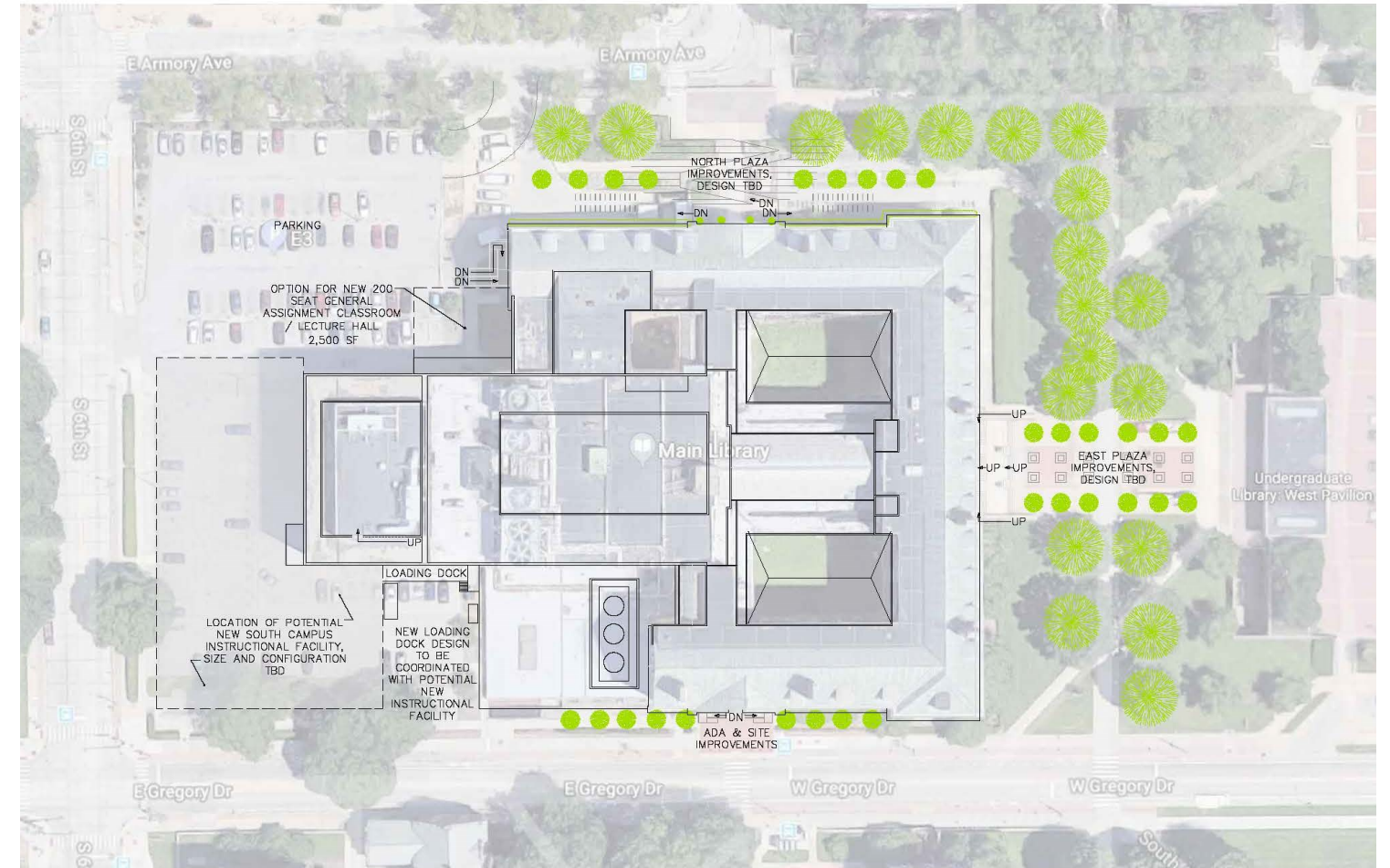
## Roof Plan

Updates to the Main Library building and the new infill building will require extensive updates and additions to the mechanical, electrical, plumbing, fire protection, and IT systems. While a portion of MEP/FP/IT equipment may be placed in the basement level, a new penthouse will be required to house additional equipment.

The preferred location for cooling towers is at the roof of the Air-Conditioning Center. This is considered the most efficient and cost effective solution and will not interfere with the location of the new South Campus Instructional Facility. These must be enclosed by a screening wall, approximately 15' tall. See the MEP analysis for additional discussion.

An additional penthouse will be required for the new elevators near the northeast corner of the infill addition.

It is preferred that the east courtyards be enclosed at the first floor with an atrium/glass roof, but an optional deduct will be priced to leave these open to the outdoors.



## Site Plan

Major changes to the existing site include the location of the new South Campus Instructional Facility at the southwest corner of the plan, an option for a new general assignment classroom / lecture hall at the northwest corner of the building, and relocation of the loading dock to the south side of the building.

Improvements to the site also include redesign of the north and east plazas, making these the most prominent entries into the building. ADA improvements to the north and south entrances will also be required. Improvements to Gregory Drive are also planned in a separate project which should be coordinated with the Library Redevelopment project.

Site design and plaza improvements will be explored and developed further in a separate design project.

# PROGRAMMED AREAS

Space	Programmed Area	Existing Area (NSF)	Final Scenario (NSF)	Notes	
<b>Collections</b>					
	Main Library	TBD based on collections strategy	195,646	70,180	All stacks listed to be high-density compact shelving. Additional stacks to be included within dept libraries and other browsable stack areas.
	Departmental Libraries*	TBD based on disciplinary needs			*SF shifted to study and collaboration areas.
	International & Area Studies		5,673	8,070	All departmental libraries to be located on the second floor. Location of individual departments within that floor may be adjusted upon further evaluation of needs.
	History, Philosophy, & Newspaper		10,967	6,560	
	Literature & Languages		18,187	8,070	
	Map Library		3,433	4,720	
	Social Science, Health & Education		18,993	18,160	
<b>Anchor Spaces</b>					
	Learning Center	5K-10K	2,900	6,590	Spillover to study/collab space
	Media Commons	15K-30K	8,000	15,970	Spillover into adjacent Flexible Instruction / Study Space
	Scholarly Commons	3.5K-5K	5,360	6,590	Important Adjacencies: Media Center and Coop Research Commons
	Cooperative Research Commons	3.5K-10K	N/A	5,360	Important Adjacencies: Scholarly Commons, May expand into Quiet Individual Research Space to the south
	Graduate Commons	3.5K-10K	N/A	5,540	
<b>Public / Event Spaces</b>					
	Entry Hub	2.5K-3.5K	N/A	3,500	
	Café	Variable, approx. 25/person	N/A	700	
	Gallery		1,820	1,820	
<b>User Spaces</b>					
	Flex Instruction/ Study Space	1K-14K	2,480	5,160	May also be accommodated within Department Libraries
	Flex Quiet Study/Events		N/A	5,110	
	Flex Collaboration Space	Variable	N/A	17,400	Likely Noisy - 1st floor
	Flexible Event / Collaboration Space	Variable	N/A	10,810	
	Individual Research Space	TBD, approx. 35-40/seat	Carrels	6,610	Upper floors, quiet area
	Quiet Individual Study & Collab		N/A	4,690	
	Reservable Meeting Space		5,649	5,220	Reservation protocols TBD. Additional space may be added within Dept Libraries and 4th floor office areas.
	Reflection Rooms and Lactation Rooms		2 units	See Plans	Location near water source preferred. Potential locations indicated on plans.
<b>Staff</b>					
	Collaboration Space	TBD, approx. 25-30/seat	N/A	4,520	Non-user-facing staff to be located on 4th and bsmt levels Near staff offices, including lounge and kitchenette. Must be acoustically isolated from adjacent offices or study space.
	Offices Proposed for 4th Floor		15,053	21,590	
	Basement Offices/Services				
	Preservation Services		3,200	5,470	
	Acquisitions & Cataloging		8,890	9,460	
	Collection Management Services		1,620	1,160	Near Receiving, Collocate with: Central Access Services and Interlibrary Loan & Document Delivery
	Central Access Services		N/A	1,640	Near Receiving, Collocate with: Collection Management Services and Interlibrary Loan & Document Delivery
	Interlibrary Loan & Document Services		750	1,300	Near Receiving, Collocate with: Collection Management Services and Central Access Services
	Library Facilities		1,580	1,640	Near Receiving.
	Receiving		920	1,010	



# PHASING

Due to the strong relationship between their programs and spaces, phasing for the Main Library and Special Collections Redevelopment Plans shall be developed in tandem. While detailed analysis of phasing was conducted in the 2009 study, this project includes a general analysis that may be used for conceptual-level planning.

The following phasing plan is largely dependent on MEP requirements—maintaining environmental controls in occupied spaces, replacement of outdated equipment, and installation of new mechanical spaces and equipment for the new infill addition. Other considerations include space for program elements, life safety, access, and existing building conditions.

The following table includes 5 phases which mostly address only one building or portion of a building within each. Phase 2 includes activities at both the Special Collections Research Center and the Main Library with the intention of hastening this process.

Activities listed within each phase are in listed in a suggested order of succession but may be reordered in future phasing plans.

See MEP Analysis for additional information.

## 1. UTILITY WORK

Item No.	Building	Description	Notes
1a	ML	Architectural work associated with new cooling tower Location - structural support at A/C Center roof (or pad/foundation if on ground), screening wall, and access.	
1b	ML	Install new cooling towers.	See MEP Analysis
1c	ML	Extend steam and condensate to new entrance location.	See MEP Analysis

## 2. COMPLETE SPECIAL COLLECTIONS RESEARCH CENTER & MEP WORK AT MAIN LIBRARY

Item No.	Building	Description	Notes
2a	SCRC	Move all existing collections - to either storage or a small portion to the Main Library stacks.	
2b	SCRC	Interior and exterior demolition work per construction documents.	Scope TBD
2c	SCRC	Construct new Special Collections Research Center per construction documents.	Scope TBD
2d	ML	Buildout new mechanical rooms at existing courtyards - excavation and construction, creation of vertical MEP chases.	See MEP Analysis
2e	ML	Install and extend steam and chilled water as described in MEP Analysis.	See MEP Analysis
2f	ML	Construct both new access stairs to 6th stack.	

## 3. RELOCATE MAIN LIBRARY FUNCTIONS INTO EXISTING BUILDING TO REMAIN

Item No.	Building	Description	MEP Work
3a	ML	Move existing collections - retain portion on site in existing building to remain, move remaining to storage.	
3b	ML	Relocate library services and functions affected by the demo & construction work into existing building to remain relatively unaffected by construction of Infill Addition (including 6th stack).	
3c	ML	Other temp construction requirements TBD during creation of construction documents.	

## 4. COMPLETE MAIN LIBRARY INFILL ADDITION

Item No.	Building	Description	MEP Work
4a	ML	Construct new Main Library Infill Addition per construction documents.	
4b	ML	Install new MEP eqpt to serve Infill Addition.	See MEP Analysis
4c	ML	Extend utilities to Infill Addition.	See MEP Analysis
4d	ML	Move collections into infill addition and 6th stacks.	
4e	ML	Move library services and functions into the new Infill Addition.	

## 5. RENOVATE EXISTING MAIN LIBRARY BUILDING

Item No.	Building	Description	MEP Work
5a	ML	Renovate existing Main Library per construction documents.	
5b	ML	Install new MEP eqpt required for existing building renovation	See MEP Analysis
5c	ML	Relocate services and functions into final locations.	

# APPENDIX

MEP Analysis

UIUC Review Comments





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## UNIVERSITY OF ILLINOIS

University of Illinois Main Library

IMEG #19000691.00

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**Mechanical/Electrical Master Plan Update  
for  
University of Illinois Main Library  
Champaign, Illinois**

**IMEG #19000691.00  
September 5, 2019**

**A. Introduction**

1. The following is a master plan update for mechanical, electrical, plumbing and technology systems at the Main Library.
2. The goals for the master plan were to work with the University of Illinois and JLK Architects to refresh the 2009 Master Plan for a complete renovation of the Main Library. This plan included:
  - a. Recommending systems for new and renovated spaces.
  - b. Recommending space requirements.
  - c. Developing phasing plan.
  - d. Systems should follow University of Illinois Standards.
  - e. Systems should provide a 25-year+ life expectancy.
3. The existing building contains many systems well beyond their useful life and lack capacity for expansion. Many components are in locations that prohibit appropriate maintenance and repair.
4. The systems discussed in this master plan are not intended to limit project designers and dictate systems and concepts. The systems chosen are conceptual in nature for the purpose of developing updated phasing plans, project budgets, load estimates, and approximate equipment and room sizes.
5. Final equipment, room sizes, exact duct and piping routing, and chases will be the responsibility of the project designers.
6. The loads given are an estimate based on envelope and equipment assumptions for the purposes of estimating equipment sizes.
7. The development of this plan understands there are multiple systems concepts available to designers. Technology advances may also provide additional opportunities to project designers. The project designers may propose system alternates and discuss feasibility with the University as individual projects develop.

**B. Systems**

**1. Overview**

**a. Mechanical**

- 1) The systems presented include a chilled beam system, variable air volume, and hydronic heating such as perimeter radiation that would in compliance with all UIUC standards. Maintenance should generally be limited to mechanical rooms located both in the basement and in an Infill mechanical penthouse. Refer to the master plan drawings for locations.
- 2) A combination of variable air volume and chilled beam systems are provided for the existing Library structure given the historic nature of the facility to closely replicate the existing systems for these types of spaces.
- 3) A chilled beam air handling unit(s) with active chilled beams is proposed for the new West Infill structure for Second, Third, and Fourth Floors. This type unit is also being proposed for two units in the Main Library.
- 4) For the Infill addition, the large open Collaboration spaces on First Floor with high ceilings would be served by displacement air distribution systems.
- 5) Energy recovery would be used where required by code and for the chilled beam units.
- 6) Humidification will be provided in new construction only where contents dictate. Those areas are outside this Main Library master plan evaluation. While a dedicated unit may be required for the Preservation Services area, there are no special humidification requirements for the Main Library.
  - a) Humidification is not recommended in the existing Main Library building. The existing envelope and recently replaced double pane windows will most likely remain. The existing envelope that would remain unchanged does not provide a satisfactory vapor barrier to allow humidification.
- 7) The existing Library AC Plant will remain. The existing cooling towers located on top of the stacks will be replaced to permit proposed demolition of Stacks 1 through 5.
- 8) Any proposed systems, including proposed manufacturers, will comply with UIUC Standards for all disciplines.

**b. Fire Protection**

- 1) Refer to the Main Library section narrative.

**c. Plumbing**

- 1) The design intent should have one central domestic water heating plant in the North Courtyard mechanical room.

Mechanical/Electrical Master Plan Update  
for University of Illinois Main Library  
IMEG #19000691.00  
September 5, 2019  
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- 2) All existing plumbing piping, equipment, and fixtures will be replaced.
  - 3) Low flow fixtures should be used throughout the facility.
  - 4) Local water heater equipment is recommended for restroom groups, as restroom groups are spread throughout the building.
  - 5) New sanitary waste and storm piping above stacks should be limited. Drip pans must be provided on piping in Collections areas.
- d. Electrical
- 1) New primary distribution system for the complex will be provided.
  - 2) All new electrical services, panels, receptacles, wiring, etc. for the buildings will be provided.
  - 3) All lighting in the buildings will be replaced.
  - 4) Historically deemed light fixtures should be refurbished or replaced by historically accurate replicas.
  - 5) The fire alarm will be upgraded to the new Pyrotronics XLSV panel and a radio repeater provided in the Main Library fire alarm system. All devices should be replaced.
  - 6) New emergency generator for the Library will be provided.
- e. Telecommunications
- 1) New telecommunications cabling will be installed throughout the facilities.
  - 2) New communication equipment rooms (CER) will be built throughout the facilities.
  - 3) A new main terminal room will be constructed.
  - 4) New copper and fiber backbone cabling will be installed to each CER from the main terminal room.
- f. Security
- 1) All current security systems will be replaced with new integrated access control systems, video surveillance systems, book security systems, and intrusion detection systems.
  - 2) A new standalone integrated access control system, video surveillance system, and intrusion detection system will be installed in the Special Collections area.
  - 3) New emergency phones will be strategically placed throughout the facilities.
  - 4) New paging systems will be installed throughout the facilities.
  - 5) A new emergency band radio repeater should be installed to support fire department communications as well as other emergency responders.
- g. Audio/Visual
- 1) New A/V systems will be installed in all new classrooms, conference rooms, and other special media rooms.

- a) Cameras will connect to new DVRs (digital video recorder) or NVRs (network video recorder). DVRs and/or NVRs will be IP based to allow for remote connection and viewing via the campus network. The requirements for this system have not been approved by the University at this time.
  - b) The DVR / NVR will be sized to provide simultaneous and continuous recording of all 16 inputs at 15 FPS for 14 days at 4 CIF resolution.
  - c) New Category 6, 4 pair cabling will be installed to each camera to support video, power, and future migration to IP cameras.
  - d) NVT or similar products will be used to convert video from UTP to BNC and provide power.
  - e) Use University Standards for approved manufacturers.
  - f) Consideration should be given to a full IP-based H.264 megapixel camera system recorded with an open architecture software NVR solution with full GUI. This will provide ultra-high resolution images with minimized network bandwidth usage and ease of integration into other systems.
  - g) The CCTV system should be integrated into the access control system for video event tagging and central GUI management.
  - h) This system should tie into the University's central security system.
- 2) Intrusion Detection System
- a) A new intrusion detection system will be installed with duress buttons, glass break detectors, and motion sensors. A keypad will be installed at selected doors to allow for activation and deactivation of the system.
  - b) This system will be an addressable system, and each room with intrusion detection devices should be on its own zone for fast identification of trouble areas.
  - c) This system should be fully integrated into the access control system for event tagging and central GUI management.
  - d) This system should tie into the University's central security system.
- 3) Emergency Telephones
- a) New emergency phones should be strategically installed throughout the facility.
  - b) Use University standards for approved emergency telephone manufacturers.
  - c) These phones should be cabled back to the nearest CER.
  - d) These phones should be fully integrated into the access control system for event tagging and central GUI management.





- 4) Public Address / Overhead Paging System
  - a) New ceiling speakers will be required to connect to a new paging control system. New amplifiers will be provided as needed to support new speakers.
  - b) A dedicated microphone station will be provided at the main receptionist's area(s).
  - c) All amplified paging cabling will be installed within its own dedicated pathway per NEC requirements.
  - d) Consideration should be given to using an IP-based paging system for providing supervised emergency notification and ease of expansion. This system should use open source IP protocols like Cobranet, Audinate, or Ethersound.

## 2. Replacement Cooling Towers

- a. The existing cooling towers currently located on the Stacks roof will be removed. These towers will be replaced. There are three potential options for the location of the new towers:
  - 1) Option #1: Locate new towers on the roof structure of the existing AC Plant. There would be two distinct orientation options at this location. Refer to the Cooling Tower section below. The following would require further evaluation during design:
    - a) Structural modifications to support towers.
    - b) Enclosure design to screen from view from adjacent Library and Infill addition.
    - c) Acoustical considerations.
    - d) Tower locations would be designed to keep the access hatch on the roof fully functional for one option and require modification for the second option
    - e) This location became the best option given the master planning for the proposed Instructional Facility west of the Sixth Stack.
  - 2) Option #2: The roof of the new Infill addition. The following would require further evaluation during design:
    - a) Requires Library AC Plant to be shut down during the winter. Review of timeline with UIUC utilities would be required.
    - b) Temporary relocation of towers from Stacks roof to grade.
    - c) Number of relocated towers coordinated with UIUC utilities.
    - d) Elevation height of relocated towers and structural support so that towers will be above condenser water connection of chillers.
    - e) Shutdown duration to allow temporary connections to AC Plant.

- f) Temporary Tower Location: Loss of space and impact to the facility for temporary cooling tower locations.
  - g) Freeze protection of condenser water piping. Infill addition will likely be 18 to 24 months and two winters.
  - h) Consideration for not using Library AC Plant for winter cooling and draining the temporary towers in the winter.
  - i) Temporary tower location would allow purchasing the new cooling towers and installing them on the roof structure during normal construction process of the Infill addition.
  - j) The temporary towers then would be removed, along with any temporary condenser water piping, to the Infill roof when the structure is ready.
  - k) Note: While this option is possible, we do not believe this is the best option given the proposed project phasing and the following:
    - (1) There will be additional cost for this option.
    - (2) Loss of parking space on the south side of the Library.
- 3) Option #3: Directly south of the Sixth Stack.
    - a) This is not desired due to the proposed location of the Instructional Facility and south side of the Library loading dock area.
    - b) This also impacts the proposed south loading dock.
    - c) This is the only other viable option for the towers and would be considered as the last option.
  - 4) Refer to Phasing narrative. Option #3 has not been included in this narrative.
- b. Condenser water routing would be as follows:
    - 1) Option #1: Directly through the roof of the AC Plant.
    - 2) Option #2:
      - a) Permanent piping would be within a chase on the south side of the Infill addition and back to the AC Plant.
      - b) Temporary piping would be above grade into AC Plant. This assumes draining of towers over the winter.



- c. The new cooling tower options are based on two options using a Composite Cooling Solutions Models 2FT-3634 or 3FT-2830. The new towers include capacity for the existing Library AC Plant and future capacity.
- d. Orientation options identified below would be determined by the UIUC-desired orientation due to many factors. It is assumed the Option #1 location on the AC Plant roof would be selected.
  - 1) Orientation Option #1: North/south on roof, Model 2FT-3634, 2-cell, with a proposed size of 74'L x 36'W x 35'H.
  - 2) Orientation Option #2: East/west on roof, Model 3FT2830, 3-cell, with a proposed size of 84'L x 32'W x 33'H.
    - a) Orientation Option #2 would require modifications to the equipment access hatch on the roof but would offer the best overall access to the tower from all sides and allow a greater distance from the proposed Infill addition.
  - 3) Sizing Criteria
    - a) 16,500 GPM
    - b) Current capacity needed: 9,900 GPM
    - c) Future capacity desired: 6,600 GPM
    - d) Wet bulb = 80°F (5°F approach)
    - e) Cooling Tower Supply (CTS) = 100°F
    - f) Cooling Tower Return (CTR) = 85°F
- e. Final sizing and design conditions to be coordinated with UIUC Utilities and verified during design of the Infill addition.

### 3. Utilities

- a. Steam
  - 1) The design intent is to have one single building steam source and one facility steam-to-hot water generation plant for the entire facility. The Phasing narrative below have been written based on this strategy.
  - 2) Provide a new steam and pumped condensate main from the steam tunnel north of Armory Avenue. Refer to Phasing narrative.
    - a) Option #1: Direct buried double wall conduit system for steam and pumped condensate routed to the north side of the facility. Final location to be determined during design.
    - b) Option #2: Shallow tunnel for steam and pumped condensate routed to the north side of the facility. Final location to be determined during design.

- 3) Steam will be extended into the building from this new north steam entrance location. Mains would be extended to both the proposed North Courtyard mechanical room and to backfeed existing risers serving the Main Library. Refer to Phasing narrative.
- 4) A new condensate return station located in the North Courtyard mechanical room will return condensate to the campus system. A return station at the steam entrance room would also be required.
- 5) Utility Phasing Note: Routing and location of the building steam main would be dependent on final project phasing and has been written assuming the Courtyard mechanical rooms would be completed as noted in the Phasing narrative.
- 6) Utilities within the tunnel or direct buried are as follows:
  - a) 14" S20
  - b) 3" pumped condensate

#### b. Chilled Water

- 1) Base Scope: Extending new mains sized for the entire facility from the Library AC Plant.
  - a) Optional: Provide new redundant direct buried mains from the loop on the north side of the Library. This would be determined by UIUC Utilities if a redundant source is desired.
- 2) Chilled water would be extended to both Courtyard mechanical rooms, new Infill mechanical penthouse, Sixth Stack, temporarily backfeeding the existing Main Library facility, and backfeeding AHU-10 serving Library 220, which will remain. Refer to the Phasing narrative.
  - a) Note: When the existing Library renovation occurs, the risers up to the Fourth Floor would be removed.

#### c. Domestic Water

- 1) The design intent is to have one domestic water service for the facility.
- 2) An 8" new main sized for both domestic water and fire protection services will be extended into the building. Final location to be determined by UIUC Utilities during design.

### 4. New West Infill addition

#### a. Mechanical

- 1) Air Handling
  - a) Desired space conditions:
    - a. All Spaces: Cooling - 75°F Heating -72°F





- b) Due to programming requirements, the mechanical spaces are limited to a mechanical penthouse for the West Infill addition. Refer to mechanical MP AHU zoning sketches.
- c) Space heating and cooling for the West Infill will use two methods for HVAC.
  - a. Given the height of the First Floor, a displacement ventilation air handling unit located in the mechanical penthouse is being proposed. While the penthouse mechanical room complicates duct routing a bit, the application makes sense given the master plan layout.
  - b. A chilled beam air handling unit to serve the basement, Second, Third and Fourth Floors.
- d) Exterior zones will contain hot water panel radiation for public spaces and standard wall-mounted radiation for office spaces.
- e) The displacement ventilation unit will contain the following equipment:
  - a. MERV 8 (30%) pre-filters
  - b. MERV 13 (65%) filters
  - c. Air blender (if space allows)
  - d. Energy recovery wheel
  - e. Fan systems ranging in capacity from 30,000 to 50,000 CFM, pending final space loads
  - f. Hot water heating coil(s)
  - g. Chilled water cooling coil(s)
- f) The chilled beam unit will contain the following:
  - a. MERV 8 (30%) pre-filters
  - b. MERV 13 (65%) filters
  - c. Enthalpy energy recovery wheel
  - d. Hot water hot water preheat coil
  - e. Chilled water coil(s)
    - (a) Two coils in series to obtain the proper design conditions.
  - f. Hot water reheat coil
  - g. Final filters
  - h. Approximately 40,000 CFM supply and return fan(s) sized for full economizer.
- g) Zone Controls
  - a. Each individual displacement zone will contain a space sensor to control zone temperature.

- b. Each individual chilled beam zone will contain a space temperature sensor, humidity sensor, and carbon dioxide sensor.
- 2) Displacement Ventilation Distribution
  - a) Terminal air boxes with reheat coils will be used to serve this space.
  - b) Displacement ventilation diffusers will be used at the perimeter of the zone.
  - c) Each room will be an independent cooling zone.
- 3) Chilled Beam Distribution
  - a) Active chilled beams would be used for the basement, Second, Third and Fourth Floors.
  - b) Each room will be an independent active chilled beam cooling zone.
- 4) Steam and Condensate
  - a) No steam or condensate scope. Refer to the Utilities section of the narrative and phasing plan.
- 5) Chilled Water
  - a) Chilled water will be extended to the mechanical penthouse from AC Plant mains in the basement. Refer to the Utilities section of the narrative.
- 6) Heating/Reheat
  - a) Provided by one central system located in the North Courtyard mechanical room in the basement of the existing Library This allows the project to be phased.
  - b) Two individual steam-to-water heat exchangers for both heating water and reheat water, including duplex heating water pumps for each system, will provide heating/reheat water for the air handling unit coils, terminal equipment, reheat coils, and panel radiation.
- 7) A new building automation system should be installed for the Infill addition compatible with the entire facility for each phase of work completed.
- 8) Humidification
  - a) Humidification will not be provided to the Infill addition units per the master plan program and space usage.
- 9) Electrical/IT/CER Rooms
  - a) The small electrical spaces will have a cooling only 1-ton wall-mounted fan coil unit mounted above the door.
  - b) The large electrical and emergency electrical will have two 2-ton cooling only units per room.
  - c) Each will have its own space thermostat.
- 10) Fire Protection
  - a) Refer to the description for the Main Library below.



