

# AGENDA

## University of Connecticut Board of Trustees

### Buildings, Grounds and Environment Committee June 11, 2024, at 10:00 a.m.

University of Connecticut  
Avery Point Campus  
Branford House – Gallery Conference Room  
1084 Shennecossett Road  
Groton, Connecticut

Public Streaming Link (with live captioning upon request): <https://ait.uconn.edu/bot>

(A recording of the meeting will be posted on the Board website <https://boardoftrustees.uconn.edu/> within seven days of the meeting.)

Call to order at **10:00 a.m.**

#### 1. Public Participation\*

\*Individuals who wish to speak during the Public Participation portion of the Tuesday, June 11, meeting must do so 24 hours in advance of the meeting's start time (i.e., 10:00 a.m. on Monday, June 10) by emailing [BoardCommittees@uconn.edu](mailto:BoardCommittees@uconn.edu). Speaking requests must include a name, telephone number, topic, and affiliation with the University (i.e., student, employee, member of the public). The Committee may limit the entirety of public comment to a maximum of 30 minutes. As an alternative, individuals may submit written comments to the Committee via email ([BoardCommittees@uconn.edu](mailto:BoardCommittees@uconn.edu)), and all comments will be transmitted to the Committee.

- |   | <u>TAB</u> |
|---|------------|
| 2. Approval of the Minutes of the Buildings, Grounds and Environment Committee Meeting of April 10, 2024  | 1          |
| 3. Proposed Drainage Easement for UConn Property on Hunting Lodge Road, Storrs<br>➤ Presenter: Robert Corbett, Interim Associate Vice President of University Planning, Design & Construction   | 2          |
| 4. FY25 Capital Budget Presentation<br>➤ Presenter: Reka Wrynn, Associate Vice President for Budget, Planning and Institutional Research  | 3          |
| 5. Construction Assurance Office Report – June 2024<br>➤ Presenter: Angelo Quaresima<br>Associate Vice President and Chief Audit Executive  | 4          |
| 6. Project Updates ~ Storrs Based Programs<br>➤ Presenter: Robert Corbett, Interim Associate Vice President of University Planning, Design & Construction<br>➤ Presenter: Stanley Nolan, Interim Associate Vice President for Facilities Operations | 5          |

7. UConn Health Updates, Facilities Development and Operations  
 ➤ Presenter: Eric Kruger, Vice President for UConn Health  
 Facilities Development & Operations

8. **Projects Reviewed by BGE and to be presented to Financial Affairs on 06/25/24:**

<u>STORRS BASED PROGRAMS</u>	<u>Phase</u>	<u>Budget</u>	<u>Tab</u>
Mirror Lake Improvements	Final	\$11,500,000	7
PBB Research Support Expansion	Design	\$1,000,000	8
Werth Residence Tower High Humidity Mitigation	Final	\$8,500,000	9
Babbidge Library Stairs and Doors	Final	\$771,760	10
Innovation Partnership Building (IPB) Renovations for the Center for Clean Energy Engineering (C2E2)	Final	\$24,000,000	11
Andover Infrastructure and Software Upgrade Phases I Through V	Revised Final	\$4,355,439	12
Wired Access Layer Cabling	Final	\$2,000,000	13
 <u>UCONN HEALTH</u>			
CT-7 Inpatient & Research Renovations	Planning	\$1,675,000	14
Main Building Lab (L) Area Renovations – 1 <sup>st</sup> Floor	Planning	\$11,900,000	15
Surgery Center Operating #6 Renovation	Planning	\$1,750,000	16
ASB Data Center Generator and Power Improvements	Planning	\$3,150,000	17
IT Disaster Recovery Room	Planning	\$1,370,000	18
Parking Lots L1 & A5 Repavement	Design	\$1,020,000	19
Building F & Building M Roof Replacement	Final	\$1,615,000	20
Cryo Electron Microscope Installation	Final	TBD	21
KB034-36 Research Lab Renovation	Revised Final	TBD	22

**INFORMATION ITEMS:**

9. Summary of Individual Change Orders Greater Than 3% of Project Cost (Storrs based projects) 23
10. Status of Code Correction Projects 24
- Construction Management Oversight Committee Quarterly Code Correction Status Report – Code Exception Report
  - Quarterly Construction Status Report, Period Ending March 31, 2024  
[https://updc.uconn.edu/wp-content/uploads/sites/1525/2023/05/UConn-Quarterly-Construction-Report\\_03312024web.pdf](https://updc.uconn.edu/wp-content/uploads/sites/1525/2023/05/UConn-Quarterly-Construction-Report_03312024web.pdf)

11. Construction Projects Status Report

- <https://bpir.media.uconn.edu/wp-content/uploads/sites/3452/2024/04/Construction-Status-Report-4.17.24.xlsx.pdf>

12. University Senate Representative Report

- Presenter: Alexander Agrios, P.E.

13. Other Business

14. Executive Session (*As Needed*)

15. Adjournment

PLEASE NOTE: *If you are an individual with a disability and require accommodations, please e-mail the Board of Trustees Office at [boardoftrustees@uconn.edu](mailto:boardoftrustees@uconn.edu) prior to the meeting.*

# ATTACHMENT 1

# MINUTES

## University of Connecticut Board of Trustees

### Buildings, Grounds and Environment Committee April 10, 2024 Virtual Meeting

Committee Trustees: Charles Bunnell, Andrea Dennis-LaVigne, Marilda Gandara

UConn Health Board of Directors  
Directors Committee Members: Francis Archambault, Jr., Richard Carbray, Jr.

Other Trustees: Thomas Ritter, Daniel Toscano

University Senate Representatives: Alexander Agrios

University Staff: Radenka Maric, Robert Corbett, Anne D'Alleva,  
Nathan Fuerst, Nicole Gelston, Jeffrey Geoghegan,  
David Hook, Andrea Keilty, Eric Kruger, Nathan LaVallee,  
Lynn Lesniak, Matthew Longenecker, Margaret McCarthy,  
Stanley Nolan, Hans Rhyhart, Julie Schwager, Joseph  
Thompson, Kristen Wirtanen, Reka Wrynn

Vice-Chair Gandara called the meeting to order at 10:01 a.m.

1. Public Participation

No members of the public signed up to address the Committee.

2. Minutes of the Buildings, Grounds and Environment Committee Meeting of February 22, 2024

On a motion by Director Archambault, seconded by Director Carbray, the Committee voted unanimously to approve the minutes of the February 22, 2024, Meeting.

3. Construction Assurance Office Report – February 2024

Presenter: David Hook, Construction Auditor

4. Project Updates ~ Storrs Based Programs

Presenter: Robert Corbett, Interim Associate Vice President for University Planning,  
Design and Construction

Presenter: Stanley Nolan, Interim Associate Vice President for Facilities Operations

University Safety Reporting Systems Update

Presenter: Hans Rhyhart, Vice President Public Safety

5. UConn Health Updates, Facilities Development and Operations  
Presenter: Eric Kruger, Vice President for UConn Health Facilities Development & Operations

6. Projects Reviewed by BGE and to be presented to Financial Affairs on February 28, 2024, for Storrs Based Programs and UConn Health

This agenda item was informational.

7. Audit of UCONN 2000 Projects – Informational Only

This agenda item was informational.

8. Summary of Individual Change Orders Greater Than 3% of Project Cost (Storrs-based projects)

This agenda item was informational.

9. Status of Code Correction Projects

- Construction Management Oversight Committee Quarterly Code Correction, Status Report – Code Exception Report
- Quarterly Construction Status Report, Period Ending December 31, 2023

This agenda item was informational.

10. Construction Projects Status Report

This agenda item was informational.

11. Other Business

There was no Other Business.

12. University Senate Representative Report

There was no Senate Representative Report.

13. Executive Session (*As Needed*)

There was no Executive Session.

14. Adjournment

On a motion by Trustee Bunnell, seconded by Director Carbray, the Committee voted unanimously to adjourn the meeting at 10:53 a.m.

Respectfully submitted,

*Debbie L. Carone*


Debbie L. Carone  
Secretary to the Committee

# ATTACHMENT 2



June 26, 2024

TO: Members of the Board of Trustees

FROM: Jeffrey P. Geoghegan, CPA   
Executive Vice President for Finance & Chief Financial Officer

RE: Proposed Drainage Easement for UConn Property on Hunting Lodge Road, Storrs

RECOMMENDATION:

That the Board of Trustees approve the University Administration entering into a drainage easement with the Town of Mansfield to grant use of UConn-owned property for the purpose of providing adequate drainage for a new culvert to be installed by the Town of Mansfield. The Administration recommends that the Board of Trustees adopt the Resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees authorizes the University Administration to enter into a drainage easement with the Town of Mansfield for the use of UConn-owned property located along Hunting Lodge Road in Storrs.”

BACKGROUND:

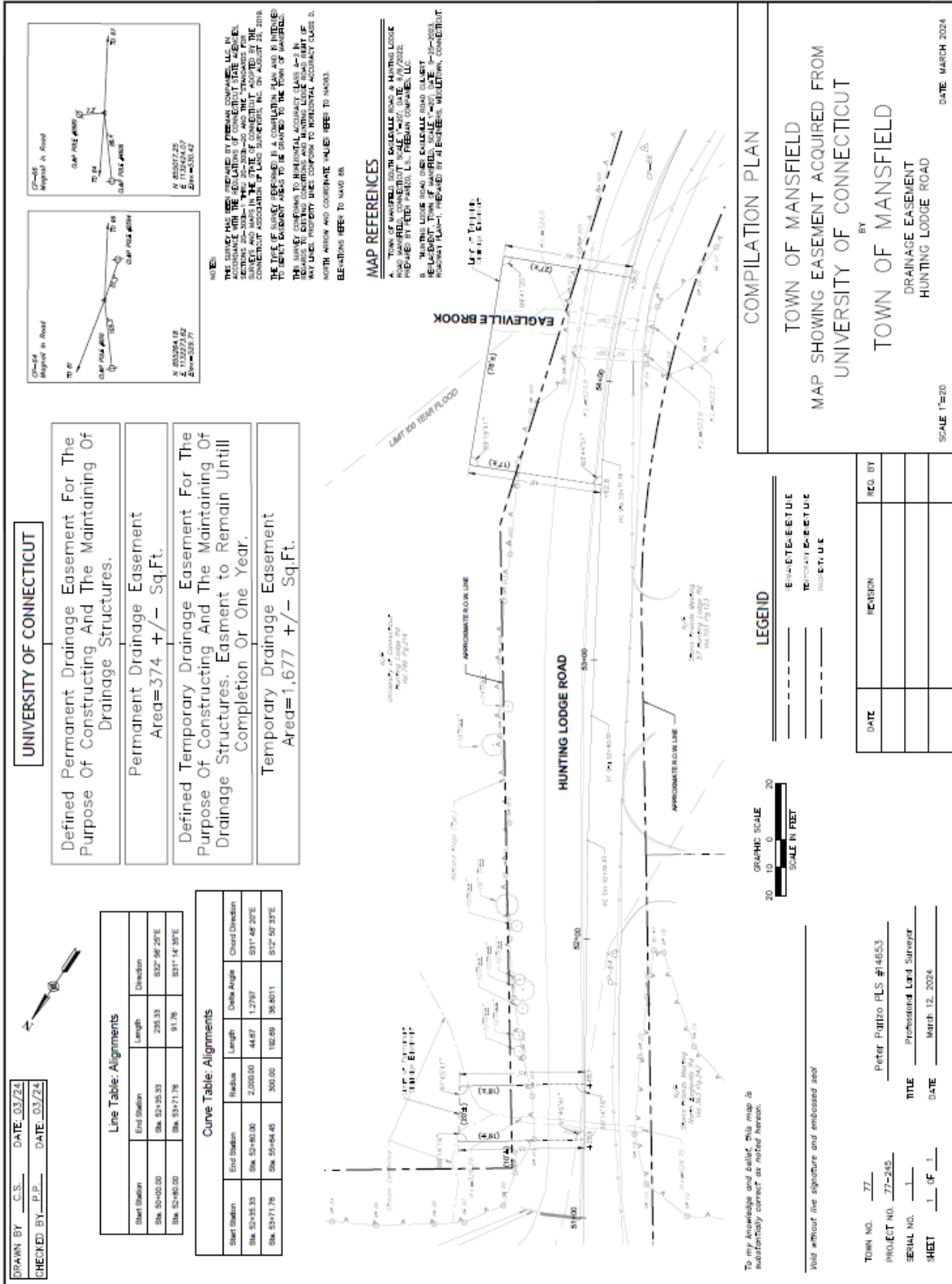
This easement is to benefit the Town of Mansfield’s construction of a new culvert on Hunting Lodge Road between North Eagleville Road and Separatist Road. The proposed easement area is shown in Attachment A and is entitled “Compilation Plan, Map Showing Easement Acquired from University of Connecticut by Town of Mansfield, Drainage Easement Hunting Lodge Road,” prepared by Peter Parizo and dated March 2024. The final easement language remains subject to final negotiations. The University will not seek consideration for this easement given the public benefit the new culvert provides to the Mansfield community.

SUMMARY

The Board of Trustees approval of this Resolution will serve to authorize the University Administration to enter into a drainage easement for the use of UConn-owned property by the Town of Mansfield.

-END-

# Attachment A



# ATTACHMENT 3

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# UCONN 2000 Capital Program



Board of Trustees

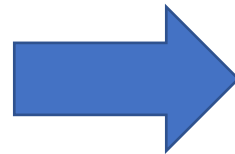
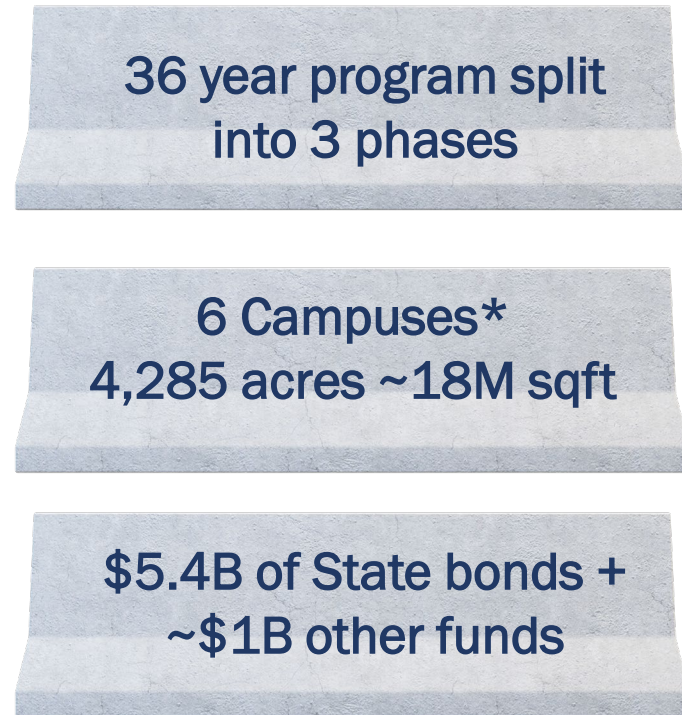
Buildings, Grounds and  
Environment Committee

June 11, 2024

**UCONN**

# UCONN 2000 Capital Program

The program was enacted to attract and retain CT's high-achieving students through a dramatic transformation and modernization of the University physical plant.



Over \$5.0B in capital expenditures since FY96 from all fund sources.

Capital Expenditures (\$M)	
\$3,870.5	State-supported UCONN 2000 GO Bonds
259.6	Other State-supported bonds (i.e. Tech Park, Waterbury)
346.6	UConn-supported Special Obligation bonds
565.4	Non-State funds (i.e. UConn operating funds, gifts)
<b>\$5,042.1M Total Expenditures (as of 3/31/24)</b>	

\*Storrs, Avery Point, Farmington, Hartford, Stamford, Waterbury

# UConn 2000: Proven Performance

## Major successes of UConn 2000

- Transformed the University's 6 campuses over 29 years and in an incredible return on investment – UConn is in high demand and received a record high ~57,000 applications for fall 2024
- Dedicated funding allowed University to utilize a long-term master plan to be strategic and flexible to address emergency infrastructure and facility needs of a 24/7 operation
- UConn 2000's proven program structure and annual approval processes resulted in clean audits, regular progress reports to the Board, Legislature and OPM, and bonds have high credit ratings which save money

## Why funding in UConn 2000 is essential:

Predictable, long-term funding is required to:

- Maintain and protect the State's investment, and
- Ensure the safety of the students, faculty, staff, and general public who use UConn's facilities on a daily basis

# UCONN 2000: Incredible Return on Investment

## UConn ROI

**~57,000**

Undergraduate applications for admission

**41%**

Increase in undergrad STEM enrollment since 2013

**\$56M**

Increase in research awards, from \$266M to \$322M, past five years

**11,020**

Increase in undergrad enrollment since 1995 (83%)

**53%**

Of the State's engineering workforce is produced by UConn

**160**

New start-up businesses hosted by the incubator since 2003; in FY23, the incubator hosted 59 start-ups supporting 381 jobs

## UConn Health ROI

- Served as the catalyst to the expansion of the bioscience industry
- Increased Medicine and Dental Medicine enrollment by 30%
- Increased access to patient care
- Achieved unprecedented clinical revenue growth from \$356M in FY13 to more than \$919M in FY24

# UCONN 2000 State GO Bonds

UCONN 2000 State supported General Obligation bonds have historically funded the majority of the capital budget.

Bonding Schedule (\$M)		Phase I	Phase II	Phase III	Status
UConn	FY96-FY99	\$382.0			Complete
UConn	FY00-FY05		\$580.0		
21 <sup>st</sup> Century UConn	FY05-FY14			\$627.2	
Bioscience CT	FY05-FY19			825.9	
NextGenCT	FY15-FY31			2,480.8	Active
UConn Health	FY22			25.0	
Total		\$4,920.9			

**\$692M remains over the next 7 years (FY25-FY31) as a result of the recent UCONN 2000 extension.**

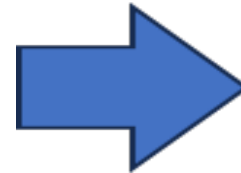




# UCONN 2000 Extension

Extension of the UCONN 2000 program includes an additional \$625M in funding over 7 years.

New Projects (\$M)	New Bonds
Life Sciences Building (aka Science 2)	\$269.5
Torrey Demo	25.0
Gant-Code Repairs & Renovations	100.0
Deferred Maintenance	50.0
Return Hydrogen Hub Funds	12.0
Gampel Renovations	100.0
Field House Renovation (Title IX + DM)	60.0
Coventry Boathouse (Title IX)	0.8
Freitas Renovation (Title IX)	7.0
Tennis Facility (Title IX)	0.7
<b>New Project Total</b>	<b>\$625.0</b>



UCONN 2000 (\$M)	Prior Total	Change	New Total
FY25	44.0	78.0	122.0
FY26	14.0	110.0	124.0
FY27	9.0	107.0	116.0
FY28		103.5	103.5
FY29		101.5	101.5
FY30		100.0	100.0
FY31		25.0	25.0
<b>Total</b>	<b>\$67.0</b>	<b>\$625.0</b>	<b>\$692.0</b>

# Fundraising

- Fundraising goal of \$100M to be raised over 8 years (by FY32)
  - \$40M for operational expenses inclusive of \$10M endowed
  - \$60M for construction expenses
- Reporting of progress towards cumulative milestone targets
  - Annual bond authorization approval to be reduced if targets not met

Milestone Fundraising Targets (\$M)	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32
	\$20.0	\$31.5	\$43.0	\$54.5	\$66.0	\$77.5	\$89.0	\$100.0

# UConn Capital Budget Planning

The long-term capital budget plan is continuously reviewed to ensure funding for our highest priorities.

UCONN 2000 Bond Funded Projects (in millions)		FY25	FY26-FY31	Status for FY25
Academic / Research	Gant-Code Repairs & Renovations	\$ 15.0	\$ 44.0	Design
	Life Sciences Building		269.5	Planning
	Nursing		25.0	Design
	Torrey Demo		25.0	Planning
	<b>Total Academic / Research</b>	<b>\$ 15.0</b>	<b>\$ 363.5</b>	
DM	Coventry Boathouse	0.6		Planning/Design
	Field House Renovation	28.2		Design
	Freitas Renovation	2.0	5.0	Construction
	Gampel Renovations	19.0	81.0	Planning/Design
	Housing Repairs & Improvements	8.0		Construction
	Infrastructure & Building Repairs	3.5	86.5	Ongoing
	IPB Office & Lab Renovation for C2E2	13.6		Construction
	NW Quad: Electrical Infrastructure Upgrades	18.0	5.0	Design
	Stamford Campus Mill River Remediation		9.5	Planning
	Tennis Facility Improvements	0.7		Planning
	Contingency	8.4		
<b>Total Deferred Maintenance</b>	<b>\$ 102.0</b>	<b>\$ 187.0</b>		
Equipment	Information Technology	5.0		Ongoing
	Academic/Research		19.6	Planning
	<b>Total Equipment</b>	<b>\$ 5.0</b>	<b>\$ 19.6</b>	
<b>Total UCONN 2000 Bond Funded Projects</b>		<b>\$ 122.0</b>	<b>\$ 570.0</b>	
<b>Other Funded Projects (University, GO Bonds)</b>				
Academic / Research	Programmatic Renovations (University)	\$ 6.5	\$ 30.0	Ongoing
DM	Facilities Repairs & Improvements (University)	11.5	69.0	Design/Construction
	Gampel Enhancements (State GO Bonds)	10.0		Construction
Other	Equipment (State GO Bonds)	10.0		Ongoing
<b>Total Other Funded Projects</b>		<b>\$ 38.0</b>	<b>\$ 99.0</b>	
<b>Total Capital Budget - Storrs &amp; Regional Campuses</b>		<b>\$ 160.0</b>	<b>\$ 669.0</b>	

UCONN 2000 Bond Funded Projects by Statutory Named Lines	Total	By Program	
		Deferred Maint.	Other Improvements
<b>Academic and Research Facilities</b>	<b>\$15.0</b>		
Gant-Code Repairs & Renovations	15.0	15.0	
<b>Deferred Maintenance</b>	<b>102.0</b>		
Coventry Boathouse	0.6		0.6
Freitas Renovations	2.0		2.0
Gampel Renovations	19.0		19.0
Housing Repairs & Improvements	8.0	8.0	
Infrastructure & Building Repairs	3.5	3.5	
NW Quad: Electrical Infrastructure Upgrades	18.0	18.0	
Field House Renovation	28.2	28.2	
IPB Office & Lab Renovation for C2E2	13.6	5.0	8.6
Tennis Facility Improvements	0.7		0.7
Contingency	8.4	8.4	
<b>Equipment</b>	<b>5.0</b>		
Information Technology	5.0	5.0	
<b>Total UCONN 2000 Bond Funded Projects</b>	<b>\$122.0</b>	<b>\$91.1</b>	<b>\$30.9</b>
<b>Other Funded Projects (University, Gifts, SO/GO Bonds)</b>			
Equipment (State GO Bonds)	10.0	5.0	5.0
Gampel Enhancements (State GO Bonds)	10.0	10.0	
Facilities Repairs & Improvements (University)	11.5	11.5	
Programmatic Renovations (University)	6.5	3.3	3.3
<b>Total Other Funded Projects</b>	<b>\$38.0</b>	<b>\$29.8</b>	<b>\$8.3</b>
<b>Grand Total FY25 Capital Budget</b>	<b>\$160.0</b>	<b>\$120.9</b>	<b>\$39.1</b>

# FY25 UConn Capital Budget

- FY25 is year 11 of the 17-year NextGenCT initiative.
- 28% of the capital budget will provide funding for active construction projects.

# FY25 UConn Health Capital Budget

<b>State GO Bonds</b>	
Deferred maintenance, code compliance and infrastructure improvements	30.0
System telecommunications infrastructure upgrades, improvements and expansions	3.0
Equipment, library collections and telecommunications	10.0
<b>Total State GO Bonds</b>	<b>\$43.0</b>
<b>UConn Health Operating Funds*</b>	
Campus Renovations	5.0
Clinical Equipment	3.0
Deferred Maintenance	8.0
Information Technology Security and equipment	3.0
Revenue Growth Investment	2.0
Research Capital Use Allowance	8.0
Other/Contingency	8.7
<b>Total UConn Health Operating Funds</b>	<b>\$37.7</b>
<b>Grand Total FY25 Capital Budget</b>	<b>\$80.7</b>

\*Categories/Projects may be redistributed based on UConn Health Capital Prioritization

# State Bonding Support

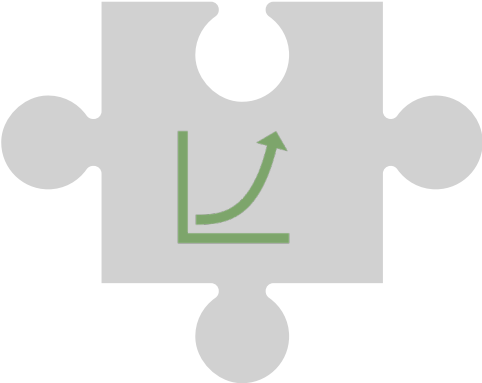
FY24 & FY25 State Bond Funds Approved in PA 23-205:

State GO Bond Funds	FY24	FY24 Bond Commission Approvals	FY25
Academic & Research Equipment	\$10.0	✓	\$10.0
Gampel Pavilion Renovation			10.0
New Nursing Program Facility-Storrs	30.0	✓	
XL Center Academic Space-Acquisition/Leasing & Renovation	5.0	✓	
<b>UConn Total</b>	<b>\$45.0</b>		<b>\$20.0</b>
Deferred Maintenance	30.0		30.0
Equipment, Library Collections and Telecommunications	10.0	✓	10.0
System Telecommunications Infrastructure	3.0	✓	3.0
<b>UCH Total</b>	<b>\$43.0</b>		<b>\$43.0</b>
<b>Grand Total</b>	<b>\$88.0</b>		<b>\$63.0</b>

# UConn & UCH Capital Program Challenges

## Challenges:

- Workforce - limitations, interruptions or unavailability
- Materials - production timelines, shortages and prices



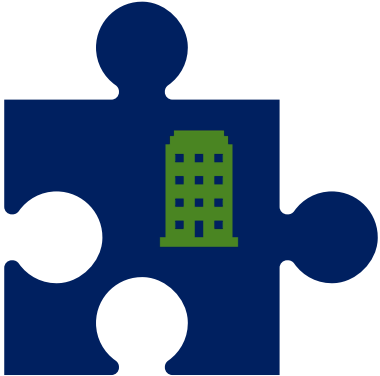
## Facilities Conditions:

- 55% of UConn's footprint is considered high-risk or over the age of 25 years old
- DM needs are \$1.2B at UConn and \$0.5B at UCH



## Economy:

- Significant annual escalation
- Labor expenses and construction inflation are expected to stay elevated compared to historical averages in the near term



## Project Priorities:

- The Facility Condition Assessments are informing project prioritization and development of annual capital plans

# ATTACHMENT 4



June 11, 2024

TO: Members of the Buildings, Grounds and Environment Committee

FROM: Angelo Quaresima, Chief Audit Executive

David Hook, Construction Auditor

RE: Construction Assurance Office Report – June 2024

In accordance with CT General Statutes (CGS) Section 10a-109cc, the following is the statutory required report of construction performance reviews undertaken by the Construction Assurance Office (CAO) through May 2024:

The CAO continues to review active UConn 2000 funded projects for compliance with CGS Section 10a-109n and UConn's Capital Projects Policies and Procedures Manuals maintained by Finance, Capital Projects and Facilities Procurement, and University Planning, Design and Construction.