- 11) Plumbing
  - a) The items below are based on the phasing plans noted in this report.
  - b) All new fixtures will be low flow type.
  - c) Domestic Cold Water
    - a. Refer to the Utilities section of the narrative.
  - d) Domestic Hot Water
    - a. The design intent is to have one domestic hot water system for the facility. A steam-to-hot water system is recommended. This would be in the North Courtyard mechanical room.
    - b. Domestic water heaters will be installed to serve restrooms and any service water needs in the mechanical rooms.
  - e) The design intent is to have a single domestic water booster pump for the entire facility. The location of this pump will be in a basement mechanical room. The final location to be determined during facility design.
  - f) Sanitary Waste and Vent
    - a. New sanitary waste and vent system will be extended to the existing sanitary mains.
  - g) Storm
    - a. New storm piping will be extended up to the new roof and connected to existing storm mains.

b. Electrical

- 1) Primary Power
  - a) A new 13.8KV feeder from the existing DC-9 to a new load center located in the renovated portion of the Main Library building will be provided via the existing and new ductline. The University will need to decide which reserve feeder they would like to bring into the building.
  - b) A new lineup of 15KV switchgear consisting of two incoming 15 KV switches and eight fused load break switches will be installed. The incoming switches will be phased the same so both incoming switches can be closed at the same time.
  - c) This switchgear will be in a separate room from the unit substation for system integrity.
  - d) New 8-5" cell concrete encased ductline from the load center in the Main Library building to the new double-ended substation will be provided with appropriately sized copper 133% EPR 15KV cabling.

- 2) Building Power
  - a) A new appropriately sized double-ended unit substation will take the 13.8 KV 3-phase primary service down to a 277/480V 3-phase, 4-wire service for the building.
  - b) The substation will be sized to be half loaded, so if one substation goes down, the other substation can pick up the entire load for the building.
    - a. All bussing and transformer coils will be copper.
    - b. Fans will be installed in the transformers for cooling.
    - c. The secondary main switches and the secondary tie switch will be Kirk keyed interlocked.
    - d. Metering will be per UIUC Standards.
  - c) This substation will provide service to all mechanical, major library equipment loads requiring 480V 3-phase service. It will also be sized to handle the mechanical load for the renovated portion of the Library.
  - d) Lighting will be at 277V.
  - e) The distribution of electrical power will be done so the mechanical, lighting, and general receptacle loads are separately metered.
  - f) Power for receptacles will be obtained from a 480V to 120/208V, 3-phase, 4-wire appropriately sized transformer that will provide service to an appropriately sized distribution panel, which, in turn, will provide service to 42 circuit 200 amp branch panelboards. These panelboards will provide power to all receptacles and other loads requiring 120 or 208V single power or 208V 3-phase power.
  - g) Per University standards, variable frequency drives will be used for air handling equipment and pumps as required.
  - h) Classroom A/V systems will have their own panelboards with surge protection.
  - i) Floor boxes in the new addition will be recessed in the new floors. The AV floor boxes will be the University Standard for AV floor boxes.
  - j) All wiring will be in conduit.
  - k) All wiring will be copper.
  - l) All panel bussing will be copper.
  - m) All receptacles will be specification grade hard use type.
  - n) Surge protection devices will be installed at the unit substation and the 120/208V distribution panel.
  - o) Surge protection will also be provided for the fire alarm panels.
- 3) Emergency Power
  - a) A new 277/ 480V, 3-phase diesel standby generator will be installed to replace the existing Sixth Stack Addition generator. The new generator





- will be sized to handle the entire renovated and new spaces for the Library.
  - b) A separate feed to the fire pump transfer switch from the generator will be provided.
  - c) The distribution system will be divided into two transfer switches: one for the life safety branch and one for the equipment branch. Each transfer switch will be appropriately sized for each branch. They will be a four-pole type transfer switch.
  - d) The life safety branch will provide power for egress lighting, elevator, and the fire alarm system.
  - e) The equipment branch will provide power to a heating water pump, sump pumps, security system, and sewage ejector pumps.
- 4) Lighting
- a) For the most part, building lighting will be LED light fixtures.
  - b) Foot candle levels will be per IES Standards, except per SAA Guidelines in Special Collections grade level, and meet ASHRAE 90.1 watts per square foot requirements.
  - c) Direct/indirect lighting will be used in the shelving and reading areas. They will be controlled by a combination of time clocks or occupancy sensors where it makes sense. Near the windows, daylight harvesting will occur using daylight sensors.
  - d) Direct lighting will be used in restrooms, offices, storage rooms, and work spaces and will be LED type.
  - e) Dual technology occupancy sensors will be used to control lighting in the restrooms, offices, storage rooms, and work spaces.
  - f) Ultrasonic sensors will be used to control corridor lighting.
  - g) Lighting controls to meet current energy code requirements.
- 5) Systems
- a) Fire Alarm
    - a. Extend the fire alarm system to the new addition.
    - b. Fire alarm initiation devices will be laid out to meet code minimum requirements for a sprinkled building and University Standards.
    - c. A radio repeater system will be added to the fire alarm system and through the building.
    - d. Notification will be done by a voice system and visual lights laid out to meet ADA and code requirements.
    - e. All fire alarm wiring will be in red color conduit.

- b) Lightning Protection
  - a. A new lightning protection system will be provided for the building per NFPA Article 780 and be UL master labeled.
  - b. This new system will be connected into the overall Library lightning protection system for the entire building at the end of the project.
- c. Technology
  - 1) Interior Spaces
    - a) New communication equipment rooms (CER) will be located on each floor.
      - a. CERs will be located to maintain the maximum cable distance limitation of 295 feet from workstation outlet to the equipment patch panel.
      - b. Each room size will be a minimum of 8' x 10' (80 square feet). Actual size will be identified during the programming phase to confirm what systems will be installed within the room.
      - c. CERs will be stacked to minimize backbone cabling.
        - (a) All walls will receive 3/4" fire treated plywood installed 6" to 8'6" AFF. The rating stamp will be exposed.
        - (b) The room will have dedicated power, cooling, and standard lighting. Cooling will be 24/7/365 maintaining 68° to 72°F. Dedicated 120 and/or 208 volt power receptacles will also be required.
        - (c) Doors will be lockable, with rough-ins for proximity readers, door status switches, and exit devices for entry access.
        - (d) New 19" (w) x 7' (h) equipment racks with vertical wire management will be installed.
        - (e) Grounding of all equipment to a ground bar located in the CER will be required.
        - (f) Vertical STI "EZ Path" sleeves should be installed between floors of stacked closets.
  - 2) Structured Cabling System
    - a) An EIA/TIA Category 6A structured cabling system will be installed to support all voice and data applications.
    - b) All cabling will route back and terminate within the existing CER.
    - c) Use University Standards for approved manufacturers.
    - d) Patch cords will be provided and installed by the Owner.



- e) Wireless LAN: Cabling will be provided and installed by the Contractor. All wireless access points (APs) will be provided and installed by the University.
  - f) Consideration should be given to using a shielded Cat 6A system to maximize pathways and cabling performance.
- 3) Intra Building-Backbone Cabling Systems
- a) New high pair count copper and OS2 single-mode fiber will be required to be installed from each CER back to the server room or main communications equipment room.
  - b) Copper and fiber quantities will be identified during the programming phase.
- 4) Cable Television (CATV)
- a) A coaxial cabling infrastructure will be provided to distribute cable TV programming.
  - b) The coaxial system will be RG-6 quad-shield in the horizontal system, distributed from the CERs. RG-11 cabling will be provided from the source signal's service entrance to each CER area.
  - c) An EIA/TIA Category 6 cable will be installed along with the coaxial cable for IPTV implementation. This cable will be within 295 feet (outlet to patch panel) of the CERs.
  - d) The Contractor will provide amplifiers, taps, and splitters, as required based on the design, to maintain a required signal level at each jack.
- 5) Interior Pathways
- a) General: Anywhere a penetration is required through a corridor, wall, or hard ceiling for telecommunications cabling, installation of STI "EZ Path" conduit sleeves will be required.
  - b) A cable tray system with minimum dimensions of 4" (h) x 12" (w) will be installed on each floor to support voice, data, security, and CATV.
    - a. Overhead paging will not be installed within the cable tray system and will require dedicated conduits. No conduits or other cabling will hang off the cable tray system.
  - c) One 1" conduit will be installed from each telecommunications outlet to the cable tray installed above the ceiling.
- 6) Access Control System
- a) A new access control system will be required. New control panels, card readers, door contacts, and request-to-exit devices will be installed and connected to the existing campus system.
  - b) Each door that requires a card reader will have the following:
    - a. Card reader
    - b. Request-to-exit device internal to the door hardware



- c. Door contact switches
  - d. Latch retraction detection
  - e. Electrified hardware
  - f. Note: Electrified hardware and door contact will be provided and installed by the door hardware contractor.
- c) Use University Standards for approved manufacturers.
  - d) Consideration should be given to a full IP-based system or hybrid IP-based system for ease of integration and future expansion.
  - e) A full map-based GUI (graphical user interface) should be considered. These maps should include all devices from the access control system, CCTV system, book security system, intrusion detection system and emergency telephones. This will allow security personal to quickly and efficiently find problem areas and video feeds.
  - f) The access control system should serve as the system to which all other security systems integrate.
  - g) This system should tie into the University's central security system.
- 7) Video Surveillance System (CCTV)
- a) New surveillance cameras will be required. A new security office will be constructed. New monitors will be required for viewing selected cameras.
  - b) Cameras will connect to new DVRs (digital video recorder) or NVRs (network video recorder). DVRs and/or NVRs will be IP based to allow for remote connection and viewing via the campus network. The requirements for this system have not been approved by the University at this time.
  - c) The DVR / NVR will be sized to provide simultaneous and continuous recording of all 16 inputs at 15 FPS for 14 days at 4 CIF resolution.
  - d) New Category 6, 4 pair cabling will be installed to each camera to support video, power, and future migration to IP cameras.
  - e) NVT or similar products will be used to convert video from UTP to BNC and provide power.
  - f) Use University Standards for approved manufacturers.
  - g) Consideration should be given to a full IP-based H.264 megapixel camera system recorded with an open architecture software NVR solution with full GUI. This will provide ultra-high resolution images with minimized network bandwidth usage and ease of integration into other systems.
  - h) The CCTV system should be integrated into the access control system for video event tagging and central GUI management.
  - i) This system should tie into the University's central security system.





- 8) Intrusion Detection System
  - a) A new intrusion detection system will be installed with duress buttons, glass break detectors, and motion sensors. A keypad will be installed at selected doors to allow for activation and deactivation of the system.
  - b) This system will be an addressable system, and each room with intrusion detection devices should be on its own zone for fast identification of trouble areas.
  - c) This system should be fully integrated into the access control system for event tagging and central GUI management.
  - d) This system should tie into the University's central security system.
- 9) Emergency Telephones
  - a) New emergency phones should be strategically installed throughout the facility.
  - b) Use University standards for approved emergency telephone manufacturers.
  - c) These phones should be cabled back to the nearest CER.
  - d) These phones should be fully integrated into the access control system for event tagging and central GUI management.
- 10) Public Address / Overhead Paging System
  - a) New ceiling speakers will be required to connect to a new paging control system. New amplifiers will be provided as needed to support new speakers.
  - b) A dedicated microphone station will be provided at the main receptionist's area(s).
  - c) All amplified paging cabling will be installed within its own dedicated pathway per NEC requirements.
  - d) Consideration should be given to using an IP-based paging system for providing supervised emergency notification and ease of expansion. This system should use open source IP protocols like Cobranet, Audinate, or Ethersound.
- 11) Audio/Video Systems
  - a) Several classrooms, lecture rooms, and presentation rooms will have a standalone A/V system installed. The systems will include video display devices such as LCDs, plasmas, smart boards, projectors, touch screen control system, source equipment, amplification, and sound reinforcement.
  - b) Consideration should be given to using full HDCP (high-bandwidth digital content protection) compliant digital video systems with high definition video sources, displays, and projectors.

- c) The A/V control systems should be integrated into the University's central control management systems.
- d) Refer to University Standards and recommendations for additional information on audio/video system requirements and preferred manufacturers.

5. Sixth Stack Addition

a. Mechanical

1) Air Handling

- a) Desired space conditions
  - a. All Spaces: Cooling - 75°F/ RH; Heating - 70°F.
  - b. Final space temperature and humidity conditions will need to be verified during design.
- b) Spaces will be conditioned with a variable air volume system. Some spaces will be served with overhead air distribution.
- c) These units will be a direct replacement of the existing Sixth Stack AHU located in the penthouse.
- d) Zone Controls
  - a. Each individual zone will contain a terminal air box and a thermostat. Air will be provided by a variable air volume AHU.
- e) Each dedicated outside air handling unit will contain the following:
  - a. MERV 8 (30%) pre-filters
  - b. MERV 13 (65%) bag filters
  - c. Chilled water coil
  - d. Heating water coil
  - e. Supply fan
  - f. Return fan

2) Steam and Condensate

- a) Steam, if required, will be extended from the new steam main located in the North Courtyard mechanical room.

3) Chilled Water

- a) Chilled water will be extended from the mains serving the Infill addition.

4) Humidification

- a) Humidification will not be provided to the existing building units.

b. Fire Protection

- 1) Remove the fire pump serving this space and tie the existing addition piping system into the new Library fire pump.



- c. Electrical
  - 1) The existing generator will be removed, and new emergency power will be fed from the new generator sized to handle the whole building.
  - 2) Remove the electrical feed to the existing fire pump.

6. Existing Main Library Building

- a. Mechanical
  - 1) Air Handling
    - a) Space conditions – Cooling - 75°F; Heating - 70°F
      - a. Final space temperature and humidity conditions will need to be verified during design.
    - b) Due to the historical nature of the existing Library, most spaces are being proposed to be conditioned with a variable air volume system, except for those served by AHU-MLN2 and AHU-MLS3, which are proposed to be chilled beam units.
    - c) Energy recovery will be added only when dictated by code based on the percentage of outside air for the VAV units.
    - d) Energy recovery would remain in the two proposed chilled beam units.
    - e) The system energy impact as a VAV for a large portion of the existing Library will require evaluation during design to confirm LEED V4 and energy code requirements can be met.
    - f) All VAV unit spaces would be served with a terminal air box with a reheat coil and overhead air distribution.
    - g) Zones using chilled beams in the space would also have a terminal air box with reheat coil supplying air to each active chilled beam.
    - h) Each space will contain baseboard radiation for heating. The large public spaces will be panel radiation; the office and staff areas would be standard wall-mounted radiation. Each system will be carefully coordinated with any historical elements of each space.
    - i) Zone Controls
      - a. Each individual zone will contain a space sensor for terminal air box and radiation control.
    - j) Each variable air volume air handling unit will contain the following:
      - a. MERV 8 (30%) pre-filters
      - b. MERV 13 (65%) bag filters
      - c. Air blender (where space allows)
      - d. Total enthalpy energy recovery wheel (where required by code)
      - e. Chilled water coil
      - f. Supply fan

- g. Return fan
- 2) Air Handling Unit Zoning
  - a) The North Courtyard basement mechanical room will contain two AHUs to serve the north portion of the existing Library on all floors. Refer to MP AHU Zoning Plan drawing.
  - b) The South Courtyard I basement mechanical room will contain three AHUs to serve the south portion of the existing Library on all floors. Refer to MP AHU Zoning Plan drawing.
  - c) Zoning Note
    - a. The interior north courtyards should be considered for mechanical chases in the northeast and northwest corners to simplify duct routing from its associated north AHUs to each floor of the existing structure and to save program space.
    - b. The interior south courtyards should be considered for mechanical chases in the southeast and southwest corners to simplify duct routing from its associated south AHU(s) to each floor of the existing structure and to save program space.
- 3) Steam and Condensate
  - a) No steam or condensate scope. Refer to the Utilities section of the narrative and phasing plan.
- 4) Heating/Reheat
  - a) Provided by one central system located in the North Courtyard mechanical room in the basement of the existing Library. This allows the project to be phased.
  - b) Refer to the Infill addition above for system description.
- 5) Chilled Water
  - a) Chilled water will be extended to each Courtyard mechanical room from AC Plant mains in the basement. Refer to the Utilities section of the narrative.
  - b) Electrical/IT/CER Rooms
    - a. The small electrical spaces will have a cooling only 1-ton wall-mounted fan coil unit mounted above the door.
    - b. The large electrical and emergency electrical will have two 2-ton cooling only units per room.
    - c. Each will have its own space thermostat.
- 6) Humidification
  - a) Humidification will not be provided to the existing building units.



- 7) Fire Protection
  - a) Install a new fire pump and jockey pump complete with all controllers. Location of the pumps is dependent on project phasing. A single fire pump should be sized for the entire facility.
  - b) The 80 to 100 HP pump will be capable of 1,250 GPM and 65 psig.
  - c) Extend the current wet-pipe system into all areas to provide complete building coverage.
  - d) Provide a manual wet standpipe at each code-required egress stair.
  - e) Single facility fire pump service to serve:
    - a. Existing Sixth Stack Addition
    - b. New West Infill addition
    - c. Existing Library structure
  - f) Phasing Note:
    - a. The location of the fire pump will be based on project phasing. If the West Infill addition occurs first, the fire pump location would be in the existing chiller plant.
    - b. If the existing Library renovation occurs first, the fire pump would be in the south mechanical room.
    - c. Note: There is not a dedicated fire pump room shown on the master plan drawings at this time, but it may be required due to phasing during the project design.
- 8) Plumbing
  - a) Systems will match that of the Infill addition. Refer to the narrative above.
- b. Electrical
  - 1) Primary Power
    - a) New 8-5" cell concrete encased ductline from the load center room in the existing Library to an existing manhole to the south of the building will be provided. Provide with appropriately sized copper 133% EPR 15KV cabling through new and existing ductlines to a new unit substation.
  - 2) Building Power
    - a) A new appropriated unit substation will take the 13.8 KV 3-phase primary service down to a 120/208V 3-phase, 4-wire service for the building.
    - b) The substation will have the following features:
      - a. All bussing and transformer coils will be copper.
      - b. Fans will be installed in the transformers for cooling.
      - c. Metering will be per UIUC Standards.

- c) The new west additions to the Library substation will provide service to all mechanical, major library equipment loads requiring 480V 3-phase service.
- d) The new 120/208V, 3-phase, 4-wire unit substation will provide service for 42-circuit 200 amp branch panelboards located throughout the renovated space. These panelboards will provide power to all receptacles and other loads requiring 120 or 208V single power or 208V 3-phase power.
- e) Lighting will be done at 277V. Some of the historical refurbished light fixtures will be at 120V.
- f) Floor boxes will be fire-rated poke-through type that meet University Standards.
- g) Variable frequency drives per University Standards will be used for air handling equipment and pumps as required.
- h) All wiring will be in conduit.
- i) All wiring will be copper.
- j) All panel bussing will be copper.
- k) All receptacles will be specification grade, hard use type.
- l) Surge protection devices will be installed at the unit substation and at the 120/208V branch panels for computer labs.
- m) Surge protection will also be provided for the fire alarm panels.
- 3) Emergency Power
  - a) The West Addition life safety branch and equipment branch system will be extended into the renovated area.
  - b) The life safety branch will provide power for egress lighting, elevator, and the fire alarm system.
  - c) The equipment branch will provide power to a heating water pump, sump pumps, security system, and sewage ejector pumps.
- 4) Lighting
  - a) For the most part, the building lighting will be LED light fixtures.
  - b) The light fixtures that are deemed historically significant will be refurbished and reused. Where fixtures are not original in historically significant spaces, provide historically correct new fixtures.
  - c) Foot candle levels will be per IES Standards and will meet ASHRAE 90.1 watts per square foot requirements.
  - d) Direct/indirect lighting will be used in the shelving and reading areas. They will be controlled by a combination of time clocks or occupancy sensors where it makes sense. Near the windows, daylight harvesting will occur using daylight sensors.





- e) Direct lighting will be used in restrooms, offices, storage rooms, and work spaces and LED type.
- f) Dual technology occupancy sensors will be used to control the lighting in the restrooms, offices, storage rooms, and work spaces.
- g) Ultrasonic sensors will be used to control the corridor lighting.
- h) Lighting controls to meet current energy code requirements.

5) Systems

- a) Fire Alarm
  - a. Fire alarm initiation devices will be laid out to meet code-minimum requirements for a sprinkled building and University Standards.
  - b. The radio repeater system will be extended throughout the renovated area.
  - c. Notification will be done by a voice system and visual lights laid out to meet ADA and code requirements.
  - d. All fire alarm wiring will be in conduit.
- b) Lightning Protection
  - a. New lightning protection system will be provided for the building per NFPA Article 780 and will be UL master labeled.
  - b. This new system will be connected into the overall Library lightning protection system for the entire building at the end of the project.

c. Technology

1) Interior Spaces

- a) A new main terminal room or intermediate distribution frame (IDF) will be required. The purpose of this room is to house voice and data equipment, servers, inter- and intra-building backbone cabling, horizontal cabling, and serve as a main entrance room from the campus duct bank system.
- b) This room will be connected to one of the University's main distribution frames (MDF) via the campus duct bank system.
- c) Room size will be a minimum of 18' x 38' (684 square feet). Actual size will be identified during the programming phase to confirm what systems will be installed within the room. There should be an attached IT storage/work room as well as IT offices.
  - a. All walls will receive 3/4" fire treated plywood installed 6" to 8'-6" AFF. The rating stamp will be exposed.
  - b. The room will have dedicated power, cooling, and standard lighting. Cooling will be 24/7/365 maintaining 68° to 72°F.

- c. Dedicated 120 and 208 volt power receptacles will also be required.
- c. A dedicated UPS power system and generator backed power will be required for this space.
- d. Doors will be lockable with proximity readers, door status switches, and exit devices for entry access.
- e. A minimum of 12 equipment cabinets and four 4-post racks should be provided.
- f. Cooling should be figured at a minimum of 125 watts per square foot and should include a redundant cooling system. Actual cooling loads will be determined during the programming phase.
- g. Lightning protection will be provided for all incoming copper services.
- h. Grounding of all equipment to a ground bar located in the main terminal room or IDF will be required.
- d) A new telecommunications entrance room (ER) will be required to serve as an IDF if the main terminal room is not located in the basement. The purpose of this room is to serve as the entrance point for the campus duct bank. All outside plant fiber optic, copper, and CATV cabling will terminate in this closet to transition to interior rated cabling to be extended to the main terminal room.
- e) If the room will only serve as an ER, the room size will be a minimum of 7' x 8' (56 square feet). If the room will also serve as a communications equipment room (CER), the room size will be a minimum of 10' x 12' (120 square feet). Actual sizes will be identified during the programming phase to confirm what systems will be installed within the room.
  - a. All walls will receive 3/4" fire treated plywood installed 6" to 8'-6" AFF. The rating stamp will be exposed.
  - b. If the room will also serve as a CER, the room will have dedicated power, cooling, and standard lighting. Cooling will be 24/7/365 maintaining 68° to 72°F. Dedicated 120 and 208 volt power receptacles will also be required.
  - c. Doors will be lockable, with rough-ins for proximity readers, door status switches, and exit devices for entry access.
  - d. Lightning protection will be provided for all incoming copper services.
  - e. Grounding of all equipment to a ground bar located in the ER or IDF will be required.



- f) New CERs will be located on each floor.
  - a. CERs will be located to maintain the maximum cable distance limitation of 295 feet from workstation outlet to the equipment patch panel.
  - b. Each room size will be a minimum of 8' x 10' (80 square feet). Actual size will be identified during the programming phase to confirm what systems will be installed within the room.
  - c. CERs will be stacked to minimize backbone cabling.
    - (a) All walls will receive 3/4" fire treated plywood installed 6" to 8'-6" AFF. The rating stamp will be exposed.
    - (b) The room will have dedicated power, cooling, and standard lighting. Cooling will be 24/7/365 maintaining 68° to 72°F. Dedicated 120 and/or 208 volt power receptacles will also be required.
    - (c) Doors will be lockable, with rough-ins for proximity readers, door status switches, and exit devices for entry access.
    - (d) New 19" (w) x 7' (h) equipment racks with vertical wire management will be installed.
    - (e) Grounding of all equipment to a ground bar located in the CER will be required.
    - (f) Vertical STI "EZ Path" sleeves should be installed between floors of stacked closets.
- 2) Structured Cabling System
  - a) An EIA/TIA Category 6A structured cabling system will be installed to support all voice and data applications.
  - b) All cabling will route back and terminate within the existing CER.
  - c) Use University Standards for approved manufacturers.
  - d) Patch cords will be provided and installed by the Owner.
  - e) Wireless LAN: Cabling will be provided and installed by the Contractor. All wireless access points (APs) will be provided and installed by the University.
  - f) Consideration should be given to using a shielded Cat 6A system to maximize pathways and cabling performance.
- 3) Intra Building-Backbone Cabling Systems
  - a) New high pair count copper and OS2 single-mode fiber will be required to be installed from each CER back to the main terminal room or IDF.