# ATTACHMENT 5

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# Buildings, Grounds, and Environment Committee

University Planning, Design and Construction  
Facilities Operations

June 11, 2024  
Complete Report

**UCONN**

# Agenda

## **UPDC Resolutions for June BOT Meeting**

- Mirror Lake Improvements
- PBB Research Support Expansion
- Werth Residence Tower High Humidity Mitigation

## **Highlighted UPDC Projects**

- UPDC Projects in Construction
- UPDC Projects in Design

## **Real Estate Projects**

- Regional Housing
- Off-Campus Development

## **Campus Security Design Guidelines**

## **Facilities Operations Resolutions for June BOT Meeting**

- Home Babbidge Library Stairs & Doors Upgrades
- Innovation Partnership Building Renovation for the Center for Clean Energy Engineering
- Andover Infrastructure & Software Upgrade

## **Highlighted Facilities Projects**

- Facilities Operations Projects in Construction
- Facilities Operations Projects in Design

## **Appendix**

- UPDC/Facilities Operations Projects in Planning and Close Out

# UPDC Resolutions for June BOT Meeting

# Mirror Lake Improvements

## Scope:

- Construction of the New School of Nursing Building, South Campus Residence Hall and associated infrastructure requires stormwater improvements for environmental compliance
- A near-term, phased scope of work within a reduced budget and an updated feasibility study that was mutually satisfactory to CT DEEP was completed, and included two key components of work:
  - (1) Interim improvements and/or repairs to the dam and spillway due to its hazard class and existing conditions
  - (2) Stormwater attenuation and water quality improvements associated with past and active development
- Emergency Action (Safety) Plan for the dam remains in effect

Budget: \$4.0M, Revised Design, BOT approved April 2023

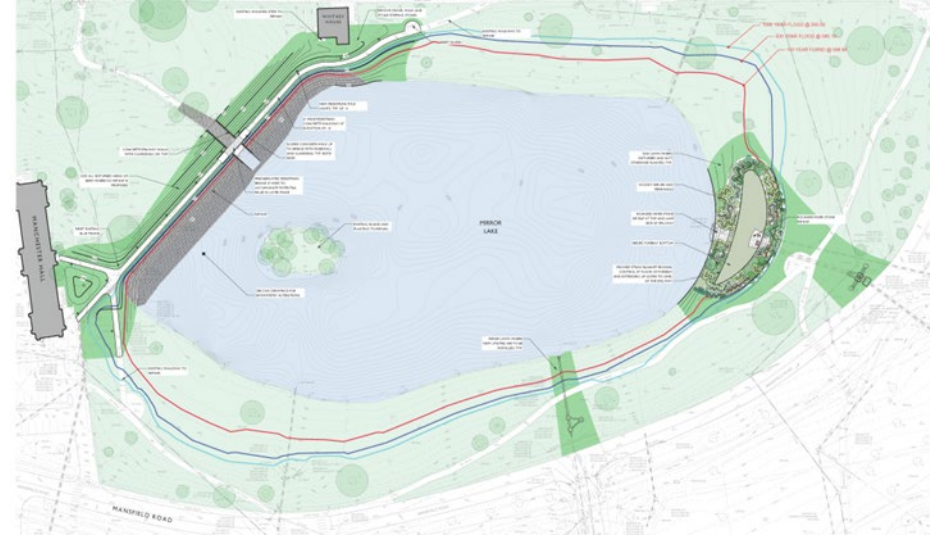
- \$11.5M, Final, Pending BOT approval June 2024

## Schedule:

- Construction Document Phase complete January 2024
- Environmental permit reviews and notices underway
- Bidding completed, draft GMP reviewed
- Construction: March 2025 – November 2025

## Key Issues & Risks:

- Environmental and construction permitting review periods
- Bid alternates not accepted include forebay and walkway on dam
- Construction logistics, including traffic controls on SR-195
- Future Phase 2 work (dredging) expected by DEEP



*Basis of Feasibility Study, Revised Design and Master FMC  
MOU Amendment with CT DEEP*

# PBB Research Support Expansion

- Scope: Fit-out the shell space adjoining the existing research support facility within the Pharmacy Biology Building on the Storrs Campus for a vivarium. The area of the project is approximately 3,850 NSF.
- Budget: \$495,000 approved, \$1.0M Pending BOT June 2024
  - Anticipated total budget: \$10,000,000
- Schedule:
  - Target Construction Spring 2025 – Spring 2026
- Key Issues & Risks:
  - Vibration/noise/dust working in an occupied research facility



PBB Vivarium

# Werth Residence Tower High Humidity Mitigation



- Scope:
  - Mock-up testing indicates that dry air needs to be delivered to the student residence rooms to lower the humidity levels and reduce moisture. The mock-up testing determined modifications to the air distribution within the rooms is required to minimize condensation on the windows during heating season is ongoing.
  - Temporary dehumidification equipment has been installed in the corridors to help lower the humidity level in the building this upcoming academic year. The final replacements will be done during the summer of 2025 due to long lead times for equipment procurement.
- Budget: \$1.5M, Approved Design, \$8.5M, Final-Pending BOT June 2024
- Schedule:
  - Dec 2023-March 2024 – Design temporary measures
  - March 2024 – May 2024 – Install temporary dehumidification system
  - Summer 2025 – Install new rooftop equipment and ductwork to rooms
- Key Issues & Risks:
  - Supply chain timeline for mechanical and electrical equipment and controls














# UPDC Project Status Summary




## In Bidding/Construction

-  Fieldhouse- Old Recreation Center Renovation- Phase 1
-  South Campus Infrastructure
-  Residential Life- South Campus Residence Hall
-  Mirror Lake Improvements
-  Gilbert Road Site Preparation
-  Freitas Renovation
-  XL Center- Academic Space Renovation







## In Design

-  Werth Residence Tower High Humidity Mitigation
-  School of Nursing New Building
-  Stamford Mill River Remediation
-  Fieldhouse- Old Recreation Center Renovation- Phase 2
-  Gant Building Renovation
-  University Second Electrical Feed
-  PBB Research Support Expansion
-  Tennis Practice Facility
-  Hartford Café




## In Planning

-  Active Transportation Grants
-  Coventry Boathouse
-  Golf Practice Facility

## In Close-Out

-  NER and Discovery Drive Intersection Improvements
-  Boiler Plant Equipment Replacement and Utility Tunnel Connection
-  Supplemental Utility Plan
-  NW Science Quad, Ph 2 Utilities and Site
-  UConn 2000 Code Remediation - Stamford
-  Fenton River Well Field and Road

Note: All projects have a degree of risk, primarily to scope and/or schedule and/or budget. In this report, the assessment of the risk per project is shown with a green, yellow or red box as follows:

 Least Risk       Some Risk       Most Risk

Typically, projects in construction may have a risk to schedule and/or to budget; projects in design and planning may have a risk to scope and/or schedule and/or budget.

# UPDC Projects in Construction

# Field House – Old Recreation Center Renovation

- Scope:
  - Athletics backfill of the Field House-Old Recreation Center
  - Renovation of the existing locker rooms and team offices
  - Academic Center- consolidation of Student-Athlete Success Program
  - New ERG Room for Women’s Rowing
  - Renovation of Strength & Conditioning and Sports Medicine Areas
- Budget: \$15.5M- Approved Phase 1 Construction
  - Phase 2 final cost pending. Total project estimate is \$90 million
- Schedule:
  - Expected design completion is Winter 2024. Phase 1 (Wolff Zackin Natatorium) GMP is being finalized with construction scheduled Spring 2025 – Fall 2025. Phase 2 (Balance of Field House) will be bid in January 2025 and constructed between Summer 2025 and Winter 2026
- Key Issues & Risks: Cost escalation and supply chain concerns, especially concerning long-lead items, and swing space/relocation requirements and plans need to be further developed



*View of Proposed New Entry*



*View of Proposed Student Academic Center*

# South Campus Infrastructure

- Scope:
  - Replace aging steam and other infrastructure on the South side of campus to increase efficiency and reliability of existing utilities; provide utilities, including a sustainable geothermal heat exchange system connected to the existing South Campus Chiller Plant and to the South Campus Residence Hall.
- Budget: \$89.5M, Approved Revised Final
  - Some Deferred Maintenance steam infrastructure replacement was removed from the project scope and will be bid as a separate project at a future date. A 450-foot segment of this steam infrastructure failed in August 2023 and will be replaced under the project.
- Schedule:
  - All project phases have been bid. Work necessary for the occupancy of the South Campus Residence Hall will be complete by August 2024.
  - Construction July 2023 – May 2025, with in-service date of electrical equipment for the South Campus Chiller Plant potentially as late as Spring 2026.
- Key Issues & Risks: Potential for unanticipated subsurface conditions, particularly rock, added costs for steam line replacement outside the original scope of the project.



*Installation of new utilities in Gilbert Road*



*Installation of geothermal system, S Lot* 10

# South Campus Residence Hall



- Scope:
  - Construction of a new 647 bed Residence Hall and 500 seat Dining Hall in the South Campus
- Budget: \$215.0M, Approved Final
  - Project is projected to be \$5 to \$8 million under budget
- Schedule:
  - Construction commenced November 7, 2022
  - Masonry exterior and windows are complete
  - Interior drywall and finishes continuing
  - Construction Completion: Fall 2024
- Key Issues & Risks: Construction noise and dust, long lead times for electrical and mechanical equipment, final inspections from OSBI



*View looking southwest of construction on the two L-shaped wings of the Residence Hall*

# Gilbert Road Site Preparation

- Scope:
  - Preparation of the area along Gilbert Road for the South Campus Residence Hall
  - Exterior House Restoration
- Budget: \$6.6M, Approved Final
  - Both Phases of the project are on budget
  - Spending to be capped at \$6.0 million
- Schedule:
  - Relocation portion of the work is complete (Phase 1). Exterior restoration scope (Phase 2) has been bid and awarded.
  - Phase 2 work commenced in spring and will be complete by the end of the summer 2024
- Key Issues & Risks: SHPO's expectations concerning the overall project



*4 Gilbert Road - House Relocation*

# Freitas Arena Renovation

- Scope:
  - Renovation of the former ice arena to support the Women's Volleyball program.
  - Phase 1: The work includes the decommissioning of the ice system, demo of the existing dasher boards, installation of new flooring and bleachers.
  - Phase 2: Renovation of the Women's locker room.
- Budget: \$3.0 Revised Final Approved BOT
- Schedule:
  - Phase 1: Completed in Summer/Fall 2023
  - Phase 2: Construction May 2024– August 2024
- Key Issues & Risks:
  - Schedule, cost, and long lead times for bleachers



*Phase 1- volleyball courts complete*

# XL Center - Academic Space Renovation

- Scope: Providing IT services, audio-visual systems and furniture for occupancy of a 51,000 SF space under a five-year lease at the XL Center.
- Budget: \$1.039M Final Approved BOT
- Schedule:
  - Lease fully executed
  - Tenant Fit-Out Work: Summer 2024- Fall 2024
- Key Issues & Risks:
  - Aggressive schedule, lead times for equipment and furniture



*229 Trumbull Street Entrance at the XL Center*



# UPDC Projects in Design

# School of Nursing New Building



- Scope:
  - Construction of a new School of Nursing building on a site adjacent to Philips Communications Science Building and the Human Development Center in South Campus
  - Design-bid-build delivery method on an aggressive three-year completion schedule
- Budget: \$5.4M Approved Design BOT October 2023
  - Design kicked-off in October 2023
  - CM selection process completed Winter 2024
  - Concept design complete and schematic design commencing
- Schedule:
  - CEPA – Post-Scoping Notice was completed in May 2024
  - Design – October 2023 to September 2024
  - Bid & Contracting – Fall 2024
  - Tentative Construction – November 2024 to Fall 2026
- Key Issues & Risks:
  - Aggressive schedule and tight budget
  - Long lead mechanical and electrical equipment
  - Difficult site and swing space possibilities



*New School of Nursing Building (View looking Northeast)*

# Stamford Garage – Mill River Remediation



- Scope:
  - Remediation of environmentally-impacted soils and sediments at the Mill River adjacent to the west of UConn's parking lot
- Budget: \$0.5M, Approved Planning, construction funding TBD
- Schedule:
  - Initial Ecology Report and testing completed and submitted in September 2020. DEEP requested additional study.
  - Access agreements from adjacent property owners completed and second round of testing of river completed Fall 2022
  - Updated reports and testing results submitted to DEEP. DEEP still reluctant to finalize a remediation level. Additional risk assessment testing was done and submitted to DEEP in Spring 2024.
  - Target Remediation Date: TBD. No earlier than Fall 2025
- Key Issues & Risks: Extent of remediation may include adjacent properties not owned by UConn. Permitting of work will take 9 – 12 months after agreement on scope with DEEP. Budget will depend on remediation scope of work. Market escalation.



*Mill River adjacent to UConn Parking Lot*

# Gant Building Renovation - STEM



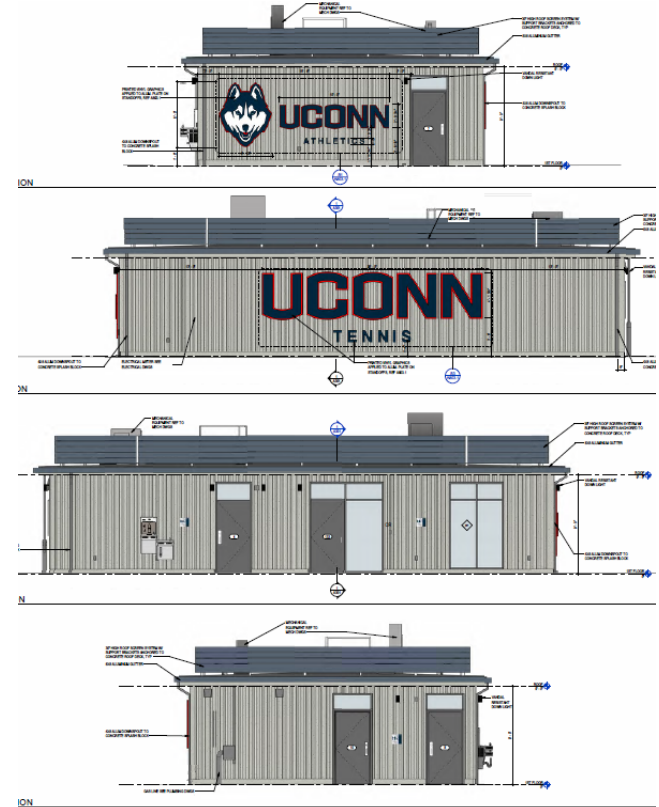
- Scope: 300,000 GSF Renovation
  - Teaching labs, faculty offices and support space upgrades
  - Infrastructure and Envelope Upgrades
  - Targeting LEED Gold
- Budget: \$170M, Approved Revised Final for Ph 1 & 2
  - Phases 1 and 2 complete.
  - Phase 3 scope being reassessed to meet available funding and address additional space and programming needs identified since project was put on hold.
- Schedule:
  - Construction Phase 1: Winter 2018 – Summer 2019
  - Construction Phase 2: Fall 2019 – Spring 2021
  - Phase 3: TBD
- Key Issues & Risks: Phase 3 cost escalation.



*View of 4<sup>th</sup> Floor North Wing Addition from North Eagleville Rd*

# Tennis Facility Improvements

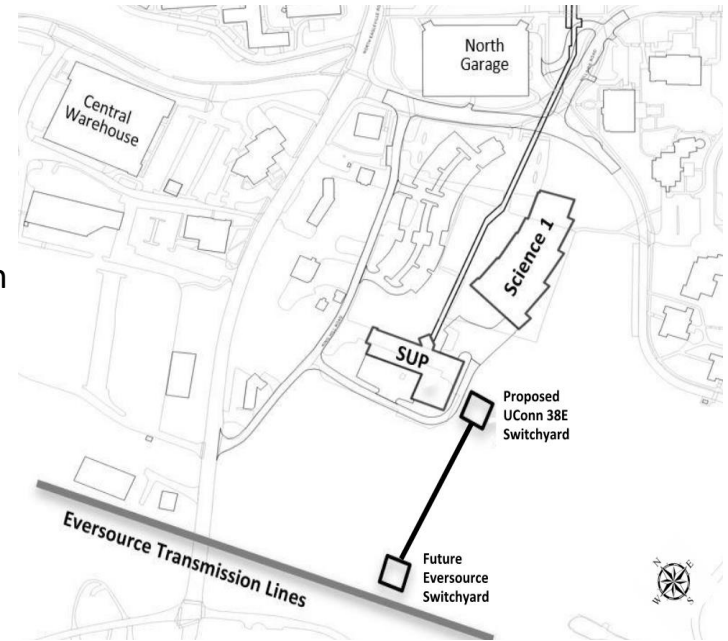
- Scope:
  - Building and surrounding site improvements for Title IX compliance at this remote facility supporting women's tennis
- Budget: Planned BOT September 2024
  - Construction documents completed May 2024
  - Value management and GC prequalification process underway
- Schedule:
  - Design January-July 2024
  - Bidding & Contracting July-August 2024
  - Construction Complete TBD
- Key Issues & Risks:
  - Preliminary cost estimate exceeds budget allocated during project formulation
  - Site requires additional operational expenses



*Proposed building*

# University Second Electrical Feed

- Scope:
  - Construction of a new UConn 38E switchyard adjacent to the Supplemental Utility Plant (SUP) and connection to Eversource transmission lines.
- Budget: \$15.0M Approved Final, Phase 1, September 2023 BOT
- Schedule:
  - Design continues and has been completed through the selection of certain equipment with long lead times.
  - Phase 1, the procurement and installation of equipment with long lead times, has been bid. An additional long lead time equipment procurement phase may be necessary.
  - Construction Schedule: TBD based upon updated lead times for equipment and completion of design.
- Key Issues & Risks: Environmental permitting, long lead times on equipment and cost escalation due to large volume of transmission upgrades nationwide, Eversource completion of its enabling design and construction.



*UConn 38E Switchyard and Eversource  
Transmission Line Connection*

*Note: Eversource switchyard by Eversource*

# Hartford Cafe



Scope: Build out a café space on the 1<sup>st</sup> Floor within the Hartford Times Building to provide students with an affordable option and to address student food insecurity.

Budget: \$100,000 approved Planning

- Target budget in the range of \$750,000 to \$950,000

Schedule:

- Design: Winter 2024-Summer 2024
- Bidding anticipated Fall 2024
- Construction Summer 2025-Fall 2025

Key Issues & Risks: Long-lead Dining Service Equipment



# Real Estate Update



# Real Estate Projects

CAV Test Track Land Sale Option: Developer has agreed to revised terms and a new land option will be proposed. Terms include a smaller land area and escrow for potential environmental conditions.

36 North Main Street - Waterbury: Construction proceeding quickly, and occupancy may be as early as January 2025.

XL Center Parking: Agreements being finalized with CRDA for parking at 200 Church Street for students, faculty and staff utilizing leased space at 229 Trumbull Street and student housing.

10 Willowbrook Road: Recommended discussions about a possible lease of the house to Chabad.

Celeron: Recommended discussions with owner about a ground lease extension for existing apartments on Hunting Lodge Road.

Fairfield Ag Extension: Discussing potential resolutions to eviction notice and long-term property use.

# Housing at Regional Campuses

UConn Hartford: BOT approved Term Sheet at May 2024 meeting. Awaiting funding confirmations prior to execution but commencing drafting of a master lease agreement in the meantime.

UConn Stamford (Fall 2024): Due to unusually high incoming class, leases at additional properties are being sought and will likely be walk-in request at June 2024 BOT meeting.

UConn Stamford (Long Term): RFEI issued in April to determine if we can procure more favorable terms for housing long-term with a target range for total beds between 650 – 750 beds. We received 10 Responses which are under review.

UConn Avery Point: Investigating additional housing and possible RFEI issuance in July. Targeting a 200-bed residence hall and may allow multi-use development to create an economies of scale.

UConn Law School: Owner of land adjacent to Law School submitted plans for development of 199 new apartments on the site.

# Safety Risk Assessment & Security Design Guidelines

## Summary:

University Safety requested a Vulnerability Risk Assessment be performed on the Storrs and Depot Campuses. The outcome of the assessment identified areas of potential vulnerability and threats, and from the assessment, mitigation strategies and design standards were developed to be applied to any project implemented by the University in the future. The University Security Design Guidelines are both conceptual in nature and technical, leading the overall best practices of Crime Prevention Through Environmental Design (CPTED). They are complimentary and additive to the University Design Guidelines and Performance Standards (University Design Standards) previously adopted.

## Goals and outcome of the Assessment:

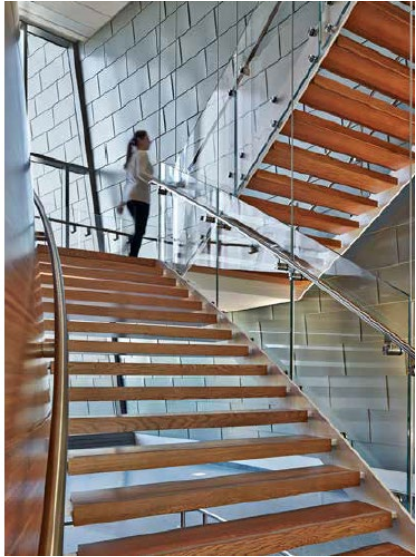
- Establish mitigation strategies to minimize these vulnerability risks.
- Weigh the level of exposure associated with each risk-based on historical reporting.
- Incorporate the types of mitigation strategies into the Campus Security Design Guidelines.
- Establish a 5 – 10 year Campus Security Master Plan which will prioritize the implementation of corrective measures to bring the campuses towards consistency with these adopted University Security Design Guidelines.
- Protection of both persons and property

# Security Design Guidelines Structure

1. Grouped by Asset Category (Academic/Residential/Event Spaces/Outdoor Gathering/Athletics, etc.)
  
2. Within Asset Category- there are 3 Groupings of Design Guidelines:
  - Campus and Building Sites
    - Emergency Blue Phones
    - Enforced Standoffs (Bollards, Fences, Knee Walls, Vehicle Interaction, etc.)
    - Hostile Vehicle Mitigation
    - Traffic Calming
  
  - Building and Exterior
    - Controlling Access to Vantage Points
    - Forced Entry Hardening
    - HVAC- Air Intake Placement
    - Specifications of laminated glass and non-flammable materials
  
  - Technology Design & Implementation
    - Access Control
    - Video Surveillance
    - Intrusion Detection
    - Duress Alarms

# Crime Prevention through Environmental Design

## Examples in Practice



Natural surveillance: See-through railings for stairs in conjunction with transparent facades to increase visibility in stairwells.

If a space can be observed by others, then it would be a less attractive target of potential crime.



Space Management: Design spaces to be easily maintained and reduce opportunities for vandalism. Use anti-graffiti finishes, avoid large blank walls, ensure trash facilities are easy to use by community and service by maintenance staff.

A well-maintained space feels riskier to target for criminal activity and naturally supports a sense of pride amongst the users.



Territorial Reinforcement: Design spaces to incorporate physical attributes that promote a sense of ownership and community, which instills an instinct to protect the space and discourages criminal activity by making the space uncomfortable for intruders.

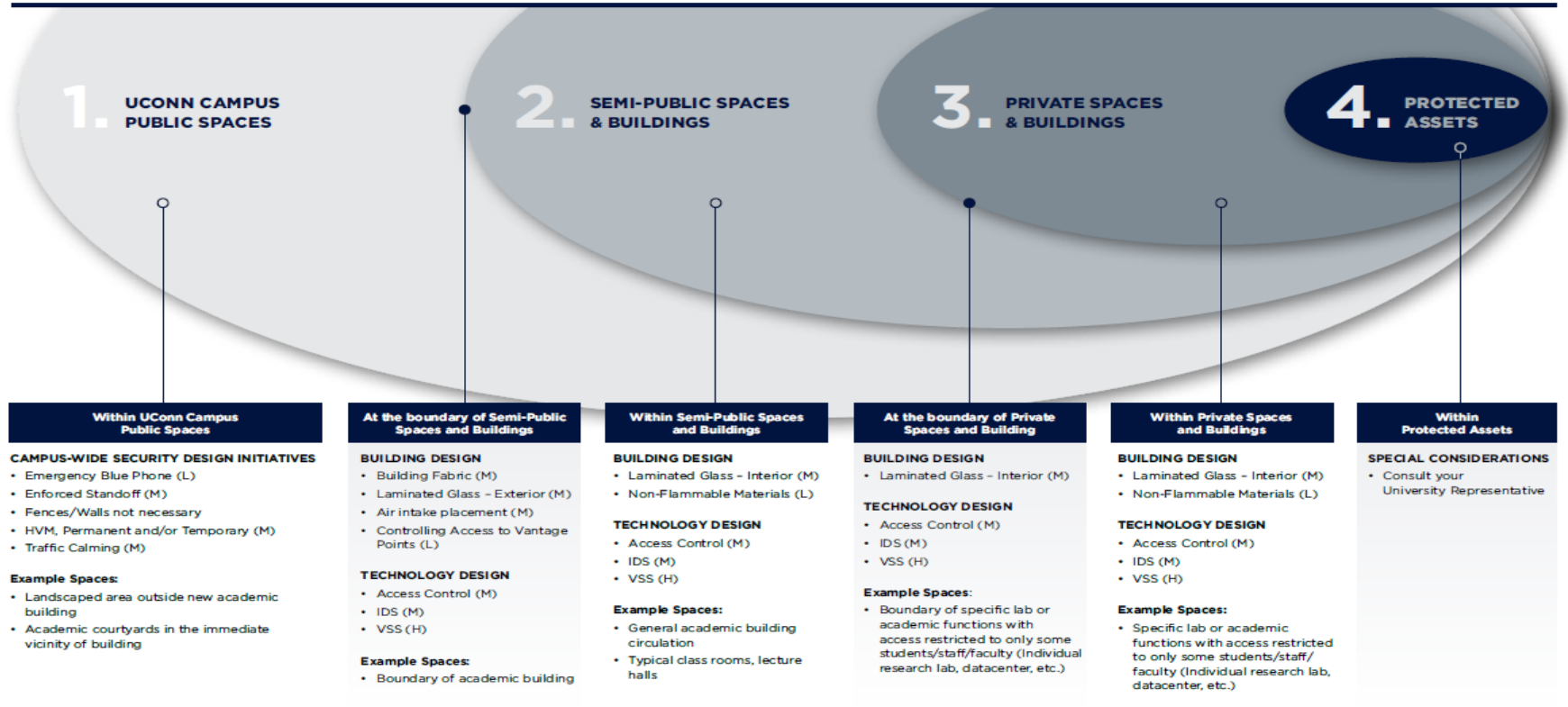


Natural Access Control: Use lighting, vegetation and landscaping to guide users of a space where to go or not to go.

Employs spatial definition cues to deny access to a potential target.

# Campus Security Design Guidelines

## Example: Academic Building Zoning



# Facilities Operations Resolutions for June BOT Meeting

# Homer Babbidge Library Stairs & Doors Upgrade



Scope: This project includes the demolition of the existing defunct and decommissioned escalator and the replacement with a bluestone staircase. It also includes the removal and replacement of six storefront doorways on the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> and plaza level to comply with building code. This aligns with the strategic initiative Excellence in Research, Innovation, and Engagement.

Budget: \$771,760 - Approved Final

Schedule: Summer 2024

Key Issues & Risks: None at this time.





# Innovation Partnership Building Renovations for the Center for Clean Energy Engineering



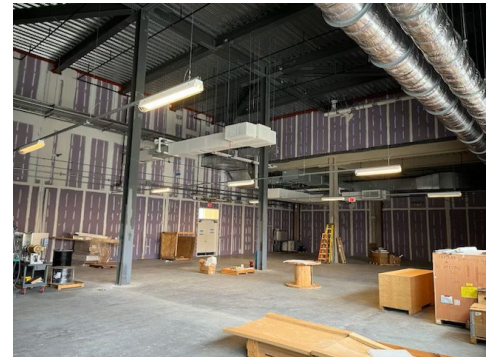
Scope: Renovation of existing office areas, creating new labs in shell spaces and revising the layout of existing labs to accommodate new equipment. This aligns with the strategic initiative Excellence in Research, Innovation, and Engagement.

Budget: Initial Target Construction Budget : \$20,000,000  
Final Revised Target Construction Budget : \$24,000,000

Schedule: Phase 1 Design Completed in January 2024  
Phase 1 Target Completion: 2025 –Q4

Phase 2 Target Design Complete: 2024-Q2  
Phase 2 Target Completion: 2025-Q4

Key Issues & Risks: Aggressive Schedule



# Andover Infrastructure and Software Upgrade

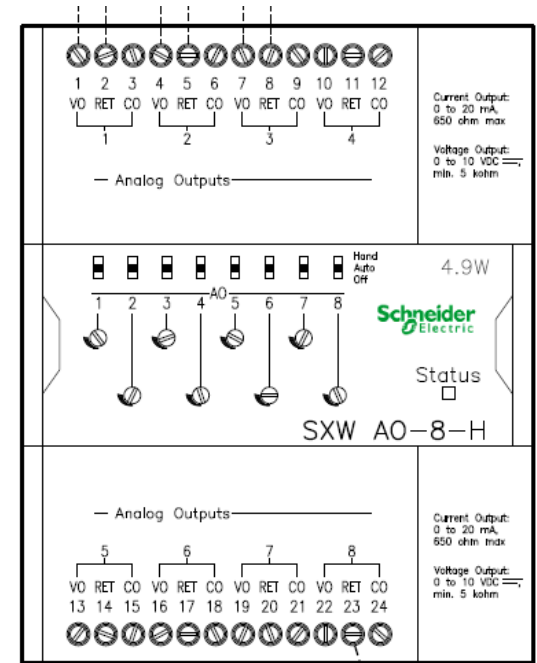


Scope: Phase 5 of the upgrade to the building automation system (BMS) software includes four more facilities as well as upgrading the main BMS server. The system controls and monitors the buildings' mechanical and electrical equipment such as ventilation, lighting, power systems, fire systems and security systems. The upgrades to the aging software for buildings and infrastructure extends the building asset life. This aligns with the strategic initiatives in Wellness of People and Planet and Seven World-Class Campuses, One Flagship University.

Budget: \$3,855,439 - Approved Final  
\$500,000 – Phase V  
\$4,355,439 – Phases I through IV












Schedule: Phase 1, 2, and 3 are completed.  
Phase 4 is scheduled to be completed at the end of June.  
Phase 5 construction to start this summer.

Key Issues & Risks: Hardware Component Availability






# Facilities Operations Project Status Summary

## In Bidding/Construction



-  Jones Annex Renovation
-  North and South Garage Restoration Phase 4
-  von der Mehden Recital Hall Roof Restoration
-  Wilbur Cross Cupola Repair
-  Gampel Pavilion Enhancements
-  Electric Vehicle Charging Infrastructure & Service Upgrades
-  Hydrogen Fuel Dispenser
-  Dining Hall Ventilation Upgrades
-  FY24 Residential Refresh Program- Buckley Hall
-  FY24 Residential Refresh Program- Sprague Hall
-  Garrigus Suites Environmental Systems Upgrade

**Note:** All projects have a degree of risk, primarily to scope and/or schedule and/or budget. In this report, the assessment of the risk per project is shown with a green, yellow or red box as follows:

 Least Risk       Some Risk       Most Risk

Typically, projects in construction may have a risk to schedule and/or to budget; projects in design and planning may have a risk to scope and/or schedule and/or budget.


## In Design

-  Energy Services Performance Contract Phase 2
-  Fuel Cell Installations – IPB and Putnam Hilltop

## In Planning

-  Hilda May Williams SHaW HVAC/Ventilation

## In Close Out

-  Avery Point Branford House Exterior Repairs, Phases 1 & 2

## Informational

None

# Facilities Projects In Construction

# Jones Annex Renovation

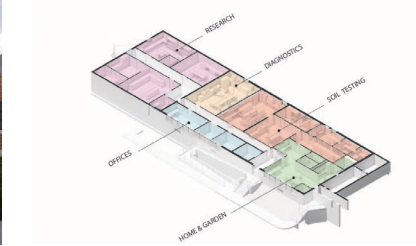


Scope: Renovation of the Jones Annex building consolidating several outreach education fee-based services at one location. The consolidation will help facilitate efficiency between personnel, collaboration of group and increase opportunities for professional staff to contribute to undergraduate educational activities. This aligns with the strategic initiative Excellence in Research, Innovation, and Engagement.

Budget: \$4,940,000- Approved Revised Final

Schedule: Target Design Completion: 2024-Q2  
Target Project Completion: 2025-Q2

Key Issues & Risks: Aggressive Schedule



# North and South Garage Restoration Phase 4



Scope: Repairs of the joint sealants, deteriorated or damaged concrete floors, beams, columns, walls, curbs, welded shear connectors, beam support, cleaning and repairs of the drainage system and paints miscellaneous surface and items. Improvement of building condition is to extend asset life. This aligns with the strategic initiative Seven World-Class Campuses, One Flagship University.

Budget: \$4,000,000- Approved Revised Final

Schedule: On schedule, construction to begin May 2024

Key Issues & Risks: Weather



# von der Mehden Recital Hall Roof Restoration

Scope: Removal and replacement of the existing roof system. The work includes removal of the existing roofing system, installation of new code compliant insulation, install of new EPDM membrane, replace roof drain assemblies, refasten metal decking, new roof edge metal. The repair to aging buildings and infrastructure extends building asset life. This aligns with the strategic initiative Seven World-Class Campuses, One Flagship University.

Budget: \$720,000 – Approved Final

Schedule: Construction to begin this summer, completion for August 2024

Key Issues & Risks: Weather, Hidden Conditions



# Wilbur Cross Cupola Repair



Scope: Replace the existing cupola roof and provide new gold finish, repair/replace wood sections of the structure where rot and water damage exist on both the inside and outside of the cupola. Prep/Prime/Seal/Paint all interior & exterior surfaces. The repair to aging buildings and infrastructure extends building asset life. This aligns with the strategic initiatives Seven World-Class Campuses, One Flagship University and Husky Pride & Resilience.

Budget: \$932,000- Approved Final

Schedule: Construction to begin this summer, completion for August 2024

Key Issues & Risks: Weather, Hidden Conditions





# Gampel Pavilion Enhancements



Scope: This project includes replacement of the lower-bowl retractable seating system, replace and enhance the videoboard system, and upgrade to the show lighting system. This aligns with the strategic initiative Seven World-Class Campuses, One Flagship University and Student Success Journey.

Budget: \$10,000,000- Approved Final

Schedule: Construction (lighting and videoboard system upgrade) to begin this Summer 2024 and the seating replacement will be scheduled in Summer 2025

Key Issues & Risks: Lead time for materials/labor



# Electric Vehicle Charging Infrastructure and Service Upgrades

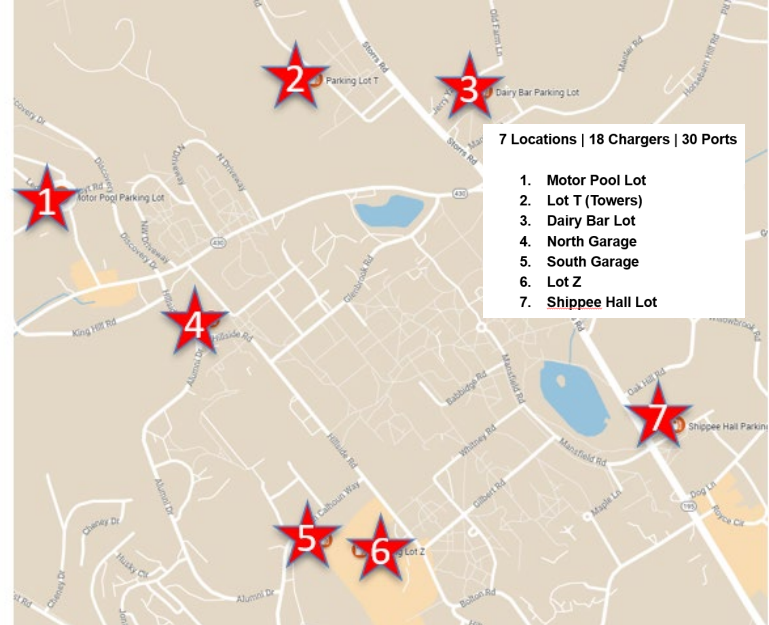


**Scope:** The project will install new EV charging equipment and upgrade infrastructure associated in 7 new locations at the Storrs Campus. This accelerates carbon mitigation towards reaching the Carbon Neutrality Goal by 2030. This aligns with the strategic initiatives Seven World-Class Campuses, One Flagship University and Wellness of People and Planet.

**Budget:** \$957,200 - Approved Final

**Schedule:** On schedule, material/equipment onsite and construction to begin in May 2024.

**Key Issues & Risks:** Lead time on material, Compliance with RCSA PR2023-023 section 22a-174-36d and Senate Bill 343 prohibiting charging in garage structures.



# Hydrogen Fuel Dispenser

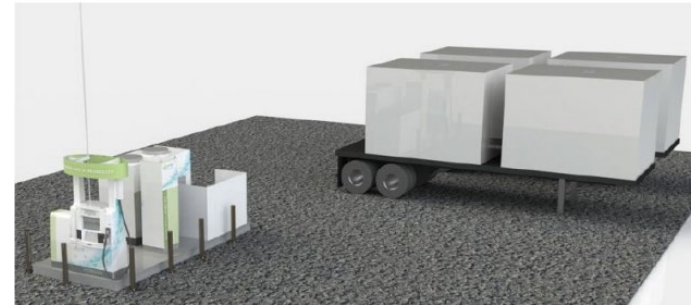


Scope: The project will install a hydrogen fuel dispenser at the Reclaimed Water Facility at the Storrs Campus to fuel light-duty vehicles (NEXOs and Mirai). The fuel dispenser includes (1) Electrical Enclosure, (1) Tube Trailer Stanchion, valve panel, cooling system, chiller, all piping for the interconnections and commissioning. This project accelerates carbon mitigation towards reaching the Carbon Neutrality Goal by 2030. This aligns with the strategic initiatives Excellence in Research, Innovation, and Engagement and Wellness of People and Planet.

Budget: \$835,500 - Approved Final

Schedule: Delay due to contract challenges but the contract has been finalized/signed. There is a ten-month lead time on equipment, construction scheduled being confirmed but potentially delayed to next winter 2024/2025.

Key Issues & Risks: Lead time and manufacturing of the unit; contract challenges and securing the hydrogen for the equipment that's within budget.



# Dining Hall Ventilation Upgrades



Scope: Dining hall ventilation upgrades to support energy conservation measures for 5 locations (Northwest, Towers, North, Rome, and Shippee). This project accelerates carbon mitigation towards reaching the Carbon Neutrality Goal by 2030. The upgrades to aging software for buildings and infrastructure extends the building asset life. This aligns with the strategic initiatives in Wellness of People and Planet and Seven World-Class Campuses, One Flagship University.

Budget: \$892,700 - Approved Final

Schedule: Northwest Dining Hall upgrade is complete, and Towers Dining Hall is in design with construction scheduled for this Summer 2024.

Key Issues & Risks: Schedule based on dining services.



# FY24 Residential Refresh Program – Buckley Hall



Scope: Buckley Hall remediation and refurbishment will be implemented over a phased 2-year period. Phase 1 is three floors and common spaces in the South tower including ACM abatement, replacing flooring, painting and lighting conversion to LED. Phase 2 (FY25) will be similar scope of work for the remaining floors of the South tower and the North tower. The repair to aging buildings and infrastructure extends building asset life. This aligns with the strategic initiatives Seven World-Class Campuses, One Flagship University and Student Success Journey.

Budget: \$1,500,000 –Approved Final

Schedule: On schedule Phase 1 construction started May 2024  
Phase 1 Completion Fall 2024 Semester  
Phase 2 Completion Fall 2025 Semester

Key Issues & Risks: Tight schedule, Lead time for materials/labor



# FY24 Residential Refresh Program – Sprague Hall



Scope: Sprague Hall remediation and refurbishment will include replacing existing flooring, and painting upgrades in all student rooms, corridors and common areas. The repair to aging buildings and infrastructure extends building asset life. This aligns with the strategic initiative Seven World-Class Campuses, One Flagship University and Student Success Journey.

Budget: \$1,050,000- Approved Final

Schedule: On schedule Phase 1 construction started May 2024  
Completion Fall 2024 Semester

Key Issues & Risks: Tight schedule, Lead time for materials/labor



# Garrigus Suites Environmental Systems Upgrade



Scope: This project involves extensions to and replacements in the existing building management system (BMS), including but not limited to new supervisory controllers and controllers for the boiler, air handlers, unit heaters, exhaust fans, and chilled water system; engineering and design; software upgrades and new control graphics; startup and commissioning. This project will align with the strategic initiatives of Seven World-Class Campuses, One Flagship University and Student Success Journey.

Budget: \$620,000- Approved Final

Schedule: Construction to begin this summer, August 2024

Key Issues & Risks: Schedule



# Additional Summer IMF and AR Projects



- Residence Hall and Apartment Washer/Dryer Replacements
- Garrigus, Foster, Thompson Interior Refresh
- Arjona 143 Lecture Hall Renovation
- Towers/Husky Village Paint and Flooring
- Multiple Buildings Classrooms Refresh
- Alumni Center Window Replacement
- Art Ceramic Studio Building Window replacement
- Smart Parking Display – Garages, Lots
- Spirit Rock Relocation
- Bronwell Elevator Modernization
- Babbidge Library HVAC improvements
- Gampel Pavilion Generator replacement
- Holcomb, Troy, Windham hot water heater replacements
- Towers steam meter and valve replacement
- Steam Repairs at ESB, Gant South, Babbidge, Student Rec Center, Shippee
- Lighting Upgrades at Dodd, Atwater, Gampel, School of Business Classrooms and McHugh Lecture Hall
- Law School –Hosmer Roof Replacement

Budget: Annual Budgeted IMF

Schedule: Commences May 2024  
Completion Fall 2024 Semester

Key Issues & Risks: Tight schedule, Materials, Labor

The repair to aging buildings and infrastructure extends building asset life. This aligns with the strategic initiatives Seven World-Class Campuses, One Flagship University and Student Success Journey.

*\*Please note, this does not include all Facilities Summer 2024 projects.*



# Facilities Projects In Design

# Energy Services Performance Contract Phase 2

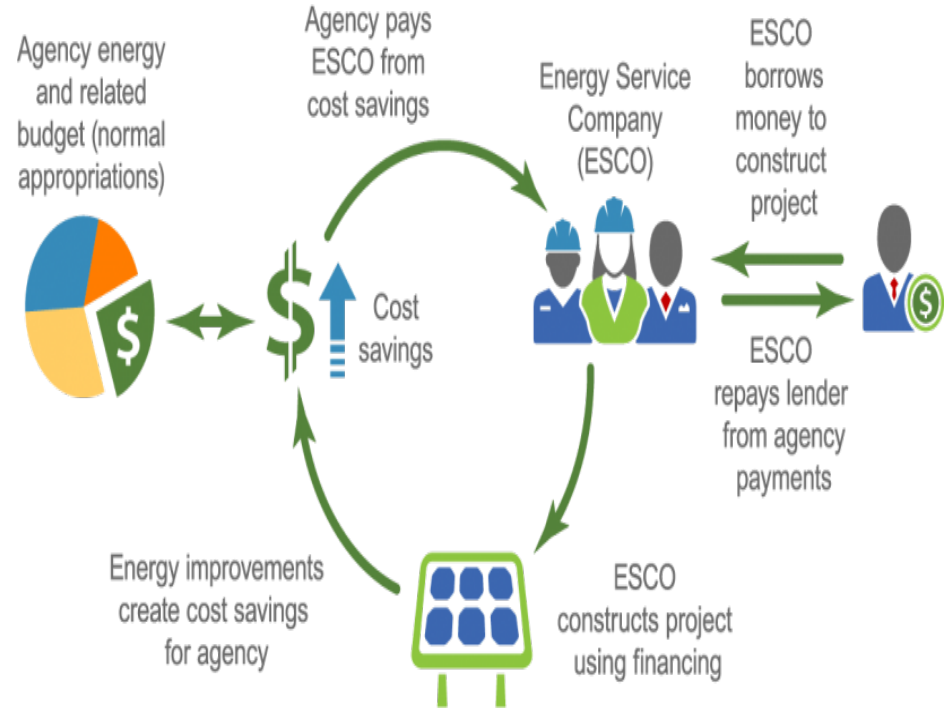


Scope: This project includes Energy Conservation Measures (steam/condensate line replacement, Retro-Commission 24 buildings (3M sq ft), LED Lighting Conversion 44 buildings (2.1M sq ft), Solar Canopies on various parking lots (1.6M sq ft). This project accelerates carbon mitigation towards reaching the Carbon Neutrality Goal by 2030. This aligns with the strategic initiatives Excellence in Research, Innovation, and Engagement and Wellness of People and Planet.

Budget: \$500,000 - Approved Planning

Schedule: Bid Process, with Procurement  
IGE Audit Completion TBD

Key Issues & Risks: Vendor Selection, ECM Costs



# Fuel Cell Installations- IPB and Putnam Hilltop



Scope: Energy Services Agreements will install and operate two 250 kW Fuel Cell Energy fuel cell units at IPB and two 460 kW Doosan Fuel Cell units at Putnam Hilltop. This project accelerates carbon mitigation towards reaching the Carbon Neutrality Goal by 2030 and provides additional electrical generation on campus. This aligns with the strategic initiatives Excellence in Research, Innovation, and Engagement and Wellness of People and Planet.

Budget: FCE \$13 Million/8 Years  
VFS Doosan \$15 Million/20 Years

Schedule: Schematic Design 2024-Q2  
Construction Commences 2024-Q4

Key Issues & Risks: Utility Interconnection



# APPENDIX

Projects in Planning and Close-Out

# UPDC Projects in Planning

# UPDC Projects in Planning



- **Coventry Boathouse**
  - Provide a new boathouse and locker room for the Women's Rowing Team
  - Project is on hold while University is negotiating with the Town of Coventry for land lease
- **Golf Practice Facility**
  - Fundraising ongoing, project initiation Fall 2024 (tentative)
  - Plan, design and construct an indoor practice facility with an outdoor driving range and chipping/putting greens.
- **Active Transportation Grants**
  - In partnership with OVPR and other campus stakeholders including the CT Transportation Institute, is pursuing multiple grant opportunities administered by USDOT. If awarded, these grants will allow the university to further progress on its Active Transportation Plan on key projects related to pedestrian safety and micromobility. University Safety, the Town of Mansfield, CRCOG, CTBILT and CTDOT have each offered written support of our grant applications. Announcements of potential awards will begin in the second half of CY 2024.

# UPDC Projects in Close-Out

# N Eagleville Rd & Discovery Dr Intersection Improvements



## Scope:

- Essential, safety-related improvements to signalization and pedestrian facilities
- Replacement of outdated poles, mast arms, signal heads and other traffic control appurtenances
- New pedestrian signal heads, push button pedestals, dedicated left turn signal, curb ramps and crosswalks

Budget: \$3.0M, Approved Revised Final

## Schedule:

- Construction fully mobilized November 2023
- Signals operational May 2024

## Key Issues & Risks:

- Unforeseen stormwater pipe repair and mast arm fabrication errors by manufacturer
- Traffic control during construction
- Continued inspections & inclement weather



*North Eagleville Road at Discovery Drive & Auditorium Road*



# Boiler Plant Equipment Replacement and Utility Tunnel Connections



- Scope: Boiler Plant Equipment Replacements and Utility Tunnel Connection
  - Scope of work includes extension of the tunnel and utilities from the Central Utility Plant (CUP) to the SUP, and installation of two new dual-fuel boilers at the CUP and one new boiler at the SUP.
- Budget: Approved \$43.0M Revised Final BOT
- Schedule:
  - Phase 1: Mechanical systems to receive new boilers: Complete
  - Phase 2: Start-up of new boilers in CUP for winter heat: Complete
  - Phase 3: Installation of third new boiler in the SUP commenced in October 2022. Installation and piping work will continue through Summer 2023. Peer review of installations on-going.
  - Rework of systems will likely continue into the Spring 2024
- Key Issues & Risks: Potential costs at close-out of all three phases. Tunnel steam pipe issues may require some rework in the CUP.



*New Boiler installed in the Central Utility Plant*

# Supplemental Utility Plant

- Scope: Supplemental Utility Plant (SUP) to enable completion of the Next Generation CT Science program, including heating and cooling for the Gant Complex renovation and the new construction Science 1 research building.
  - Project includes 4 new chillers; 2 emergency generators; electrical switchgear.
  - Formerly known as Phase 2, construction with combustion turbines for power production is on hold pending study of renewable energy sources by University committees and working groups.
- Budget: \$67M Approved Final
- Schedule: Project in close-out
  - Construction Start Summer 2020
  - Construction Completed Summer 2022
  - Rework of some systems due to peer review will continue until the Spring 2024
- Key Issues & Risks: Coordination with Science 1 and NW Science Quad utilities and tunnel repairs and peer review



*SUP View Looking South*



*SUP Interior View of 125 psi Steam Header*

# NW Science Quad, Ph 2 Utilities and Site



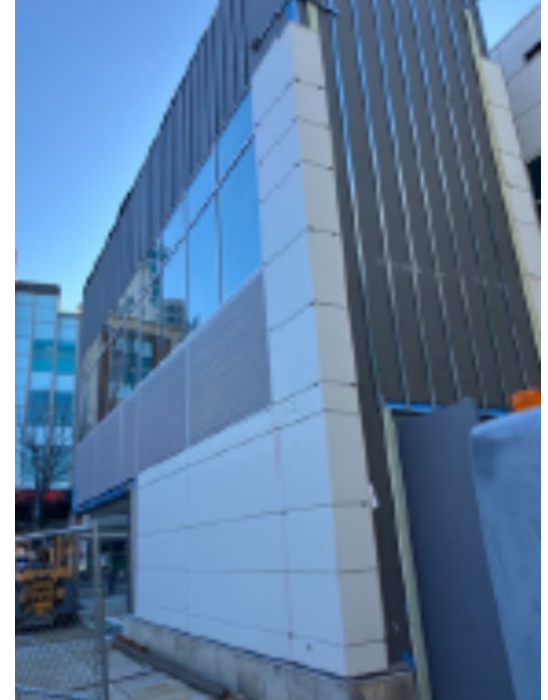
- Scope: NW Science Quad Site Development
  - Scope of work included extension of existing Gant utility tunnel (Ph 2) terminating at new SUP, direct burial utilities for connections to the campus loop, woodland corridor stormwater extension from Gant, surface parking, improvements to King Hill Rd, Alumni Drive and Hillside Rd.
- Budget: \$56M, Approved Final
- Schedule:
  - Project is substantially complete and in close-out.
- Key Issues & Risks:
  - Tunnel remains under a TCO; repair of isolated steam line issues completed in May 2024 and investigation of parts replaced at manufacturer underway. CO is anticipated but not yet received.



*North Elevation Looking East*

# UConn 2000 Code Remediation – Stamford Downtown Relocation

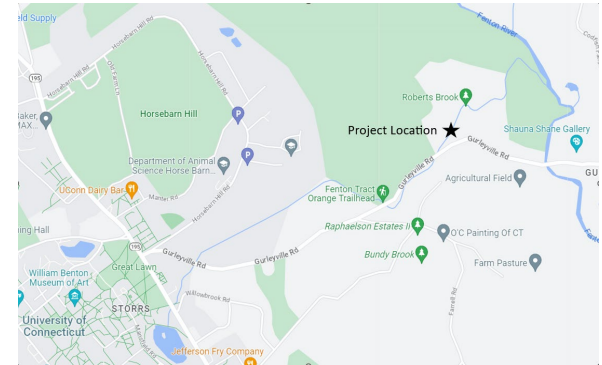
- Scope: Remediation of code discrepancies relating to the original UConn 2000 project. Primary scope of work includes sprinkler, egress, fire separation assemblies and new restrooms.
- Budget: \$22M, Approved Revised Final
  - Contract executed June 2021. Project will be completed within the budget
- Schedule:
  - Phase I work completed Summer 2020
  - Phase II work substantially completed December 2022.
  - Phase III Atria wall remediation completed Summer 2023
  - Close-out of project with fire marshal continuing and we are awaiting sign-off on all 18 open discrepancies
- Key Issues & Risks: None



*New Exterior Stairwell at West Side of Building*

# Fenton Well Field Road Bridge Replacement

- Scope: Replace the bridge on the service road to the Fenton Well Field
  - Install a temporary roadway and bridge
  - Dam the stream above the bridge and install a temporary diversion pipe
  - Construct a new bridge
  - Remove temporary dam, diversion pipe, roadway and bridge
- Budget: \$1.7M, Approved Final – BOT April 2023
  - Budget is based on low bid construction cost
- Schedule:
  - Project substantially complete and in close out. Minor wash outs will be repaired in the spring of 2024
- Key Issues & Risks:
  - None



Location Map



New Roadway being installed

# Facilities Projects in Planning

# Hilda May Williams SHaW HVAC/Ventilation



Scope: Hilda May Williams SHaW HVAC redesign will address concerns with ventilation and air quality within the specific treatment room areas of the building. This will confirm expected construction costs based on a phased construction approach including new mechanical equipment compliant with Centers for Disease Control & Prevention (CDC) regulations and guidance. This aligns with the strategic initiatives in Wellness of People and Planet, Student Success Journey, and Seven World-Class Campuses, One Flagship University

Budget: Phase 1 Schematic Design \$40,000

Schedule: TBD

Key Issues & Risks: Hidden conditions, Scope Adjustment



# Facilities Projects in Close-Out



# Branford House Exterior Repairs, Phases 1 & 2



Scope: Repairs to the building envelope of the historic, three-level, granite masonry manor at the Avery Point campus. The repairs include repointing mortar joints, flashing, downspouts, repair of certain windows, etc. The repair to aging buildings and infrastructure extends building asset life. This aligns with the strategic initiatives Seven World-Class Campuses, One Flagship University and Husky Pride & Resilience.

Budget: \$800,000 - Approved Final

Schedule: The majority of construction is complete with some minor repairs to be scheduled 2024-Q2.