- b) Copper and fiber quantities will be identified during the programming phase.
- 4) Inter Building-Backbone Cabling System
  - a) New high pair count copper and OS2 single-mode fiber will be required to be installed from the main terminal room or IDF to the MDF Node #4 at Davenport Hall via the campus duct bank system.
  - b) New CATV fiber or coaxial hardline cable will be installed to the main campus CATV distribution system.
  - c) Copper and fiber quantities will be identified during the programming phase.
- 5) Cable Television (CATV)
  - a) A coaxial cabling infrastructure will be provided to distribute cable TV programming.
  - b) The coaxial system will be RG-6 quad-shield in the horizontal system, distributed from the CERs. RG-11 cabling will be provided from the source signal's service entrance to each CER area.
  - c) An EIA/TIA Category 6 cable will be installed along with the coaxial cable for IPTV implementation. This cable will be within 295 feet (outlet to patch panel) of the CER2.
  - d) The Contractor will provide amplifiers, taps, and splitters, as required based on the design, to maintain a required signal level at each jack.
- 6) Interior Pathways
  - a) General: Anywhere a penetration is required through a corridor, wall, or hard ceiling for telecommunications cabling, installation of STI "EZ Path" conduit sleeves will be required.
  - b) A cable tray system with minimum dimensions of 4" (h) x 12" (w) will be installed on each floor to support voice, data, security, and CATV.
    - a. Overhead paging will not be installed within the cable tray system and will require dedicated conduits. No conduits or other cabling will hang off the cable tray system.
  - c) One 1" conduit will be installed from each telecommunications outlet to the cable tray installed above the ceiling.
- 7) Access Control System
  - a) A new access control system will be required. New control panels, card readers, door contacts, and request-to-exit devices will be installed and connected to the existing campus system.
  - b) Each door that requires a card reader will have the following:
    - a. Card reader
    - b. Request-to-exit device internal to the door hardware
    - c. Door contact switches



- d. Latch retraction detection
  - e. Electrified hardware
  - f. Note: Electrified hardware and door contact will be provided and installed by the door hardware contractor.
  - c) Use University Standards for approved manufacturers.
  - d) Consideration should be given to a full IP-based system or hybrid IP-based system for ease of integration and future expansion.
  - e) A full map-based GUI (graphical user interface) should be considered. These maps should include all devices from the access control system, CCTV system, book security system, intrusion detection system, and emergency telephones. This will allow security personal to quickly and efficiently find problem areas and video feeds.
  - f) The access control system should serve as the system to which all other security systems integrate.
  - g) This system should tie into the University's central security system.
- 8) Video Surveillance System (CCTV)
- a) New surveillance cameras will be required. A new security office will be constructed. New monitors will be required for viewing selected cameras.
  - b) Cameras will connect to new DVRs (digital video recorder) or NVRs (network video recorder). DVRs and/or NVRs will be IP based to allow for remote connection and viewing via the campus network. The requirements for this system have not been approved by the University at this time.
  - c) The DVR / NVR will be sized to provide simultaneous and continuous recording of all 16 inputs at 15 FPS for 14 days at 4 CIF resolution.
  - d) New Category 6, 4 pair cabling will be installed to each camera to support video, power, and future integration to IP cameras.
  - e) NVT or similar products will be used to convert video from UTP to BNC and provide power.
  - f) Use University Standards for approved manufacturers.
  - g) Consideration should be given to a full IP-based H.264 megapixel camera system recorded with an open architecture software NVR solution with full GUI. This will provide ultra-high resolution images with minimized network bandwidth usage and ease of integration into other systems.
  - h) The CCTV system should be integrated into the access control system for video event tagging and central GUI management.
  - i) This system should tie into the University's central security system.

- 9) Intrusion Detection System
  - a) A new intrusion detection system will be installed with duress buttons, glass break detectors, and motion sensors. A keypad will be installed at the selected doors to allow for activation and deactivation of the system.
  - b) This system will be an addressable system, and each room with intrusion detection devices should be on its own zone for fast identification of trouble areas.
  - c) This system should be fully integrated into the access control system for event tagging and central GUI management.
  - d) This system should tie into the University's central security system.
- 10) Emergency Telephones
  - a) New emergency phones should be strategically installed throughout the facility.
  - b) Use University Standards for approved emergency telephone manufacturers.
  - c) These phones should be cabled back to the nearest CER.
  - d) These phones should be fully integrated into the access control system for event tagging and central GUI management.
- 11) Public Address / Overhead Paging System
  - a) New ceiling speakers will be required to connect to a new paging control system. New amplifiers will be provided as needed to support new speakers.
  - b) A dedicated microphone station will be provided at the main receptionist's area(s).
  - c) All amplified paging cabling will be installed within its own dedicated pathway per NEC requirements.
  - d) Consideration should be given to using an IP-based paging system for providing supervised emergency notification and ease of expansion. This system should use open source IP protocols like Cobranet, Audinate, or Ethersound.
- 12) Audio/Video Systems
  - a) Several classrooms, lecture rooms, and presentation rooms will have a standalone A/V system installed. The systems will include video display devices such as LCDs, plasmas, smart boards, projectors, touch screen control system, source equipment, amplification, and sound reinforcement.
  - b) Consideration should be given to using full HDCP (high-bandwidth digital content protection) compliant digital video systems with high definition video sources, displays and projectors.





- c) The A/V control systems should be integrated into the University's central control management systems.
- d) Refer to University Standards and recommendations for additional information on Audio/Video system requirements and preferred manufacturers.

C. Phasing

1. Mechanical/Electrical

- a. The sequence below is based on the master plan drawings and the A/E team's opinion based on the concepts shown.
- b. Phase 1 - Utilities
  - a) Option #1 – Cooling Towers – AC Plant Roof
    - a. Step 1: Add additional structural support including tower bases to AC Plant for proposed cooling tower locations on roof.
    - b. Step 2: Install a new two or three cell cooling tower on the AC Plant roof and extend new condenser piping into AC Plant for backfeeding existing.
    - c. Step 3: Cut in new condenser water piping into existing mains in AC Plant to allow for new chiller startup.
      - (a) Note: A short outage will be required.
    - d. Step 4: Remove five cooling towers from Stack 1-5 roof and all associated condenser water piping on roof and south side of building.
    - e. Note: This is the most economical and most practical from a phasing standpoint.
  - b) Option #2 – Cooling Towers - Move to Infill roof.
    - a. Step 1: Relocate three existing cooling towers located on the Stacks roof to grade west of AC Plant but east of proposed Instructional Facility. This work would occur in the winter.
      - (a) Note: The number for relocation and associated tonnages would have to be worked out with UIUC Utilities.
    - b. Step 2: Extend temporary condenser water piping above grade from tower locations on grade to AC Plant to backfeed associated chillers.
    - c. Step 3: Remove remaining chiller(s) not used for temporary relocation from the Library roof.

- d. Step 4: Remove all condenser water piping from roof and south face of Library.
- e. Step 5: During normal construction sequencing, install three new cooling towers on the roof of the new infill and route condenser water piping to AC Plant internal to Infill addition.
- f. Step 6: When Infill addition has been completed, backfeed existing chillers and start up system with new cooling towers.
- g. Step 7: Remove existing relocated cooling towers from grade and all associated temporary condenser water piping.

- c) Recommendation: Moving permanent cooling towers to roof of AC Plant. This option is the most practical and least overall cost.

- 2) Extend steam and condensate from steam tunnel north of the Library at Armory Avenue to the northwest corner of the existing portion of the original Library structure. Refer to Phasing plans for location and utilities section of narrative.

- a) Extending steam and condensate to the building during Phase 1 allows for a new single source steam service for the proposed facility.
- b) Allows for the proposed project phasing, backfeeding of the existing facility, and for new mechanical spaces.

c. Phase 2: Complete Special Collections Research Center

- 1) Mechanical/electrical demolition work to be determined during Undergraduate Master Plan phase.
- 2) Mechanical/electrical new work to be determined during Undergraduate Master Plan phase.
- 3) Buildout of mechanical rooms in existing North and South Courtyards. Includes excavation and construction of required chases.
- 4) Modify outside air and relief air for existing AHU-10.
- 5) Add space heating and mechanical room ventilation.
- 6) Add any ductwork required for OA/EA for units to be installed during later phases.
- 7) Install lighting and life safety items required until Main Library renovation takes place.
- 8) Mechanical/electrical rooms remain open until the Infill addition design.
- 9) Extend new steam main from the new entrance point defined in Phase 1 to new Courtyard mechanical room and to Stacks riser location defined below.
- 10) Install new steam and pumped condensate risers outside current location in northeast Stacks structure to allow current risers to be removed in Phase 4.



- 11) Extend new chilled water mains from AC Plant to new Courtyard mechanical room and to northeast Stacks riser location defined below. Piping sized for entire facility.
- 12) Install new chilled water supply and chilled water return risers outside the current location within Stacks structure to backfeed existing equipment.
- 13) Back feed existing Library and Sixth Stack chilled water mains from new risers.
- 14) Install new 15KV load center into the existing northwest area of the Main Library.

d. Phase 3 – Relocate Main Library Functions into Existing Building to Remain

- 1) No MEP work for this phase.

e. Phase 4 – Complete Main Library Infill addition

- 1) Remove abandoned steam, condensate, CWS/CWR risers.
- 2) Install new mechanical/electrical in penthouse to serve Infill addition.
- 3) Install new heating plant in North Courtyard mechanical room sized for the entire facility.
- 4) Install new domestic water heating and pressure booster equipment in North Courtyard mechanical room.
- 5) Create new unit substation in south portion of northwest Library (refer to drawings).
- 6) Install new emergency generator and emergency electrical room south of existing Library.
- 7) Refer to drawings for mechanical/electrical room locations.

f. Phase 5 – Renovate Existing Main Library

- 1) Install new air moving equipment systems in Courtyard mechanical spaces created to serve existing Main Library. Refer to drawings for room locations.
- 2) Install new electrical equipment in substation room created to serve existing Main Library.
- 3) Refer to drawings for mechanical/electrical room locations.

D. Estimated System Sizes and Capacities

1. Mechanical

a. Steam and Condensate

- 1) Estimated Steam and Condensate (Note: The flow rates noted below do not assume heat recovery wheel failure.)
  - a) Existing Main Library Building
    - a. 5,500 #/hr

- b) New West Infill addition
  - a. 5,000 #/hr
- c) Total Project Steam Consumption
  - a. 10,500 #/hr

2) Direct Buried Piping for the Entire Facility

- a) 14" 20 psig steam
- b) 3" pumped condensate

3) Individual branch sizes noted above assume a heat wheel failure within the zone.

b. Chilled Water

1) Estimated Tonnages (provided by the existing central campus system):

- a) Existing Main Library Building
  - a. 795 tons
- b) New West Infill addition
  - a. 570 tons
- c) Total Project Tonnages
  - a. 1950 tons

2) Main from AC Plant to Backfeed Facility

- a) 12" chilled water supply and return

3) Existing Sixth Stack Addition

- a) 8" chilled water supply and return

4) West Addition and Existing Main Library Branch

- a) 8" chilled water supply and return

c. Heating Water Systems

1) Estimated Flow Rate and Main Sizes (Note: The flow rates noted below assume heat recovery wheel has failed in each zone for redundancy.)

- a) Existing Main Library Building
  - a. Two 350 GPM systems
  - b. 6"  $\Phi$  mains
- b) New West Infill Addition
  - a. Two 525 GPM systems
  - b. 6"  $\Phi$  mains

d. Condenser Water

- 1) No new central plant chillers are provided with this project or within this narrative. The condenser water noted below is provided to connect new cooling towers located in the southwest corner of the Sixth Stack on grade.
- 2) AC Plant Roof to Chillers
  - a) 30"  $\Phi$  condenser water supply and return



- 3) West Infill addition
  - a) None required

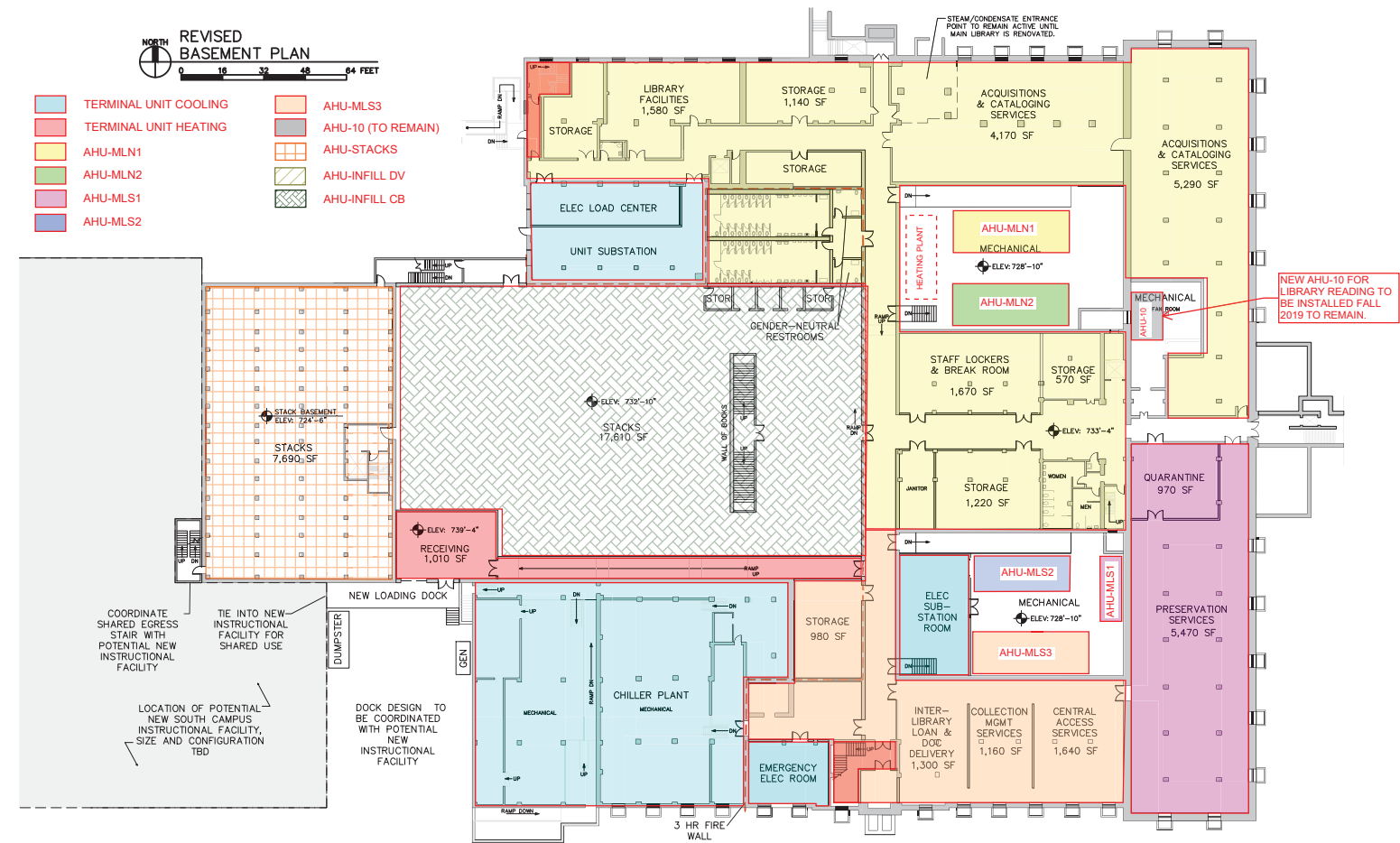
2. Electrical

- a. Main Library
  - 1) West Addition: Two 3000KVA
  - 2) Renovated Space: One 750KVA
  - 3) Generator: 1000 KW

Prepared by: Mike Taube, Dave Hanshaw, PE

MJT:DAH/dks

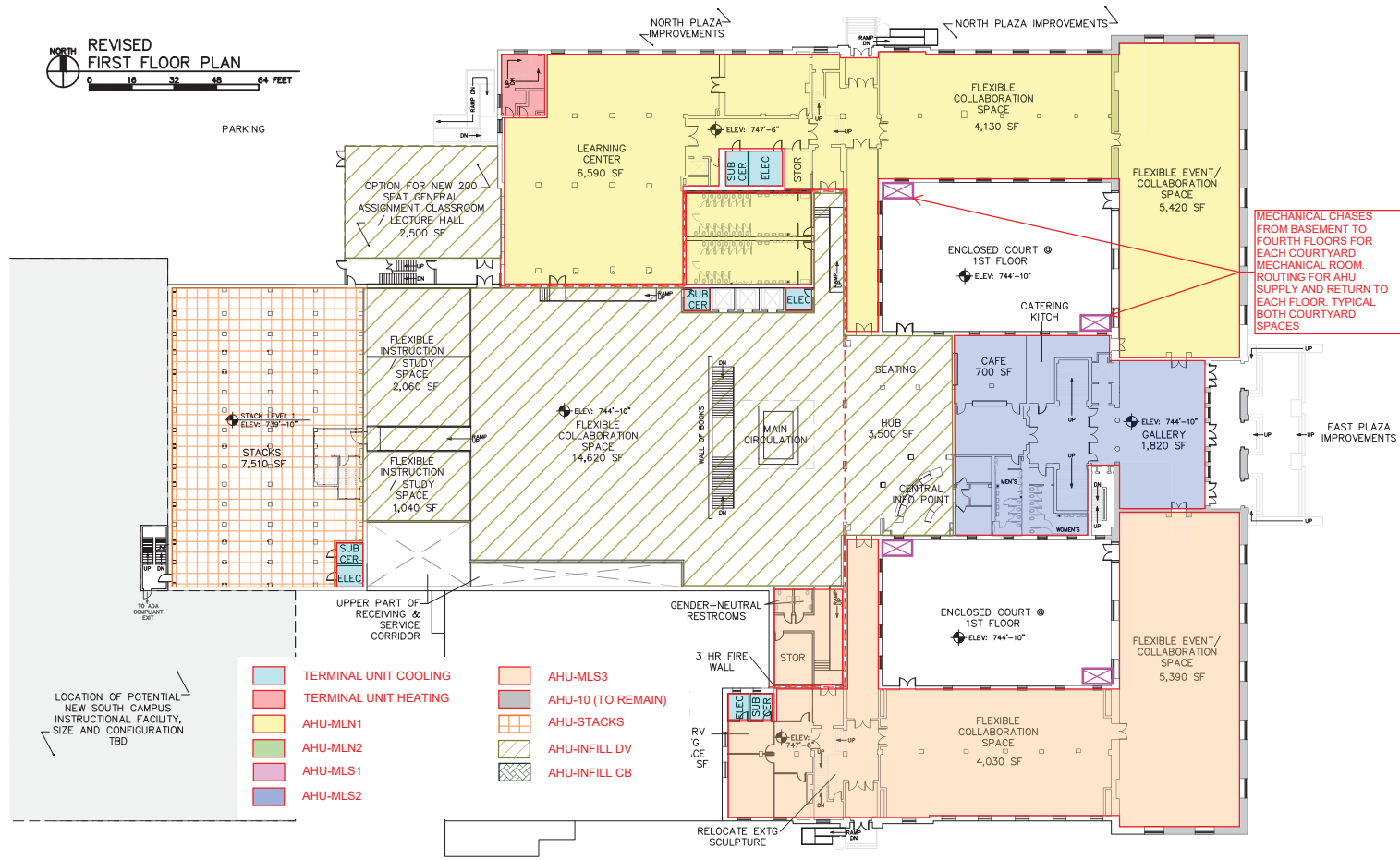
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**REVISED FIRST FLOOR PLAN**

0 16 32 48 64 FEET



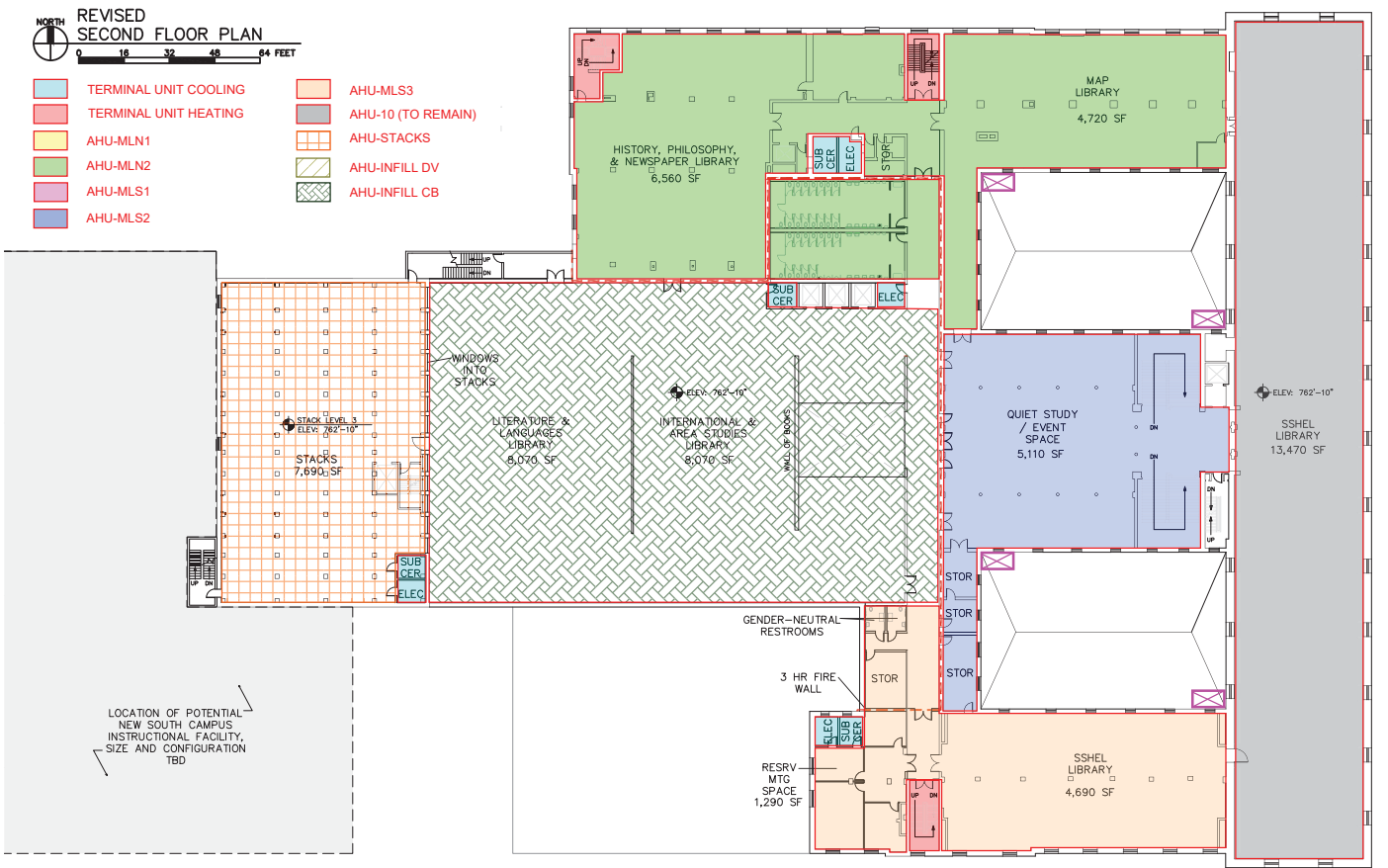
MECHANICAL CHASES FROM BASEMENT TO FOURTH FLOORS FOR EACH COURTYARD MECHANICAL ROOM. ROUTING FOR AHU SUPPLY AND RETURN TO EACH FLOOR. TYPICAL BOTH COURTYARD SPACES

- TERMINAL UNIT COOLING
- TERMINAL UNIT HEATING
- AHU-MLN1
- AHU-MLN2
- AHU-MLS1
- AHU-MLS2
- AHU-MLS3
- AHU-10 (TO REMAIN)
- AHU-STACKS
- AHU-INFILL DV
- AHU-INFILL CB

LOCATION OF POTENTIAL NEW SOUTH CAMPUS INSTRUCTIONAL FACILITY. SIZE AND CONFIGURATION TBD

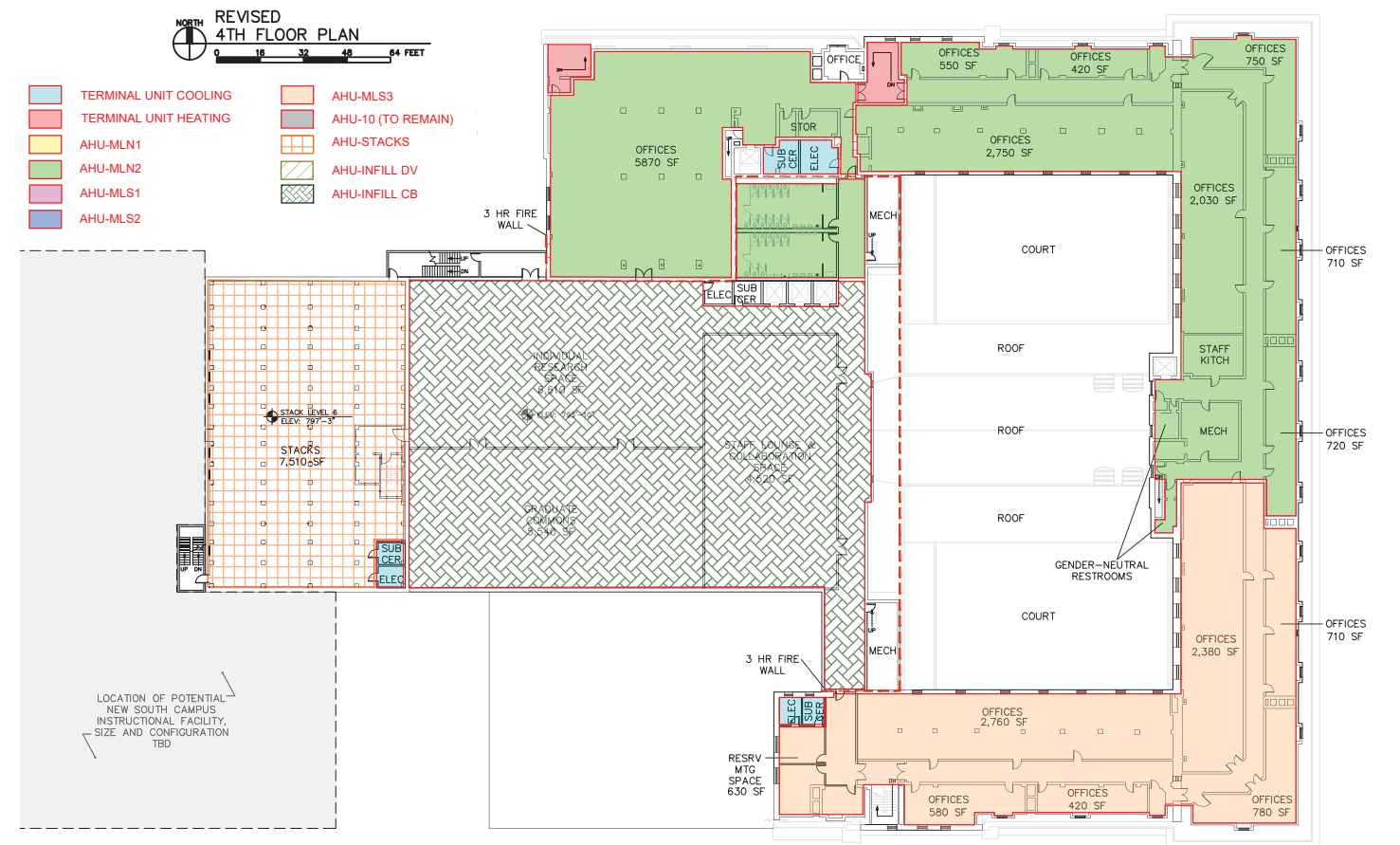
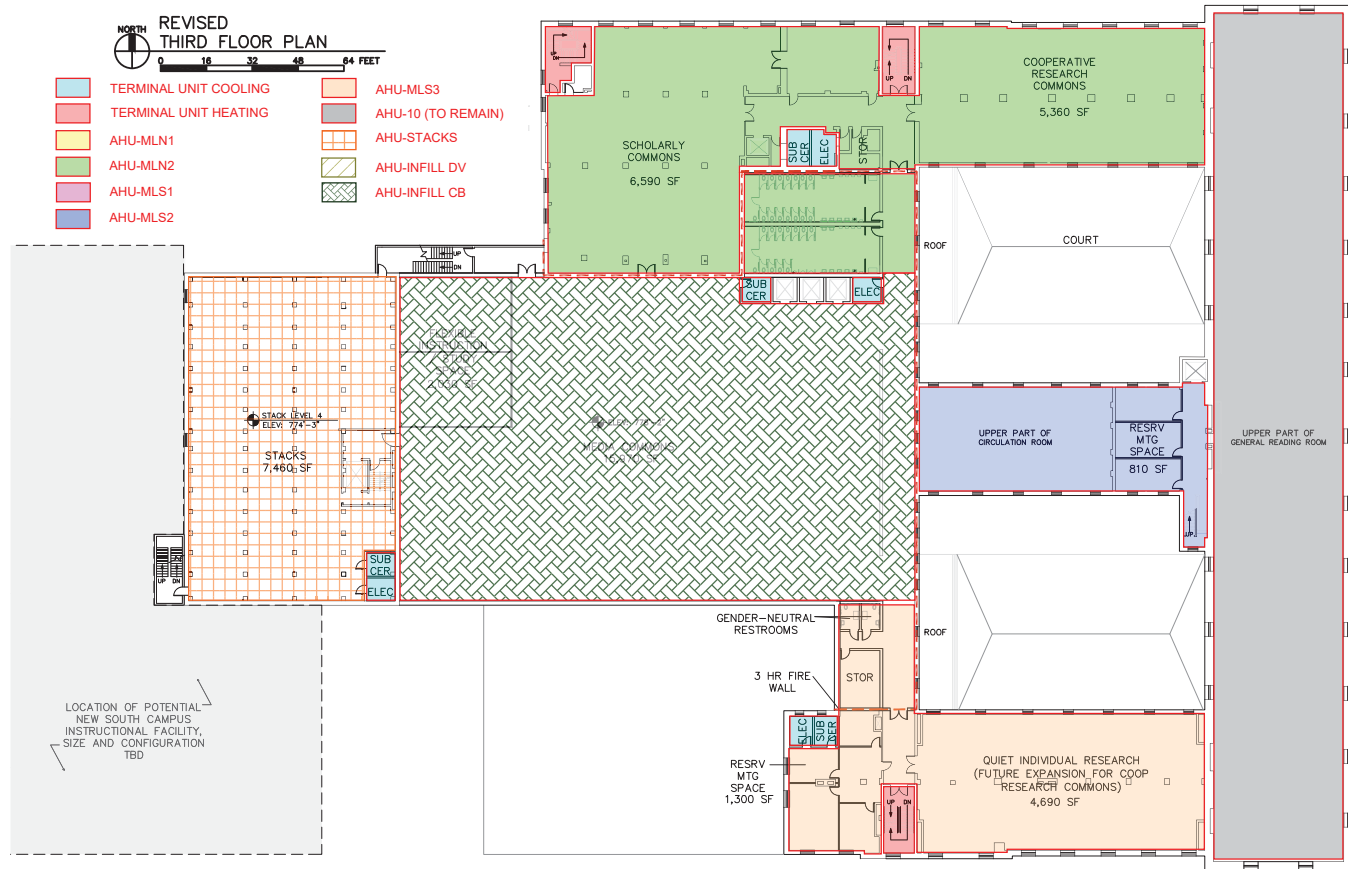
**REVISED SECOND FLOOR PLAN**

0 16 32 48 64 FEET

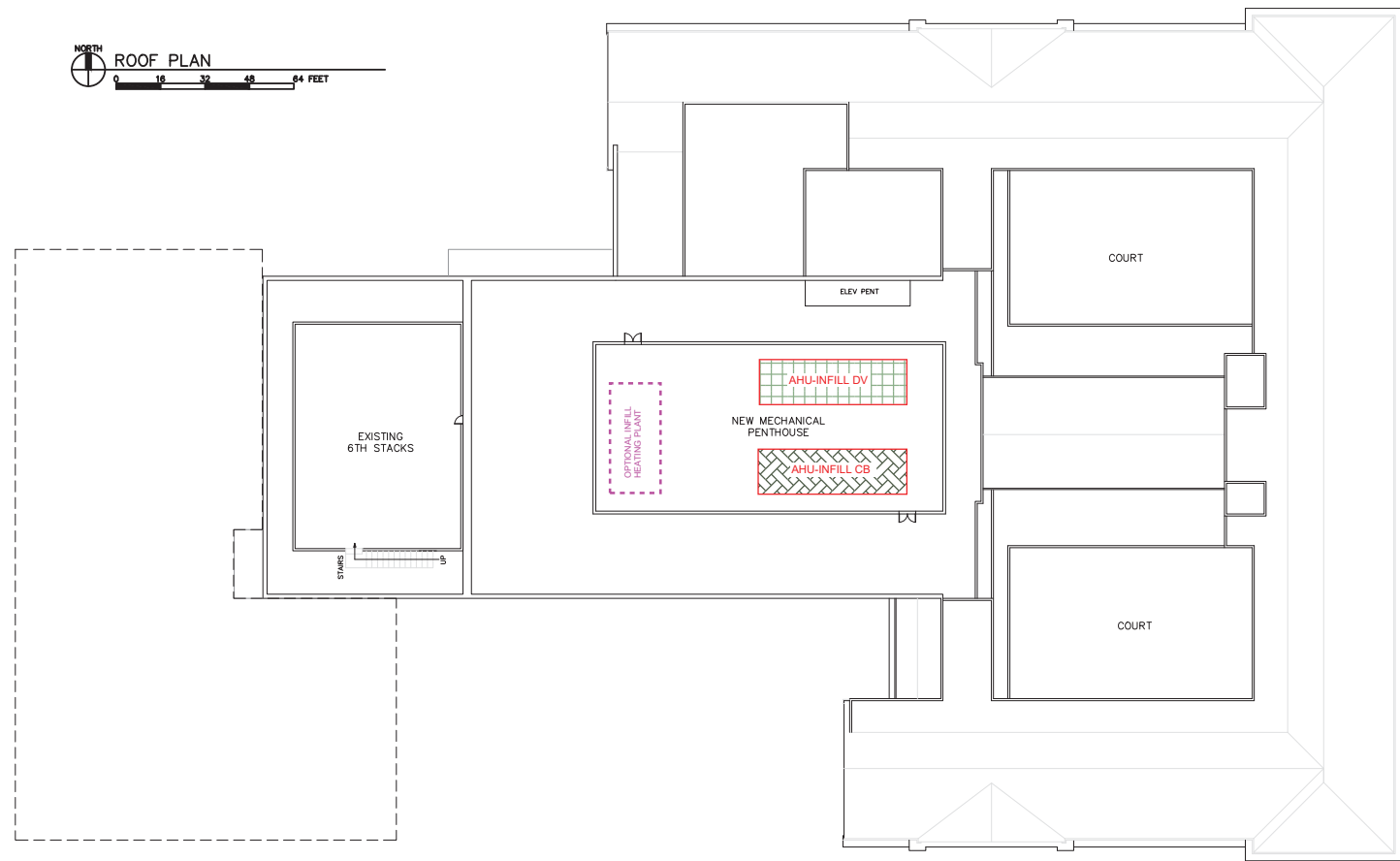


LOCATION OF POTENTIAL NEW SOUTH CAMPUS INSTRUCTIONAL FACILITY. SIZE AND CONFIGURATION TBD

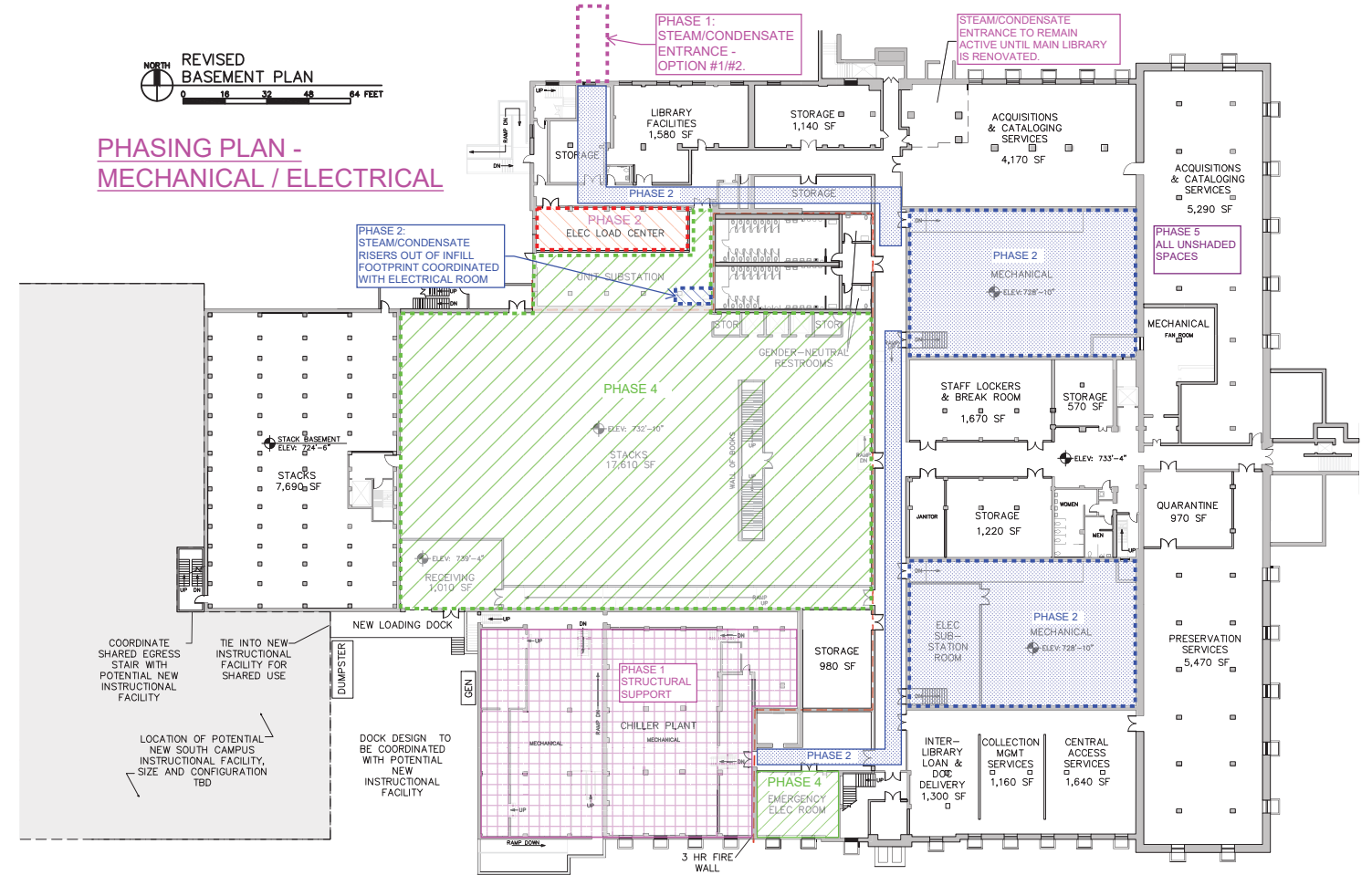
- TERMINAL UNIT COOLING
- TERMINAL UNIT HEATING
- AHU-MLN1
- AHU-MLN2
- AHU-MLS1
- AHU-MLS2
- AHU-MLS3
- AHU-10 (TO REMAIN)
- AHU-STACKS
- AHU-INFILL DV
- AHU-INFILL CB



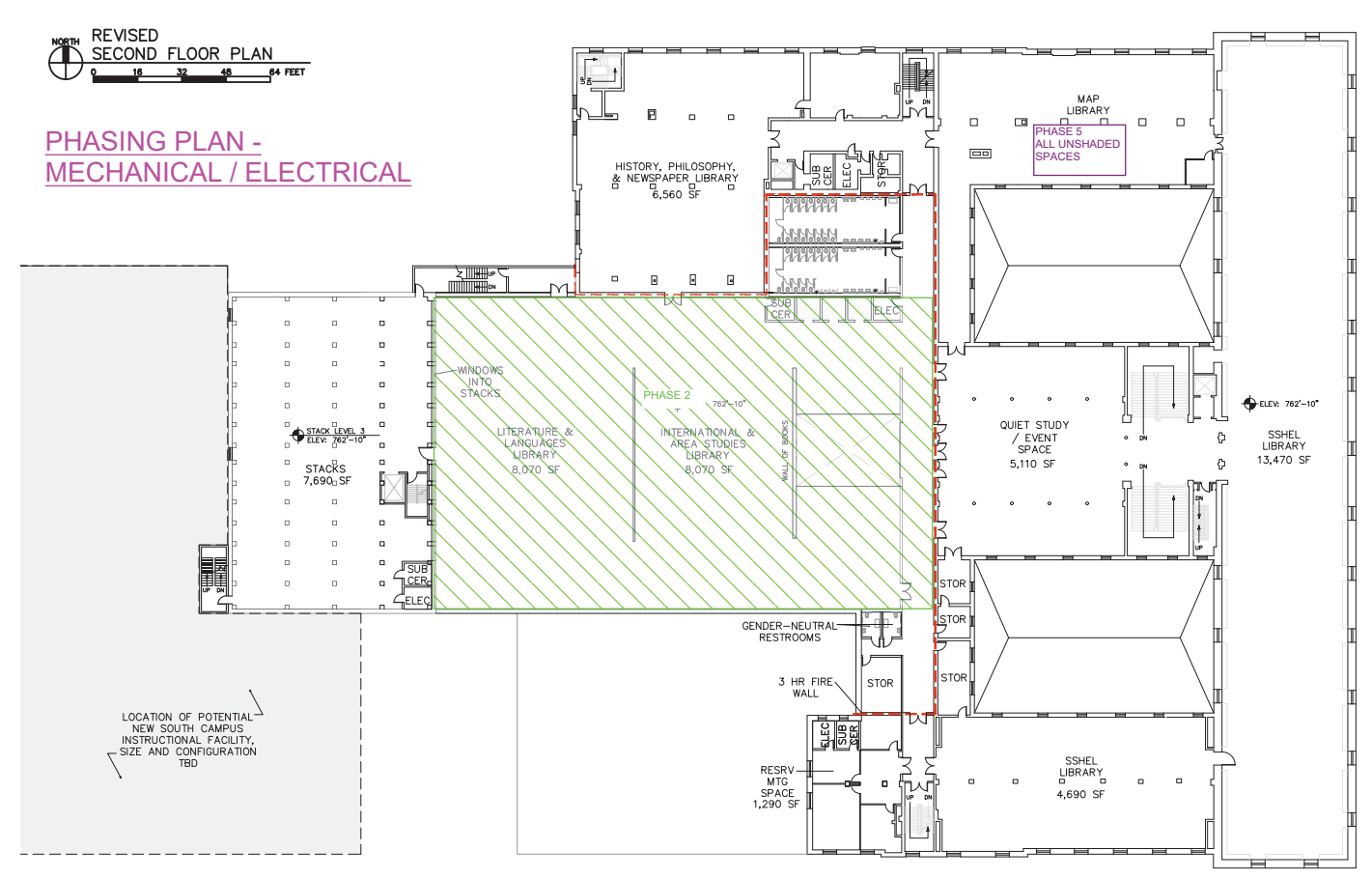
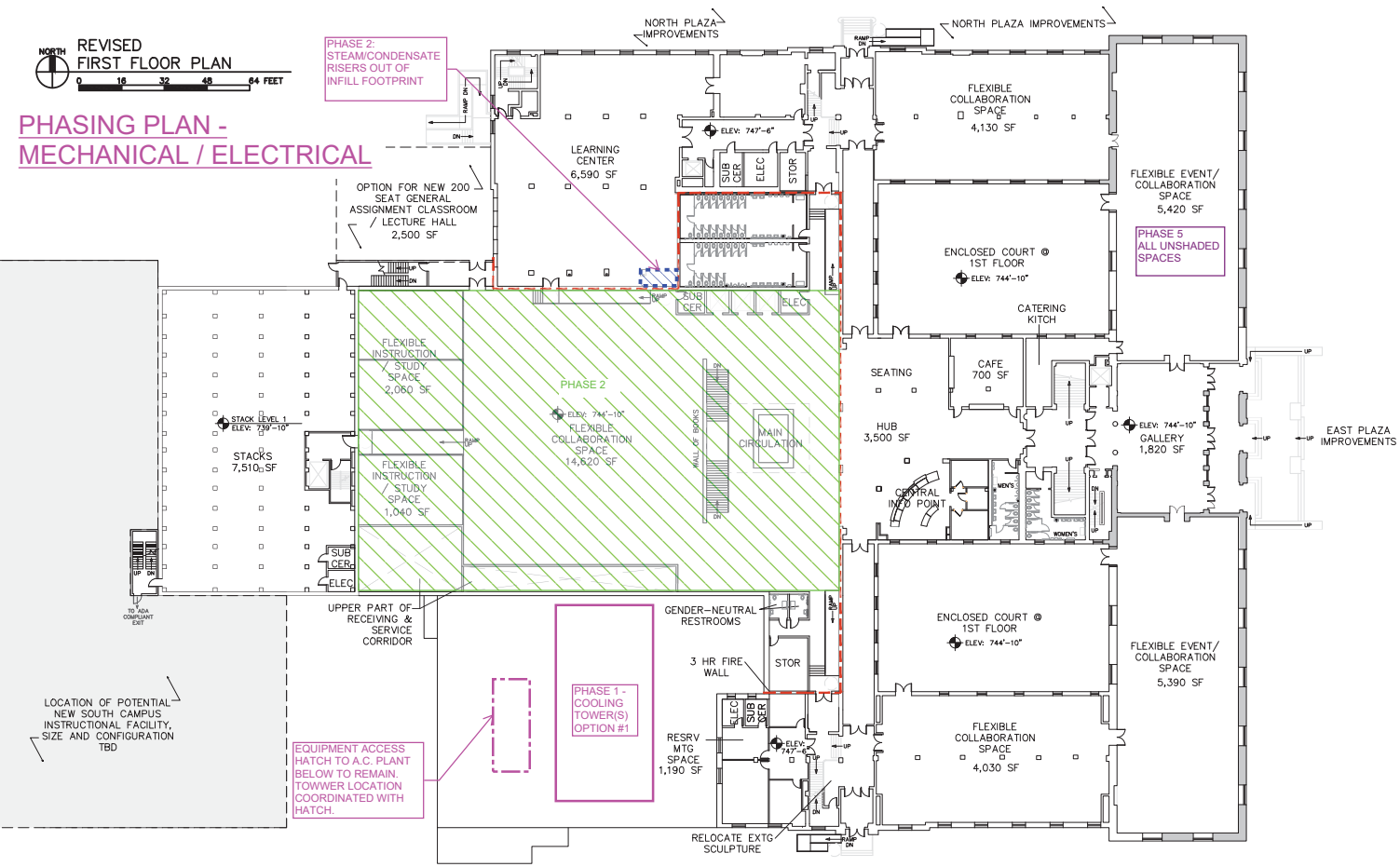
**ROOF PLAN**