Key Issues & Risks: None



# Campus Security Design Guidelines

*These guidelines are to be used in conjunction with the University Design Guidelines and Performance Standards including but not limited to Appendix X — Physical Security Systems Standards.*

ARUP

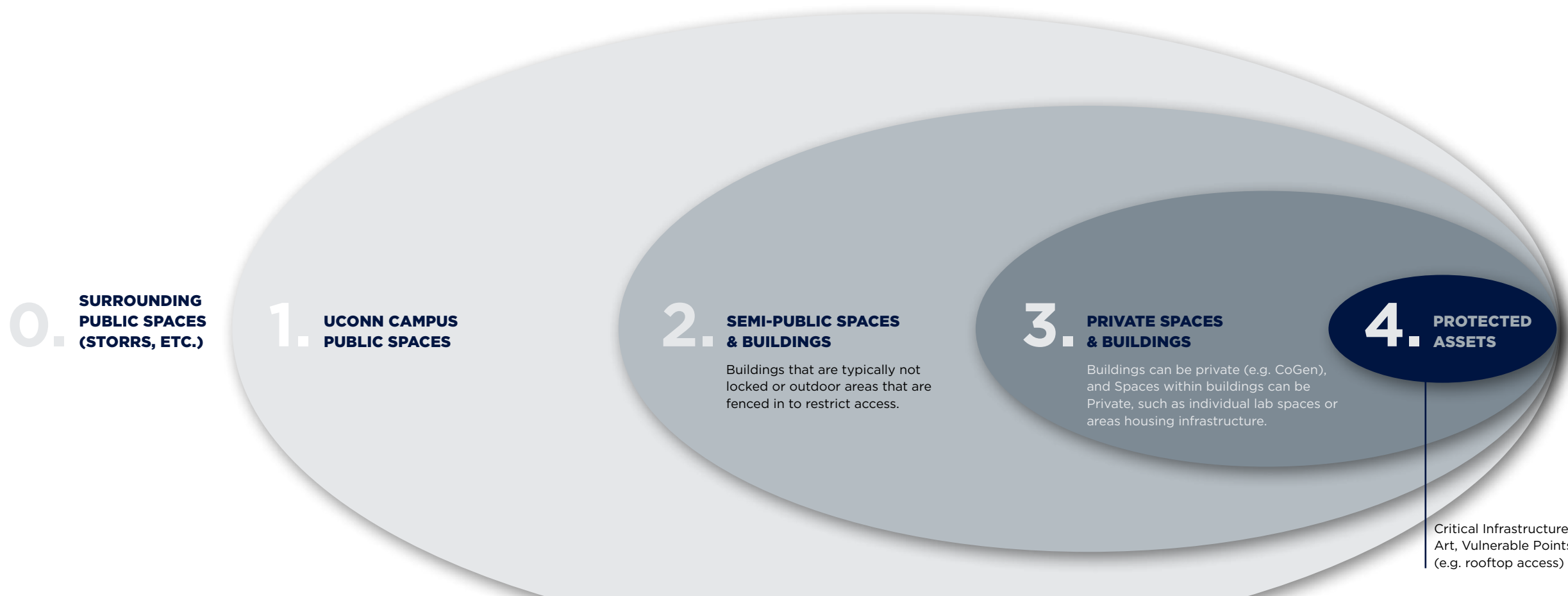
CENTERBROOK

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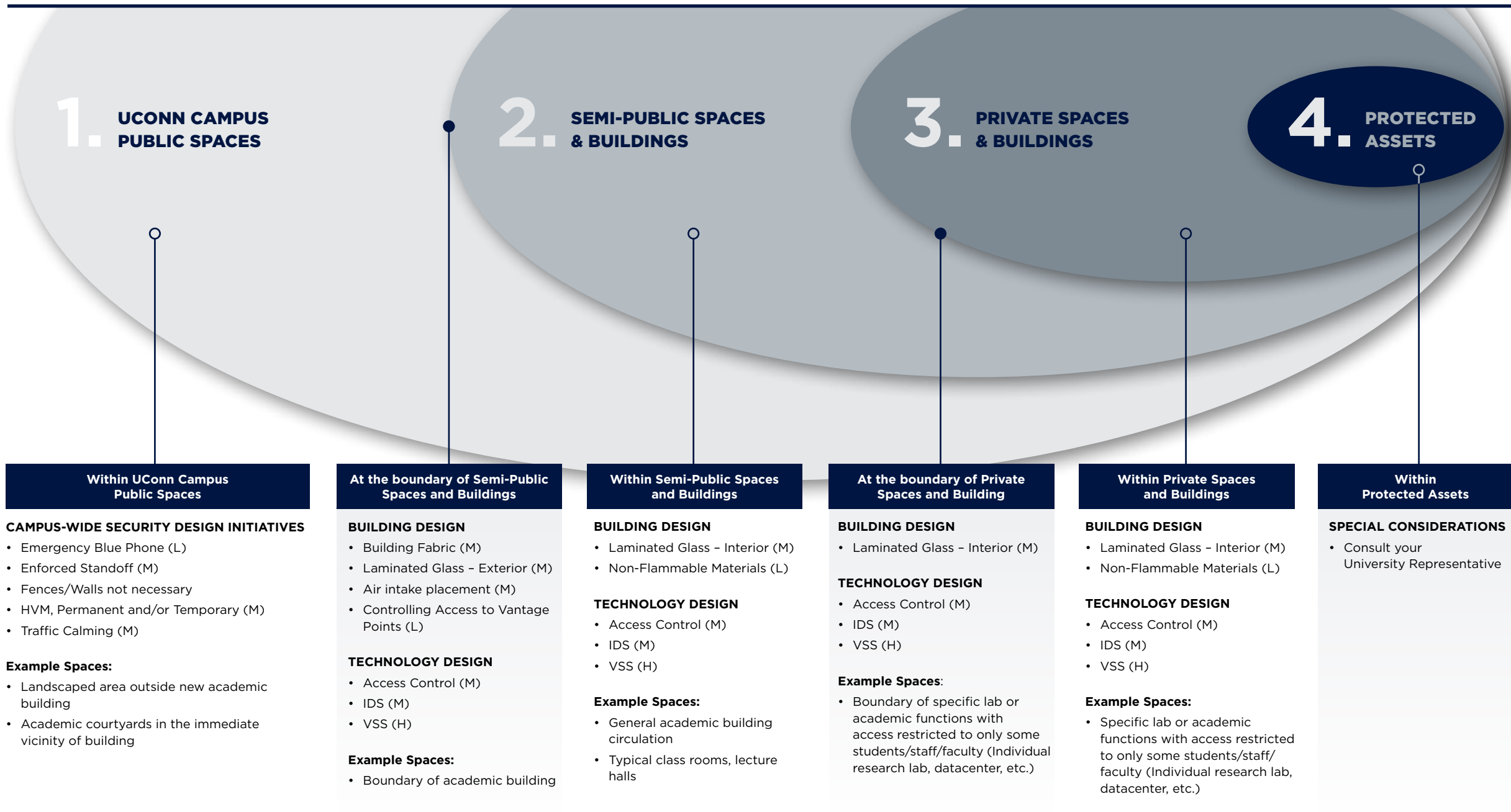
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# Introduction

The UConn Campus Security Design Guidelines (or Guidelines) feature a layered, risk-based approach to achieve mitigation objectives that are proportionate to the threat and appropriate for the immediate campus environment. The Guidelines consider a wide variety of terrorist and general criminal threats through a threat, vulnerability, and risk assessment (TVRA). The layered approach accounts for variable threat environments and vulnerabilities amongst building and asset types to incorporate site, building, and technology design interventions. The figure below shows how the layered concept can be applied to organize the university's assets into different security zones. The subsequent figure expands on the zoning concept with specific examples of what features can be employed within each zone as well as how to enforce zone boundaries to maintain the security zone system. Section 5 provides diagrams tailored for other settings. These guidelines are to be used in conjunction with the University Design Guidelines and Performance Standards including but not limited to Appendix X — Physical Security Systems Standards.

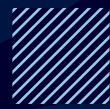


# Example: Academic Building Zoning



**Campus Security  
Design Guidelines**

**1**



**Campus-wide Security  
Design Initiatives**

# What is CPTED?

- Crime Prevention Through Environmental Design (CPTED)
- Integrates security needs into the design process to achieve naturally safe, cohesive, and vibrant spaces for communities.
- Allows designers to move beyond traditional methods of reducing crime in urban spaces such as hardening the structure with walls, fences, cameras, and guards.
- Based on the concept that we can make spaces feel and become safer through intentional design



Example of campus design following the principles of CPTED, resulting in a space that is full of activity. Crime is discouraged through high visibility, effective lighting, and activity generators.

# Potential Challenges of CPTED

- Some CPTED designs and principles can result in accidental or purposeful exclusion of certain groups. CPTED asks the community to determine who belongs and who does not through natural surveillance and territorial reinforcement. These are features that reinforce boundaries and emphasize control of an area by the local community. Visual transparency at a personal scale is key to discouraging crime by setting a tone that the community is aware and watching.
- Exclusionary features can be subtle, such as landscaping cues, path redirection, or signage. Alternatively, they could also be more overt such as walls or hostile vehicle mitigation.
- Examples of exclusionary design:
  - Making access to the area difficult by foot or public transport. For example, this approach is appropriate for the Water Pollution Control Facility, which is located in a less-trafficked corner of the campus.
  - Hostile architecture, such as spikes or sharp features that discourage rough-sleeping, loitering, or sitting on landscaping elements. These types of features are generally discouraged for designs at UConn.



Example of good visibility and place definition in a busy plaza through thoughtful landscaping and visible pavement features. Note the newer building to the right, which facilitates better natural surveillance through abundant windows facing the open space.

# Principles of CPTED

The four principles of CPTED are summarized below and explained in greater detail in the following sections. The principles are not exclusionary but rather they tend to overlap with each other which offers natural methods of combining principles to maximize the effectiveness of interventions. Because they are mutually supporting, incorporating one principle in a space can often trigger or enhance another principle. While CPTED is typically applied to site design (outdoors), it offers useful guidance for the design of interior spaces as well. Natural surveillance, for example, should be applied while considering the relationship between the interior and exterior of a building via windows and elements that add transparency.

## 1. NATURAL SURVEILLANCE

This principle operates on the idea that a space is a less attractive target if the potential threat actor knows their actions can be observed by others. Designers should make choices which will encourage users and community members to have their “eyes on the street.”

## 2. TERRITORIAL REINFORCEMENT

This principle uses physical attributes to express ownership and promote feelings of propriety within legitimate users and community members. This instills an instinct to protect and steward the space and discourages criminal activity by making the space uncomfortable for illegitimate users and intruders.

## 3. SPACE MANAGEMENT AND MAINTENANCE

This focuses attention on the positive security benefits achieved from keeping a well-maintained space. Potential threat actors will feel the space is too risky to target. Design interventions should consider ease-of-maintenance in the broader design. This principle naturally supports the territorial reinforcement as it instills a sense of pride amongst the users.

## 4. NATURAL ACCESS CONTROL

Natural access control employs spatial definition cues to deny access to a target, guide users of a space through an area, and create a perception of heightened risk for threat actors.

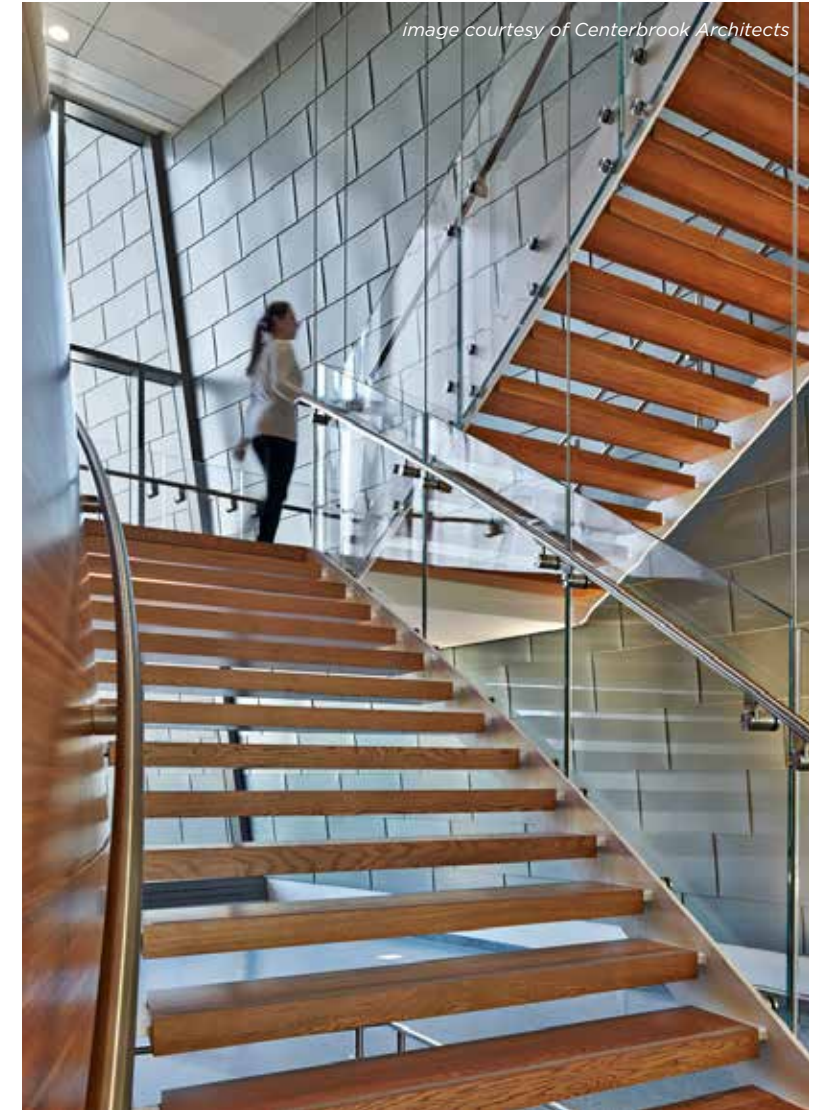


# Natural Surveillance Examples

- Use open spaces and avoid interior corners to minimize blind spots and maintain good sightlines throughout a space.
- Ensure entryways are well-lit with layered lighting to maintain visibility at night.
- 2ft/6ft Rule for Landscaping: Keep shrubs and ground plants below 2' and tree foliage at least 6' above the ground.
- Use see-through railings for stairs in conjunction with transparent facades to increase visibility in stairwells and create a brighter, safer environment as opposed to isolated and threatening.
- Leverage UConn's large plazas and quads which lend themselves to this principle by directing adjacent windows to face onto the landscaped areas with well-maintained landscaping.



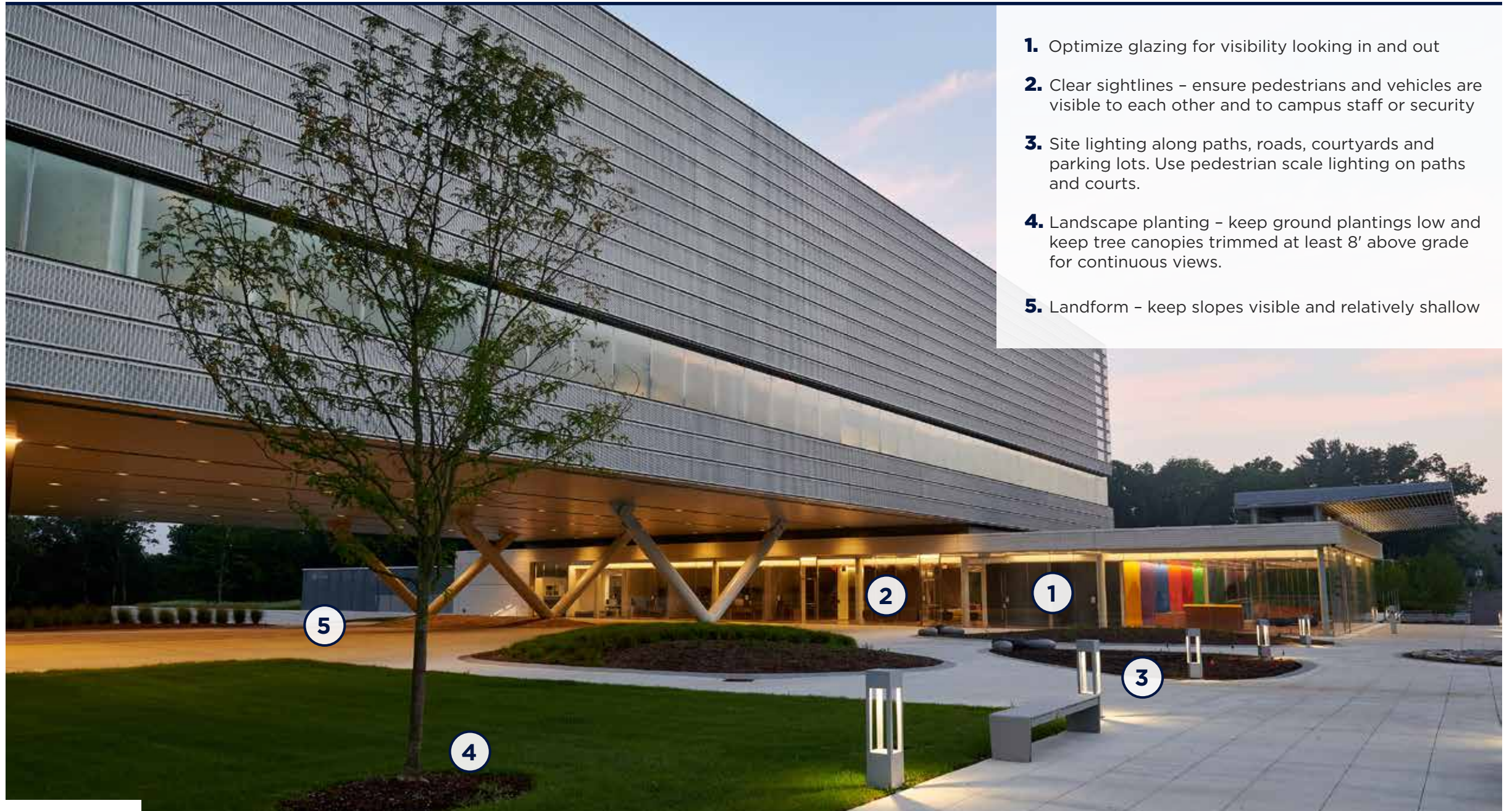
2ft/6ft Rule: Note how easy it is to see below the tree foliage and above the shrubs in this busy plaza.



*Image courtesy of Centerbrook Architects*

Natural Surveillance: See-through railings for stairs in conjunction with transparent facades to increase visibility in stairwells.

# Natural Surveillance Examples



1. Optimize glazing for visibility looking in and out
2. Clear sightlines – ensure pedestrians and vehicles are visible to each other and to campus staff or security
3. Site lighting along paths, roads, courtyards and parking lots. Use pedestrian scale lighting on paths and courts.
4. Landscape planting – keep ground plantings low and keep tree canopies trimmed at least 8' above grade for continuous views.
5. Landform – keep slopes visible and relatively shallow

# Territorial Reinforcement

- Promote a sense of ownership with clearly defined property lines.
- Limit access to windows or other private/more vulnerable spaces with hostile vegetation or landscaping such as river rocks.
- Host community projects and gathering spaces to strengthen a feeling of shared ownership.
- Incorporate art installations to positively reinforce the space's shared identity with its community of legitimate users while discouraging potential criminal activity. Potential threat actors will feel less comfortable operating in a cohesive environment with a strong sense of community.



Territorial Reinforcement: Property lines defined



Territorial Reinforcement: Gathering spaces enforce shared ownership



Territorial Reinforcement: Art installation

# Space Management Examples

- Design spaces to be easily maintained and reduce opportunities for vandalism.
- Use anti-graffiti materials and finishes.
- Ensure trash facilities are easy to use by the community and easy to empty for the maintenance staff.
- Avoid large, blank walls by using plants, windows, or other design features whether decorative or integrated with the building function.
- Avoid creating spaces where threat actors can conceal themselves. This will support efforts towards Natural Surveillance.



# Natural Access Control Examples

- Use vegetation and landscaping to guide users of a space where to or not to go.
- Highlight main entrances to direct users.
- Use signage and wayfinding that makes legitimate users confident and comfortable in their journey.



# Public Safety & Connectivity

One approach to addressing security risks in public spaces include maximizing opportunities to incorporate both social and physical CPTED principles during the planning and design stage.

## CPTED STRATEGIES AND EXAMPLES BY PROJECT STAGE

Stage	Strategies	Examples
Planning	Avoiding blind/entrapment spots	Minimizing isolated areas; avoiding blind spots of buildings and planted areas
	Vitality of public spaces	Adequate density and activity; proper land use; human scale
	Well-connected/integrated plan	Connected streets; proper mixed uses; good street pattern
	Green spaces	Controlled green spaces and parks
	Proper placement of lighting and security cameras	Good placement of street lighting and security cameras
	Anti-terrorist planning	Anti-terrorism planning for target: a temporary or permanent site or building that is sensitive to terrorism (e.g. fan zone, multi-activity hall type arena)
Design	Visibility	Landscape; planting; lighting illumination/color rendering/ uniformity; large glass windows
	Access control	Entry barriers, walls and fences, gates
	Site/target hardening	Soft target building/street hardening through security equipment (e.g. vehicle security barriers, windows and doors, locks, mesh and grilles) certified by relevant security performance standards
	Territoriality	Clear demarcation of space; design promotes a sense of community ownership/ responsibility
	Attractive design	Positive area image; attractive lighting and public art
	Robust materials	Vandal-resistant street furniture; convenient maintenance; integrity of devices used for networks (e.g. data, sensors, energy, water, gas, high pressure steam, air intakes)
Site and social management	Maintenance	Design for ease of maintenance, to enable clean streets, greenery and well-groomed vegetation
	Surveillance	Security camera for vulnerable spots; police/security guards targeting patrols
	Publicity activities	Active communication with the public; preventive messages and rules of conduct for the public

Source: BS ISO 22341:2021



Lighting shall serve as surface illumination, way finding elements, as well as a contribution to the creation of a safe. Specific elements of lighting can help to foster feelings of safety and inclusivity, creating a more enjoyable experience for students.

## UCONN REQUIREMENT

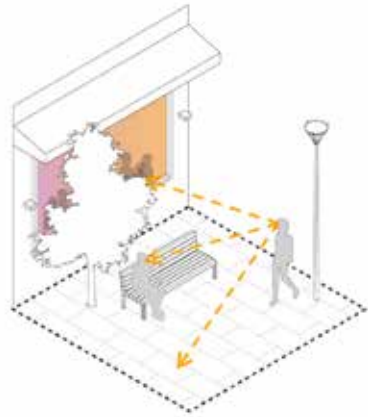
**“Although a minimum of 1.0 ft.-candles is required on all sidewalks in all locations, this lighting criteria shall also apply to five (5) feet on either side of the sidewalk.”**

A minimum of 1-ft. candles is required at egress, but may not be appropriate across the entire site. Brighter doesn't always mean safer — poorly considered lighting can sometimes cause more glare or imbalance in your perception of space. Designers should ensure that luminaires are well angled and their brightness adjusted after installation. This helps to avoid bright lights in front of a dark background causing discomfort, glare, and making the darker spaces appear even more dark. Use the principles of the following pages to provide a considered approach to lighting.

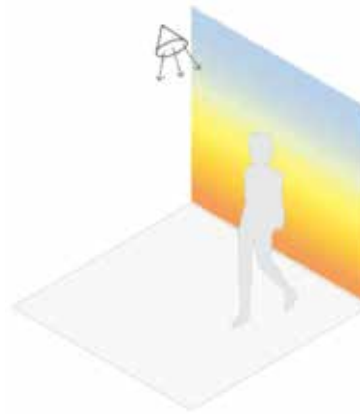


Lighting elements provide a layered approach using appropriately scaled lighting for the building for pedestrians along the path ways. Note the evenness of the lighting and minimal glare.

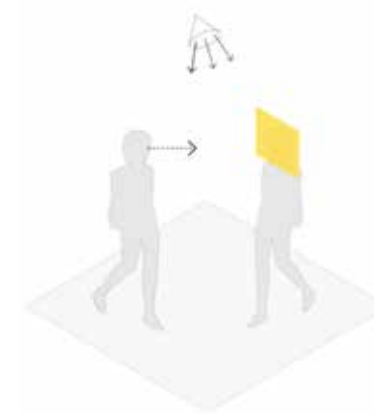
# Safe by Design Lighting Layers & CPTED



Visual Transparency allows for light to glow from within or behind walls, indicating there is human presence in the area and an intangible sense of “not being alone.”



Research has found that humans tend to prefer warmer color temperatures at night, as it offers a higher sense of comfort for a space.



Facial luminance is important in providing accurate assessment of the space in front of you. For example, it allows people to differentiate between a person walking towards them and a bush that is next to them.

- Vertical illuminance
- Horizontal illuminance

**COMPLIANCE  
DESIGN APPROACH**

- Layered approach
- Perception of brightness
- Context
- Surface finishes
- Focal points

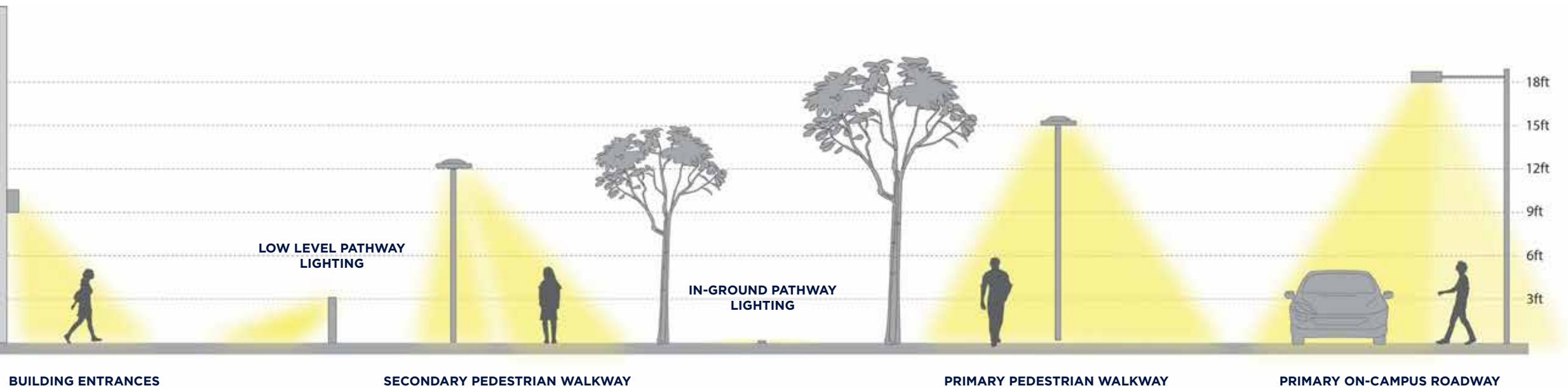
**CONSIDERED  
DESIGN APPROACH**

Safer spaces typically provide the ability to clearly identify the path of travel and offer assurance that there are no unknowns in the shadows. Emphasizing not only the footpaths but the verticality of the surroundings will help to reduce hotspots/potential for shadows, providing a more uniformly-illuminated environment.



# Lighting Hierarchy

It is key to establish a clear visual hierarchy, creating a meaningful set of relationships between the various components of the campus setting and its residents. Independent yet fully integrated solutions for way finding and general lighting create nighttime illumination that is more specific and purposeful, providing a supportive environment for expanded visual communication.



# Lighting Strategies

A human-centered night-time design promotes a clear visual hierarchy, creating a meaningful set of relationships between the various components of the campus setting and its residents. Lighting also serves as a beacon in the night signifying a destination, a goal, a place of importance and can operate at various levels of scale, from telling a visitor how to find the campus to indicating points of interest within the campus.

- Illuminate natural surroundings providing good uniformity on walking paths and surfaces.
- Provide soft, warm low-level light to illuminate faces and gestures in a comfortable way, enhancing communication.
- Integrate lighting solutions that accommodate long distance communication and short distance private communication.
- Illuminate surrounding elements vertically, such as facade, walls or other backdrops to create visual transparency and enhance visual assessment of surroundings.



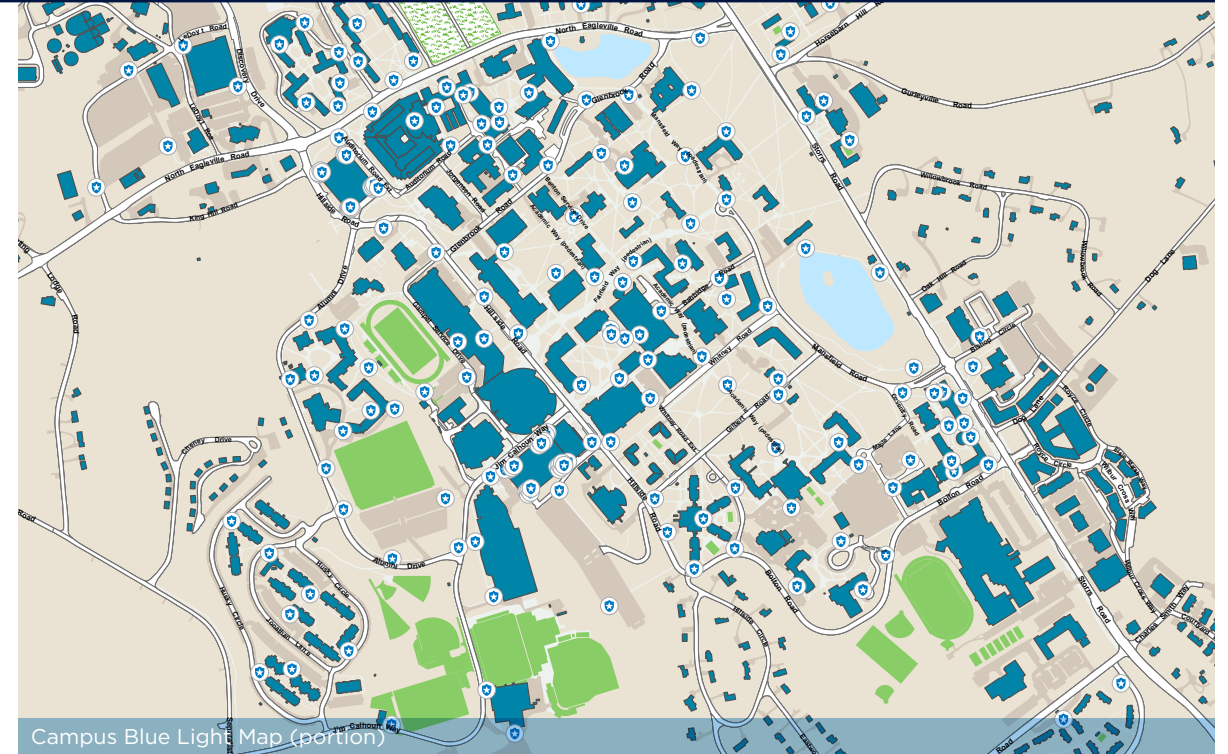
# Emergency Blue Phones

Emergency blue phones are designed to provide quick and easy access to emergency assistance. The main aims of emergency blue phones are to:

- **Provide quick access to emergency services:** The blue phones provide direct access to UConn Police Department, enabling immediate access to help in emergency situations.
- **Improve safety:** The presence of emergency blue phones can help deter crime and make people feel safer.