**REVISIED BASEMENT PLAN**  
**PHASING PLAN - MECHANICAL / ELECTRICAL**

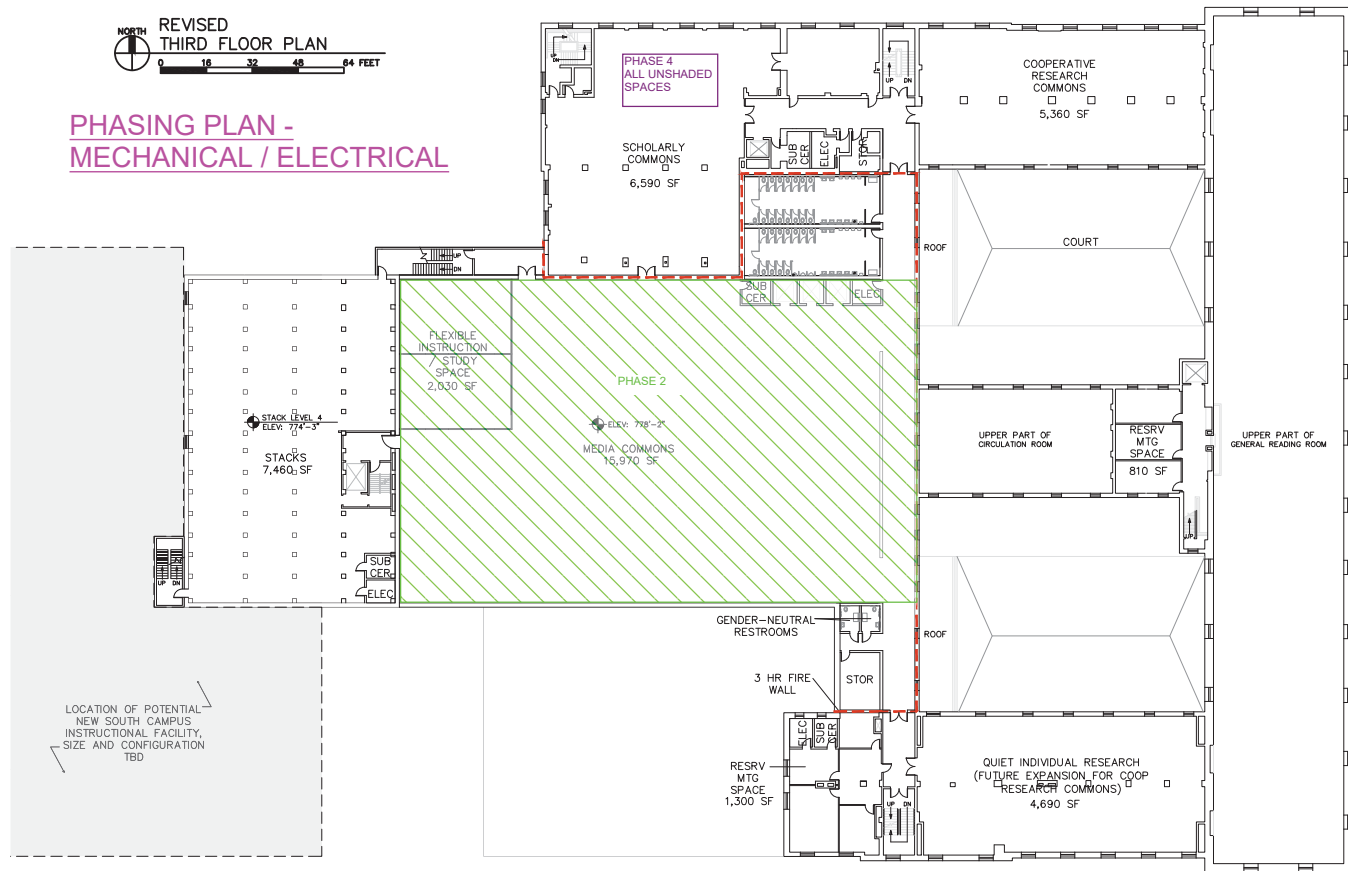






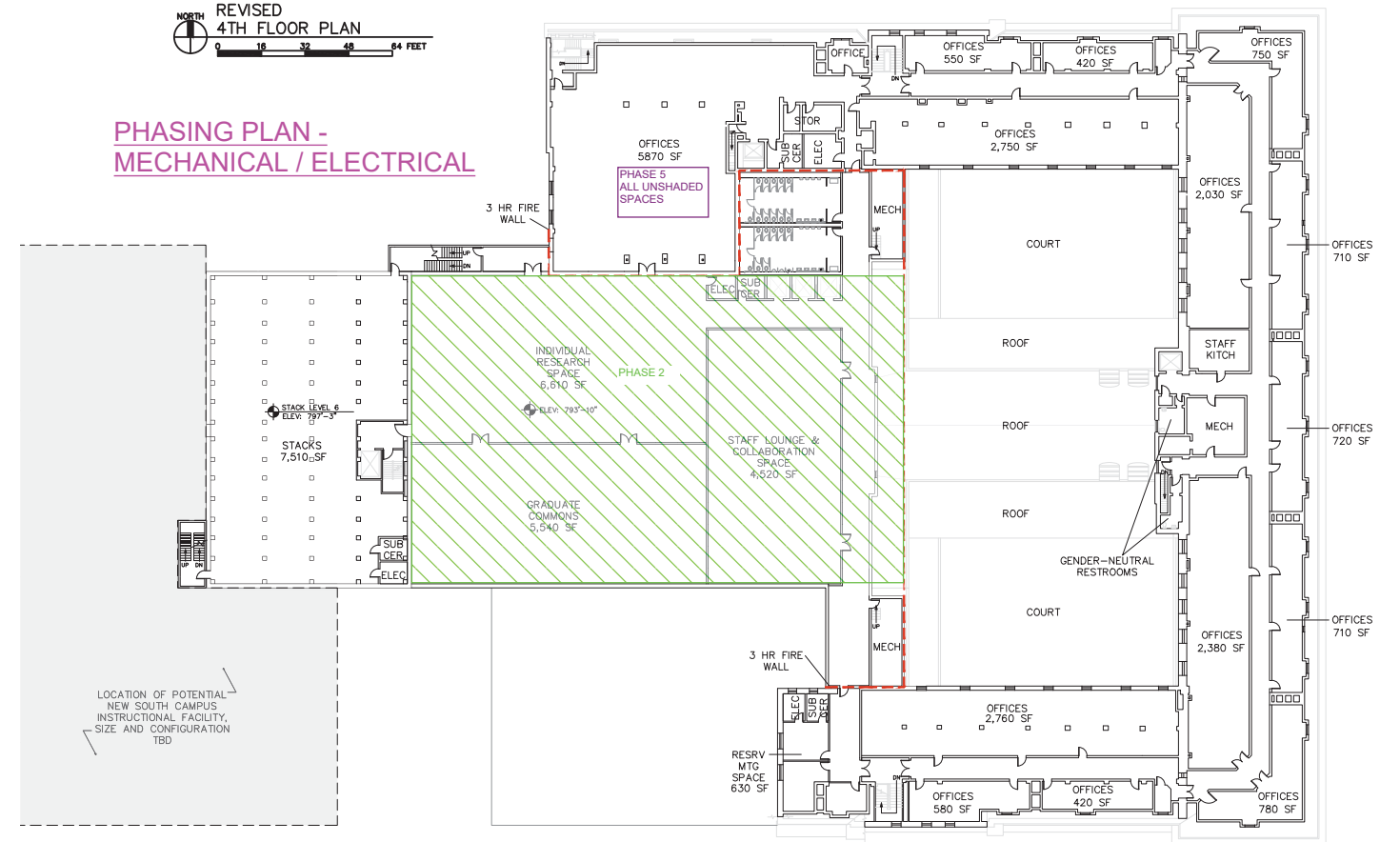
REVISED  
THIRD FLOOR PLAN

PHASING PLAN -  
MECHANICAL / ELECTRICAL



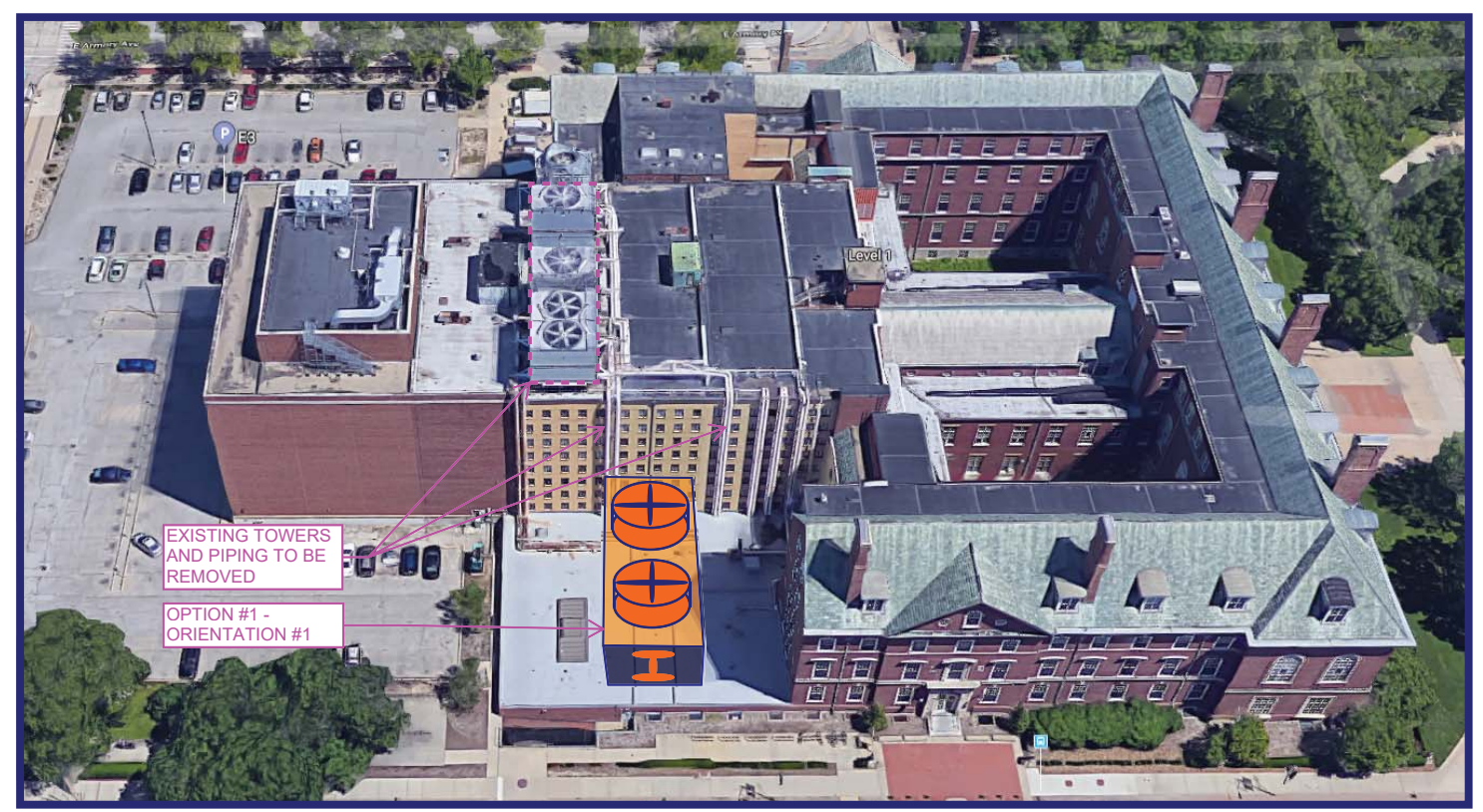
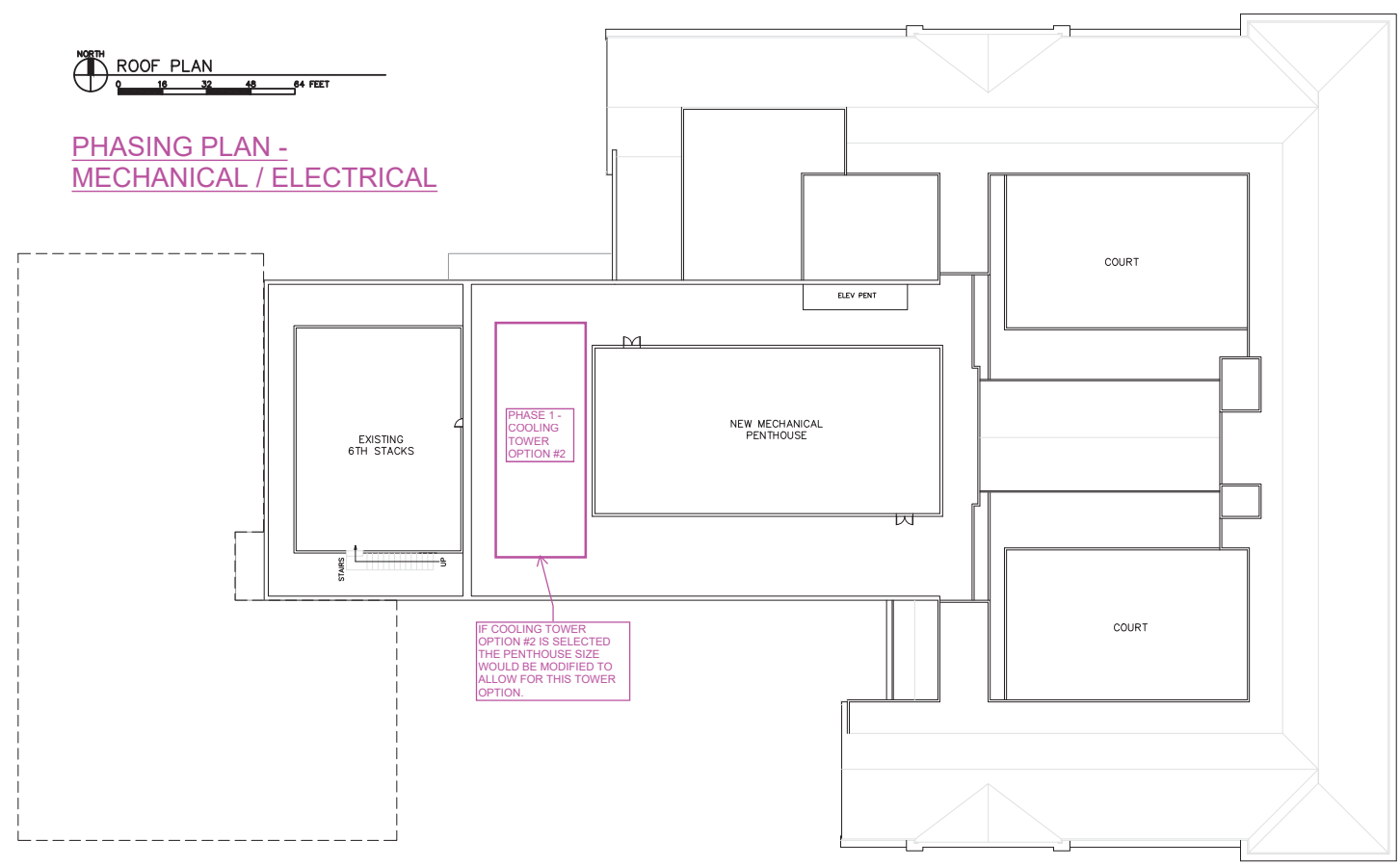
REVISED  
4TH FLOOR PLAN

PHASING PLAN -  
MECHANICAL / ELECTRICAL



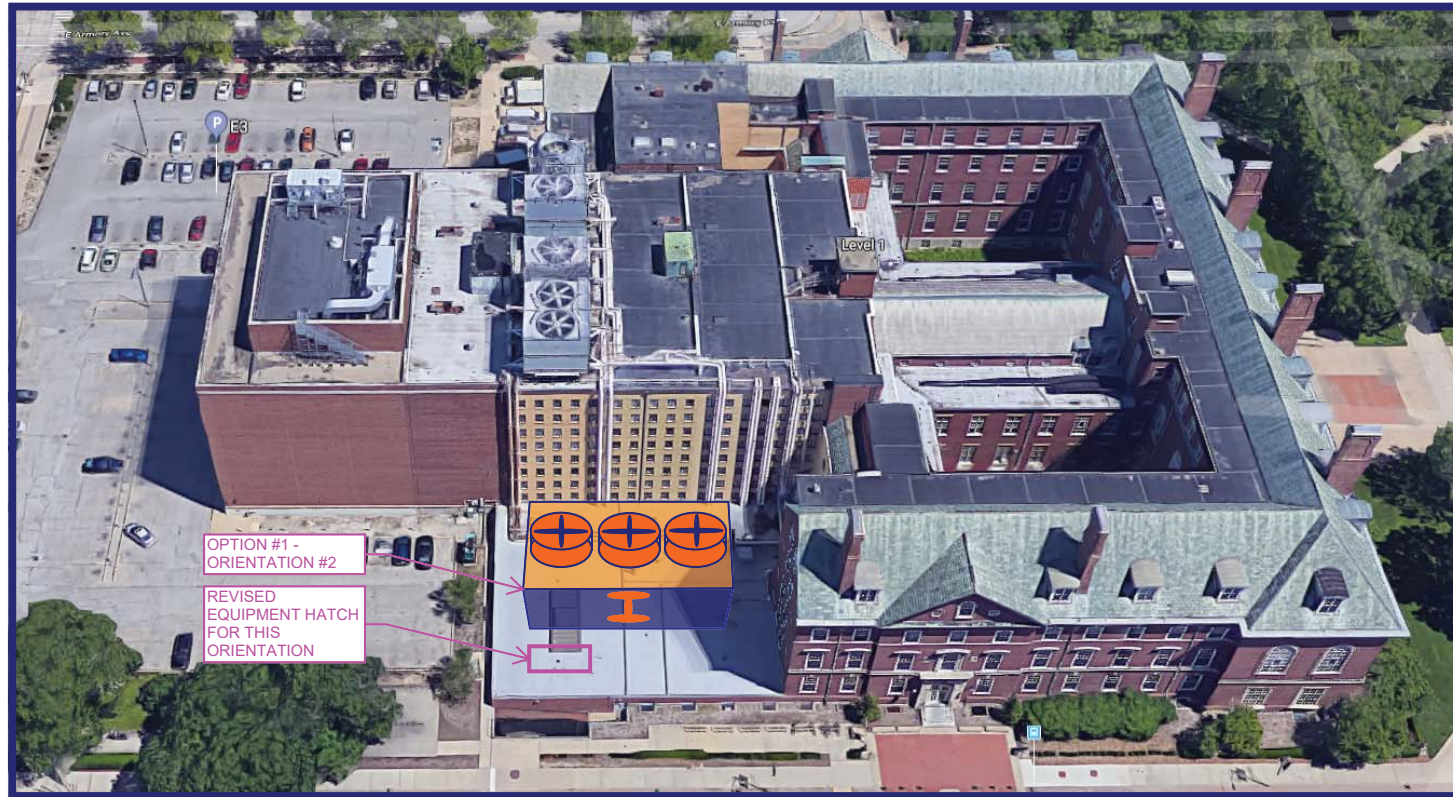


**PHASING PLAN -  
MECHANICAL / ELECTRICAL**

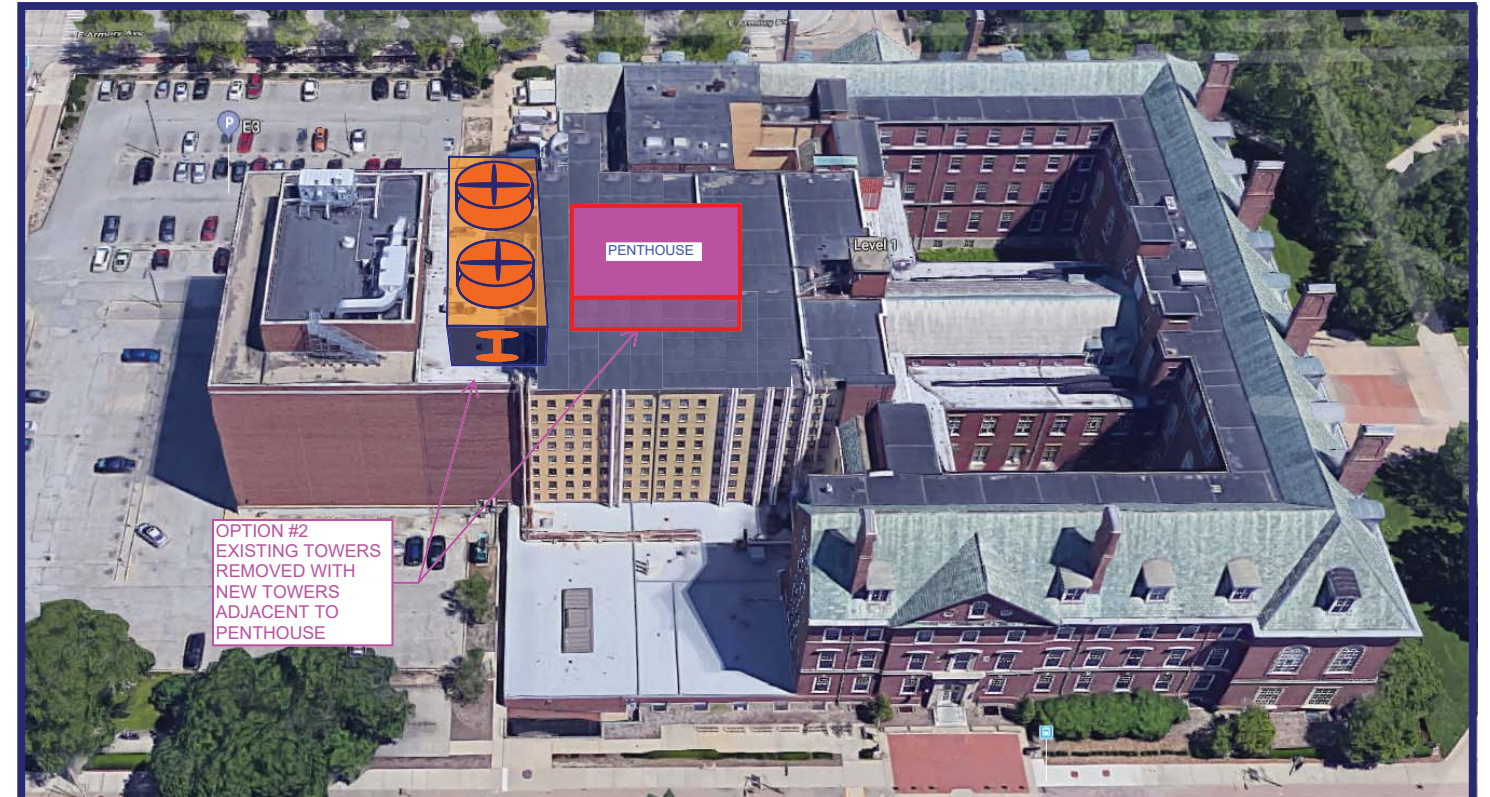


**COOLING TOWER LAYOUT -  
AC PLANT ROOF - OPTION #1  
ORIENTATION #1**





COOLING TOWER LAYOUT -  
AC PLANT ROOF - OPTION #1  
ORIENTATION #2



COOLING TOWER LAYOUT - INFILL  
ADDITION ROOF - OPTION #2



**Library Redevelopment Plan Programming and Conceptual Design Study  
Part I: Programming Report  
50% Comments**

**Introductory Notes**

This document represents the summarized comments of the participants from the University Library's working group membership, the Library Consultation Working Group, and other individuals who participated in the three-day visioning exercise from May 15 – 17, 2019. All members of the aforementioned working groups, the Library Consultation Working Group, and the other participants in the visioning exercise had access to both print and digital copies of the 50% document and were asked to submit comments. Comments were received via email from Dean Wilkin, Heidi Imker, Chris Prom, Cherie' Weible, and as a compiled set from the Library's Programming the Main Library Working Group. All of those comments are appended to this summary in their *raw and unedited form*. Minutes from a meeting of the Library Consultation Working Group are also included in their raw and unedited form. These comments provide valuable insight – in some cases – into how various items were perceived; however, they are integrated into the synthesis and summary corrections authored by Thomas Teper.

**Structure**

The entire document is structured as follows:

- Synthesis of Comments Received
- Editorial Notes (arranged by page number)
- Email Communications:
  - Dean Wilkin
  - Heidi Imker
  - Chris Prom
  - Cherie' Weible
  - Programming the Main Library Working Group
- Minutes of the Library Consultation Working Group Discussion

**DRAFT RESPONSES FROM JLK AND BRIGHTSPOT STRATEGY, 6/18/2019**

**RESPONSE KEY:**

**JLK responses in red**

**Items addressed by brightspot strategy highlighted in blue – general responses attached at end.**

**Library Redevelopment Plan Programming and Conceptual Design Study  
Part I: Programming Report  
50% Comments**

**Synthesis of Comments Received – Prepared by Thomas Teper**

Overall, I feel that the document is moving us in a positive direction. There are clearly a number of things that need clean up, some by careful editing as the document moves forward and some for consistency. Many of the minor issues along those lines are elaborated below, but I am happy to have detailed discussions about those sorts of issues with JLK/brightspot as we move forward.

In terms of comments received thus far, many of those received from Dean Wilkin were among items that I had noted, including the First Floor Service Point, Preservation Services location, naming consistency, etc....

The comments from Heidi Imker are interesting from the standpoint that we might need to do a better job of identifying certain types of spaces and their role. The Graduate Commons is a good example. I believe that this emerged from discussions about the need for study spaces that were specifically geared toward serving the needs of graduate students. The description certainly gives this impression, but the use of the title "Commons" might be problematic. This was something highlighted in the sessions with the campus-wide advisory group. The proliferation of the name "Commons" makes the term effectively meaningless, especially if they are not juxtaposed against something that is clearly the opposite (e.g. private property and common property). The notion of a commons is that it is something that belongs to all. In the case of the Graduate Commons, the name itself means that it is not held in common. Indeed, the word 'commons' sort of flies in the face of the notion of having dedicated space for quiet study and contemplation. Similarly, we have both "commons" and "centers" with no clear distinction between them. Again, this gets back to the discussion with the campus-wide committee about naming.

In terms of the comments from Chris Prom, I believe that model #2 holds promise on many levels. Personally, I think that the notion of rethinking entry portals is worth considering – both to the southwest and northwest. This would also make incorporation of universal design principles into the building more feasible – improving the climate of accessibility to the facility without requiring substantial changes to existing historic entry points and being a direct response to comments made at the salons that we held, from the Library's team, and from members of the campus-wide advisory committee regarding accessibility. I also like the notion of rethinking the loading dock. The existing dock is functional – at best – and a regular source of facilities problems. Where I differ from Chris is that I can see the use of room 200 as a departmental library. We will need to have collections in that room. Something will need to be there in order to fully utilize the classical built-in shelving in that room. While having that room as part of a departmental library is not 100% consistent with the adjacencies document, there is merit to thinking about whether we can aggregate departmental libraries and still seek to give deference to the differences between those associated with the social sciences and those associated with the humanities. It might even be seen as a beneficial element from the standpoint of some members of the campus community. **Noted. We support the inclusion of universal design principals. As discussed in the 50% review meeting, this will be incorporated into Part 2.**

In terms of comments from the Library Consultation Working Group, there seem to be mixed feelings about the southwest entry with some strongly supporting the notion of a SW entry and others being quite against it – although for what seem to be somewhat ideological reasons. Questions were raised about whether there should also be a NW entry and about how SW and/or NW entries would impact buss traffic, etc. .... There was very little concern raised during that group's meeting about the adjacencies as diagrammed. Much of the discussion honestly focused on the existing main entry (East) to the building, how that "blank" space was underwhelming and how this program could help convey to those entering the building that they are entering a place of grandeur. Other, more specific comments from that group

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and the Programming WG membership are integrated into the “additional thoughts” below. **We will address these as individually listed.**

A couple additional thoughts....

Administrative Offices.... Both in terms of placement in the building and in terms of how such placement might compare with other academic departments on campus. This seems to be missing and was noted by the Library Consultation WG. **We will be looking at this in Part 2 of this project, guided by discussions at the 50% review meeting.**

Mortenson Center.... This operation will be moving from the Undergraduate Library into the Main Library. I think that there is a need to look at current space WRT actual need. That it was not factored in is likely an oversight on our part. It is noted in the bulleted list below for p. 54, but it might warrant some discussion. **Inclusion of this item is intended. Will revise.**

Preservation Services.... There were multiple positive comments received from the Programming WG membership about the possibility of relocating Preservation Services to the basement level. **Noted.**

ADA Compliance.... There were several comments received from the Programming WG membership requesting that we seek something more than just ADA compliance. There is a desire for incorporating more universal design into the language of the document as this serves a broader population and benefits everyone. This was also brought up by members of the Library Consultation WG. **Noted. Please see previous related comment response.**

Instructional Facility.... Referred to as a Learning Center in some locations throughout the document, this is also creating confusion in the responses from Programming WG members and campus WG members as there is a lack of clarity of potential placement. This ranges from concern over the parking arrangements to concern over how the SW entry mentioned on page 28 and repurposing of space to SW mentioned on page 31 work in that situation. Future documents would benefit from clarifying that relationship as much as possible as well as the footprint of any proposed Instructional Facility as the footprint greatly impacts various options that might be under consideration for the Library Building (e.g., moving the loading dock, looking at the SW entry, etc....). **Discussed in the 50% review meeting. Location to be at southwest corner of plan, possibly wrapping around the building, and of approximately 20K SF footprint. Report to be revised accordingly.**

**Blended Staff and User Space.... Some concern about a lack of general enthusiasm for “blended spaces” as a phrase. On some levels, individuals see this as being very much like what we see in departmental libraries. In others, individuals see this as being a far cry from that. Future iterations of the document might benefit from better clarification of the intent. This confusion is evident in the campus-level committee and lukewarm reception is being heard from Library Programming WG. Do we mean something similar to departmental libraries? Do we mean something else?**

Noise Transmission and Dampening in Envisioned Space.... Multiple comments expressing concern about noise transmission in both an atrium-type space and in the enclosed courtyards. Any efforts to do such should also account for efforts to dampen noise, especially if any adjacent spaces are utilized for quiet study, departmental libraries, etc.... In addition to the courtyards/atrium spaces, this concern came up with respect to adjacencies. One reviewer notes: “One note about the 4<sup>th</sup> floor – if the idea of putting a grad commons right next to grad quiet study is implemented, I would recommend close attention be paid to sound dampening between the two spaces. We had that kind of configuration at McGill without

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adequate sound dampening and we had constant complaints from the grad students about the noise leeching over into what was supposed to be a quiet space.” **Concerns for noise transmission and dampening will be noted and considered in finalizing adjacencies.**

Courtyards.... Although there are some concerns, there is general support for the benefits of enclosing the courtyards with a distinct desire to have them as open spaces, perhaps with some intent of incorporating internal “green space” into the model. An additional concern with enclosing the courtyards and building up any floor is the loss of natural light into the basement-level rooms which will – in the scenarios provided – largely be operational staff spaces. **Noted. Enclosure of the east courtyards will be considered in only one scenario. This enclosure will occupy only one level (at the current grade level), and will incorporate an atrium roof. Should it be Opening up one or both of the east courtyards as 3-season outdoor space will continue to be included in one or more scenario.**

Learning Center.... Used multiple times in multiple different ways throughout the document. Refers to the Instructional Facility in some locations and to a location within the Library in others. This has created confusion within Library team comments and campus-level team discussions. Additionally, according to David Ward, “I will likely know more about possible directions for the learning/tutoring center in a month or so, after some campus meetings and planning sessions, but may be a bit late for this report.” **The report will be revised to refer to the separate future project to the west as the “Instructional Facility” not “Learning Center”.**

**Media Commons.... The functions slide for the media commons (page 13) has good coverage of some of the technology required, but should also make note of unique media production instruction services emanating from the unit and connected to the technology. We’ve started some new instruction with Susan Muirhead’s new position, and this will grow quite a bit by the time we move in. The scholarly commons slide specifically mentioned a classroom with specialized software – access to a space like this will be a common need for the media commons as well.**

Parking Lot.... Much consternation was created by the outline eating the entire parking lot, especially as there are plans for more events, programming, etc.... No parking would hamper that as well as the proposed Special Collections Building, especially as there is no reference to alternative parking arrangements being considered (garages, etc....) in the vicinity that might absorb some of the lost capacity. **It is not the intention of this study to propose elimination of large amounts of parking. We understand that some amount may be eliminated by the future Instructional Facility project and are making some assumptions on where to locate possible new entrances and loading dock for this project accordingly.**

Staff Needs.... There is a general feeling in both the Programming WG and the Campus WG that there is too little attention being paid to staff space needs in the document. What kinds of spaces are we talking about (offices, pods, cube-farms, etc....)? Although visible in scenario #1, what and where are break spaces in scenarios 2 & 3...? What about offices for faculty, administrative personnel, etc...? **Specific locations for staff spaces will be presented in Part 2 of this project. Design of these offices (closed offices vs pods, vs cubes, etc) will be need to be addressed in future design projects, but should currently be under consideration by the University working groups.**

Adjacencies....

- Among the comments from the Programming WG, the opinion was expressed that non-departmental services to graduate students and the “Scholarly Center” are both within the current remit of the Scholarly Commons, as is the Cooperative Research Commons (CRC). If these three



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operational programs are physically separated, this will naturally lead to internal discussions about how they will be supported. This dovetails with a comment received about the need for staff space in the “cooperative research commons.” Currently, there is a lack of clarity among library personnel about the types of staffing/support needs that will be associated with the CRC. If the CRC is physically separated from other operations such as the Scholarly Center/Scholarly Commons, will there be a need to create a separate staffing site at a time when we are trying to negotiate how to have fewer of them? **This seems to be a question about staffing, but if needed, we can work to make these spaces adjacent to each other with one staffing point.**

- In comments from the Programming WG and discussion with the campus committee, there was some concern expressed about the wisdom of moving traditional service points away from the extant entries of the building. In one case, this was expressed as a concern over moving departmental libraries away from main entries. In another, this was expressed through the absence of a service point in the existing Marshall Gallery – a means of clearly welcoming users into the building. **Noted. Putting a service point in the Marshall Gallery may also help as a security point and/or collections circulation desk as well. We’d also like to see this space become more active with comfortable seating.**

In comments from Programming WG and in discussions among the AULs, there is a definite preference for the basement layout in scenarios 2 & 3.

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**Editorial Notes (Arranged by Page Number)**

Please Note: As the page numbering is inconsistent throughout the document as received, there are multiple sequences of page numbers. Those falling within the section prepared by brightspot are identified as such before the document reverts to the overall page numbering scheme. Both of those transitions are noted in the line below. **This will be corrected.**

Page 2:

- “Illicit” should be “elicit” **This has been corrected.**

Page 4:

- First Column: Use of the “Beckman Institute” raises hackles among folks in the library and elsewhere. Likely can eliminate entire transitional phrase of the sentence: “Where the Beckman...STEM disciplines...” **This will be eliminated.**
- Second Column, First Bullet: Document identifies construction of instructional facility above cooling plant. I thought that we were looking at that as potential library space with the instructional facility going to the west of the plant? **This text is from the original UIUC project statement and will be updated to reflect current understanding of the instructional facility to the west, not over the Cooling Center.**
- Second Column, Third Bullet: Better to replace “...portion of...” with “elements from...” the first stack addition. It gives us more flexibility in the language. **Will revise.**

Page 6:

- Typos: “Building” is misspelled in heading. Errant letter in fourth line of first paragraph **Will revise.**
- Third Paragraph: Yes the tunnel is ADA compliant, but only with the use of a service elevator. That caveat might be a good addition. **Will revise.**

Page 12:

- Text:
  - “Several divisions...” should be “Several departmental libraries...” Divisions hold a different administrative context in the library. And, the units in question are all departmental libraries. **Noted and will revise.**
- Basement Illustration:
  - Room 44: Should be “Library Facilities” in order to distinguish between campus Facilities & Services” Can be shaded same as “RCVG26, 22, and 22A.” **Will Revise.**
- First floor illustration:
  - Spaces Identified as “Business Office” are all to be “Central Reference Point” by end of calendar year. We should clarify that. **Will revise.**
  - 100B: SSHEL Library. Not a schedulable conference room. **Will revise.**
- Second Floor:
  - Rooms 203 and 209: Should be “Central Access Services” not “not occupied” **Will revise.**

Page 13:

- Third Floor:
  - “Bibliotech” is space assigned to RBML and should be shaded as such. **Will revise.**
  - International Studies Library should be “International and Area Studies Library” **Will revise.**

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- Fourth Floor:
  - Room 419: Should be labeled as “Vacant/Collection Storage” **Will revise.**
  - Rooms 407 & 409: Should be labeled “IA Scanning Center” **Will revise.**
  - Rooms 411, 413, and 415: Should be labeled as part of “Preservation Services” and shaded as such **Will revise.**
  - Room 427: It is an assignable “Conference Room”, not officially preservation services space. **Will revise.**
  - “Maps & Geography Library” is just the “Map Library” **Will revise.**
- Text:
  - Delete “Learning Commons” as there is no such entity currently in the Library. **Will revise.**

Page 14:

- In text for Rooms 17D&E, 19A, and & 21...
  - Potential reuse should include “Office and Processing” and “Preservation Services” **Will revise.**

Page 16:

- See comments above regarding first floor illustration **Will revise.**
- First Column: Use of the phrase “library division” as opposed to “departmental library or unit” creates confusion. Should be one of the latter options. **Will revise.**
- Room 100B and 106: Potential Reuse appears to be missing. Instructional Space? **This section of the report is intended to cover main spaces on each floor, not every space. Reuse for these rooms will be examined in Part 2.**

Page 18

- See comments above about second floor illustration **Will revise.**
- Room 204: Potential reuse as event space should include thought about adjacency of event storage. For example, if should it be used for events, might we want to look at 203 or 209 as space for event support? **Noted. Will revise.**

Page 20:

- See comments above regarding second floor illustration **Will revise.**

Page 21:

- First Image is Corridor C305 and room 346, not 205 and 246. **Will revise.**

Page 22:

- See comments above regarding third floor illustration **Will revise.**
- Room 320, 322, and 324: Are these slated for demotion? Or, are these part of the “dog ears” of the Stacks that might be reused? **These are part of the “dog ears” and it is possible they will be retained in some part. Currently, extent of demolition is an approximation.**
- Rooms 323C and 323: Not addressed. These also appear to be part of the “dog ears”. **These are also considered part of the “dog ears”. This section of the report is meant to address “main spaces” on each floor and does not cover every room.**
- Rooms 309... bullet. Current use is as “International and Area Studies Library” **Will Revise.**

Page 23:

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- Research & Information Services Offices and Research Data Services Offices are administratively separate. Would benefit from being distinct colors. **Will revise.**
- Room 326A – G
  - Should be “Room 346A-G” **Will revise.**
  - Should be called “Rare Book & Manuscript Library” **Will revise.**

Page 24:

- See comments above about fourth floor illustration **Will revise.**
- Room 418... bullet: Should just be “Map Library” **Will revise.**
- Spaces identified as “Digitization Services” are actually part of “IA Scanning Center” or “Preservation Services” not a separate admin unit. **Will revise.**

Page 25:

- Room 427 is “Conference Room” not part of “Preservation Services” **Will revise.**
- Room 419: “Vacant/RBML Collections Storage”, not part of Preservation Services **Will revise.**

Page 26:

- “The 6<sup>th</sup> stack addition was constructed with floor levels that do align with those of the rest of the building.” It should read “do not.” This paragraph might also benefit from some clarification. **Will revise.**

Page 27:

- Photo labeled “Map and Geography Library” **Will revise.**

Page 28:

- Courtyard Reuse Section: third sentence has a typo **Will revise.**

Page 30:

- Extension of Building into NW Courtyard...
  - Isn't this the current overflow drain for many of the rooftop chillers? **To be examined in Part 2.**

**Brightspot section with different page numbers**

**Page 2:**

- “Kirstin Dougan” should be changed to “Kirstin Johnson”

**Page 7:**

- “interdisciplinarity” seems to be buried in this vision statement.

**Page 10: Partner+ Category Level Program**

- #4 should include Illinois History & Lincoln Collections as a potential location to leave.
- #3 does not call out Departmental Library Collections as also remaining in the building as additions to the 3.5 million capacity for basement and stacks.

**Page 11:**

- Is “Scholarly Center” the Scholarly Commons? How does this relate to the Cooperative Research Commons? The note says that centers are service focused cluster of spaces while commons

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provide users with shared spaces and tools—the Scholarly Commons is both of these things. I am also not sure how Graduate Commons fits into this picture. (OK, I've read a little further and it sounds like the Scholarly Center and Cooperative Research Commons are adjacent/blended, but I still don't think that Center is an appropriate term based on their definition—it seems like an arbitrary distinction once I read the details on page 46). This issue hasn't been clear in any discussions the Library has had.

- Learning Center is causing some confusion here, especially as proposed site plan talks about a different “Learning Center”. We need to clarify what we mean by Learning Center and be consistent.

Page 15:

- It is not clear to some of the readers that the 1<sup>st</sup> floor service point (which – we pointed out needs to be incorporated into the drawings earlier) is included in the “Hub” space. Clarifying this would be helpful.

Page 16:

- Event Space: Elsewhere in the document, there appears to be reference to event space in the current Room 204. Perhaps a note here that seeks to clarify that event space might be located in that room as opposed to in new construction?
- Flex Instruction: Discussion in our programming WG has the potential capacity as expandable to upwards of ca. 60 individuals.

Page 18:

- According to members of our Programming WG, the blended staff and user space looks like a service desk in user space. As noted earlier in the comments, it might be worth clarifying what is meant by such spaces. In the discussions in May, it sounded like we were talking about putting open-ish concept staff offices in user space with no service desk. The version on this page would work a lot better. However, that also conflicts on some levels with what we see in terms of the departmental library model, a model that many of our folks already consider to be a blended model.

Page 20: Category-Level Program

- Staff space on basement level of 6<sup>th</sup> stack addition should be in “Original Building” space under the “Café” and “Hub/Entry”

**Back to Main Page Numbering**

Page 54: Space Needs and Adjacencies Study

- Should we have a block to highlight those units that will be moving out of the Main Library? **Will revise.**
- Programmed spaces block **Will revise.**
  - General Collection from Undergrad, yes.
  - “Media Collections” should be added.
- Undergrad to Main Block **Will revise.**
  - No mention of Mortenson Center.
- Library Departments Block **Will revise.**
  - Map Library, not Maps and Geography
- Staff and Area Services Block **Will revise.**

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- BiblioTECH is part of RBML and will, presumably, be moving out.

Pages 56/57:

- Space Design and Placement Factors:
  - Should there be mention of “Staff Break Spaces”? **Yes, we will clarify that at this point, within the adjacency studies, these are included in the staff office areas. They will be located and identified separately in floor plans presented in Part 2 of this study.**
  - Adjacency of Preservation Services operations to Special Collections units and other Technical Services Units should be considered. **It is our understanding that Preservation Services is to remain in this building and that adjacency to other technical services and the shipping/receiving area is desirable. If this is to be moved to the current UGL building, please alert us to this so that we may revise.**
- “Proposed Site and Circulation”
  - For the image, we should rethink the outline of the Potential Site of New Learning Center. It's too expansive for need – maybe 1/3 of current diagramed size going forward. **Yes, let us discuss in the review meeting so that we may revise accordingly.**

Page 58:

- Staff space on basement level of 6<sup>th</sup> stack addition should be in “Original Building” space under the “Café” and “Hub/Entry”. When one reviews the scenarios on the following pages, we see that, but not in this adjacencies document. **Yes, this is the adjacency diagram produced at the visioning sessions. We'll have this updated.**

Page 59:

- The observation was made that it would be good to have obvious/easy connections between the Media Commons, “Scholarly Center” and Cooperative Research Commons. Maybe a largish staircase? This connection would be harder with the plan on p. 60. **Noted. This will be examined in Part 2 during production of conceptual floor plans.**

Page 61:

- Comments received on this scenario often looked at the new/old divide and the overall negative impression that left on several individuals. **Noted. A new scenario is to be developed for the Final Part 1 submission.**



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**Email of Dean Wilkin**

I'm generally comfortable with the 50%, especially the scenarios laid out at the end. There are a few things I'd like them to address, most of which are related to terminology and would be confusing to our constituency. Specifically, I'd like them to address:

1. use of the word "divisions" (e.g., p. 12), apparently to refer to departmental libraries (should say "departmental libraries") **Will revise.**
2. to remove the reference to an existing "Learning Commons" on p. 13 **Will revise. This is meant to refer to the 220.**
3. and to refer to individual departmental libraries consistently by the names we use (e.g., "International and Area Studies Library") **Will revise.**

Also,

1. I note your concern about the staff location in the 6th stack range. They were being deliberate in responding to Cherié's suggestion, and may have misunderstood. Synch up with Cherié to confirm your sense of a misunderstanding. **Will revise.**
2. I believe you were suggesting locating preservation services in the tunnel, and that's not reflected on p. 14. Did I misunderstand? If I understood your suggestion, make sure that's clear. **We are not suggesting location of preservation services (or anything else) within the tunnel. I do not see reference to this on page 14, but will correct/clarify as needed here or elsewhere.**
3. I'm troubled by the diagrammatic representation of the "Learning Center" on p. 57. While some things are stakes in the ground and only an abstraction, to suggest that the new learning center might be this large and occupy that much real estate is troubling. I'm assuming they invented this, and thus their diagram can just be scaled back significantly (1/3 or so of this size) **Agreed. This will be updated per our discussion at the 50% review meeting.**
4. I believe the "first floor service point" needs to be in here as a fact in the building layout, e.g., on pages 16/17. **This will be updated per plans provided at the 50% review meeting.**

Before you send feedback on (e.g., to Dennis or others), I'd like you to consolidate it, including my comments here, and go over it with me. Make sure you plan accordingly so that we get things back to them on time.

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**Email of Heidi Imker**

Thanks Tom.

I just took a quick look. Here are my impressions...

The adjacencies diagrams are really helpful.

Do you know where this Grad Commons idea is coming from? I don't remember discussing that ... in fact, I remember discussing UG space explicitly but don't see anything here specifically naming UG. Especially odd given a Grad Commons is named.

Also, if having a set of Commons and Centers, which I have mixed feelings about, why call some commons and others centers? If anything, I'd like to see consolidation of those units, not proliferation...

Er, are we really trying to fit staff and grad offices on the 4<sup>th</sup> floor? **Adjacency diagrams are not meant to represent spatial requirements of each program element. This will be examined in Part 2 of this study.**

Of the scenarios on 59-61, I like a mix between the three. Too much to try to explain in email, but happy to talk in person if my impressions could be useful.

Heidi

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**Email of Chris Prom**

I haven't had a chance to go fully through this, but agree the adjacencies are helpful. I think people will hone in on pages 58 to 61 for our discussion.

My preference of the three is #2, the southwest plaza, since I like the idea of keeping the dept libraries close to the stacks, and in place where we can build toward a central circ point. But in that one, I am not sure why you'd keep room 200 a dept library, as opposed to just making it a study space. Overall, I don't understand how 1 or especially # 3 would work, since they seem to separate the dept libraries too much from the stacks, which long term will just keep us replicating the conceptual model that I think we want to break free from . . . and have them all closer to each other as research becomes increasingly interdisciplinary. I could see a mix of #1 and #2, for example. **Noted. To be discussed further at the review meeting.**

Chris

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**Email of Cherie' Weible**

I think, from what I have seen, that I also like #2 the best, but there are aspects of the others that are good.

I want us to move toward one circulation point if we possible can do so. The problem with 200 not being a dept. library is all of those bookshelves in there . . . however, I wonder if that is a good place for the "book wall" thing that highlights the collection – things that show the breadth and depth of the collection, but not of high value. **Noted and to be considered.**

I talked to Tom – I did not want staff in the 6<sup>th</sup> addition of the basement where we have compact shelving – just down near the loading dock area for processing everything. **Agreed. This initial adjacency diagram will be revised.**

Also, it was apparent to me while looking this over that we seem to push most of our Civil Service staff to the basement and most of the faculty to the 4<sup>th</sup> floor which does not send a good message. **This is due to efficiencies created by adjacency of Civil Service staff to the loading dock and MEP/building service spaces and efficiencies created by consolidating faculty offices into one area/floor.**

This needs more discussion and hammering out so that we get it right. **For further discussion at the review meeting.**

--Cherie'

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**Email Comments from Programming the Main Library WG – Compiled Feedback (6/10/2019)**

June 10, 2019

50% Plan feedback from the Programming and Services Working Group

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Overall, I thought the company could have done a better job of editing. E.g., “illicit response” phrase on page 2 (preface). (NO) **Will revise.**

There are various uses of the terms “Library division” (pg 16) vs Library unit and departmental library throughout that make me think the consultants aren’t 100% clear on our structure just yet. (KJ) **Will revise.**

Pg. 4 I know this is an internal document, but why call out Beckman? (KJ) **This text is from the UIUC program statement. Will eliminate this reference.**

Pg. 11 Isn’t 203 Billing and 209 Janelle’s office? Both are marked unused on the diagram. (KJ) **Will revise.**

Pg. 13 419 is empty/storage at the moment and not necessarily all space that needs to be assigned to digital services in future. (KJ) **Will revise.**

Pg. 13: we do not have a learning commons. (KH) **Will revise.**

Pg. 19 specifically 225 is Classics collection—do we need to keep physical distinction going forward per former agreements from when they moved from 4<sup>th</sup> floor? (KJ) **Will revise.**

Pg. 21: It might not matter, but the first image is actually of the third floor, not the second floor. (JL) **Will revise.**

Pg. 22: re: IHLC, “all of this area is contained within the area proposed for demolition.” If I’m reading the maps correctly, the three offices would not be demolished. (KH) **These are part of the “dog ears” and it is possible they will be retained in some part. Currently, extent of demolition is an approximation.**

Pg. 22 what about IAS office, would those be demolished like the IHLC offices? (KJ) **These are part of the “dog ears” and it is possible they will be retained in some part. Currently, extent of demolition is an approximation.**

On page 23 I felt there was a real lack of addressing or understanding the functions of office space for RIS, and grouping RIS with RDS, BiblioTech in terms of office configurations was confusing. I think each should be separated since they align with different services. (NO) {KH noted later that BiblioTech is part of RBML so would move with them, no?} **Noted. This will be considered in Part 2 conceptual floor plans.**

On page 25, I thought the suggestions of relocating Preservation Services to the basement was good since that might allow for more functional adjacencies. (NO) **Noted and agreed.**

Pg. 25 what about 419? It’s currently empty/storage. (KJ) **Will revise.**

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Pg. 26 How can we go beyond ADA compliance to get to true accessibility/human-centered design—something we’ve heard as a priority from several voices. (KJ) **To be discussed at the review meeting. We would like to know the University’s vision for this.**

Pg. 28: It looks like they are picturing a grand entry to the new space in the same space that will be the instructional facility funded by COB, if that facility is still in the works. (KH) **For discussion at the review meeting.**

Pg. 31: Again, they are making plans for the space where the COB instructional facility was mapped. (KH) **For discussion at the review meeting.**

“Summary of documentation” section: Again, I know it’s an internal document, but on p. 2 my name/title should be corrected to Kirstin Johnson, Head of Music and Performing Arts Library (KJ)

Pg. 39: I’ve heard (and said) a lot about the library as a place for interdisciplinarity, but it is buried in this vision statement. (KH)

Pg. 41: In the sessions I attended, I did not hear a lot of enthusiasm for the idea of blended staff and user space. (KH)

Slide 42/Partner+ Category-Level Program (Master Plan, pg. 10) – I think we established in the sessions that 3.5 million volumes is what we expect for “stacks,” but does not address the collections for the departmental libraries and UGL. Where are the spatial and structural concerns for these volumes addressed? (JL)

Slide 42/page 10 of the Visioning document: I have serious concerns about the recommendation to enclose the courtyards in the east section of the building because that creates very loud and distracting noise in the spaces adjacent to the light courts. The times when people have been in the courtyard have caused echoes and acoustic problems. Unless some type of noise baffling system can be added, the enclosure of those spaces will cause noise problems for years to come. (NO)

I don’t have a lot of feedback since this phase is still pretty nebulous and unfocused. I do like that they’ve identified some potential for using the courtyard spaces and the possibility for adding glass to others to create a “greenhouse” atmosphere. Despite all of the windows in this building, it’s still pretty dark – getting more light in would be nice. (SH) **Noted.**

Pg. 43: Is “Scholarly Center” the Scholarly Commons? How does this relate to the Cooperative Research Commons? The note says that centers are service focused cluster of spaces while commons provide users with shared spaces and tools—the Scholarly Commons is both of these things. I am also not sure how Graduate Commons fits into this picture. (OK, I’ve read a little further and it sounds like the Scholarly Center and Cooperative Research Commons are adjacent/blended, but I still don’t think that Center is an appropriate term based on their definition—it seems like an arbitrary distinction once I read the details on page 46). This issue hasn’t been clear in any discussions the Library has had. (KH)

Also, “Learning Center” pops up again here, and I don’t think it’s something we’ve talked about unless it is instructional space, which is listed separately. (KH)



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Slide 46/Pg. 14 Will the cooperative research commons need staff and individual study space? Or is concept really just about the “project rooms” What other service/use needs to be accommodated here? (KJ)

Slide 47/ page 15: It’s not necessarily clear from the term “Hub,” but my take-away from the sessions with the consultants was the area marked “Hub” on the diagrams would include the first floor service point that might act as a funnel to the rest of the building. I read some of the others’ comments about that lack and wanted to provide my understanding of what was discussed. (JL)

Slide 48/page 16 Flexible instruction space/event space—needs to exist in multiple iterations? Need capacity for at least 60 students in instructional space, but need access to event spaces when instruction space is in use too. (KJ)

Pg. 50: The blended staff and user space looks like a service desk in user space. This is different from what I understood at the workshops with brightspot: it sounded like they were talking about putting staff offices in user space with no service desk. The version on this page would work a lot better, IMHO. (KH)

Pg. 52: This looks again like offices are in user space. (KH)

Pg. 54: This is a question rather than a comment: isn’t BiblioTECH a special collections function? Should it move with them? (KH) **Will revise.**

Pg. 54 UGL “General collections” includes media and this would likely be housed differently than books in compact shelving, so will need consideration as to location in new space (KJ) **Noted. Will be examined in Part 2 conceptual floor plans.**

Pg. 57 Proposed site and circulation—wasn’t the instructional building going to go on the mechanical level and not in the parking lot. I can’t fathom that we could do without a parking lot—especially to engender good will with community patrons and of course to accommodate patrons and staff who need close parking. (KJ) **Site plan to be revised per discussion at the review meeting.**

I was quite surprised to see that a new learning center is being considered for the northwest corner of the parking lot that will wrap around the entire west side of the library building. All previous reference has been to another business instructional facility at the southwest corner of the building. In the drawing on page 57 this would remove all parking for the Main Library building which is extremely problematic for researchers and visitors. And, frankly for the business students as well if that is where this proposal is coming from. I disagree with removing parking completely, although I am resigned to some space being allocated to an instructional facility. I think the Library will have structural, public relations, and organizational problems if it has a complete wraparound building added to the west that is not part of the Library spaces. (NO) **Site plan to be revised per discussion at the review meeting.**

Pg. 59: This may come later, but it would be good to have obvious/easy connections between the Media Commons, “Scholarly Center” and Cooperative Research Commons. Maybe a largish staircase? This connection would be harder with the plan on p. 60. (KH) **Noted. To be considered in Part 2.**

The adjacency scenario diagrams (pp. 59-61) were helpful in visualizing what things could look like. I’m currently partial to #3 but I’d also like to see the new southwest entrance added. One note about the 4<sup>th</sup> floor – if the idea of putting a grad commons right next to grad quiet study is implemented, I would recommend close attention be paid to sound dampening between the two spaces. We had that kind of

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configuration at McGill without adequate sound dampening and we had constant complaints from the grad students about the noise leeching over into what was supposed to be a quiet space. (SH) **Noted. Will be considered during production of conceptual plans in Part 2.**

Pg. 61 Scenario 3—we specifically talked about how we wanted to avoid the new/old divide with “old” things remaining in existing building and “new” things going in the new space. (KJ) **Will be revised.**

General comments: The non-departmental services to graduate students and the “Scholarly Center” are both within the current remit of the Scholarly Commons, as is the Cooperative Research Commons as far as I understand it (not very far). If these three things are being separated we need to have a lot of conversation about how they will be supported. (KH) **We will consider how to make these adjacent in order to use only one service point.**

Also, I will leave authoritative comments on instruction space to the folks at Undergrad, but the drawings show less overlap between instruction and collaboration/open study space than I was expecting, making the instruction space look somewhat small. (KH) **Currently, the programmed instruction space is relatively small and distributed through the plan in multiple separate spaces. This will be further examined in Part 2 conceptual floor plans.**

There is very limited reference to staff needs in this document. The programmatic plans relate to services but do not recognize that services are provided by people who need adequate, often private-office space to conduct their work. **This is a serious, major concern.** (NO) **This level of detail is important and will be addressed and incorporated during future design projects. For now, more general programmatic percentages are to be used for conceptual-level plans.**

There is very little reference to the fact that the print collection continues to grow and transfers from departmental libraries into the Stacks (or elsewhere) will be needed for the foreseeable future. Attention needs to be given to the fact that the new building will have to house expanding collections, even if they do not expand at the same rate as in the past. (NO) **This level of detail is not included in the scope of this project and will need to be addressed in future design phases.**

The security issues of a building that needs to have some areas closed and locked at specific times are barely mentioned. Security in a space that is open at differing times, some of the spaces possibly being open 24 hours daily, is a major concern. Construction that allows for spaces to be closed and locked is essential. (NO) **This is being considered, and solutions will be presented in Part 2 conceptual plans.**

While I appreciate the architects trying to create a flexible space, they still seem to lack an understanding of the mission of the Library. Having the first floor resemble a large shopping mall without much in the way of assistance, collections, or other services diminishes the purpose and grandeur of the Library. Despite stating that the east side of the building needs to remain intact, and that departmental libraries will remain in the building, there are repeated efforts to move service points away from spaces where users enter the building. (NO) **Currently, we are in Part 1 of this project, Pre-Design, where the intention is to present diagrams of adjacencies and figure out appropriate programmatic elements and associated space requirements. We will present conceptual design of the resulting ideas in Part 2.**

I like that the Media Commons appears more coadjacent to other commons in this draft; during the discussions, the talk of putting it in the basement seemed problematic, given the programmatic functions of the space and opportunities to collaborate with the scholarly commons and departmental libraries more directly. (DW) **Noted.**

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The functions slide for the media commons (page 13) has good coverage of some of the technology required, but should also make note of unique media production instruction services emanating from the unit and connected to the technology. We've started some new instruction with Susan Muirhead's new position, and this will grow quite a bit by the time we move in. The scholarly commons slide specifically mentioned a classroom with specialized software – access to a space like this will be a common need for the media commons as well. (DW) **Noted. Adjacency of scholarly commons and media commons to be considered.**

I will likely know more about possible directions for the learning/tutoring center in a month or so, after some campus meetings and planning sessions, but may be a bit late for this report. (DW)  
**Noted.**

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**Library Consultation Working Group Minutes**

**Library Consultation Working Group**  
**Meeting Minutes June 10, 2019 – 3:00 p.m.**  
**Main Library, Room 428**

**Present:** David Chasco, Ariana Traill, Greg Girolami, Tom Johnson, Kathryn LaBarre, Lori Newcomb, Bob Morrissey, Cynthia Oliver, Aric Rindfleisch, Lynne Thomas, Tom Teper, Matthew Tomaszewski, Assata Zerai, John Wilkin

**Absent:** Melissa Michael, Laura Payne, Leslie Morrow, Alexandra Greulich,

1. David Chasco welcomed the group and turned the meeting over to Tom Teper. Tom presented a Power Point of highlights of the 50% submittal from the project consultants. (The presentation is attached). Tom asked the group how they felt about the vision and the rest of the submittal?
  - a. Ariana responded with the following comments/questions: humanize the space, why fill the light courts, why Marshall Gallery isn't mentioned in the submittal to make it more welcoming, inviting, and comfortable with better directional signage.
  - b. Cynthia Oliver questioned why the consultants only show staff in the basement and fourth floor? Lynne Thomas explained that the staff shown in the basement and fourth floor would not be public facing staff, these employees do behind the scene work.
  - c. David commented that when you enter through the east entrance, you have no sense that you are entering a preeminent Library. David stated that when you walk into the union, you sense the grandeur with all of the wood and furnishings. David made the following suggestions:
    - Begin with exterior-update area between the current Undergrad Library and Main Library
    - Light court could have skylights if covered
    - There should be personnel at the main entry to greet patrons **Noted. Will consider adding a service point at this entrance.**
    - Wood could be removed from the second floor circulation area, and placed in the east entry. New lighting and surfaces could make this area more inviting. **The Marshall Gallery is of primary historic significance and will be treated accordingly.**
    - Walls could be removed, with light courts exposed to make the entry more grand **Connection between light courts and first floor to be examined in Part 2.**
  - d. Greg asked is this is part of the scope of the project? David responded that this is not part of the scope of the project, but more of a design issue.
  - e. Matthew stated that it is great to be mindful of the whole building with desires and key pieces a great value to the discussion. As we move forward, we can see what we can afford.
  - f. Tom Teper asked if the adjacencies seem logical. Lori Newcomb responded with the following: **(All of these to be considered.)**
    - Instructional spaces close to the first floor entry make sense.
    - How much of the building can be secured for late night study?
    - If there is an evening performance, is there a secure space away from the collection and study space?
    - Will there be books on the fourth floor if this is a destination space?
  - g. David stated that there are architectural ways to deal with security. He asked the following questions:
    - Does it make sense to have a northwest entry in the new space?
    - Is the current north/south corridor commonly used?