When designers are considering where to place new Emergency Blue Phones or whether new ones may be required as part of their project, they should consider the following:

- **Visibility:** Blue phones should be placed in visible locations, such as near well-lit areas or along well-traveled pathways. This makes it easier for people to locate the phone in an emergency and increases the likelihood that it will be used.
- **Proximity to high-risk areas:** The phones should be placed in areas that are perceived to be high-risk, such as near parking lots, residential buildings, or areas with poor natural surveillance.
- **Accessibility:** The phones should be placed in locations that are easily accessible, with clear pathways and minimal obstacles.



At the UConn campus, Emergency Blue Phones are located with the intent that at least one is always visible from any location on site. When considering an Emergency Blue Phone locations for a new building project, one should typically be located within line-of-sight of the main entrance of a building. Along paths or sidewalks, a maximum distance of 1000' can be considered, however it's likely that pragmatic design considerations will result in distances between phones that are shorter than this.

Final placement of Emergency Blue Phones will be coordinated with the UConn project design representative and appropriate University Safety stakeholders.

**Campus Security  
Design Guidelines**



**District and  
Project Site Design  
Considerations**

# Enforced Standoff

Many security threats are most effectively mitigated by keeping clear distance between the threat and the asset to be protected. This is particularly true of vehicle-based threats to security and safety. Enforced standoff measures seek to provide vehicle-free zones near crowded buildings and busy pedestrian routes. This is achieved with varying levels of enforcement, from signage and measures that discourage unauthorized vehicle access through to the use of temporary road closures for major events.

By considering the parking, delivery, and other access needs early in the design stages of a project, enforced standoff can be used to create a safe, pedestrian-friendly experience while meeting the operational needs of each facility.



# Levels of Protection — Enforced Standoff



## Low

- Seek to move or locate all parking and vehicle circulation 30' or more away from the building, with particular attention to accommodate routes of pedestrian travel.
- Eliminate parking for unknown vehicles (e.g. general public) within 20' of the building. Consider the designation of separate residents' and visitors' parking areas with credentialed use of residents' spaces.
- Eliminate parking within 10' of the building for all vehicles. Enforce this via landscaping and road layout design.
- Where parking and/or vehicle circulation is allowed near the building, signage should discourage unauthorized access.
- Consider Landscape design to discourage interaction between pedestrian and vehicle traffic.



## Medium

- Design for Card Access at Main Access/Egress Points (front and back entrance, loading docks)
- When feasible, locate all parking and vehicle circulation 50' or more away from the building, with particular attention to accommodate routes of pedestrian travel.
- Eliminate parking for unknown vehicles (e.g. general public) within 50' of the building.
- Eliminate parking and vehicle circulation immediately adjacent to the building for all vehicles.
- Where parking and/or vehicle circulation is allowed near the building, use signage, paving styles or materials, a defined circulation layout, and other means to discourage unauthorized access.
- Consider the use of parking barriers and access control for vehicles requiring access close to the building.



## High

- In general, seek to provide 100' of standoff from crowded outdoor gathering areas from busy vehicle circulation routes and parking.
- *The following apply during event times; however, they may have permanent features or infrastructure required to achieve the design goal.*
  - Design to locate all parking and unscreened vehicle circulation 100' or more away from the building/gathering space, with particular attention to accommodate routes of pedestrian travel.
  - Eliminate parking for unknown/unscreened vehicles (e.g. general public) within 100' of the building/gathering space.
  - Eliminate parking and vehicle circulation immediately adjacent to the building/gathering space for all vehicles except emergency vehicles and vehicles critical to the operation of the event.
  - Use temporary checkpoints or screening operations in order to enforce road closures.
  - Provide infrastructure and facilities to support additional security presence if required by UConn PD and/or Event Security.

# Fences and Walls

As part of the open and welcoming character of the University architecture, fences and walls for security purposes are generally excluded apart from at Critical Operations Facilities, events with limited attendance.

The University has a preference for site walls. The implementation of such walls should be considered early in the design in order to coordinate access needs with security goals for this and other mitigation categories.



At this location, the footpath is delineated by landscaping with low walls. These are also effective natural access control and emphasize the pedestrianized, vehicle-free zone.

# Levels of Protection — Fences and Walls



## Medium

- Incorporate architectural pedestrian fence or low wall; no anti-climb rating or measures are required. Chain-link fences may be considered for operations or sports facilities, consistent with the University Architectural Design Guidelines.



## High

- For ticketed / managed events:
  - Outdoor Gatherings should be provided with a 6' tall (minimum) anti-pedestrian fence that does not include anti-climb features (e.g. topping). Consider using a taller (8' or more) fence or walls for permanent outdoor gathering spaces that enclose ticketed venues.
  - Seek to eliminate gaps that would allow unauthorized access, paying close attention to the interface with other buildings/assets/infrastructure.
  - Limit the number of access and egress points and align their location with emergency services / event planning.



# Hostile Vehicle Mitigation (HVM)

Hostile vehicle mitigation is a site-focused design element comprising measures that seek to prevent unauthorized access or malicious activity by persons in a vehicle, such as the use of a vehicle as a weapon or delivery of other threats (e.g. an improvised explosive device).

For environments where little mitigation is necessary, landscaping, traffic calming, and designing to reduce interactions between pedestrian and vehicle traffic generally suffice. For design conditions that require more protection, a wide variety of measures could be used, such as bollards, street furniture, landscaping or boulders, low walls, pedestrian seating elements and many more.

By carefully considering the landscaping, building design, and pedestrian wayfinding early in a project, it is possible to integrate HVM into thoughtful, aesthetically pleasing landscape designs, where it doesn't stand out as 'security' elements.



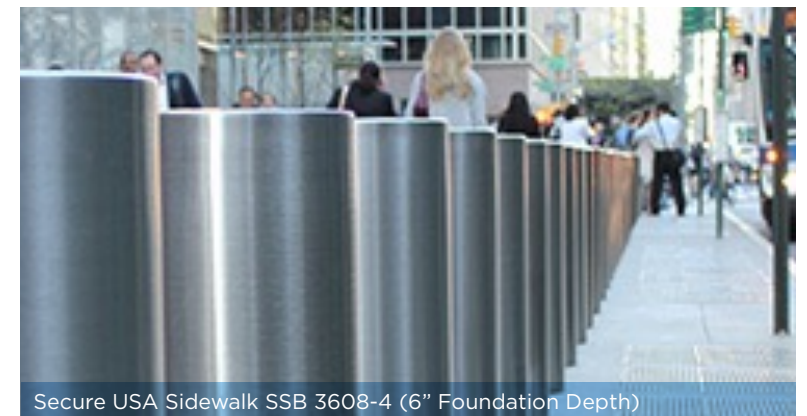
Huntco 6" Bollard - Surface Mounted



Huntco 6" Bollard - Surface Mounted

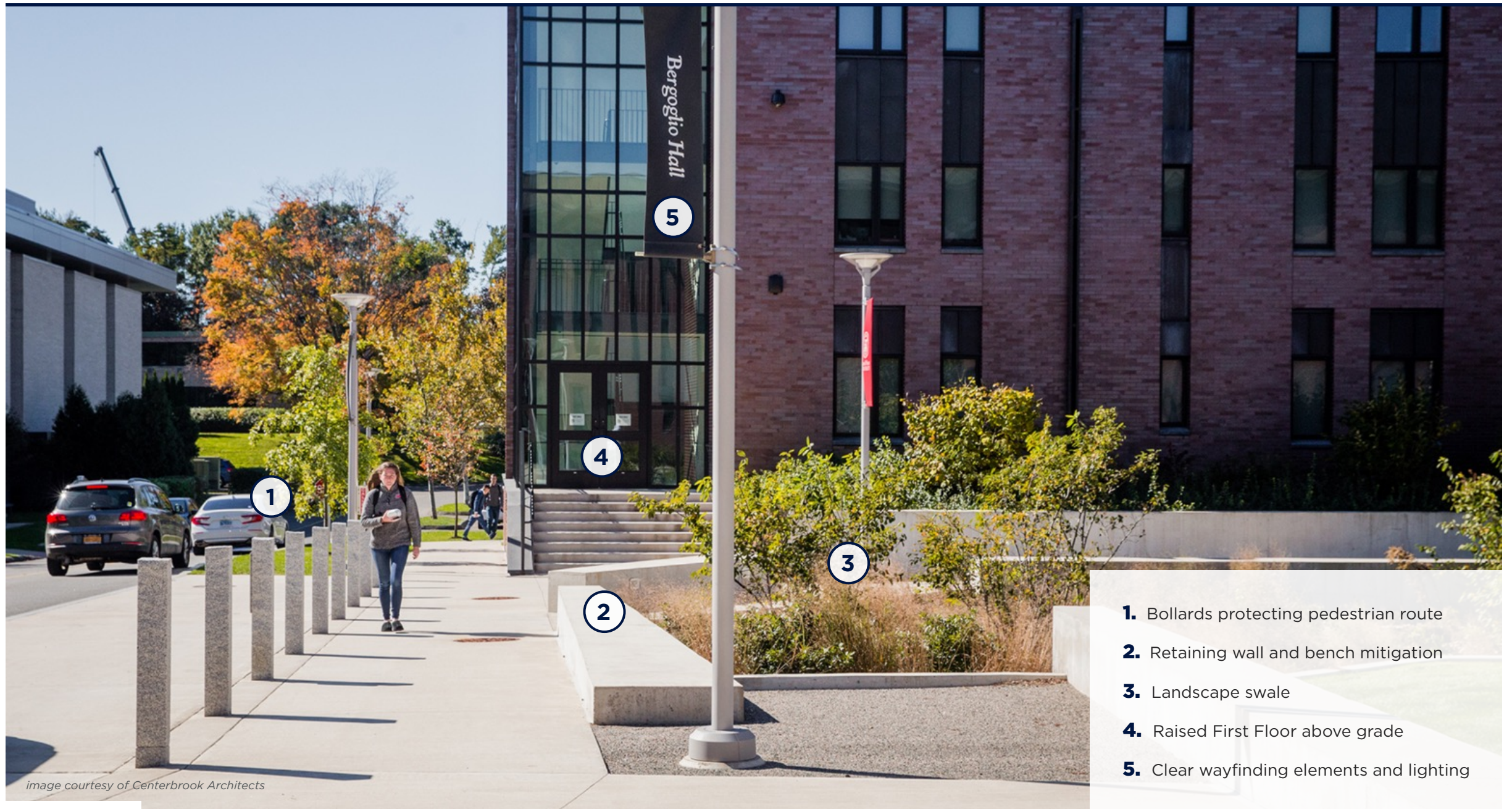


Engineered Boulders



Secure USA Sidewalk SSB 3608-4 (6" Foundation Depth)

# Site Design Considerations



# Levels of Protection — Permanent HVM



## Baseline

- Consider installation of flexible delineator posts to guide vehicle traffic.
- Evaluate the benefit of bollards at primary pedestrian access points to/from parking areas considering how busy the parking area may be and the likelihood for interactions between vehicles and pedestrians in that area.
- Seek to provide large paths and resting areas for pedestrians to cross vehicle routes safely. If pedestrian routes are adjacent to high-speed vehicle routes, evaluate the benefit from bollards or fencing to discourage interaction between pedestrians and vehicles at locations away from safe crossing points.



## Low

- Design to deter hostile vehicle access via street furniture, landscaping, and measures that are not impact tested or rated. Placement of measures does not need to form a full perimeter around the space, but instead should be focused on protecting likely pedestrian routes and potential interaction points between vehicles and pedestrians.



## Medium

- Design for vehicle interdiction with landscaping as an HVM solution. The proposed mitigation may or may not be impact-rated or tested, but pose as a deterrent.
- For new buildings, consider raising the first floor above grade in order to avoid vehicle access.
- Design to deter hostile vehicle access via street furniture, landscaping, and untested measures. Seek to create a continuous line of mitigation measures that discourage hostile vehicle access with gaps minimized while considering project access requirements.
- Consider products or mitigation solutions such as: bollards, berms, planters, swales, adapted signage and wayfinding elements, topography and level changes (e.g. retaining walls, steps), seating/benches, etc.



## High

- Design for vehicle interdiction with HVM solutions and/or landscaping features that are impact-rated according to ASTM F2656 or equivalent international standard (e.g. IWA 14:2013 or PAS 68) or engineered to provide equivalent performance to these standards.
- The layout of the HVM measures should create a continuous perimeter around vulnerable parts of the event space, such as areas where crowds gather for ingress / egress, areas of extensive glazing, etc. For new buildings, consider raising the first floor above grade in order to avoid vehicle access.
- Consider products or mitigation solutions such as: bollards, berms, planters, swales, adapted signage and wayfinding elements, topography and level changes (e.g. retaining walls, steps), seating /benches, etc.

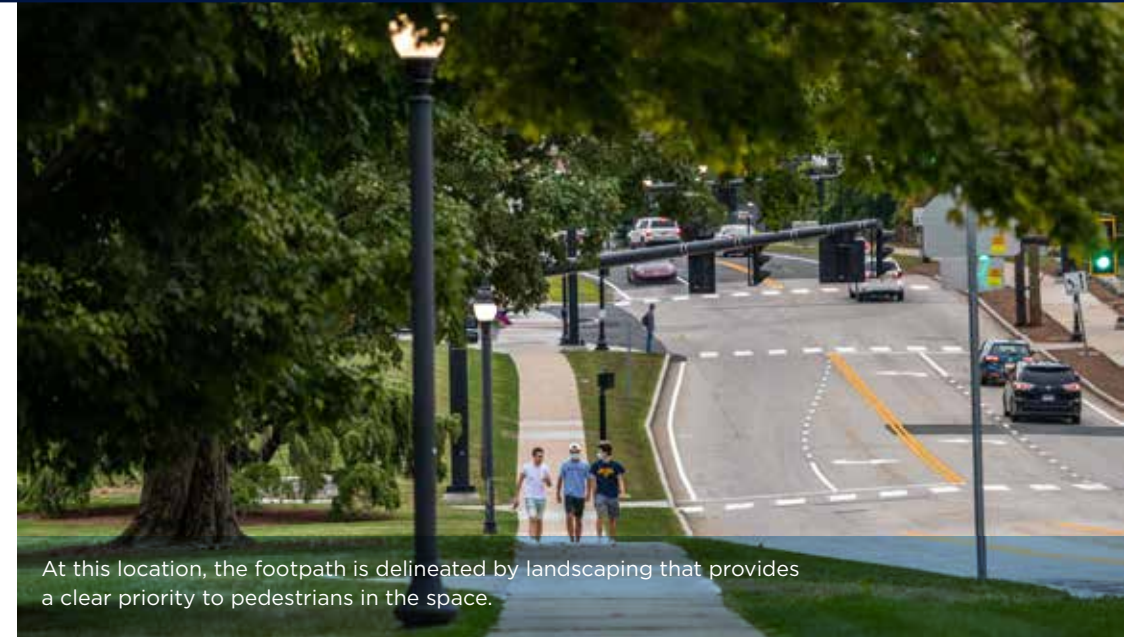
# Traffic Calming

While hostile vehicle mitigation seeks to exclude and control vehicles, traffic calming creates safer and more livable streets by slowing down vehicular traffic and prioritizing the needs of pedestrians, cyclists, and other non-motorized traffic. It aims to shift the focus from high-speed, vehicle-centric environments to a more balanced and inclusive approach, encouraging safer and more responsible driving. By integrating traffic calming measures into the general vehicle circulation design of the UConn campus, errant vehicles will be slower and pose less of a threat to public safety.

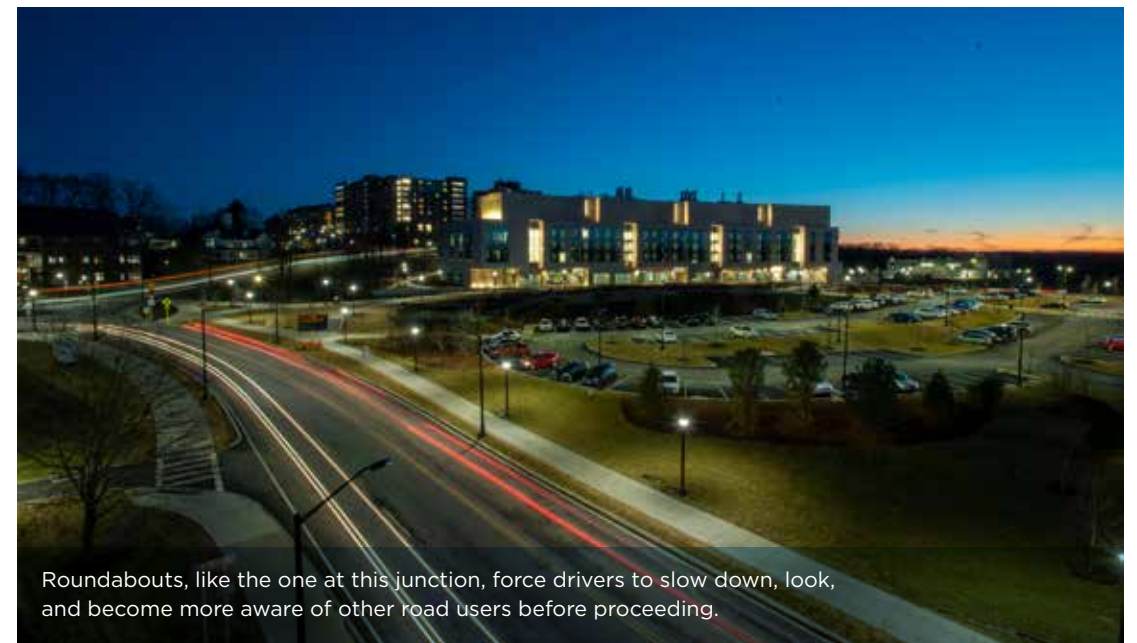
Traffic calming measures should be integrated into the overall road design for maximum effectiveness. Speed bumps, roundabouts, and narrower vehicle lanes can all be effective ways of slowing traffic. Elements that prioritize pedestrian routes, such as increased visibility and creating islands for wider road crossings, are often helpful in making pedestrians feel safer in their journey.

**CHICANE IMAGE PENDING**

A chicane on lower-traffic routes can be an effective measure to slow traffic by forcing lateral deviation of traffic along an otherwise straight path.



At this location, the footpath is delineated by landscaping that provides a clear priority to pedestrians in the space.



Roundabouts, like the one at this junction, force drivers to slow down, look, and become more aware of other road users before proceeding.

# Levels of Protection – Traffic Calming



## Medium

- Design to divide pedestrian and vehicular traffic. Provide measures to slow vehicles on roads such as speed bumps, landscaped islands, expanded crossing areas, appropriate signage, etc.



## High

- Divide pedestrian and vehicular traffic. Provide measures to slow vehicles on roads such as speed bumps, landscaped islands, expanded crossing areas, appropriate signage, etc.
- Use strategies to provide defensive zones for pedestrian crossing, such as islands with waiting areas, expanded curb waiting areas at crossings, etc.
- Use chicanes or other redirection and narrowing of lanes to slow traffic before it arrives near the Event venue

# Levels of Protection – Site Mitigations

## Summary Table

PROJECT TYPE	ENFORCED STANDOFF				FENCES / WALLS				PERMANENT HVM				TEMPORARY HVM				TRAFFIC CALMING			
	MEASURE LEVEL OF PROTECTION																			
	B	L	M	H	B	L	M	H	B	L	M	H	B	L	M	H	B	L	M	H
Academic			X		N/A						X				X				X	
Administration			X		N/A					X				X					X	
Residential		X			N/A					X				X			N/A			
Critical Operations			X				X				X				X		N/A			
Environment / Health & Safety		X			N/A						X				X		N/A			
Events				X	N/A							X				X				X
Outdoor Gathering Areas				X				X				X				X				X
Landscaped and Other Outdoor Areas		X			N/A						X		N/A						X	
Parking	N/A						X		X				N/A				N/A			

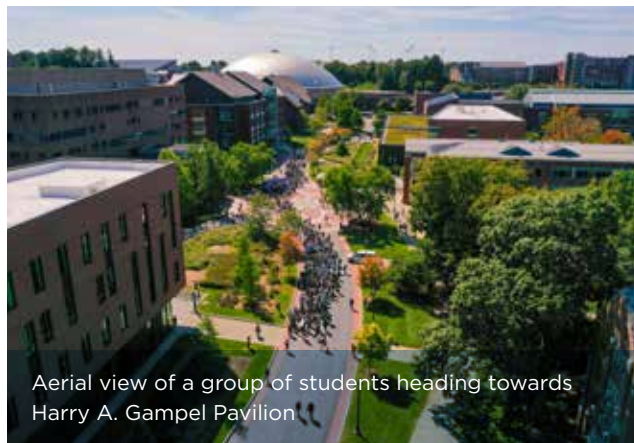
**Campus Security  
Design Guidelines**



**Building Security  
Design**

# Controlling Access to Vantage Points

Locations that provide expansive views over busy areas of the campus are uniquely vulnerable to two threats: actions from single-interest and/or protest groups, who wish for their message to be widely seen, and actions from individuals who would seek to harm large numbers of people from such a vantage point. As a result, practical security measures, such as locked access to these locations, are to be included as a typical provision throughout the University. For those locations at higher risk, such as buildings next to outdoor gathering areas, this is to be coupled with the ability to monitor the status of access points.



Aerial view of a group of students heading towards Harry A. Gampel Pavilion



While most roof space at the University is pitched, some roofs are flat. These kinds of vantage points present a unique risk for those with unauthorized access.



# Levels of Protection — Controlling Access to Vantage Points



## Low

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.



## Medium

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.
- Provide monitoring contact to confirm closed position for roof access doors and a standalone audible alarm for held-open access to roof.



## High

- For Buildings at or adjacent to Outdoor Gathering Areas, provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.
- Provide monitoring contact to confirm closed position for roof access doors and a standalone audible alarm for held-open access to roof.

# Forced Entry Hardening — Building Fabric

Similar to the site-wide mitigation concepts of CPTED, the choice of materials and finishes for the exterior of a building can also deter opportunistic crime. By choosing materials that project an impression of strength and provide a reasonable, basic robustness against damage from hand tools, designers can make a building's entrances unattractive to opportunistic threats. Doors and windows at ground level are the most vulnerable elements for opportunistic attack, and consideration or use of forced-entry resistant building elements are to be included on University projects.

The architectural style of the University, heavily featuring brick and robust finishes is aligned well with the goals of this mitigation. By building in alignment with these style guidelines and incorporating pragmatic forced-entry resistance (according to ASTM 476), the buildings will deter and delay potential threat actors.



Buildings at the University typically feature brick even on highly glazed facades. Brick and similar cladding materials present a strong deterrent to those seeking to gain entry despite locked doors and windows.

# Levels of Protection – Forced Entry Hardening – Building Fabric



## Low

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. Consider the use of ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.



## Medium

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. At a minimum, materials should meet ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.

# HVAC – Air Intake Placement

Correct air intake placement is important for Heating, Ventilation, and Air Conditioning (HVAC) for the systems' correction function, and it also has impacts on security. Security can be enhanced by placing air intakes away from potential sources of contamination, whether that contamination is intentional (such as pollutants or irritants) or non-malicious (such as odors or dust). Intakes at UConn are to be placed away from ground level to minimize these risks.

Additional, non-security benefits from correct intake placement typically include:

- Better balanced airflow, allowing proper distribution of conditioned air throughout the space
- Reduced recirculation of stale air, leading to better indoor air quality
- Increased efficiency associated with reduced workload for the HVAC system.



# Levels of Protection – HVAC – Air Intake Placement



## Low

- Air intakes are to be located according to building functional requirements and away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building.
- Consider concealment and/or elevation of air intakes taking into account building function.



## Medium

- Air intakes are to be placed at elevated locations away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building.
- In situations where the intake cannot be elevated, conceal below ground level and have lockable steel grating.



## High

- Air intakes are to be placed at elevated locations away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building.
- In situations where the intake cannot be elevated, conceal below ground and have lockable steel grating.

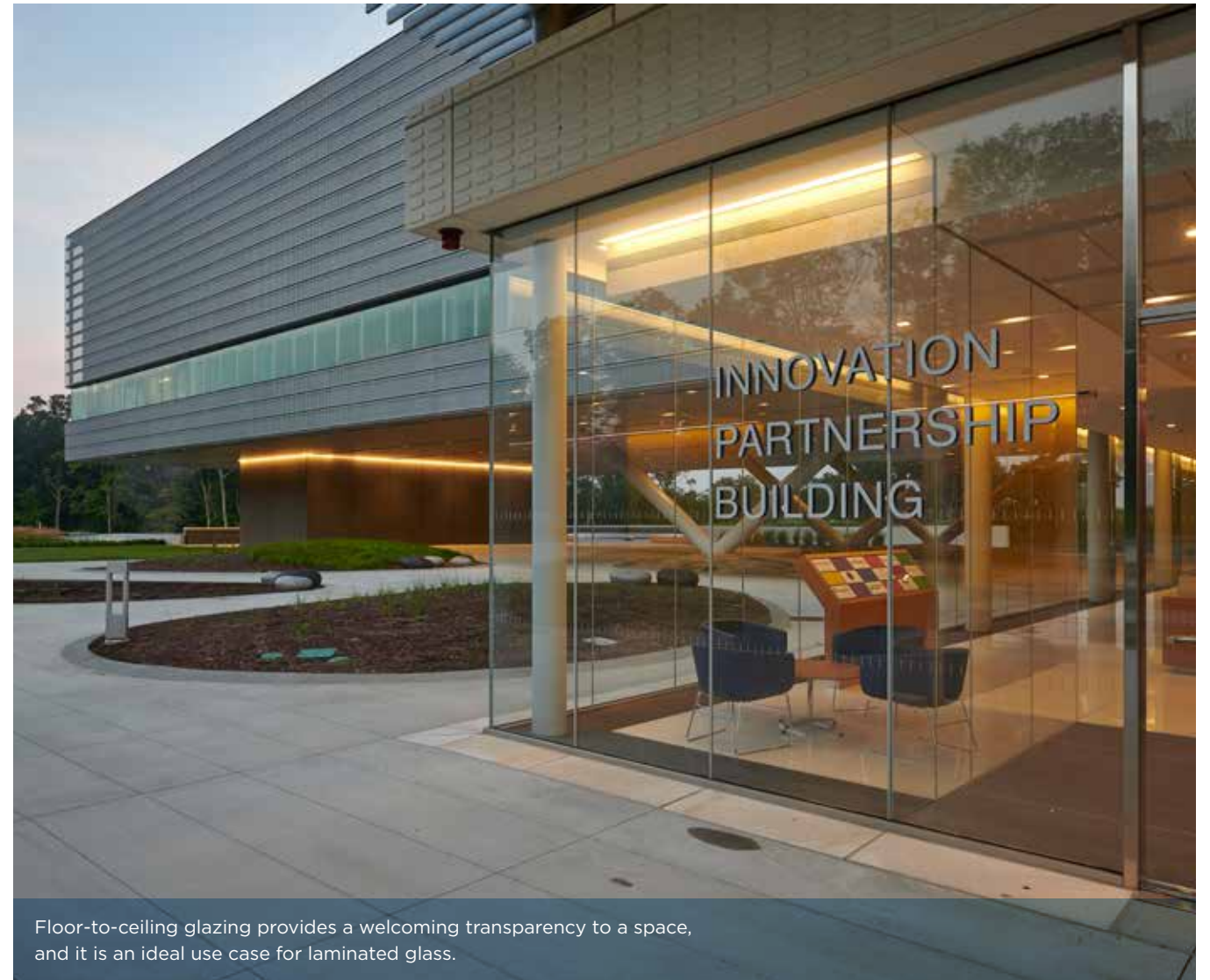
# Specification of Laminated Glass

Laminated glass offers significant safety and security benefits due to its unique construction. It consists of two or more layers of glass bonded together with a polymer interlayer, typically polyvinyl butyral (PVB) or another clear plastic. In the event of breakage, the interlayer holds the glass fragments together, reducing the risk of injury from sharp shards. This makes laminated glass highly resistant to impacts, including forced entry attempts, and it maintains its integrity even when cracked. These qualities make it highly beneficial for windows, doors, and other applications where safety, security, and transparency are all important.

By including laminated glass on the exterior of buildings, opportunistic crimes are deterred. Additionally, by including laminated glass at key interior locations, safety is enhanced in case of accidental or intentional breakage. The Underwriters Laboratory (UL) 972 standard provides a baseline for security glazing throughout buildings at UConn.



Laminated glass maintains high levels of visibility with additional robustness in case of accidental or malicious breakage.



Floor-to-ceiling glazing provides a welcoming transparency to a space, and it is an ideal use case for laminated glass.

# Levels of Protection — Specification of Laminated Glass



## Low

- Exterior glazing at ground-level shall have a UL 972 burglary resistant rating.



## Medium

- Exterior glazing at ground-level shall have a UL 972 burglary resistant rating.
- Interior glazing that provides a view into high occupancy spaces shall be laminated.

# Specification of Non-Flammable Materials

Building and furnishing material choices can be very effective to discourage minor acts of arson. While perhaps viewed by the perpetrator as mischief, the act of setting fire to furnishings within a building can result in substantial danger to persons and damage to property. By designing and specifying furnishings and building finishes that are non-flammable, the opportunity for such crime is drastically reduced. While this is not appropriate for all campus settings, creative design solutions can result in non-flammable, built-in furnishings that maintain the comfort, aesthetic, and functionality of the space.

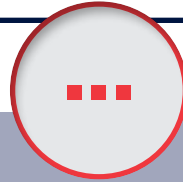
While not mandated, these approaches should be considered for most facility types on the UConn Campus.



By considering lighting, the use of color, and other design strategies, non-flammable finishes and fixtures can still present a warm and inviting aesthetic for a space.



# Levels of Protection — Specification of Non-Flammable Materials



## Baseline

- Consider the use of integrated (immovable), noncombustible furnishings in common areas.



## Low

- Use noncombustible materials and finishes appropriate to maintain the style of the facility.
- Evaluate the opportunity to use noncombustible materials for street furniture, landscaping features, and structures.
- Consider the use of integrated (immovable), noncombustible furnishings.

# Levels of Protection – Building Mitigations

## Summary Table

PROJECT TYPE	CONTROLLING ACCESS TO VANTAGE POINTS				FORCED ENTRY HARDENING - BUILDING FABRIC				HVAC - AIR INTAKE PLACEMENT				SPECIFICATION OF LAMINATED GLASS				SPECIFICATION OF NON- FLAMMABLE MATERIALS			
	MEASURE LEVEL OF PROTECTION																			
	B	L	M	H	B	L	M	H	B	L	M	H	B	L	M	H	B	L	M	H
Academic		X					X				X				X			X		
Administration		X					X				X				X			X		
Residential		X				X					X			X			X			
Critical Operations		X					X			X				X			X			
Environment / Health & Safety		X					X					X			X		N/A			
Events			X				X				X				X			X		
Outdoor Gathering Areas				X	N/A				N/A				N/A				N/A			
Landscaped and Other Outdoor Areas		X			N/A				N/A				N/A					X		
Parking	N/A					X			N/A				N/A				N/A			

**Campus Security  
Design Guidelines**



**Security Technology  
Design**

# Security Technology Design

Security Technology on UConn projects feature the appropriate deployment of Access Control Systems (ACS), Intrusion Detection Systems (IDS), and Video Surveillance Systems (VSS). While ACS function to deter or delay a security threat, IDS and VSS are more effective to detect a threat and enable law enforcement response. For all projects, also refer to the University Design Guidelines and Performance Standards including Appendix X – Physical Security Systems Standards.



**ACCESS CONTROL SYSTEMS** delay a threat by denying access to unauthorized persons via locks on doors, gates or fences. They can be centrally managed, electronic, card-based systems or they can use basic mechanical locks.



**INTRUSION DETECTION SYSTEMS** at UConn focus on unauthorized access at doors through held open or forced door alarms. Other types of intruder detection, such as volumetric sensors, glass break detectors, or VSS analytics may be appropriate for specific high-value assets (e.g. works of art or cultural heritage), and these would warrant a site-specific approach.

For certain spaces with high vulnerability, duress buttons are an additional measure that enables notification of law enforcement. These are addressed separately from the main Technology mitigations because they are applicable only to particular design situations.



**VISUAL SURVEILLANCE SYSTEMS** (sometimes referred to as CCTV) enable response to a threat and coordination of that response by improving situational awareness. After a security incident has taken place, recordings from the VSS contribute to evidence when an investigation is necessary. VSS placement at UConn is coordinated on a functional basis, providing cameras that are efficiently placed to ensure correct views.

# Access Control

Access Control is a Technology-focused design element comprising measures to monitor and restrict access to an area. Access control systems can range from simple physical locks and keys to complex, networked systems that use biometrics, smart cards, or other technologies to verify identity and authorization.

At UConn, the current approach features the use of proximity, magnetic stripe, and smart technology photo ID badges to provide access through card reader-controlled doors on the Genetec system.

Access Control should be provided in the building design according to the layered approach for security throughout the UConn campus environment. For example, the following access control provisions would be in alignment with this guideline:

- **Access to general campus environment:** No restriction; CPTED including emphasis on territorial reinforcement through signage and landscaping.
- **Access to new academic building from exterior:** Scheduled lock/unlock. Card access for locked times when appropriate students, staff, faculty are able to access. This includes side doors that are for limited usage. Egress only doors should remain locked from the outside at all times.
- **Access to spaces storing high-value items within new academic building:** Card access managed for specific individuals at specific locations.



*images courtesy of Centerbrook Architects*

# Levels of Protection for Access Control Systems



## Low

- Design for card Access at Main Access/Egress Points.
- Evaluate the benefit of a second layer of Access Control/ Card Access Point at entrance from common and visitor areas into circulation leading to sensitive and/or personal spaces.
- **For Parking:** Design for Card Access or Payment/Ticket Registration at Main Access/Egress Points.



## Medium

Design for Card Access at Main Access/Egress Points (front and back entrance, loading docks)

- Loading Docks: Provide access with video intercom at perimeter doors.
- Provide an additional second layer of security egress point interior from the loading dock external doors which may be left open for extended periods of time.
- Provide Second Layer of Access Control (second card access point) at entrance to following locations if present in building:
  - Areas where controlled substances (e.g. hazardous chemicals, radioactive sources, etc.), items of historical or cultural significance, items of significant theft potential (e.g., concealable, portable items of high value) are held (e.g. audio visual control rooms).
  - Areas where student access is restricted (e.g. specialized labs, critical infrastructure within academic settings, etc.).
- Access control for second layer of security may use additional card reader for central access control system or alternative if required by the project (e.g. number pad/keypad, local ID card reader, lock and key, etc.).
- Provide manual measures to enable Shelter-in-Place or Lockdown of individual classrooms or low-occupancy rooms via door hardware only. (Non-networked, e.g. dead bolt or mortice lock).
- For ticketed or attendance-managed events:
  - Coordinate screening/security at access points with event requirements from University Safety. These may include walk through metal detectors, hand-held metal detectors, bag restrictions, etc. facilitated by Event Security or University Safety.
- Provide infrastructure and facilities to support additional security presence if required by University Safety and/or Event Security.



## High

- For ticketed or attendance-managed events:
  - Limit the number of access/egress points.
  - Keep access/egress points away from areas where crowds are anticipated to gather.
  - Where possible, provide measures to prevent direct line-of-sight from screening locations to the location of main crowd via location or alignment of screening areas and/or via hoarding/fencing (whether temporary or permanent).
- Coordinate screening and security at access points with event requirements from University Safety. These may include walk through metal detectors, hand-held metal detectors, bag restrictions, etc. facilitated by Event Security or University Safety.
- Provide infrastructure and facilities to support additional security presence if required by University Safety and/or Event Security.

# Levels of Protection for Access Control Systems

## Summary Table

PROJECT TYPE	ACCESS CONTROL		
	MEASURE LEVEL OF PROTECTION		
	Low	Medium	High
Academic		X	
Administration		X	
Residential	X		
Critical Operations		X	
Environment / Health & Safety	X		
Events		X	
Outdoor Gathering Areas			X
Landscaped and Other Outdoor Areas	N/A		
Parking	X		

# Intrusion Detection Systems

An intrusion detection system (IDS) is a technology mitigation that is designed to detect unauthorized entry into a building or other secure area. It typically consists of a combination of hardware and software components that work together to monitor access points, such as doors and windows, and to alert security personnel in the event of a potential intrusion.

IDS use various technologies to detect intrusions, including:

- **Motion sensors:** These sensors detect movement within a defined area and can be used to detect intrusions by people or vehicles.
- **Glass break detectors:** These sensors use microphone technology to detect the sound of breaking glass and can be used to detect intrusions through windows.
- **Door and window contacts:** These devices detect the opening of doors and windows and can be used to detect intrusions.
- **Video surveillance system analytics:** These analytics identify motion or features, such as an abandoned package, within VSS views, alerting security personnel upon identification of a threat.

An IDS can play an important role in protecting buildings and other secure areas from unauthorized entry and helping to ensure the safety of the people and assets within.

At UConn, IDS design is focused on utilization of door contacts and hold-open alarms, which can also be thought of as part of the ACS design. For protected areas or assets, such as art installations, cultural artifacts, or regulated materials or lab spaces consideration should be given to the potential addition of other elements of IDS such as those identified above.





# Levels of Protection for Intrusion Detection Systems



## Low

- Design for forced door or held-open door alarm capability for doors on access control.
- Emergency egress only doors should have the capability to be monitored with local audible alarm for held-open door (e.g. stairwells).
- Second layer of security should be monitored with local audible forced door and held-open door alarm.



## Medium

- Design for forced door or held-open door alarm capability for all doors that are on access control.
- Equip all exterior doors with status monitoring via door contacts and with optional request-to-exit.
- Emergency egress only doors should be monitored and provided with local audible alarm for held-open door (e.g. stairwells) at a minimum.
- Second layer of security should be monitored and provided with local audible forced door and held-open door alarm.
- Provide a specific audible alarm for unauthorized access to spaces containing high-value assets (e.g., art pieces, historically significant items, controlled substances).



## High

- For items of cultural significance, high value (e.g. art pieces), controlled substances, hazardous area, or similar areas with special considerations, consult your University Representative.

# Levels of Protection for Intrusion Detection Systems

## Summary Table

PROJECT TYPE	INTRUSION DETECTION		
	MEASURE LEVEL OF PROTECTION		
	Low	Medium	High
Academic		X	
Administration		X	
Residential	X		
Critical Operations	X		
Environment / Health & Safety		X	
Events	X		
Outdoor Gathering Areas	X		
Landscaped and Other Outdoor Areas	N/A		
Parking	N/A		

# Video Surveillance

**Video Surveillance is a Technology-focused design element that enables response to a threat and coordination of that response by improving situational awareness. After a security incident has taken place, recordings from the VSS contribute to evidence when an investigation is necessary.**

VSS design and implementation at UConn is to be coordinated on a functional basis, providing cameras that are efficiently placed to ensure correct views.

One of the most important aspects of VSS design is the placement of cameras. The decision on camera placement and resolution should be made by the security design team in order to meet the functional requirements of the camera view. These functional requirements are outlined in more detail in the following pages.



Careful camera placement can ensure that cameras blend in with lighting and other devices while providing adequate views.



Cameras are placed along this curved hallway to facilitate a view of the doorway and to ensure adequate views all around the corner.

# Video Surveillance Scenes

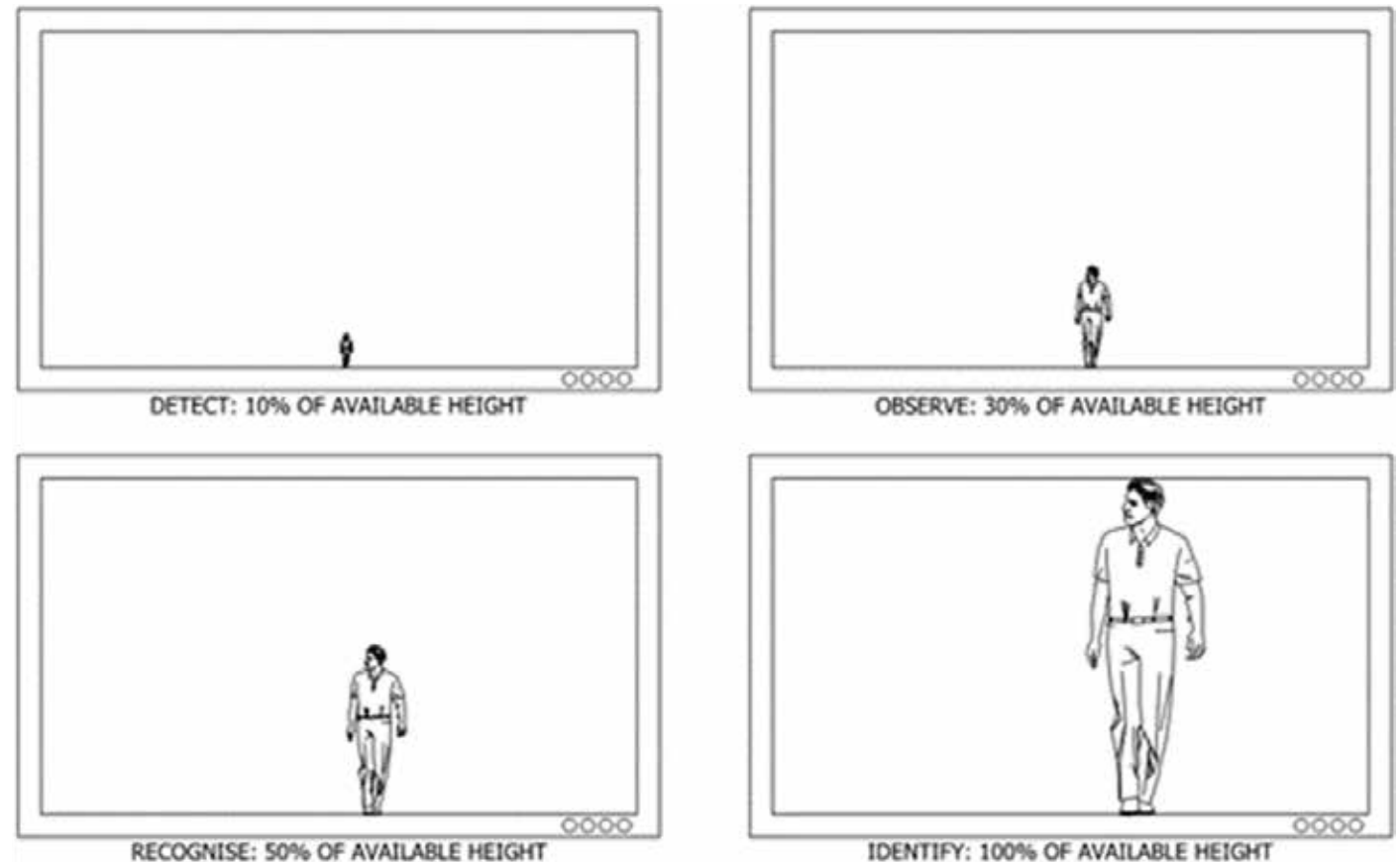
The placement of cameras during the design of the VSS will be based on achieving a particular video surveillance scene. Each project will utilize four (4) primary categories of video surveillance scenes. Each scene should be calculated using a baseline height of 5'-9" for the person of interest (POI).

**DETECT:** The POI occupies at least 10% of the available screen height. After an alert, an observer would be able to search the display screens and ascertain with a high degree of certainty whether or not a person is present.

**OBSERVE:** A POI should occupy between 25% and 30% of the screen height. At this scale, some characteristic details of the individual, such as distinctive clothing, can be seen, whilst the view remains sufficiently wide to allow some activity surrounding an incident to be monitored.

**RECOGNIZE:** When the POI occupies at least 50% of screen height, viewers can say with a high degree of certainty whether or not an individual shown is the same as someone they have seen before.

**IDENTIFY:** When the POI occupies at least 100% of the screen height, picture quality and detail should be sufficient to enable the identity of an individual to be established beyond a reasonable doubt.



Example of Video Surveillance Scenes

In order to maximize the effectiveness of each video surveillance scene, the resulting image quality (pixels-per-foot) for each camera must be considered in addition to the percentage of available screen height occupied. Parameters such as the camera's resolution, lighting, distance to the target, and lens size will all play a part in determining the image quality.

# Video Surveillance Image Quality

To establish image quality, these standards define the needed resolution of the camera based on its operational requirements. Select an appropriate focal point within the FoV we define the pixel count required to achieve the operational goal. The operational goal and pixel count are defined as follows:

**IDENTIFICATION (non-controlled conditions):**

80 horizontal pixels/face

**IDENTIFICATION (controlled conditions):**

40 horizontal pixels/face

**RECOGNITION:** 25 horizontal pixels/face

**DETECTION:** 10 horizontal pixels/face

As shown in the image, the percentage of available screen height occupied by the POI is constant, but the viewer's ability to definitively identify the POI varies based on the image quality.



250 Pixels per Foot  
104 Pixels per Face



200 Pixels per Foot  
83 Pixels per Face



150 Pixels per Foot  
63 Pixels per Face



100 Pixels per Foot  
42 Pixels per Face



80 Pixels per Foot  
33 Pixels per Face



60 Pixels per Foot  
25 Pixels per Face



40 Pixels per Foot  
17 Pixels per Face

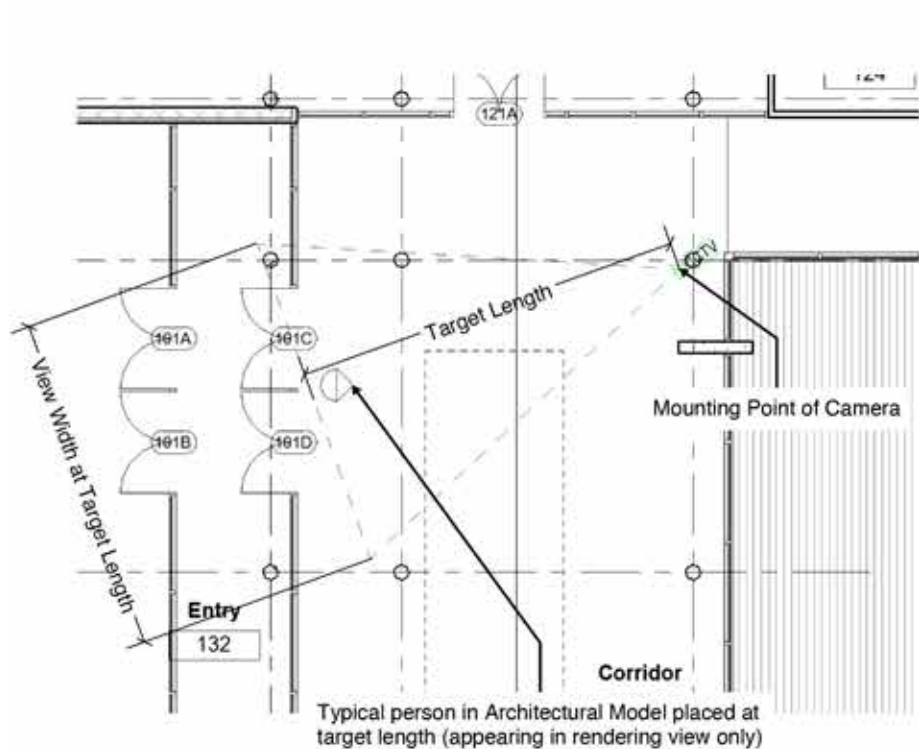


20 Pixels per Foot  
8 Pixels per Face

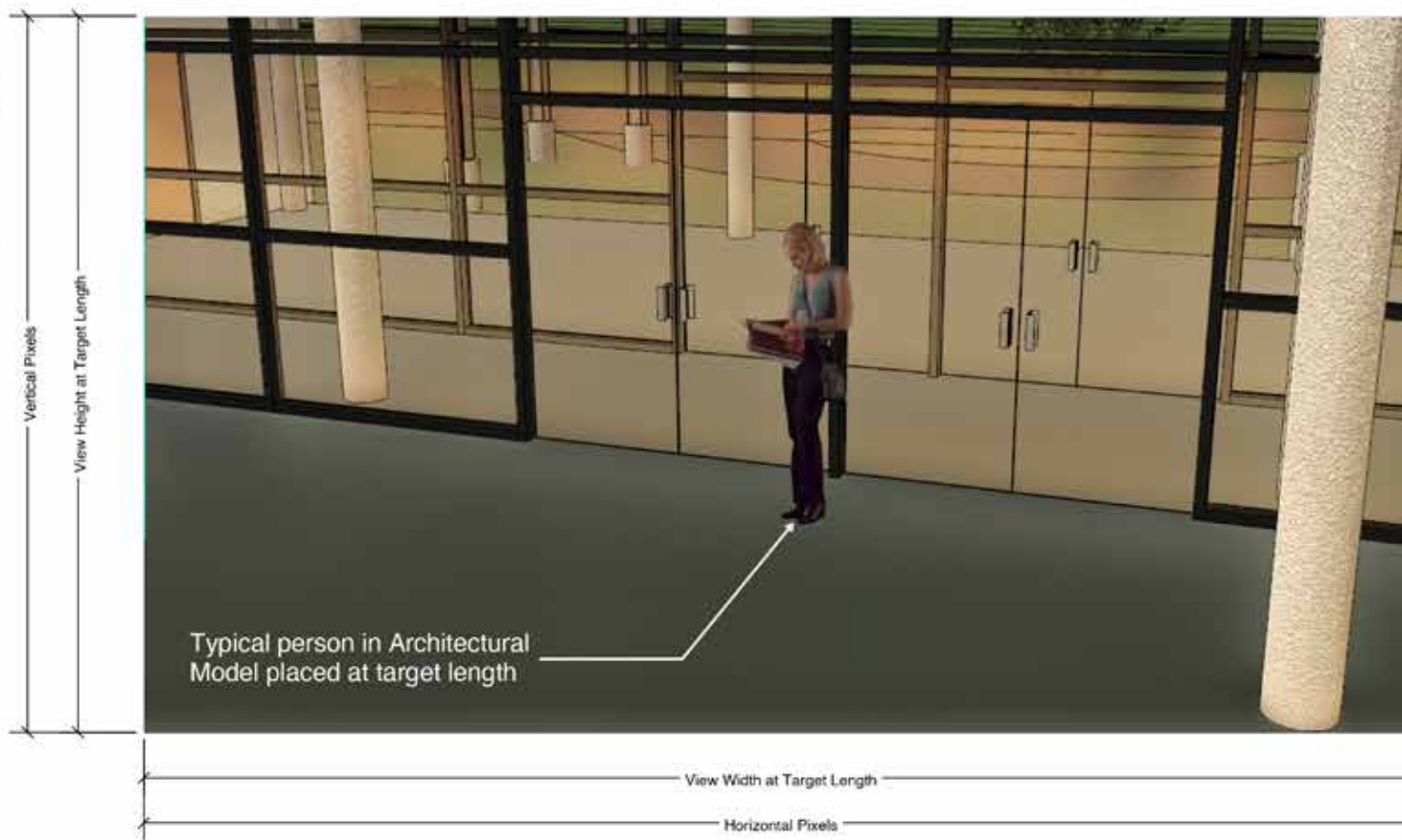
Security Image 02: Representative Example of Image Quality

# Example of Typical Camera Placements for VSS

TYPICAL FIXED CAMERA FIELD OF VIEW FLOORPLAN



TYPICAL FIXED CAMERA FIELD OF VIEW RENDERING



$$\text{Pixels Per Foot at Target Length (ppf)} = \frac{\text{Vertical Pixels}}{\text{View Height at Target Length}} = \frac{\text{Horizontal Pixels}}{\text{View Width at Target Length}}$$

# Levels of Protection for VSS



## Low

Provide a level of surveillance coverage at main thoroughfares throughout the Storrs campus where it can be achieved through the pragmatic use of existing camera mounting locations, such as existing buildings:

- Detect level coverage at routes of primary pedestrian and vehicular travel.
- Resolution of 20ppf minimum.



## Medium

Provide coverage at Main Access/Egress Points:

- Identify level coverage across threshold (100% extents), resolution of 100ppf and in access stairwells for parking garages.
- Observe level coverage to exterior of building.

Provide coverage in circulation areas and areas to congregate:

- Observe level coverage across main thoroughfares / lobbies (75% extents).
- Observe level coverage throughout public areas of parking structures (100% extents) and Detect level coverage at external lots. Resolution of 40ppf minimum.
- For Areas where Second Layer of Access Control is required, evaluate treating the same as Access / Egress Point.

Provide a level of surveillance coverage for buildings that include areas of Second Line of Access Control (due to labs, critical infrastructure, restricted areas, etc.):

- Recognize level coverage at all access points including egress only (100% coverage extents, Resolution of 40ppf).



## High

Provide a level of surveillance coverage at Access / Egress Points of buildings:

- Identify level coverage across threshold (100% extents), resolution of 100ppf.
- Observe level coverage to exterior of building.
- Provide a level of surveillance coverage in pathways and areas to congregate within buildings:
- Observe level coverage across full area (100% extents).
- Resolution of 40ppf minimum.

Provide a level of surveillance coverage for buildings that include areas of Second Line of Access Control (due to labs, critical infrastructure, restricted areas, etc.):

- Observe level coverage around full perimeter (100% of immediate perimeter).
- Resolution of 40ppf.
- For Areas where Second Layer of Access Control is required, evaluate treating the same as Access / Egress Point.

### For outdoor gathering spaces:

Provide a level of surveillance coverage at main circulation points into and out of the gathering area (e.g. natural choke point between two buildings on a quad):

- Observe level coverage across typical main ingress and egress routes, resolution of 40ppf.

Provide a level of surveillance coverage in the main gathering area:

- Detect level coverage across full gathering area, which should be achieved by cameras that are located either on standalone poles or on neighboring buildings or infrastructure.
- Resolution of 20ppf minimum.