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- Do bus drop-off and pick-up locations need to change?
  - Is there a heavy flow coming into the building from the north and south?
  - Is there a way to change the entry location for room 66? It is impossible to find.
  - How unthinkable would it be to eliminate the east entry?
  - How many people will enter the Main and Special Collections building?
  - How will ADA compliance be dealt with if there is a new southwest entry above the current mechanical room?
- h. Tom Teper stated that the consultants have given us three scenarios. We will need to break down each floor and choose what is important.
- i. David commented that the possibility of other scenarios or additions to the scope of the project should be down on paper for the consultants to see in case additional funds become available.
- j. David explained that HVAC needs are different for staff areas compared to public spaces. This will come into play later, and be a challenge for consultants. **Agreed and to be considered in Part 2.**
- k. Lori asked what the goals are for the group, so that Brightspot can reach a 75% submittal? **Currently, our next submittal is scheduled to be the completion of Part 1 on June 28. Do we want to put down for the record the southwest entry challenges? Per discussion at 50% review meeting, the new entrance at this location will continue to be examined in one scenario.**
- l. David stated that he would encourage the group to do that, as this is a great donor opportunity. If we don't put it on paper, it won't be addressed. We need to include dreams and aspirations. We also need to ensure that we discuss both the Special Collections building project, and Main Library building project.
- m. Tom Teper stated that the consultants need to be cognizant of both projects and how we combine them for best results.
- n. Lori commented that the group must stand their ground on the west parking lot. Parking is already difficult, and it would be very beneficial to double the current parking.

The meeting adjourned at 4:20 p.m.

## **brightspot strategy General Comments**

Responses to general comments are below.

- **Commons & Centers**
  - Commons and centers distinction was in response to the library consultation group regarding confusion about the number of commons and what that meant. Generally, commons primary focus is shared space and tools, but it can be for a specific user group, i.e. graduate students. A center's primary focus was providing services and support, although it can include shared spaces and tools. However, it sounds like many of these spaces may have significant aspects of both which makes the distinction less relevant. Here are our thoughts on how to address each one.
  - **Scholarly Commons and CRC (Combine into one place?)** - Our understanding was the CRC was focused on spaces for partners and long term projects. Consequently, the library staffing should be minimal. However, should the CRC be integrated into the Scholarly Commons? The significant change from its current program would be to spaces for partners and long term project rooms, and scholarly commons does include spaces to support communities of practice.
  - **Media Commons (now Studio?)**: Perhaps a better word be studio which connotes a place to create with the tools?
  - **Graduate Commons (now Lounge and workspace?)**: Perhaps this closer to "lounge" where there is a shared informal gathering space with meeting rooms that is connected to but acoustically separated from the individual workspaces.
  - **Learning Center (Learning Commons?)** - In the programming section, the learning center refers to academic support, i.e. tutoring, writing center, that is part of undergraduate library. It can include classrooms (or group instructional spaces). Conventionally, academic libraries have referred to these kinds of spaces as learning commons. In addition, In the adjacency diagram we can show the learning center as smaller, per Dean Wilkin's comment.
- **Service points**
  - Service points are not always the most welcoming way to enter a building. They are often better located near the users at their point of need rather than entrances where they really act as points of control.
  - The idea was to place the integrated service point near the hub rather than at multiple entrances.
- **Administrative offices**
- **Mortensen Center**
  - As an approach, the program includes all the spaces of the undergraduate library in the new Main Library. However, we will confirm that the mortensen center was included in the programming total.
- **Blended staff and user space**
  - Blended workspace model can include the diversity of forms. We listed the departmental library as one, but not only form, under consideration. Throughout the building different



forms may be more appropriate. Potential forms are listed below, but perhaps the best approach is to determine which form(s) are most appropriate and specifically mention them on the space type page.

- Open staff workspace as service point in user space -- This is closest to departmental model.
- Accessible service points/consultation areas in staff workspace - This is the model of the Emory Digital Scholarship Center shown in photo.
- Shared collaborative and creative space - This is the model of UCLA inquiry lab. See article [here](#) for more description.

#### Comments on detailed edits. Comments in red.

- Page 2: “Kirstin Dougan” should be changed to “Kirstin Johnson” - **Will update.**
- Page 7: “interdisciplinarity” seems to be buried in this vision statement. **We can potentially add another statement about the role of interdisciplinary work under this environment will or integrate into first statement regarding research.**
- Page 10: Partner+ Category Level Program
  - #4 should include Illinois History & Lincoln Collections as a potential location to leave. **Will update.**
  - #3 does not call out Departmental Library Collections as also remaining in the building as additions to the 3.5 million capacity for basement and stacks. **Will update but perhaps its better to expand on #1 in terms of what collections will remain in the 3.5 million volumes. In addition to the collections of departmental libraries, which will remain in their current organization (collections + user space + service point), how would you like the collections remaining in the building described?**
- Page 11:
  - Is “Scholarly Center” the Scholarly Commons? How does this relate to the Cooperative Research Commons? **The scholarly center is the scholarly commons. See discussion above on centers vs. commons above.**
  - Learning Center is causing some confusion here, especially as proposed site plan talks about a different “Learning Center” **In the programming section, the learning center refers to academic support, i.e. tutoring, writing center, that is part of undergraduate library. It can include classrooms (or group instructional spaces)**
- Page 15: It is not clear to some of the readers that the 1st floor service point (which – we pointed out needs to be incorporated into the drawings earlier) is included in the “Hub” space. Clarifying this would be helpful **We can clarify in HUB space type page and in adjacency diagram.**
- Event Space: Elsewhere in the document, there appears to be reference to event space in the current Room 204. Perhaps a note here that seeks to clarify that event space might be located in that room as opposed to in new construction? **The event space described in the space type pages is the cafe which would be located near the ‘HUB’. During our adjacency discussions the upper floors would be ‘quiet’ while the ground floor would be ‘loud’. Should we consider making room 204 a flexible event space, which can serve as a ‘study space’ but be converted?**
- According to members of our Programming WG, the blended staff and user space looks like a service desk in user space. As noted earlier in the comments, it might be worth clarifying what is meant by such spaces. In the discussions in May, it sounded like we were talking about putting open-ish concept staff offices in user space with no service desk. The version on this page would work a lot better. However, that also conflicts on some levels with what we see in terms of the departmental library model, a model that many of our folks already consider to be a blended model **See general comments above.**
- Page 20: Category-Level Program - Staff space on basement level of 6<sup>th</sup> stack addition should be in “Original Building” space under the “Café” and “Hub/Entry” **Will update diagram.**
-



ENGINEERING QUALITY ASSURANCE



Project Review:		Library Redevelopment Plan - U18083 - 50% Draft Report	
Review Comments:		Fire suppression (F), Plumbing (P), Heating and air-conditioning (H), and Ventilating (V)	
Bldg No:		41, 99	
Plan Reviewer:		Thomas J. Keller, PE	
Comment Number	Drawing or Spec Reference	UIUC Facilities & Services Comment	PSC Response
<b>General Project - COMMENTS</b>			
100	Study	No specific comments. Would like a general discussion of the coordinating work with the AC center. Would also like to discuss the LCCA requirements and proposed geothermal.	This will be addressed in Part 2 of this project should work above the AC center ber persued.

ENGINEERING QUALITY ASSURANCE



Project Review:		Library Redevelopment Plan - U18083 - 50% Draft Report	
Review Comments:		Building Systems	
Bldg. No:		41, 99	
Plan Reviewer:		Sanja Koric	
Comment Number	Drawing or Spec Reference	UIUC Facilities & Services Comment	PSC Response
<b>04a - Basis of Design (BOD) - COMMENTS</b>			
101	Page 6	Thank you on providing a through report, especially regarding current spaces and functions , and also understanding existing building deficiencies and issues.	Noted. Thank you.
102	Page 39	Vison and the future of Main Library supports a balance of traditional and new modern working ways.	Noted.
103		If anything needed to be clarified in this report, then I would suggest to add a paragraph on new technologies related to building operation and mechanical systems and infrastructure. And to support idea of modernizing lighting systems and building automation systems with the clear goals to improve building ambiance but also to save energy at the same time. Thank you.	Noted. MEP/FP/Infrastructure to be examined and discussed in Part 2.
104	Page43	Allocate more % to axillary space and building support. Is 2% really sufficient? Please clarify and add as necessary	Noted. To be considered.
<b>06 - Project Manual - COMMENTS</b>			
<b>General Project - COMMENTS</b>			





Generally, most comments seem to be asking for detail beyond the conceptual level and is therefore out of scope for this project.

We appreciate the additional meetings and adjacency and Visibility Workshops that have taken place, but this conceptual design process and short project schedule do not allow for detailed programming at this time. However, these studies should be used in advising the design team once schematic level programming and design begin.

FOR DISCUSSION AT REVIEW MEETING. Below are comments of note that I see potentially affecting the final conceptual design scheme (directly quoted). I will provide initial responses where appropriate (in red).

Location of Café:

- I was dismayed by the proposed scenario that placed the café adjacent to a major service point. That would be disruptive. Instead the café should be placed near an entrance for quick access and also to hopefully limit the pests to a somewhat exterior area.
- Café – I could see this at the center, as the place people meet when they say “let’s meet at the library;” but depending on how the North/South entrances evolve, it could make good use of green space to have it by an entrance. Or we use the atriums as the green spaces and place the café between them.

We see adjacencies to both the hub and some type of exterior space important for the café. We therefore recommend its location at the center of the plan where it is equally accessible to all 3 major entrances and will contribute to the lively atmosphere of the hub.

I would flip the Media Commons and the Learning Center to put the Learning Center on the first floor (assuming this will be a collaborative study area with help available from librarians and the Writing Center). This general opinion was mentioned by several reviewers. JLK will plan to incorporate into the final scenario unless advised otherwise by UIUC project leadership.

Historic Spaces / Flexible Instructional Space:

- Another concern that ties into the more general concerns about security, is the proposed use of the historical grand spaces in the original building for things like open seating or instruction. Those spaces have high ceilings which make for poor acoustics for instruction and the inclusion of instructional technology would not be in keeping with the historic aspect of those spaces. In addition, leaving these spaces unattended by staff poses a security risk since they are near the entrance and people can quickly enter and exit unmonitored spaces which poses a risk to students.
- Large grand historical spaces should not be designated for instruction due to acoustics and disruption due to technology needs.

Perhaps these spaces are best suited for flexible collaboration space. Security concerns are notable and may be mitigated through use of a security staff or a checkpoint at the east entrance. We maintain that the second floor circulation room should be used for quiet study and occasional public events. This room is architecturally appropriate for representing the heritage of the University to the public and potential donors.

The co-location of individual research space, graduate space, and the staff lounge could be problematic because noise from the lounge could leak into the other spaces and disturb users. **Noted. Staff lounge could be separated from the Staff collaboration space and placed elsewhere on the floor. Generally, it seems individual research space should be within an enclosed space to isolate it from other sounds on the floor. Likewise, collaboration spaces for graduates and staff could also be enclosed to keep sound from group activities from bleeding onto the rest of the floor.**

Determining how we “lock down” certain floors of the library in order to have extended hours in other parts will need to take place. **Agreed. Generally, this has been addressed by isolating user/study spaces to the first and second floors. The basement, third floor, and the majority of the 4<sup>th</sup> floor could be secured after hours. Areas on the first and second floor which require securing after hours may be placed within areas that are naturally more securable (such as portions of the existing building). Elevators may also be programmed to access only certain floors at certain hours. With this perspective, arrangement of spaces in scenario 3 may be the easiest to secure.**

UGL is losing its entire library. I don’t know if this piece belongs here or down the road, but it is crucial we find a way to say to our undergrad library users that “You still matter to us, here is your space.” **We viewed Flexible Collaboration Space, the Media Commons, and the Learning Center as representative areas defining the major services and character of the UGL. In scenario 3, these spaces are grouped on the first and second floors directly adjacent to the central hub. Naming, signage, and branding of these spaces may help convey that they are intended to primarily serve this population.**

I agree with Karen on looping the Scholarly Commons into the tech spaces discussion, and locating the Media Commons near the SC on the 2<sup>nd</sup> floor. Eric and I discussed the models, and the ones with this pairing make the most sense to us. **This also makes sense to us. Considering scenario 3 as a basis, the scholarly commons could be swapped with the cooperative research commons.**

First floor – this should be the space that has daily use services for the most people; so the louder/group study spaces, café, and learning center/reference consultation service points all seem like good items to include. **Agreed.**

3<sup>rd</sup> floor – Given campus interest in inter-/multi-disciplinary research, and feedback like what Celestina suggested about History scholars wanting to see all the books, not just their call number ranges, some form of co-located, browsable collection space seems like an appropriate model. There’s a lot of directions this could go in application. **Agreed. We believe the wall of books, or some type of highly visible collection of stacks is a great design element and should be incorporated into the new library space, but browsable stacks should also remain (space permitting) within department libraries and the historic reading room.**

Mediated collections – there are a number of ways to approach these; it might mean an additional circulation point which focuses on the browsing area, or that service point could be the entrance to the Stacks. However, given earlier discussion, a first floor Stacks circulation/ILL pickup point seems to better fit a user model where some patrons just want to stop in, grab their stuff and a coffee, and leave. So I think I’m leaning towards a second specialized point on the 3<sup>rd</sup> floor, with different hours of operation based on need. **Yes, a second circulation point near the elevators/stairs for at the third floor will be incorporated into the final scenario.**

This might also be a good discussion point for loanable tech and related items, and how to mediate their use. This could be a 2<sup>nd</sup> floor service point, could work from a first floor service point. We currently have them at their own service point with reduced hours because of the extra training and handling to process them. The loanable tech circulation operation is more complicated than the traditional circulation. **Agreed. It seems a separate service & circulation point for loanable tech items should be provided at the Media Center. It would make sense that this be located near the stairs/elevator to this area. This will be incorporated into the final scenario.**

the third scenario labeled “First Floor Enlivening” was the preferred building plan of the three for our combined membership. **Noted.**

The visibility of the Stacks is paramount. **In addition to a “wall of books” – type feature, it would be a nice design element to create visual connections through the east wall of the 6<sup>th</sup> stacks into the new addition.**

Central Access Services and Research & Information Services were universally considered to be high-visible service desks. **Let’s discuss where in plan these should be located.**

**All of the following comments have been considered and will be incorporated into the plans.**

- Many of the “new” features were recommended for high visibility. Specifically instructional space, exhibit space, the café, and collaborative/“non-quiet” study space trended high among participants.
- Scholarly Commons and Media Commons were also considered valuable high-visibility choices.
- Top Priority – Most visible: Info/Service Point centralized on ground floor with signage and maps to other public areas.
- High Priorities: Both active (most visible/easy access) and quiet (easy to find, but “protected”)
- Easy to find: Café, restrooms, Scholarly Commons, Writers Workshop, Loanable Tech, and collaboration spaces
- More private: Tech services, storage (ex: digital preservation, cataloging and acquisitions)
- Departmental libraries, collections, service points and personnel need to be together!
  
- Departmental libraries should be close to main stacks entrance.
- All the CAS functions and personnel should be together and close to main stacks.

Level of Information Gathering via Programming/Design Team:

- Architects and consultants should meet with units to assess real needs.
- **I am increasingly concerned that these documents are moving forward and I have not had a specific structured or formal time with the architects.**

**This comment has been repeated by several reviewers and we have tried to preface reports and respond to previous comments to mitigate this misunderstanding. As the conceptual design team we have had limited time for meeting with users and staff. The brightspot workshops and leadership interviews were intended to be the facetime allowed for the conceptual level of programming required by this study. It is our understanding that the previous detailed programming study presented in 2009**

**will be combined with further schematic level programming and staff/user engagement during schematic design and design development of the project.**

Staff need PRIVATE spaces, especially librarians who meet with patrons regarding research. **Reservable meeting rooms are meant to serve a variety of private use or meeting needs and are included on all floors for use by different types of users and staff.**

For units: service points should be most visible, personnel space in the middle, and workrooms least visible.

Discharging should be closer to circulation than book stacks personnel and workroom.

Discharging does not need a service point.

**These are all important to note for schematic and design development.**

Billing office should be near to circulation desk/service point but not attached to it.

Patron services manager should be near CAS staff.

Business Center should be near HR.

Discharging workroom and personnel should be adjacent to ILL workroom/personnel and central circulation workroom (phone center)/personnel.

**For discussion – are all agreed that these adjacencies should be incorporated into the final scenario?**

Department Libraries:

More than one participant expressed the desire to think of departmental libraries cohesively, and that keeping each library in a box with a separate service point may not serve patrons well.

There is strong support for locating departmental libraries near one another and close to the stacks.

The final scenario will combine service areas for co-located departments.

Additional spaces/functions requested not already incorporated in the plans include:

- Kitchen for staff and event prep use
- Green space / rooftop garden
- Showers for staff (who may commute by bike)
- Nap pods for patrons/staff
- Reflection room(s)/ respite space
- Lactation room(s)

**All noteworthy requests. Will be considered and incorporated into the final scenario. While a rooftop garden may not be feasible due to mechanical requirements at the roof, green space in the form of courtyard space will be recommended.**

Has there been any thought to having a second staff/student break room near the cafe? Possibly for personal lunch/food storage as it sounds like the cafe might be a great place to relax and eat.

**Great idea- there is adjacent space that may be used for this and will be incorporated into the final scenario.**







Project Review:	Library Redevelopment Plan - U18083 -Concept Part 2 Draft Report
Review Comments:	Fire suppression (F), Plumbing (P), Heating and air-conditioning (H), and Ventilating (V)

Bldg No:	41, 99
Plan Reviewer:	Thomas J. Keller, PE

Comment Number	Drawing or Spec Reference	UIUC Facilities & Services Comment	PSC Response
<b>General Project - COMMENTS</b>			
100	Study	No specific comments. Would like a general discussion of the coordinating work with the AC center. Would also like to discuss the LCCA requirements and proposed geothermal.	Agree, Kent Reifsteck suggested IMEG talk to Dave Green, which we did. A general discussion with all F&S would be helpful. A geothermal system has not been proposed by IMEG. Are you stating that is an option?
101	Study	MEP Pg 2 of 36 - Revise the term "...all-air..." systems to be more appropriate. Systems presented include chilled beam as well as hydronic heating (such as perimeter).	Will revise to what we think is the suggested verbiage.
102	Study	MEP Pg 2 of 36 - Confirm humidity requirements with the users/department. Also, be clear on which areas require strict dehumidification. Primary air temperature reset (upwards) has caused document damage in the recent past due to aggressive night setbacks and energy saving attempts.	IMEG will confirm with the Library one more time. To our knowledge, all special collections will be relocated to the undergraduate Library side which will be a separate master plan narrative. There was no specific humidity requirements listed for the main Library, we will confirm with the user.
103	Study	MEP Pg 8 of 36 - Would like to discuss the smoke evac MAU. First, a steam pre-heat coil is not preferred. Provide a standard pumped glycol coil with out stages freeze protection sequence. Is a MAU needed? Can the other AHU's be opened full and the rest be made-up elsewhere (ie. raw air). This is traditionally what we see and the unit will (hopefully) never run.	<i>Updated response 8/20/19: The design team met with the users during the review meeting and it was decided to remove the Atrium from the proposed design. The steam preheat coil goes back to the last smoke evacuation system IMEG did on campus for BIF. We are fine with the proposed system for pumped glycol coil. For BIF a dedicated MAU was desired by F&amp;S. Due to CFM we had a dedicated MAU but using the D.V. system ductwork. I could see that for this application as well, could use the AHU equipment if F&amp;S agrees with that. In the past, that was not an option.</i>
104	Study	MEP Pg 10&22 of 36 - I would like to see a list of the fire suppression zone hazard classifications.	

Project Review:	Library Redevelopment Plan - U18083 – Part 2 Conceptual Design report, 3 Scenarios - Draft
Review Comments:	Electrical

Bldg No:	41, 99
Plan Reviewer:	Joseph Youakim - Part 2 - Draft

Comment Number	Drawing or Spec Reference	UIUC Facilities & Services Comment	PSC Response
<b>07a - Drawing Set - COMMENTS</b>			
1	Pg. 16	For all Scenarios shows a "New Mechanical Penthouse", why there is no electrical room or closet in the penthouse to feed all the mechanical loads.	These spaces will be determined once a concept has been selected and phasing has been determined.
2	Pg. 21	Shouldn't the new Fire Alarm be XLSV instead of just XLS?	We will update the narrative.
3	Pg. 25	It states that a new 4-5" cell will be installed. Please increase the cell count to 8-5" cell duct.	We will update the narrative as noted.
4	Pg. 25	The report indicates that there will be two 15 KV feeds to the new 15 KV switchgear. However, the report indicates that one of the feeds is from DC-9 but does not mention where is the other feed routed from?	We will clarify in the narrative.
<b>06 - Project Manual - COMMENTS</b>			
<b>General Project - COMMENTS</b>			



Project Review:	Library Redevelopment Plan - U18083 – Part 2 Conceptual Design report, 3 Scenarios - Draft
Review Comments:	Technology Services - Data

Bldg No:	41, 99
Plan Reviewer:	Brent Lackey

Comment Number	Drawing or Spec Reference	UIUC Facilities & Services Comment	PSC Response
<b>07a - Drawing Set - COMMENTS</b>			
101	Draft pg 14	Will data cabling be installed by an Outside Contractor or will Technology Services be installing the data cabling in the building?	This will have to be determined by UIUC project manager.
102	Draft pg 14,26, and 28	Single Mode (OS2) Fiber cable will be used between CERs instead of Multi-mode Fiber cable.	We will update our narrative.
103	Draft pg 26, and 28	Single Mode (OS2) Fiber cable is used between the IDF and Node #4 instead of Multi-mode Fiber cable.	We will update our narrative.
<b>06 - Project Manual - COMMENTS</b>			
<b>General Project - COMMENTS</b>			

U18083 – Library Redevelopment Plan Programming and Conceptual Design Study  
Part 2: Conceptual Design, 3 Scenarios

Review Comments from Denis Craig, Planner  
August 9, 2019

Access to 6<sup>th</sup> Stack Addition:

- Will patron access to the 6th stack be monitored/controlled as is presently done to the stacks on the second floor? **This was discussed at the review meeting. How monitoring of materials coming into and out of the stacks may be changing from the current system. While materials must be tracked, leadership would not like security to deter patrons from entering or using the stacks. Architecturally, we will have direct access to the stacks from a stair to the basement near the main circulation desk and at the second floor, adjacent to the dept. libraries. Secured access may be available at other floors.**
- If so, how can that control point be made visually apparent to patrons? **From the first floor, access will be along the wall of books. Here and at the second floor signage and possibly furnishings will need to be designed to direct attention to these access points.**
- Do we want to visually open up a portion of the wall on the second floor with glass, etc. so that some of the collection is visible? **Yes, this will be incorporated into the final scenario.**
- The location of the access to the 6<sup>th</sup> stack is located in different places in each of the scenarios. Why? The existing location is in the center. I’m not sure there are good reasons to go to the expense of relocating it. **The 3 scenarios presented ways of combining a communicating stair to the 6<sup>th</sup> stacks with an egress stair. If a new egress stairs are added, the existing stair/access point location could remain in place and act as a communicating stair between 6<sup>th</sup> stack levels. Discussions with UIUC after the review meeting confirmed this approach.**
- I see the access to the basement stacks coming from the 6<sup>th</sup> stack basement level at the west end and the doors from the infill basement stacks at the east end being an emergency exit. To make elevations work, there may need to be some ramping considered for the center corridor of the basement stacks. **Yes, agreed. This has been simplified at this time as we do not have an accurate survey on level changes here. Will be revised for the Final Scenario based on previous elevation drawings and field survey.**
- Could the existing entries to the 6<sup>th</sup> stack on the first, third and fourth floors remain with card access (staff, and possibly, authorized patrons)? If general access will be permitted, how can the patron experience be enhanced -- wayfinding, etc. **Yes, secured/card access will be accommodated on the first through 4<sup>th</sup> floors. At patron access points, see previous answer above.**

Browsable Stacks vs. Compact Shelving:

- Consider how stacks are illustrated so that it is clear which stacks are browsable vs. which ones are compact shelving units. **Will do. Currently, we expect stacks in the 6<sup>th</sup> addition and basement to be compact. All shelving within departmental libraries and the Reading Room are assumed to be browsable. Please advise if this is incorrect.**

Elevations of Building Levels:

- At some point, we will need to get accurate elevations of all the building levels that will remain. I’m thinking that some of the assumptions being made may need to be tweaked with that

information. For example, my sense is that as you traverse the existing stacks from east to west, the east end is a couple of inches higher than the west end on some of the levels. **Noted. An accurate elevation survey will affect these plans as slight ramping may be required or stair dimensions adjusted. For now, sections and vertical circulation elements will be updated for the Final Scenario based on previous elevation drawings and field survey.**

#### Loading Dock and Cooling Tower Locations:

- My preference is to group these service/utilitarian functions on the south side of the building adjacent to the air conditioning center. Gregory Drive tends to serve as a service corridor through this part of campus. **Noted. This shall be reflected in the final preferred scenario.**
- Placing the cooling towers adjacent to the air conditioning center will allow piping runs to be shortened and concealed more easily. **Noted.**
- The loading dock can be planned to serve both the library and the business interdisciplinary facility. **Noted. Plan to be developed with UIUC for the Final Scenario.**
- Some sort of screening of the equipment and piping on the air conditioning center might be considered. **Agreed. We have assumed a masonry screening wall for visual and acoustic control (briefly mentioned on page 16).**
- I like the possibility of the new north entry plaza this allows. **Noted.**

#### First Floor:

- I'm not sure how the first floor elevations are working in the various scenarios. Part of me is thinking that I would like to see the first floor all at the level of the main east entry and address the small areas at the stairs on the northwest and southwest corners of the original building as exceptions and provide accessibility to those areas from the new infill addition. (But I could be convinced otherwise.) **All 3 scenarios assume the First Floor in spaces to remain will remain at their current levels. In scenarios 2&3, lifts are provided at the location of existing elevators to serve the raised areas to the west. In scenario 1, ramps are provided instead. This does become an issue in connecting the NW corner of the building to the new addition, which would require a stair and ramp needs to be considered/updated in plan. UIUC and JLK will coordinate to look at the possibility of raising the 1<sup>st</sup> floor to the level of northwest and southwest corners of the early building and/or using ramps instead of elevators to communicate between these level changes.**
- I'd like to hear more about the creation/purpose of the gallery space in the north-south first floor corridor. **This is in response to the life safety evaluation created for the 2009 study. According to that study, a 3 hour fire wall must be constructed to separate the existing building from the new. This wall must be structurally independent and contain no vertical jogs. Because the first floor corridor does not line up with those above it, there is no ideal place for this wall. The eastmost wall of the 4<sup>th</sup> floor which corresponds to the west wall of the main N-S corridor for floors 2&3 was chosen for this purpose. This creates a sort of "double-corridor" at first and basement levels. The final scenario will move this wall further east to align with the west wall of the first floor corridor to eliminate this double-corridor.**
- Has any consideration been given to where the Bronze tablets will be relocated? **Not at this time. To be suggested in the final scenario.**
- My sense is that we can work to simplify things along the first floor north-south corridor to make it cleaner and more inviting. **Agreed! To be refined in the final scenario.**

#### Emergency Egress/Vertical Circulation:

- Recognizing that we're only at the conceptual stage, I'd like to see some consideration given to egress issues. **The 2009 Life Safety evaluation was referenced for this purpose and explained briefly on page 3. Considering that access to the 6<sup>th</sup> stacks may be limited, a new egress stair must be added to serve the 6<sup>th</sup> stacks and new infill. A second exit from the stacks is also required, and may be located to also serve the future Instructional Facility to the west.**
- I'm thinking that we may need emergency egress stairs (which could possibly be shared with the business interdisciplinary facility) at the northwest and/or southwest corners of the 6<sup>th</sup> stack (outside of the footprint of the 6<sup>th</sup> stack addition). Construction of one or both of these egress stairs might be necessary to allow access to the 6<sup>th</sup> stack during demolition and construction. This could be determined as the construction phasing is detailed. **Yes, noted and agreed.**
- Do we need additional vertical circulation (stairs and elevator) at the west end of the infill addition so a patron would not have to go all of the way back to the east end of the addition? Could this be accomplished with the existing stair and elevator at the center east portion of the 6<sup>th</sup> stack? How would doing this impact access control to the stacks? **Yes, in the previous submittal, we were considering reuse (or relocation) of the existing stairs and elevator at the 6<sup>th</sup> stacks for these purposes. But this places limitations on access to these areas and creation of more fluid access points could make this difficult. A new egress stair will be added to the west of the 6<sup>th</sup> stack.**
- I'm also thinking we might need to consider other emergency egress stair locations such as the northwest or southwest corners of the new infill addition. **Yes, see previous answer above.**

#### Departmental Libraries:

- Is there enough patron seating in the departmental libraries? Can some of the shelving be compact shelving in order to provide more space for seating? **For discussion with Library leadership. Compact shelving combined with open seating areas seems potentially a poor combination of uses. Flexible collaboration spaces and other quiet study spaces are intended to decrease the demand for seating areas within the individual departmental libraries.**

#### Historic Preservation:

- Do these scenarios contemplate using any of the structural stacks as a possible mitigation action to demolishing them? **Salvage and reuse are recommended, specifically for the "wall of books" elements. Reuse in place does not appear feasible considering the University's commitment to Universal Accessibility.**
- Are there any preservation concerns about opening up the north-south corridor to the new infill addition? **The north-south corridor on 1<sup>st</sup> and 2<sup>nd</sup> floors, while of secondary historic significance, will require some compromises to create an open area between the existing building and the new infill. This may be weighed against the high level of preservation treatments recommended for the areas of primary historic significance within the building – notably the Reading Room, Delivery Room, Main Stair Hall, and Marshall Gallery, and other spaces of secondary historic significance.**

#### Miscellaneous:

- Lest we forget, we will need BSW closets on each floor. **Please define BSW closet, adjacencies, and space needs – thanks!**

## Library Redevelopment Plan Programming and Conceptual Design Study

### Part II: Three Scenarios

#### Introductory Notes

This document represents the summarized comments of the participants from the University Library's working group membership, the Library Consultation Working Group (LCWG), Associate University Librarians and others who engaged and commented during the four-day period during which the three scenarios were displayed for comment by members of the University Library, the LCWG, and others who casually engaged with the displayed scenarios. All members of the aforementioned working groups had access to digital copies of the document and were asked to submit comments. Comments were received via email from Dean Wilkin, Heidi Imker, Cherie Weible, individual members of the Library's Programming the Main Library Working Group, personnel in the International and Area Studies Library, and both the LCWG and individual members. All of those comments were taken into consideration in producing the summary document. The bulleted list of comments received during the public display of the three scenarios are provided in an unedited form and provided valuable insight into how various items were perceived; many of them are integrated into the synthesis and summary corrections authored by Thomas Teper.

#### Structure

The entire document is structured as follows:

- Synthesis of Comments Received
- The LCWG statement drafted by WG chairs David Chasco and Ariana Traill
- The bullet list of comments received when the illustrations were hung in 220

## Library Redevelopment Plan Programming and Conceptual Design Study

### Part II: Three Scenarios

#### Synthesis of Comments Received – Prepared by Thomas Teper

In general, much of the feedback received on the three different scenarios is positive, with most of the comments focusing on specific issues that individuals or groups may have with particular aspects, adjacencies, or absences rather than the overall concepts. As one would expect, there are individuals who favor individual aspects of multiple scenarios, with a most respondents appearing to favor the overall thematic underpinnings of Scenario One. The most significant change that some of us see as being beneficial from comments is the placement of departmental libraries on the second floor with more specialized services such as the Media Commons, Scholarly Commons, and Cooperative Research Commons on the Third Floor. This does not necessarily run counter to anything discussed in the adjacencies diagram developed a couple months ago.

#### General Comments:

- Internally, there is a feeling that we need to limit the access points to the Main Stacks in order to ensure oversight over materials, limit control points, etc.... There is a strong feeling that the first floor entry detailed in Scenario One is good with the note that access could be augmented with a stairway down along the "Wall of Books" located on that level behind the circulation desk. With these two points of access to the general collections, we could limit circulation points for that collection, limit control gates along that single point of entry (and the elevator bank) and provide a better level of physical control over the materials. **Access point locations were discussed and confirmed at the review meeting.**
  - A challenge to this is an expression from subject specialists in the library and teaching faculty on the campus' working group that entry via multiple points throughout the New Construction would benefit users and assist subject specialists with guiding users to find materials. The counterpoint to this is the lack of evidence that such assistance occurs with any frequency.
- Inclusion of furniture in the various spaces has created the impression among colleagues in the Library that planning is much further along. **These have been included for scale as noted in the Preface. For the final scenario, only major items (stacks, major partition walls, and service desks) will be included. It will be noted that these are not to indicate final locations or design, but are meant to indicate a general conceptual level of organizing space.**
- Plumbing Fixtures – While this is not a schematic drawing, comments from library personnel who viewed the drawings expressed a desire for us to ensure that we have both a suitable number of gender neutral washrooms and that they not be located in out of the way spaces. **These will be added to the final plans.**
- Entry – General concern continues to be expressed about accessibility of entry points to the Main Library Building. **This study proposes that all entries will be made ADA-accessible. Specific concerns to be discussed in review meeting.**
- Generally, there is a positive impression of the basement level of the existing Main Building as a "Staff Only" level. **Noted.**

#### Basement Level:



## Library Redevelopment Plan Programming and Conceptual Design Study

### Part II: Three Scenarios

- Preservation Services:
  - There is a need for a “quarantine room” affiliated with the Preservation Services Unit. It would be a strong benefit to have this quarantine room located external to the Special Collections Building, but in an environment in which access could be tightly controlled. **In the current Special Collections study, it was recommended this room exist between the loading dock and the Special Collections processing and vault spaces, and would therefore need to be located at the Special Collections building. This space is also quite large and would be difficult to add to the basement of the Main Library without moving something else out. For further discussion.**
  - Preservation Services: Media Labs have highly sensitive equipment. Placement of the media labs in that unit must take adjacency of mechanical rooms and other vibration/noise producing operations into account. Any subsequent development will require the input of qualified personnel/sub-consultants to ensure that placement/development of audio-visual labs in this level is not detrimental to services. **This was discussed at the review meeting. Further design of the room will mitigate issues that may be caused by adjacency to MEP equipment.**
- Facilities:
  - Loading Dock: There is a consensus emerging that moving the loading dock to the south or west sides of the building would be appropriate and desirable, especially when the high level of pedestrian traffic and desire to improve accessibility on the north side is considered. **Noted. Will be incorporated into the final scenario.**
- Acquisitions and Cataloging Services:
  - Keeping these two operations in close adjacency to one another is desirable as they are administratively one unit. **Noted. Will be maintained for the final scenario.**
- Central Access Services (CAS) Spaces:
  - ILL/DD Space: Insufficient. Needs to be expanded by ca. 100%. The current operation includes space in Main Library 124 and 128. **This was discussed at the review meeting. ILL/DD, CAS, and CMS will be co-located near the loading dock. Space available was reviewed and approved.**
  - At present, the plans have no assigned space for book sort or CAS collections personnel. There was previous discussion about including this within the central corridor spaces that are identified for “Smoke Evacuation” in several scenarios. If this space is not available, could sort and staff spaces be incorporated into the “Breakout Spaces or Storage” rooms identified in several of these scenarios? **See previous answer above.**

#### First Floor (moving from east to west through building):

- Flexible/Collaboration Space – many favorable comments received about use of flexible/collaboration space as detailed in Scenario One. In general, the overall impression is that use of these spaces for instruction as detailed in other scenarios is problematic from an acoustic standpoint and not a suitable use of such grand spaces within the historic part

## Library Redevelopment Plan Programming and Conceptual Design Study

### Part II: Three Scenarios

- of the Main Library. **Noted. Will be updated accordingly for final scenario. Based on review meeting, rooms 100 and 101 will also be designated as flex event space.**
- Human Resources – multiple comments received against the notion of first floor human resources. Virtually no one applies by walking in anymore. The general feeling is that Human Resources belongs with the rest of administrative offices, and that space on the first floor would be better utilized to fulfill a public service function. **Noted. Will be updated accordingly for the final scenario.**
- Courtyards – the use of the courtyard in two of the scenarios is viewed favorably. If some exterior, open-air seating can be built on top of the mechanical plant, the potential to create closed courtyards as detailed in the third scenario is favored with the caveat that there would be a decided benefit among personnel in having a basement-accessible (staff) and first floor-accessible (public) option. **Noted and discussed in review meeting. Resulting direction – courtyards to be paved at first floor, basement space below used for MEP, and atrium roofs added.**
- Café – Good. **Noted.**
- Central Information Point – Good. **Noted.**
- Circulation Point – Good as outlined in Scenario One, perhaps with the addition of stairway down along “Wall of Books” to basement level? The “grand staircase” of Scenario Three is generally viewed negatively in any of the comments received. **Noted. Will be updated accordingly for the final scenario.**
- Learning Center – There is some positive response to the Learning Center footprint as outlined in Scenario Three. The location in the NW corner (current room 146, etc...) provides a more defined amount of space, especially if some of the services are only available for limited hours. It also means that if these spaces are not “Library Spaces” per se, that we can limit control points for materials circulation. It would, however, be important to open walls enough to allow for such services to be more visible. **Noted, and will be considered for final scenario.**
- Instruction Space – Could go with Instruction/Study Space along western-most wall of new construction. One idea floated includes developing two sets of two, adjoining, expandable rooms on either side of a first floor entry point to the West Stacks Tower. Ideally, the instructional rooms would have air walls between each set of two, allowing for expansion to 60+ seats for a single session and possible air walls on the east side, allowing the rooms to be easily opened as additional study spaces during periods when they are not needed for instruction. Technology would allow rooms to be used individually or expanded to include up to all four rooms to serve a single instructional session. **This option will be examined for the final scenario at first floor.**
- Flexible/Instruction Space – With caveats outlined above, there is a feeling that the use of the first floor new construction as Flexible/Collaboration space as outlined in Scenario Three is a good option. **Noted, and will be considered for final scenario.**
- Exterior Seating – on top of mechanical plant is generally viewed as a good use of space. Perhaps just the “New Entrance/Lounge” space outlined in Scenario Two could be developed into an exterior seating option on this elevated level. As an exterior seating option that would complement enclosed courtyards as detailed elsewhere, this could be a valuable addition to the space. **Noted. F&S review has advised against a plaza above**



## Library Redevelopment Plan Programming and Conceptual Design Study

### Part II: Three Scenarios

**the A/C center and against enclosing the courtyards. Based on review meeting, this option will not be considered in the final scenario.**

- Reserve Meeting Space in SW corner – Good, but w/o direct or virtual monitoring, this is better as Staff/Personnel meeting spaces. Moreover, it may be needed as such. **We assume virtual monitoring will be provided similar to reservable meeting spaces currently at UGL. These may also be good spaces for reservable relaxation or lactation rooms.**

Second Floor (moving from east to west through building):

- Quiet Study/Browseable Stacks – The current reading room. Good use of space. **Noted.**
- Quiet Study/Event Space – Good, but this is an echo prone space. Concern was expressed that the room would require some acoustic work to serve as an event space, but there is widespread agreement that it is the best, most impressive space that we have for such purposes in the Library. **Noted.**  
Rest of Space – Should consider benefits of utilizing rest of second floor as Departmental Libraries in some configuration as outlined on third floors in Scenarios 1 – 3. This holds strong promise to rethink operational models; responds to feedback from subject specialists that we are moving many “library services” too far away from the broader undergraduate population, especially as many of the departmental library collections are configured to be used by novice users; and continues to celebrate the primacy of collections while also allowing us to more easily limit control/circulation points. One idea floated includes locating SSHEL in room 200 (the Reading Room) and south room in existing construction, Maps in north room currently designated 220, and HPNL, LLL, and IAS in adjoining spaces (with single service point) in 246/New Construction. **Noted. A revised draft plan for this was presented in the review meeting to confirm direction.**

Third Floor (moving from east to west through building):

- Reserved Meeting Space – Good. **Noted.**
- The collocation of Media Commons, Scholarly Commons, and Cooperative Research Commons is generally viewed positively. Could we place the Media Commons in new construction on third floor, the Scholarly Commons in 346 spaces, and Cooperative Research Commons in the space currently housing the Scholarly Commons? Space currently housing IAS to the south of south courtyard could be Individual Research space at outset with opportunity to expand that space as a second Cooperative Research Commons Space in the future? **Noted. A revised draft plan for this was presented in the review meeting to confirm direction.**

Fourth Floor (moving from east to west through building):

- Offices, especially for faculty and academic professionals need to be offices. There is widespread rejection of the open office concept for professional librarians and APs among our personnel. **Noted. Enclosed offices will be shown on at this floor for the final scenario.**

## Library Redevelopment Plan Programming and Conceptual Design Study

### Part II: Three Scenarios

- In the Office Spaces outlined throughout this fourth floor, we need to think about options for us to democratize light. Looking at the 2009 planning document in which offices were developed to serve as graduate studies, there were very clear have and have not offices with respect to natural light in that configuration. In general, we need to be creative about how spaces are allocated in a manner that allows as many individuals as possible to benefit from the natural light that is available. In Thompson Library at OSU, faculty offices are located away from windows, but they have glass doors/walls that allow light to pass through from staff work spaces (where the windows are, etc...). They also have pocket doors rather than traditionally swinging doors in order to maximize space. **This concern will be noted and examined for the final scenario.**
- In the Northwest Corner, the current office configuration is good with respect to private offices, but there is limited natural light. False dormers on the north facing roof – could they be made functional windows in order to bring additional natural light into this space? **Good idea and good question – further examination of this item is required during the schematic design phase.**
- Staff Lounge & Collaboration Space – General desire expressed among personnel for a break space with windows and natural light. Scenario Two provides for that, but neither of the other two scenarios do. Would be possible to take Scenario One and flip the Staff Lounge and Collaboration Space and the Individual Research Space? This would locate the Staff Lounge on the Northwest corner of the new construction with some presumed window access and the Individual Research Space to the south of the new elevator bank, allowing relatively easy pass through for graduate students seeking entry to the Graduate Commons located along the south face of the new construction? **Yes, this will be considered and reconfigured accordingly for the final scenario.**

### Introductory Notes

This document represents the summarized comments of the participants from the University Library's working group membership, the Library Consultation Working Group (LCWG), Associate University Librarians and others who engaged and commented during the four-day period during which the final scenario was displayed for comment by members of the University Library, the LCWG, and others who casually engaged with the displayed scenarios. Additionally, feedback was received from members of the library at-large as the final scenario document was posted online for all to comment. Comments were received during a quarterly meeting of library personnel, online from individuals, from the Library's Programming the Main Library Working Group, and from members of the LCWG in a face-to-face meeting. All of those comments were taken into consideration in producing the summary document.

### Structure

The entire document is structured as follows:

- Synthesis of Comments Received

### Synthesis of Comments Received – Prepared by Thomas Teper

In general, much of the feedback received on the final scenario is positive, with most significant concerns being expressed by member of the LCWG and the Programming WG focusing on the “atrium” space. In the case of the Programming WG, the concern focused on the limited open space and the impact on the directional “flow” that this created. Without the larger opening initially discussed at the May workshop on campus, there is concern that it impinges on the vision proposed. In the case of the LCWG, the concern about the atrium was expressed with a greater focus on the fact that the proposed opening was, frankly, unimpressive enough to result in it just lacking the desired impact. This, of course, raises the issue of the added fire protection requirements highlighted on page three (3) of the document along with requests from the LCWG that a more impressive multi-floor opening and necessary smoke exhaust be considered as a add-option for the final document. **IMEG response: The direction the A/E team received from the Library during the review process was to remove the opening in the plan that would create a greater than two floors being connected or “Atrium” condition. This decision was driven by impact to program space and cost. This condition requires the need for a smoke evacuation system as required by code. This system would consist of make-up air equipment, dedicated exhaust fans, ductwork, controls and fire alarm components to serve the “Atrium” smoke evacuation system. JLK Response: The atrium option was eliminated in response to UIUC comments on the 3 Scenarios submittal and the review meeting during which we confirmed that the direction would be to eliminate an atrium, limiting this space to a 2-story opening. Expense and spatial requirements of a smoke evacuation system were reasons for elimination of the atrium option. The opening at between 1<sup>st</sup> and 2<sup>nd</sup> floors may be increased, but will result in decreased area remaining for the adjacent departmental libraries at the second floor.**

The most consistent other comment generally seems to be a sense of concern about the “flow” between spaces and throughout the building. While Media Commons and Scholarly Commons units on the third floor fits what Berkeley seems to be doing and should be workable, how effectively does the proposed model connect all building services in order to ensure good flow between them? In the case of the Media Commons and Scholarly Commons, how do avoid the development of disjointed spaces given the complexity of the structures under discussion. In the current Main Library, the long standing concern about the compartmentalization of spaces rears its head in these comments. When we look at the 3<sup>rd</sup> floor, how do we avoid that? As we proceed down to the 2<sup>nd</sup> floor, how do we ensure the 2<sup>nd</sup> floor activities are well integrated with what is above and below them rather than being viewed as a level that lacks the sort of dynamic energy that is envisioned to be present on the 1<sup>st</sup> and 3<sup>rd</sup> floors? **JLK Response: The current suggested flow of spaces shown in the conceptual level plans is relatively abstract was created through iterations of design and planning with the UIUC team. Further development and reconfiguration of flow and creating dynamic energy is beyond the scope of this project and should be addressed during schematic design.**

From an administrative standpoint, we are passing these comments through without particular advocacy for a position in order to ensure that JLK/brightspot/IMEG received the feedback. In some cases, these positions may be at odds with one another. We encourage the firms to discuss these particular challenges with us. In general, the feeling is that, where the suggestions do not

## Library Redevelopment Plan Programming and Conceptual Design Study

### Part II: Final Scenario

substantially increase costs, they are favorable. Where it is impossible to do so without substantially increasing costs, the concerns should be noted and a response registered about the implications. **JLK Response: Noted and appreciated.**

#### **Additional General Comments:**

Several individuals commented on their inability to envision a mechanism by which significant portions of the building could be closed in the evenings, whether it be by floor or section. **JLK Response: Access to certain spaces and whole floors may be secured via door and elevator locks/automated controls during evening hours. While specifics on which spaces will be secured (and at what times) must be determined by UIUC, it is imagined that the second floor departmental libraries, basement stacks and staff space, and 4<sup>th</sup> floor offices will be secured in the evenings.**

With respect to collection storage, concern was expressed about the lack of humidification planned for collection storage and lack of humidity control set points being documented either for lower level of infill building or for sixth stack addition. While not as rigid as one would expect for the special collections, one would like to see some upper and lower limits established and planned for in documents. **IMEG response: This type of humidity control can easily be added to the sixth stack unit replacement. The addition of humidity control for the lower level of the infill could also be added to the unit serving this space located in the Penthouse. Neither would add significant cost.**

Regarding the Security Pedestals (pp. 20, 26), does this imply a security presence in the building? If so, that would be a departure from current practice.

On page 3, Bullet point 4: It states “Access to stacks will be available from all floors, but may be secure.” Then on Page 5 it is stated “Main access points to the stacks will be from the first and second floors while secured access is available at all floors.” Does this mean access at floors B, 3, and 4 is staff-only? If so, please specify. **JLK Response: Based on direction received at review meetings, main access points were specified at the first and second floors while access of an indeterminate type is provided at other floors. Type of access from other floors may be discussed and specified during schematic design.**

Page 6, 7: Reservable meeting space: it seems that there are 15 of these on the plans. That is not enough if they are intended to replace group meeting rooms in UGL *and* all staff meeting spaces in Main. Could more staff-only meeting spaces be included on the 4<sup>th</sup> floor (or elsewhere?) leaving these 15 for students. Alternatively, could there be additional reservable meeting rooms in more student-focused spaces, leaving these more isolated and difficult to monitor spaces to serve as staff meeting spaces? **JLK Response: Additional reservable meeting spaces may be added within departmental libraries, 4<sup>th</sup> floor office space, or other user spaces once schematic design of these spaces is determined. This may be noted in the Programmed Areas portion of the report.**

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Although mentioned earlier in the process as needed, there appear to be no reflection rooms or dedicated lactation space. **Please see Programmed Areas – Reservable Meeting Space. Final location of these and/or additional provision for these may be included in other areas of the plan during schematic design.**

Unnumbered pages from IMEG: “Phasing Plan” pages all have “mechanical” misspelled. **IMEG response: We apologize for this oversight and will correct.**

#### **Fourth Floor**

There is a strong feeling (based on experience elsewhere) that the staff lounge adjacent not be placed directly adjacent to the graduate commons, particularly if it will double as a space for staff training/events/collaboration, etc. We had exactly this configuration in the main library at McGill and there were frequent complaints from grad students about noise coming from the staff space. **This configuration shown was confirmed at the last review meeting. Wall construction and acoustical treatments may be specified during design development to decrease sound transmission.**

There is a lack of clarity expressed about the need for a staff kitchen on the east end of the floor and the staff lounge. If there is also supposed to be a kitchen space in the lounge, it might be best to specify that, or to just collocate the two spaces. **Please advise on what is desired by the University.**

#### **Third Floor:**

The collocation of the Scholarly Commons and Media Commons is viewed favorably. However, some desire was expressed that figuring out how to have better “flow” between the two spaces would be helpful, even going so far as to suggest that configuring one or more of the instructional spaces on that level be placed in such a way as to allow entry from either of the two units. Similarly, this raises issues about the present separateness of the units and how that fits within the model being proposed. Does it make more sense for us to label these two spaces collectively as “Scholarly and Media Commons.” **Please see previous response on “flow”. Naming of spaces is for purposes of this study and may be changed during the upcoming design process.**

Presently, there is a feeling that the instructional spaces on the third floor are serving only as a place holder for a more fully fleshed out, flexible/customizable instruction space. **This is true. This design will happen during schematic design and design development.**

#### **Second Floor:**

There is a feeling expressed that the departmental libraries are overly nested in the infill portion of the building. For example, should we be thinking more holistically about integrating the services, collections, and programs of the HPNL, L&L and IAS libraries? This notion raises a broader sentiment expressed in several comments that, perhaps, we should look at the spaces



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designated as specific departmental libraries on the second floor be generally labelled “Departmental Libraries and Services”. Location of libraries may be changed in following design process. For now, we may note such in the report.

Could there be a shared instructional space (could double as conference room space) on floor two for the departmental libraries (not necessarily in one or the other of them)? This could possibly also serve as the desired mediated use space for “medium rare” materials.

Generally, the departmental libraries are only designated as collection spaces (page 9). We believe that this is largely due to a lack of detail in the drawings and a misleading header in the chart on page 9 that implies that they are collections-only spaces. Yes, they will need to be largely collections spaces (with some staff offices) while seating, collaboration spaces, etc, will be shifted into collaboration areas. Due to the conceptual level of these plans, furnishings and partition walls shown are minimal and only meant to suggest scale and possible arrangements, as indicated in the Preface.

#### **First Floor:**

Page 3, Bullet point 2: There is a desire to ensure that the enclosed courtyards are accessible to all.

Should the “Upper part of receiving and corridor” be designated as an additional instructional space or configured along with the south instructional room into a tiered instructional space? Presently, it appears to be lost space. Yes. Please confirm if this is the desired direction.

Although moving the Learning Center on Page 6 reflects past recommendations from the earlier scenarios, the shift from ca. 15,000 square feet to 6,600 square feet challenges the developing vision of the space. Presently, there are thoughts about how the space directly to the south of the Learning Center could be used in a flexible manner, but it would greatly benefit from efforts to make the “Wall/Ramp/Entrance” between the Learning Center and the Flexible Collaboration Space more open. If there are mechanisms to ensure that there could be a more fluid passage between the two, it would greatly enhance the developing vision. Combined with a Yellow/Blue Cross Shading on the present 9,240 square foot Flexible Collaboration Space, it would serve as a signal that there is a developing vision for a robust integration of services and programs in which part of it could be multiuse space that would be available to the learning center during day/peak use hours, and could be used for open study at other times. This would reflect models developed and implemented at other institutions. Yes, treatment of this wall and entrance may be developed during schematic design for these purposes.

#### **Basement:**

Facilities must be located closer to the loading dock/receiving. Likewise, if the dock ends up being on the north side, please relocate other services such as receiving, CMS, and CAS (ILL/DD) to be closer to that dock. Per previous UIUC review, direction for the final scenario is for the dock to be located on the south side. Facilities may be relocated to the central spaces

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currently labelled as Storage and Jan (south of the new staff lockers & Break room). Please confirm if this change should be made.

#### **Site Plan:**

While it is indicated that exterior entry approaches need to be made more accessible (perhaps through other, independent projects), could the illustrations provided explore more architectural ramped entrances? It looks like the Marshall Gallery entrance is staying the same and the North and South entrances are getting switch-back ramps. This is the kind of accessibility I would refer to as “alternative, but accessible” and rather than universal design principles. This is outside the scope of this project. Ramps shown are placeholders for design development in the future. As shown, the north entrance ramp is a stair/ramp combination suggesting a more modern and universal design oriented solution.

It doesn't appear that there is a direct and accessible route from the north entrance to the learning commons without needing to come through the Hub first. Correct. There is a direct route which contains stairs, and an accessible route through the hub. This compromise retains these historic corridors and does not interrupt the flow of the main N-S corridor. Addition of an elevator at this location was seen to be cost prohibitive in comparison to the ramp solution.

In the southwest corner of the stacks is a note “To ADA compliant exit.” It is unclear that this appears to be a stair tower that is serving as an emergency egress for the building. Design of this stair tower is to be finalized in conjunction with the adjacent Instructional Facility. Note on ADA compliance is not needed. Note to be revised accordingly.