# Levels of Protection for VSS

## Summary Table

PROJECT TYPE	VIDEO SURVEILLANCE		
	MEASURE LEVEL OF PROTECTION		
	Low	Medium	High
Academic			X
Administration			X
Residential		X	
Critical Operations		X	
Environment / Health & Safety		X	
Events		X	
Outdoor Gathering Areas			X
Landscaped and Other Outdoor Areas	X		
Parking		X	

Notes:

- While the VSS protection level for buildings is focused primarily at entrances, exits, and secondarily in circulation spaces, the use of cameras for outdoor spaces must be adjusted appropriately for the space. VSS deployment around the outdoor campus areas is focused on specific outdoor Gathering Areas, where there is a precedent for organized events or for large groups of students to congregate. The high protection level at these areas is focused on providing situational awareness for the University Police.
- VSS coverage is subject to the following limitations:
  - Cameras are not provided in elevators. Instead, cameras should cover the entrances/exits for elevators.
  - Requirements for privacy strictly preclude installation of cameras in bathrooms, shower rooms, locker rooms, general and private office spaces, and in residential dormitory rooms and halls except for cameras facing elevator doors on each floor of a dorm building.



# Duress Alarms

A duress alarm (sometimes referred to as panic alarm) is a device installed in a concealed location and in select visible areas that notifies the University Police Department of a silent alarm activation. Due to the immediate and serious nature of a duress alarm activation, the University reserves their use only for the most vulnerable circumstances and subject to careful design consideration.

There are multiple areas throughout the University where faculty, staff, or others may come into contact with highly emotional or irate individuals. The first priority in these areas is to provide design and situational mitigations that reduce the potential for harm, such as:

- Providing access to multiple routes of escape.
- Providing natural surveillance of the space via windows or an open-plan environment, where privacy permits.
- Ensuring that other faculty, staff, or colleagues are within ear-shot and aware of the planned activity.

Despite these mitigations and other strategies, some locations and activities may still present vulnerabilities that warrant the installation of a duress alarm. High traffic areas do not automatically warrant duress alarms. The following risk criteria will be considered along with an objective threat assessment by University Safety in order to establish whether duress alarms are warranted:

- Areas of drug dispensing, mental health counseling, or high volume cash collection.
- Offices for the President, UCH CEO, Provost, Dean of Students, and select Human Resource spaces.
- Areas or work that is isolated, after-hours, and where previous incidents of actual acts of violence have occurred.

Where duress alarms are installed, VSS camera coverage of the area must also be coordinated in order to provide timely situational awareness to the University Police Department in their response.



Most parts of the University have opportunities to mitigate vulnerable situations without duress alarms via natural surveillance, building design features, and carefully considered operational protocols.

# Levels of Protection – Security Technology Design

## Summary Table

PROJECT TYPE	ACCESS CONTROL SYSTEMS				INTRUSION DETRECTION				VIDEO SURVEILLANCE			
	MEASURE LEVEL OF PROTECTION											
	B	L	M	H	B	L	M	H	B	L	M	H
Academic			X				X					X
Administration			X				X					X
Residential		X				X					X	
Critical Operations			X			X					X	
Environment / Health & Safety		X					X				X	
Events			X			X					X	
Outdoor Gathering Areas				X		X						X
Landscaped and Other Outdoor Areas	N/A				N/A					X		
Parking		X			N/A						X	

Note: Duress alarms are not typical, and are considered on a case-by-case basis in line with the considerations noted previously.

**Campus Security  
Design Guidelines**



**Summary of  
Design Requirements  
for UConn Projects**

# Introduction

The following Design Guidelines were compiled following a Threat, Vulnerability and Risk Assessment (TVRA) process and in consultation with the university and relevant stakeholders. Each recommendation in the Design Guidelines is included in order to mitigate security risks that were identified in the TVRA. The intent is that a project Designer will apply these guidelines as relevant to the project type at the outset as a part of the basis of design. Changes to the specific design would be possible in consultation with the relevant stakeholders.

These guidelines are to be used in conjunction with the University Design Guidelines and Performance Standards including but not limited to Appendix X — Physical Security Systems Standards.

Duress alarms are not typical and are considered on a case-by-case basis. Therefore, they are not included in the following design summaries. Consideration of their inclusion should be in consultation with University Safety according to the principles laid out in the 'Technology' section of these Guidelines.

## The Design guidelines are structured as follows:

Individual guidelines requirements are grouped by asset category (e.g. Academic, Administration, etc. as listed below) to address the differing risk profiles at each type of facility.

The asset categories are as follows:

- |                                   |                                       |
|-----------------------------------|---------------------------------------|
| 1. Academic                       | 6. Event Spaces and Venues            |
| 2. Administration                 | 7. Outdoor Gathering                  |
| 3. Residential                    | 8. Landscaped and Other Outdoor Areas |
| 4. Critical Operations            | 9. Parking                            |
| 5. Environment / Health, & Safety |                                       |

Further, the guidelines are then broken down within each facility type into three groupings based on the affected scope of mitigation design:

1. Technology design and implementation
2. Building design
3. Site design

There are up to six types of mitigation to be considered within each grouping of Technology, Building, and Site design. Each of these mitigation types is unique to that category and their respective mitigation type are shown below:

### 1. Technology

- a. Access Control
- b. Intrusion Detection System
- c. Video Surveillance

### 2. Building

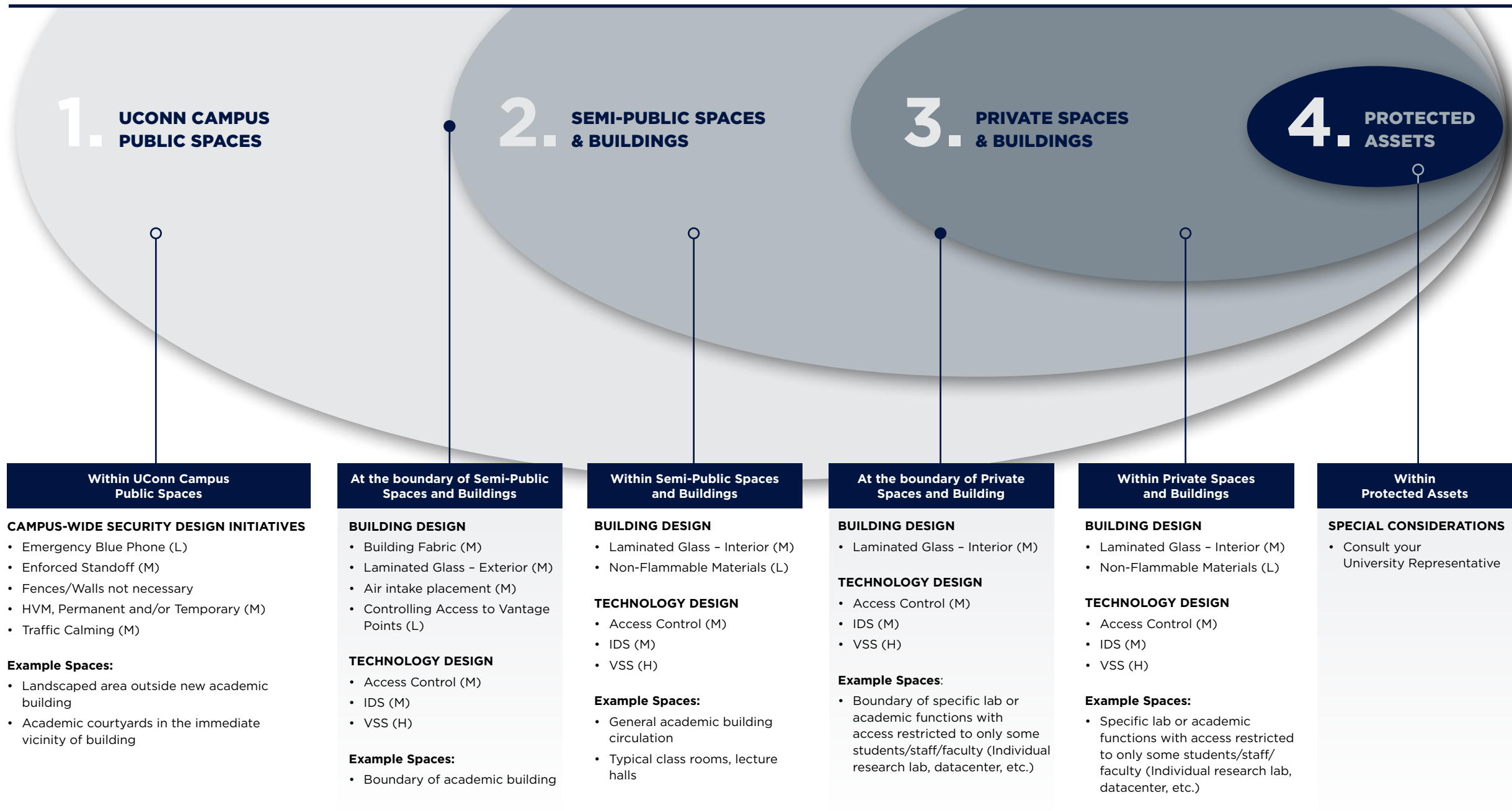
- a. Controlling Access to Vantage Points
- b. Forced Entry Hardening - Building Fabric
- c. HVAC - Air Intake Placement
- d. Specification of laminated glass
- e. Specification of non-flammable materials

### 3. Site

- a. Emergency Blue Phones
- b. Enforced Standoff (Bollards, Knee Wall, Vehicle Interdiction)
- c. Fences / Walls
- d. Hostile Vehicle Mitigation (Permanent)
- e. Hostile Vehicle Mitigation (Temporary)
- f. Traffic Calming

Under each mitigation type there are individual security product types and design guidelines for that specific asset category and mitigation design group.

# Academic Building Typical Zoning



## 1.1 TECHNOLOGY

### 1.1.1 Access Control (M)

- Design for Card Access at Main Access / Egress Points (front and back entrance, loading docks).
  - Loading Docks
    - Provide card access with video intercom at perimeter doors.
    - Provide an additional second layer of security egress point interior from the loading dock external doors which may be left open for extended periods of time.
- Provide Second Layer of Access Control (second card access point) at entrance to following locations if present in building:
  - Areas where controlled substances (e.g. hazardous chemicals, radioactive sources, etc.), items of historical or cultural significance, items of significant theft potential (e.g., concealable, portable items of high value) are held (e.g. audio visual control rooms).
  - Areas where student access is restricted (e.g. specialized labs, critical infrastructure within academic settings, etc.).
- Access control for second layer of security may use additional card reader for central access control system or alternative if required by the project (e.g. number pad / keypad, local ID card reader, lock and key, etc.).
- Provide manual measures to enable Shelter-in-Place or Lockdown of individual classrooms or low-occupancy rooms via door hardware only. (Non-networked, e.g. dead bolt or mortice lock).

### 1.1.2 Intrusion Detection System (M)

- Design for forced door or held-open door alarm capability for all doors that are on access control.
- Equip all exterior doors with status monitoring via door contacts and with optional request-to-exit.
- Emergency egress only doors should be monitored and provided with local audible alarm for held-open door (e.g. stairwells).
- Second layer of security should be monitored and provided with local audible forced door and held-open door alarm.

### 1.1.3 Video Surveillance (H)

- Provide a level of surveillance coverage at Access / Egress Points:
  - Identify level coverage across threshold (100% extents), resolution of 100ppf.
  - Observe level coverage to exterior of building.
- Provide a level of surveillance coverage in pathways and areas to congregate:
  - Observe level coverage across full area (100% extents).
  - Resolution of 40ppf minimum.
- Provide a level of surveillance coverage for buildings that include areas of Second Line of Access Control (due to labs, critical infrastructure, restricted areas, etc.):
  - Observe level coverage around full perimeter (100% of immediate perimeter).
  - Resolution of 40ppf.
- For Areas where Second Layer of Access Control is required, evaluate treating the same as Access / Egress Point.

# 1. Academic continued

## 1.2 BUILDING

### 1.2.1 Controlling Access to Vantage Points (L)

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.

### 1.2.2 Forced Entry Hardening - Building Fabric (M)

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. At a minimum, materials should meet ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.

### 1.2.3 HVAC - Air Intake Placement (M)

- Air intakes are to be placed at elevated locations away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building. In situations where the intake cannot be elevated, conceal below ground level and have lockable steel grating.

### 1.2.4 Specification of laminated glass (M)

- Exterior glazing at ground-level shall have a UL 972 burglary resistant rating.
- Interior glazing that provides a view into high occupancy spaces shall be laminated.

### 1.2.5 Specification of Non-Flammable materials (L)

- Use noncombustible materials and finishes appropriate to maintain the style of the facility.
- Consider the use of integrated (immovable), noncombustible furnishings.

## 1.3 SITE

### 1.3.1 Emergency Blue Phones (L)

- Locate an Emergency Blue Phone within line-of-sight of the main entrance of the building.
- Locate Emergency Blue Phones generally along path or sidewalk at a distance not exceeding 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

### 1.3.2 Enforced Standoff (M)

- When feasible, locate all parking and vehicle circulation 50' or more away from the building, with particular attention to accommodate routes of pedestrian travel.
- Eliminate parking for unknown vehicles (e.g. general public) within 50' of the building.
- Eliminate parking and vehicle circulation immediately adjacent to the building for all vehicles.
- Where parking and/or vehicle circulation is allowed near the building, use signage, paving styles or materials, a defined circulation layout, and other means to discourage unauthorized access.
- Consider the use of parking barriers and access control for vehicles requiring access close to the building.

### 1.3.3 Fences / Walls (N/A)

- Not applicable.

# 1. Academic continued

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## 1.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (M)

- Design for vehicle interdiction with landscaping as an HVM solution. The proposed mitigation may or may not be impact-rated or tested, but pose as a deterrent.
- For new buildings, consider raising the first floor above grade in order to avoid vehicle access.
- Design to deter hostile vehicle access via street furniture, landscaping, and untested measures. Seek to create a continuous line of mitigation measures that discourage hostile vehicle access with gaps minimized while considering project access requirements.
- Consider products or mitigation solutions such as: bollards, berms, planters, swales, adapted signage and wayfinding elements, topography and level changes (e.g. retaining walls, steps), seating / benches, etc.

## 1.3.5 Hostile Vehicle Mitigation (HVM) (Temporary) (M)

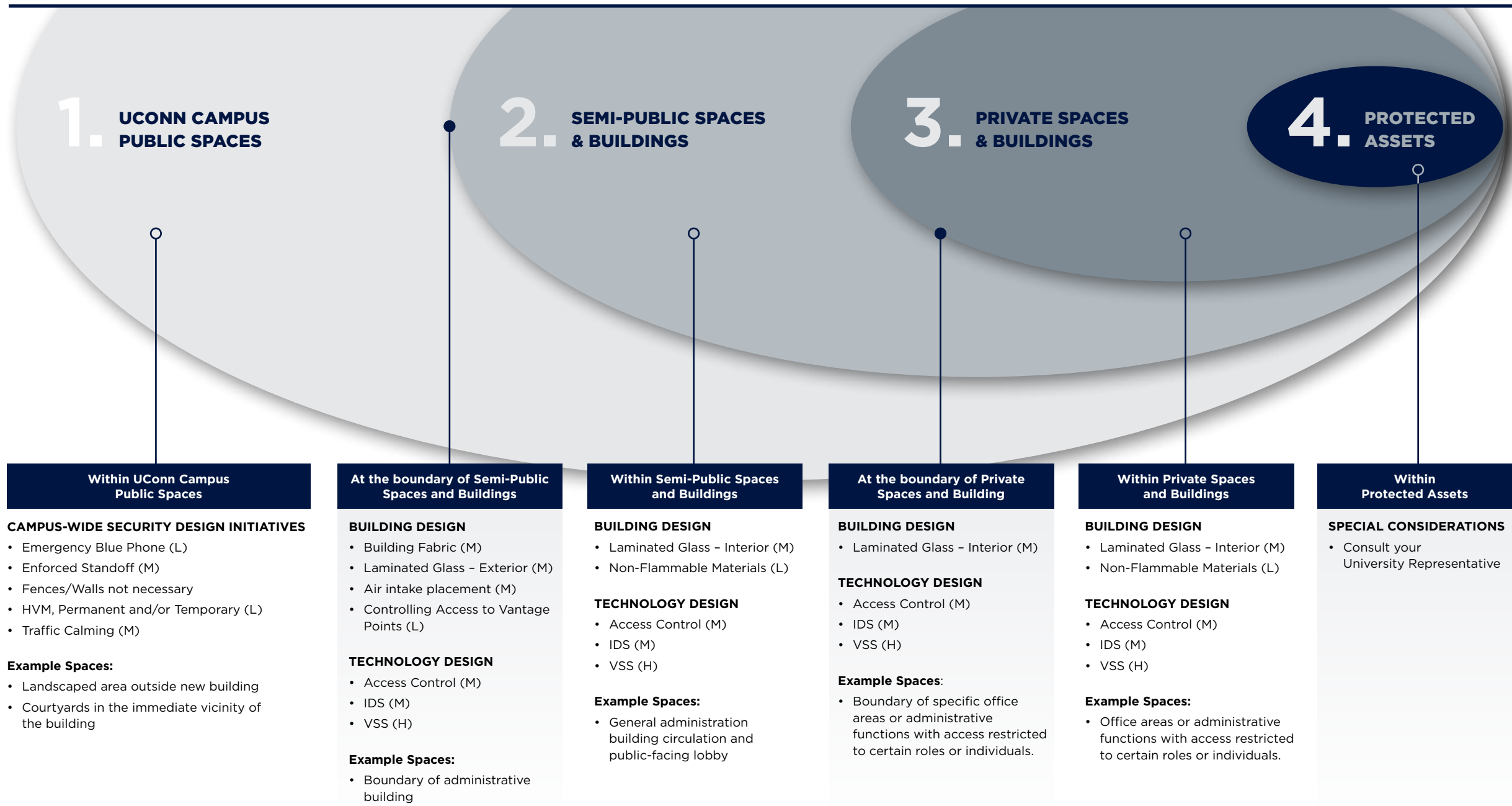
- Specify substantial deployable obstacles (e.g., jersey barriers, boulders, planters, concrete blocks) provided around main gathering spaces for events, providing deterrent from vehicle attack. Deployment should focus on access and egress points and predictably crowded spaces.
- Consideration should be given to the broader perimeter of the area. A gap should be provided between crowded areas and the measures.

## 1.3.6 Traffic Calming (M)

- Design to divide pedestrian and vehicular traffic. Provide measures to slow vehicles on roads such as speed bumps, landscaped islands, expanded crossing areas, appropriate signage, etc.



# Administration Building Typical Zoning



**Within UConn Campus Public Spaces**

**CAMPUS-WIDE SECURITY DESIGN INITIATIVES**

- Emergency Blue Phone (L)
- Enforced Standoff (M)
- Fences/Walls not necessary
- HVM, Permanent and/or Temporary (L)
- Traffic Calming (M)

**Example Spaces:**

- Landscaped area outside new building
- Courtyards in the immediate vicinity of the building

**At the boundary of Semi-Public Spaces and Buildings**

**BUILDING DESIGN**

- Building Fabric (M)
- Laminated Glass - Exterior (M)
- Air intake placement (M)
- Controlling Access to Vantage Points (L)

**TECHNOLOGY DESIGN**

- Access Control (M)
- IDS (M)
- VSS (H)

**Example Spaces:**

- Boundary of administrative building

**Within Semi-Public Spaces and Buildings**

**BUILDING DESIGN**

- Laminated Glass - Interior (M)
- Non-Flammable Materials (L)

**TECHNOLOGY DESIGN**

- Access Control (M)
- IDS (M)
- VSS (H)

**Example Spaces:**

- General administration building circulation and public-facing lobby

**At the boundary of Private Spaces and Building**

**BUILDING DESIGN**

- Laminated Glass - Interior (M)

**TECHNOLOGY DESIGN**

- Access Control (M)
- IDS (M)
- VSS (H)

**Example Spaces:**

- Boundary of specific office areas or administrative functions with access restricted to certain roles or individuals.

**Within Private Spaces and Buildings**

**BUILDING DESIGN**

- Laminated Glass - Interior (M)
- Non-Flammable Materials (L)

**TECHNOLOGY DESIGN**

- Access Control (M)
- IDS (M)
- VSS (H)

**Example Spaces:**

- Office areas or administrative functions with access restricted to certain roles or individuals.

**Within Protected Assets**

**SPECIAL CONSIDERATIONS**

- Consult your University Representative

# 2. Administration

## 2.1 TECHNOLOGY

### 2.1.1 Access Control (M)

- Design for Card Access at Main Access / Egress Points (front and back entrance, loading docks).
  - Loading Docks
    - Provide card access with video intercom at perimeter doors.
    - Provide an additional second layer of security egress point interior from the loading dock external doors which may be left open for extended periods of time.
- Provide Second Layer of Access Control (second card access point) at entrance to following locations if present in building:
  - Areas where controlled substances (e.g. hazardous chemicals, radioactive sources, etc.), items of historical or cultural significance, items of significant theft potential (e.g., concealable, portable items of high value) are held (e.g. audio visual control rooms).
  - Areas where student access is restricted (e.g. specialized labs, critical infrastructure within academic settings, etc.).
- Access control for second layer of security may use additional card reader for central access control system or alternative if required by the project (e.g. number pad / keypad, local ID card reader, lock and key, etc.).
- Provide manual measures to enable Shelter-in-Place or Lockdown of individual classrooms or low-occupancy rooms via door hardware only. (Non-networked, e.g. dead bolt or mortice lock).

### 2.1.2 Intrusion Detection System (M)

- Design for forced door or held-open door alarm capability for all doors that are on access control.
  - Equip all exterior doors with status monitoring via door contacts and with optional request-to-exit.
  - Emergency egress only doors should be monitored and provided with local audible alarm for held-open door (e.g. stairwells).
  - Second layer of security should be monitored and provided with local audible forced door and held-open door alarm.
- Provide a specific audible alarm for unauthorized access to spaces containing high-value assets (e.g., art pieces, historically significant items, controlled substances).

### 2.1.3 Video Surveillance (H)

- Provide a level of surveillance coverage at Access / Egress Points:
  - Identify level coverage across threshold (100% extents), resolution of 100ppf.
  - Observe level coverage to exterior of building.
- Provide a level of surveillance coverage in areas to congregate and in areas with high value items or collection points:
  - Observe level coverage across full area (100% extents).
  - Resolution of 40ppf minimum.
- Provide a level of surveillance coverage for buildings that include areas of Second Line of Access Control (due to labs, critical infrastructure, restricted areas, etc.):
  - Observe level coverage around full perimeter (100% of immediate perimeter).
  - Resolution of 40ppf.
- For Areas where Second Layer of Access Control is required, evaluate treating the same as Access / Egress Point.

## 2. Administration continued

### 2.2 BUILDING

#### 2.2.1 Controlling Access to Vantage Points (L)

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.

#### 2.2.2 Forced Entry Hardening - Building Fabric (M)

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. At a minimum, materials should meet ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.

#### 2.2.3 HVAC - Air Intake Placement (M)

- Air intakes are to be placed at elevated locations away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building. In situations where the intake cannot be elevated, conceal below ground level and have lockable steel grating.

#### 2.2.4 Specification of laminated glass (M)

- Exterior glazing at ground-level shall have a UL 972 burglary resistant rating.
- Interior glazing that provides a view into high occupancy spaces shall be laminated.

#### 2.2.5 Specification of Non-Flammable materials (L)

- Use noncombustible materials and finishes appropriate to maintain the style of the facility.
- Consider the use of integrated (immovable), noncombustible furnishings.

### 2.3 SITE

#### 2.3.1 Emergency Blue Phones (L)

- Locate an Emergency Blue Phone within line-of-sight of the main entrance of the building.
- Locate Emergency Blue Phones generally along path or sidewalk at a distance not exceeding 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

#### 2.3.2 Enforced Standoff (M)

- Seek to move or locate all parking and vehicle circulation 50' or more away from the building, with particular attention to accommodate routes of pedestrian travel.
- Eliminate parking for unknown vehicles (e.g. general public) within 50' of the building.
- Eliminate parking and vehicle circulation immediately adjacent to the building for all vehicles.
- Where parking and/or vehicle circulation is allowed near the building, use signage, paving styles or materials, a defined circulation layout, and other means to discourage unauthorized access.
- Consider the use of parking barriers and access control for vehicles requiring access close to the building.

#### 2.3.3 Fences / Walls (N/A)

- Not applicable.

## 2. Administration continued

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### 2.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (L)

- Design to deter hostile vehicle access via street furniture, landscaping, and measures that are not impact tested or rated. Placement of measures does not need to form a full perimeter around the space, but instead should be focused on protecting likely pedestrian routes and potential interaction points between vehicles and pedestrians.

### 2.3.5 Hostile Vehicle Mitigation (HVM) (Temporary) (L)

- Provide movable fence structures and similar obstacles around main gathering area, providing deterrent from vehicle attack. Deployment should focus on access and egress points and predictably crowded spaces. A gap should be provided between crowded Areas and the measures.

### 2.3.6 Traffic Calming (M)

- Divide pedestrian and vehicular traffic. Provide measures to slow vehicles on roads such as speed bumps, landscaped islands, expanded crossing areas, appropriate signage, etc.

# Residential Building Typical Zoning

## 1. UCONN CAMPUS PUBLIC SPACES

## 2. SEMI-PUBLIC SPACES & BUILDINGS

## 3. PRIVATE SPACES & BUILDINGS

### Within UConn Campus Public Spaces

#### CAMPUS-WIDE SECURITY DESIGN INITIATIVES

- Emergency Blue Phone (L)
- Enforced Standoff (L)
- HVM (L)

#### Example Spaces:

- Landscaped and circulation area outside new residential building

### At the boundary of Semi-Public Spaces and Buildings

#### BUILDING DESIGN

- Building Fabric (L)
- Laminated Glass - Exterior (L)
- Air intake placement (M)
- Controlling Access to Vantage Points (L)

#### TECHNOLOGY DESIGN

- Access Control (L)
- IDS (L)
- VSS (M)

#### Example Spaces:

- Boundary of residential building

### Within Semi-Public Spaces and Buildings

#### BUILDING DESIGN

- Non-Flammable Materials (B)

#### TECHNOLOGY DESIGN

- Access Control (L)
- IDS (L)
- VSS (M)

#### Example Spaces:

- Common entrance lobby or circulation space

### At the boundary of Private Spaces and Building

#### TECHNOLOGY DESIGN

- Access Control (L)
- IDS (L)

#### Example Spaces:

- Entrance from common and visitor areas to circulation leading to resident personal spaces

### Within Private Spaces and Buildings

- Residential spaces locked per residential requirements; no exceptional security design requirements.

#### Example Spaces:

- Resident spaces and associated circulation areas.

## 3.1 TECHNOLOGY

### 3.1.1 Access Control (L)

- Design for card Access at Main Access / Egress Points.
- Evaluate the benefit of a second layer of Access Control / Card Access Point at entrance from common and visitor areas into circulation leading to resident personal spaces.

### 3.1.2 Intrusion Detection System (L)

- Design for forced door or held-open door alarm capability for doors on access control.
- Emergency egress only doors should be monitored and provided with local audible alarm for held-open door (e.g. stairwells).
- Second layer of security should be monitored with allowance for future capability for local audible forced door and held-open door alarm.

### 3.1.3 Video Surveillance (M)

- Provide coverage at Main Access / Egress Points:
  - Identify level coverage across threshold (100% extents), resolution of 100ppf.
  - Observe level coverage to exterior of building.
- Provide coverage at entrance to elevators on each floor:
  - Observe level coverage across main thoroughfares/lobbies specific to the elevator entry/exit (75% extents).
  - Resolution of 40ppf minimum.
  - No coverage in private and sensitive areas.

## 3.2 BUILDING

### 3.2.1 Controlling Access to Vantage Points (L)

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.

### 3.2.2 Forced Entry Hardening – Building Fabric (L)

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. Consider the use of ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.

### 3.2.3 HVAC – Air Intake Placement (M)

- Air intakes are to be placed at elevated locations away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building. In situations where the intake cannot be elevated, conceal below ground and have lockable steel grating.

### 3.2.4 Specification of laminated glass (L)

- Exterior glazing at ground-level shall have a UL 972 burglary resistant rating.

### 3.2.5 Specification of Non-Flammable materials (B)

- Consider the use of integrated (immovable), noncombustible furnishings in common areas.

# 3. Residential continued

## 3.3 SITE

### 3.3.1 Emergency Blue Phones (L)

- Locate an Emergency Blue Phone within line-of-sight of the main entrance of the building.
- Locate Emergency Blue Phones generally along path or sidewalk at a distance not exceeding 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

### 3.3.2 Enforced Standoff (L)

- Seek to move or locate all parking and vehicle circulation 30' or more away from the building, with particular attention to accommodate routes of pedestrian travel.
- Eliminate parking for unknown vehicles (e.g. general public) within 20' of the building. Consider the designation of separate residents' and visitors' parking areas with credentialed use of residents' spaces.
- Eliminate parking within 10' of the building for all vehicles. Enforce this via landscaping and road layout design.
- Where parking and/or vehicle circulation is allowed near the building, signage should discourage unauthorized access.

### 3.3.3 Fences / Walls (N/A)

- Not applicable.

### 3.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (L)

- Design to deter hostile vehicle access via street furniture, landscaping, and measures that are not impact tested or rated. Placement of measures does not need to form a full perimeter around the space, but instead should be focused on protecting likely pedestrian routes and potential interaction points between vehicles and pedestrians.

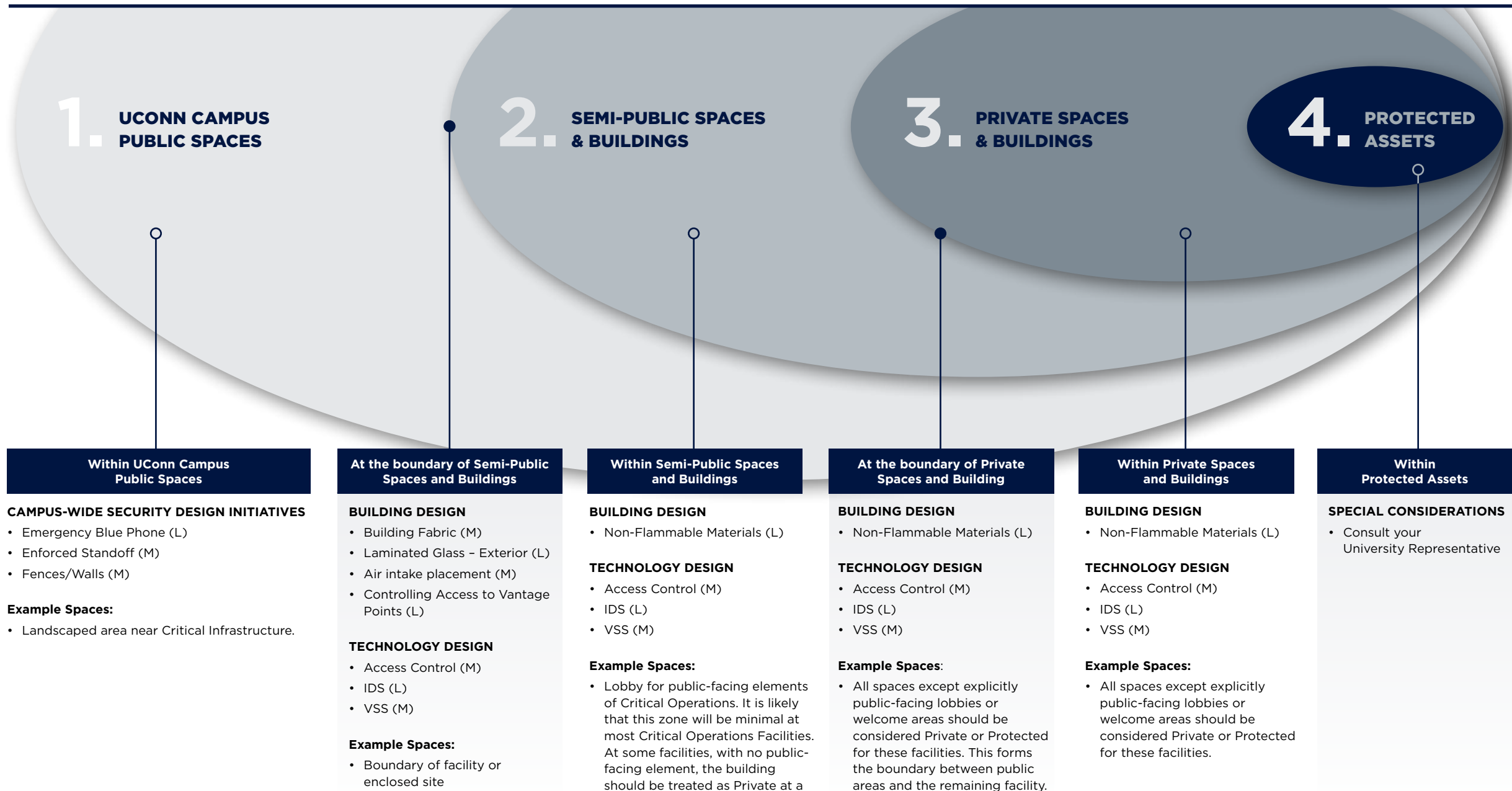
### 3.3.5 Hostile Vehicle Mitigation (HVM) (Temporary) (N/A)

- Not applicable.

### 3.3.6 Traffic Calming (N/A)

- Not applicable.

# Critical Operations Facility Typical Zoning





# 4. Critical Operations

## 4.1 TECHNOLOGY

### 4.1.1 Access Control (M)

- Design for Card Access at Main Access / Egress Points (front and back entrance, loading docks).
  - Loading Docks
    - Provide card access with video intercom at perimeter doors.
    - Provide an additional second layer of security egress point interior from the loading dock external doors which may be left open for extended periods of time.
- Provide Second Layer of Access Control (second card access point) at entrance to following locations if present in building:
  - Areas where controlled substances (e.g. hazardous chemicals), items of significant theft potential (e.g., concealable, portable items of high value) are held.
  - Areas where student and/or staff access is restricted (e.g., specialized labs, critical infrastructure control and/or equipment areas, etc.).
  - Access control for second layer of security may use additional card reader for central access control system or alternative if required by the project (e.g. number pad / keypad, local ID card reader, lock and key, etc.).
- Provide manual measures to enable Shelter-in-Place or Lockdown of individual offices or low-occupancy rooms via door hardware only. (Non-networked, e.g., dead bolt or mortice lock).

### 4.1.2 Intrusion Detection System (L)

- Design for forced door or held-open door alarm capability for doors on access control.
  - Emergency egress only doors should have the capability to be monitored with local audible alarm for held-open door (e.g. stairwells).
  - Second layer of security should be monitored with local audible forced door and held-open door alarm.

### 4.1.3 Video Surveillance (M)

- Provide a level of surveillance coverage at Access / Egress Points:
  - Identify level coverage across threshold (100% extents), resolution of 100ppf.
  - Observe level coverage to exterior of building.
- Provide a level of surveillance coverage in main circulation areas and areas to congregate:
  - Observe level coverage across main thoroughfares (75% extents).
  - Resolution of 40ppf minimum.
- For Areas where Second Layer of Access Control is required, evaluate treating the same as Access / Egress Point.

## 4.2 BUILDING

### 4.2.1 Controlling Access to Vantage Points (L)

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.

### 4.2.2 Forced Entry Hardening – Building Fabric (M)

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. At a minimum, materials should meet ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.

### 4.2.3 HVAC – Air Intake Placement (L)

- Air intakes are to be located according to building functional requirements and away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building.
  - Consider concealment and/or elevation of air intakes taking into account building function.

# 4. Critical Operations continued

## 4.2.4 Specification of laminated glass (L)

- Exterior glazing at ground-level shall have a UL 972 burglary resistant rating.

## 4.2.5 Specification of Non-Flammable materials (B)

- Consider the use of integrated (immovable), noncombustible furnishings in common areas.

## 4.3 SITE

### 4.3.1 Emergency Blue Phones (L)

- Locate Emergency Blue Phones generally along path or sidewalk at a distance not exceeding 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

### 4.3.2 Enforced Standoff (M)

- Design to locate all parking and vehicle circulation 50' or more away from the building, with particular attention to accommodate routes of pedestrian travel.
- Eliminate parking for unknown vehicles (e.g. general public) within 50' of the building.
- Eliminate parking and vehicle circulation immediately adjacent to the building for all vehicles.
- Where parking and/or vehicle circulation is allowed near the building, use signage, paving styles or materials, a defined circulation layout, and other means to discourage unauthorized access.
- Consider the use of parking barriers and access control for vehicles requiring access close to the building.

### 4.3.3 Fences / Walls (M)

- Incorporate architectural pedestrian fence or low wall; no anti-climb rating or measures are required.

### 4.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (M)

- Design for vehicle interdiction with landscaping as a HVM solution. The proposed mitigation may or may not be impact-rated or tested.
- For new buildings, consider raising the first floor above grade in order to avoid vehicle access.
- Design to deter hostile vehicle access via street furniture, landscaping, and untested measures. Seek to create a continuous line of mitigation measures that discourage hostile vehicle access with gaps minimized while considering project access requirements.
- Consider products or mitigation solutions such as: bollards, berms, planters, swales, adapted signage and wayfinding elements, topography and level changes (e.g. retaining walls, steps), seating / benches, etc.

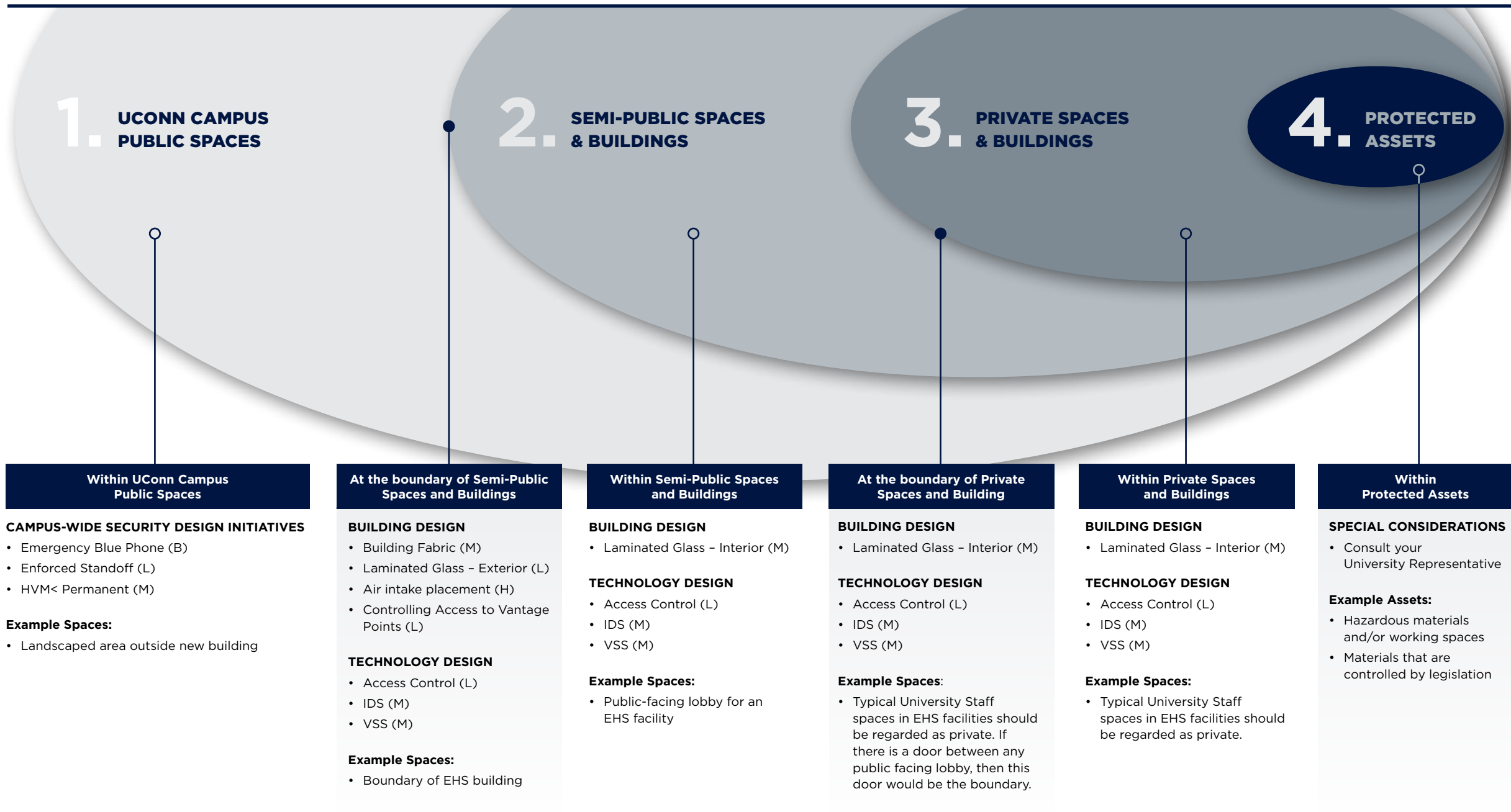
### 4.3.5 Hostile Vehicle Mitigation (HVM) (Temporary) (N/A)

- Not applicable.

### 4.3.6 Traffic Calming (N/A)

- Not applicable.

# Environmental, Health & Safety Facility Typical Zoning



**Within UConn Campus Public Spaces**

**CAMPUS-WIDE SECURITY DESIGN INITIATIVES**

- Emergency Blue Phone (B)
- Enforced Standoff (L)
- HVM< Permanent (M)

**Example Spaces:**

- Landscaped area outside new building

**At the boundary of Semi-Public Spaces and Buildings**

**BUILDING DESIGN**

- Building Fabric (M)
- Laminated Glass - Exterior (L)
- Air intake placement (H)
- Controlling Access to Vantage Points (L)

**TECHNOLOGY DESIGN**

- Access Control (L)
- IDS (M)
- VSS (M)

**Example Spaces:**

- Boundary of EHS building

**Within Semi-Public Spaces and Buildings**

**BUILDING DESIGN**

- Laminated Glass - Interior (M)

**TECHNOLOGY DESIGN**

- Access Control (L)
- IDS (M)
- VSS (M)

**Example Spaces:**

- Public-facing lobby for an EHS facility

**At the boundary of Private Spaces and Building**

**BUILDING DESIGN**

- Laminated Glass - Interior (M)

**TECHNOLOGY DESIGN**

- Access Control (L)
- IDS (M)
- VSS (M)

**Example Spaces:**

- Typical University Staff spaces in EHS facilities should be regarded as private. If there is a door between any public facing lobby, then this door would be the boundary.

**Within Private Spaces and Buildings**

**BUILDING DESIGN**

- Laminated Glass - Interior (M)

**TECHNOLOGY DESIGN**

- Access Control (L)
- IDS (M)
- VSS (M)

**Example Spaces:**

- Typical University Staff spaces in EHS facilities should be regarded as private.

**Within Protected Assets**

**SPECIAL CONSIDERATIONS**

- Consult your University Representative

**Example Assets:**

- Hazardous materials and/or working spaces
- Materials that are controlled by legislation

# 5. Environment / Health, & Safety

## 5.1 TECHNOLOGY

### 5.1.1 Access Control (L)

- Design for Card Access at Main Access / Egress Points (front and back entrance, loading docks).
  - Loading Docks
    - Provide card access with video intercom at perimeter doors.
    - Provide an additional second layer of security egress point interior from the loading dock external doors which may be left open for extended periods of time.
- Provide Second Layer of Access Control (second card access point) at entrance to following locations if present in building:
  - Areas where controlled substances (e.g. hazardous chemicals, radioactive sources, etc.), items of historical or cultural significance, items of significant theft potential (e.g., concealable, portable items of high value) are held (e.g. audio visual control rooms).
  - Areas where student and/or staff access is restricted (e.g. specialized labs, critical infrastructure within academic settings, etc.).
  - Access control for second layer of security may use additional card reader for central access control system or alternative if required by the project (e.g. number pad / keypad, local ID card reader, lock and key, etc.).

### 5.1.2 Intrusion Detection System (M)

- Design for forced door or held-open door alarm capability for all doors that are on access control.
  - Equip all exterior doors with status monitoring via door contacts and with optional request-to-exit.
  - Emergency egress only doors should be monitored and provided with local audible alarm for held-open door (e.g. stairwells).
  - Second layer of security should be monitored and provided with local audible forced door and held-open door alarm.
- Provide an audible alarm for forced or held-open condition on any door that provides access into spaces and/or facilities that hold restricted substances. Provide the local capability to silence the alarm by persons with the correct credentials (e.g. via keypad or card swipe).

### 5.1.3 Video Surveillance (M)

- Provide a level of surveillance coverage at Access / Egress Points:
  - Identify level coverage across threshold (100% extents), resolution of 100ppf.
  - Observe level coverage to exterior of building.
- Provide a level of surveillance coverage in main circulation areas and areas to congregate:
  - Observe level coverage across main thoroughfares (75% extents).
  - Resolution of 40ppf minimum.
- For Areas where Second Layer of Access Control is required, evaluate treating the same as Access / Egress Point.

# 5. Environment / Health, & Safety continued

## 5.2 BUILDING

### 5.2.1 Controlling Access to Vantage Points (L)

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.

### 5.2.2 Forced Entry Hardening – Building Fabric (M)

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. At a minimum, materials should meet ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.

### 5.2.3 HVAC – Air Intake Placement (H)

- Air intakes are to be placed at elevated locations away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building.
- In situations where the intake cannot be elevated, conceal below ground and have lockable steel grating.

### 5.2.4 Specification of laminated glass (M)

- Exterior glazing at ground-level shall have a UL 972 burglary resistant rating.
- Interior glazing that provides a view into high occupancy spaces shall be laminated.

### 5.2.5 Specification of Non-Flammable materials (N/A)

- Not applicable.

## 5.3 SITE

### 5.3.1 Emergency Blue Phones (B)

- Locate along path or sidewalk, no more than 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

### 5.3.2 Enforced Standoff (L)

- Design seeking to locate all parking and vehicle circulation 30' or more away from the building.
- Eliminate parking for unknown vehicles (e.g. general public) within 20' of the building. Consider the designation of separate staff and visitors' parking areas.
- Eliminate parking within 10' of the building for all vehicles. Enforce this via landscaping and road layout design.
- Where parking and/or vehicle circulation is allowed near the building, signage should discourage unauthorized access.

### 5.3.3 Fences / Walls (N/A)

- Not applicable.

### 5.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (M)

- Design for vehicle interdiction with landscaping as a HVM solution. The proposed mitigation may or may not be impact-rated or tested.
- For new buildings, consider raising the first floor above grade in order to avoid vehicle access.
- Design to deter hostile vehicle access via street furniture, landscaping, and untested measures. Seek to create a continuous line of mitigation measures that discourage hostile vehicle access with gaps minimized while considering project access requirements.

# 5. Environment / Health, & Safety continued

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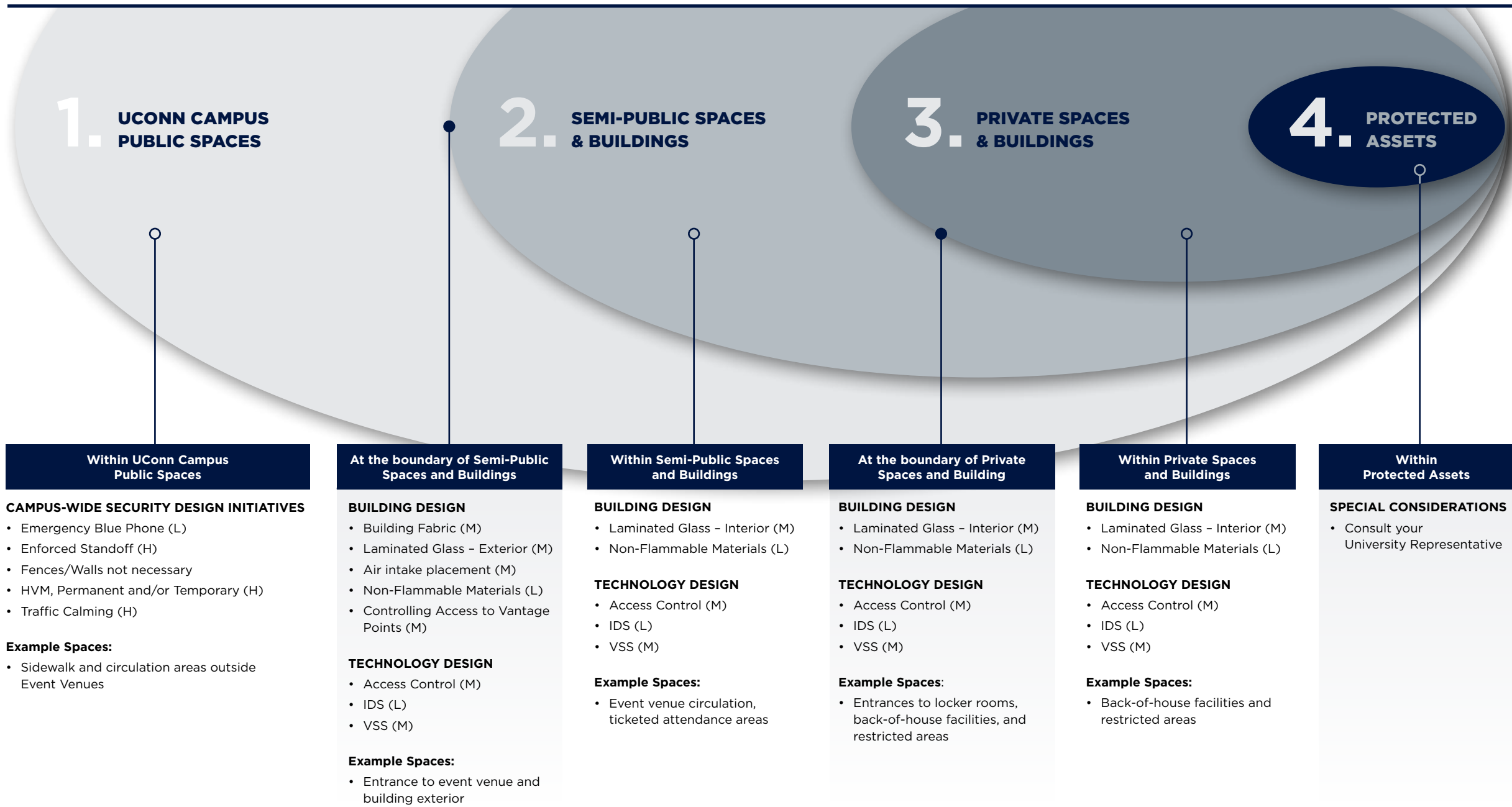
## 5.3.5 Hostile Vehicle Mitigation (HVM) (Temporary)

- Not applicable.

## 5.3.6 Traffic Calming (N/A)

- Not applicable.

# Event Space Typical Zoning



**Within UConn Campus Public Spaces**

- CAMPUS-WIDE SECURITY DESIGN INITIATIVES**
- Emergency Blue Phone (L)
  - Enforced Standoff (H)
  - Fences/Walls not necessary
  - HVM, Permanent and/or Temporary (H)
  - Traffic Calming (H)
- Example Spaces:**
- Sidewalk and circulation areas outside Event Venues

**At the boundary of Semi-Public Spaces and Buildings**

- BUILDING DESIGN**
- Building Fabric (M)
  - Laminated Glass - Exterior (M)
  - Air intake placement (M)
  - Non-Flammable Materials (L)
  - Controlling Access to Vantage Points (M)
- TECHNOLOGY DESIGN**
- Access Control (M)
  - IDS (L)
  - VSS (M)
- Example Spaces:**
- Entrance to event venue and building exterior

**Within Semi-Public Spaces and Buildings**

- BUILDING DESIGN**
- Laminated Glass - Interior (M)
  - Non-Flammable Materials (L)
- TECHNOLOGY DESIGN**
- Access Control (M)
  - IDS (L)
  - VSS (M)
- Example Spaces:**
- Event venue circulation, ticketed attendance areas

**At the boundary of Private Spaces and Building**

- BUILDING DESIGN**
- Laminated Glass - Interior (M)
  - Non-Flammable Materials (L)
- TECHNOLOGY DESIGN**
- Access Control (M)
  - IDS (L)
  - VSS (M)
- Example Spaces:**
- Entrances to locker rooms, back-of-house facilities, and restricted areas

**Within Private Spaces and Buildings**

- BUILDING DESIGN**
- Laminated Glass - Interior (M)
  - Non-Flammable Materials (L)
- TECHNOLOGY DESIGN**
- Access Control (M)
  - IDS (L)
  - VSS (M)
- Example Spaces:**
- Back-of-house facilities and restricted areas

**Within Protected Assets**

- SPECIAL CONSIDERATIONS**
- Consult your University Representative

# 6. Event Spaces and Venues

## 6.1 TECHNOLOGY

### 6.1.1 Access Control (M)

- Design for Card Access at Main Access / Egress Points (front and back entrance, loading docks).
  - Loading Docks
    - Provide card access with video intercom at perimeter doors.
    - Provide an additional second layer of security egress point interior from the loading dock external doors which may be left open for extended periods of time.
- Provide Second Layer of Access Control (second card access point) at entrance to following locations if present in building:
  - Areas where controlled substances (e.g. hazardous chemicals, radioactive sources, etc.), items of historical or cultural significance, items of significant theft potential (e.g., concealable, portable items of high value) are held (e.g. audio visual control rooms).
  - Areas where student access is restricted (e.g. specialized labs, critical infrastructure within academic settings, etc.).
  - Access control for second layer of security may use additional card reader for central access control system or alternative if required by the project (e.g. number pad / keypad, local ID card reader, lock and key, etc.).
- Provide manual measures to enable Shelter-in-Place or Lockdown of individual classrooms or low-occupancy rooms via door hardware only. (Non-networked, e.g. dead bolt or mortice lock).

- For ticketed or attendance-managed events:
  - Coordinate screening/security at access points with event requirements from UConn Police Department and/or University Safety. These may include walk through metal detectors, hand-held metal detectors, bag restrictions, etc. facilitated by Event Security or UConn PD.
  - Provide infrastructure and facilities to support additional security presence if required by UConn PD and/or Event Security.

### 6.1.2 Intrusion Detection System (L)

- Design for forced door or held-open door alarm capability for all doors that are on access control.

### 6.1.3 Video Surveillance (M)

- Provide a level of surveillance coverage at Access / Egress Points:
  - Identify level coverage across threshold (100% extents), resolution of 100ppf.
  - Observe level coverage to exterior of building.
- Provide a level of surveillance coverage in main circulation areas and areas to congregate:
  - Observe level coverage across main thoroughfares (75% extents).
  - Resolution of 40ppf minimum.
  - For Areas where Second Layer of Access Control is required, evaluate treating the same as Access / Egress Point.



# 6. Event Spaces and Venues continued

## 6.2 BUILDING

### 6.2.1 Controlling Access to Vantage Points (M)

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.
- Provide monitoring contact to confirm closed position for roof access doors and a standalone audible alarm for held-open access to roof.

### 6.2.2 Forced Entry Hardening – Building Fabric (M)

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. At a minimum, materials should meet ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.

### 6.2.3 HVAC – Air Intake Placement (M)

- Air intakes are to be placed at elevated locations away from parking spaces, loading docks, and exhaust fans and from the visible perimeter of the building. In situations where the intake cannot be elevated, conceal below ground and have lockable steel grating.

### 6.2.4 Specification of laminated glass (M)

- Exterior glazing at ground-level shall have a UL 972 burglary resistant rating.
- Interior glazing that provides a view into high occupancy spaces, shall be laminated.

### 6.2.5 Specification of Non-Flammable materials (L)

- Use noncombustible materials and finishes appropriate to maintain the style of the facility.
- Consider the use of integrated (immovable), noncombustible furnishings.

## 6.3 SITE

### 6.3.1 Emergency Blue Phones (L)

- Locate Emergency Blue Phones generally along paths or sidewalks at a distance not exceeding 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

### 6.3.2 Enforced Standoff (H)

*The following apply during event times; however, they may have permanent features or infrastructure required to achieve the design goal.*

- Design to locate all parking and unscreened vehicle circulation 100' or more away from the building, with particular attention to accommodate routes of pedestrian travel.
- Eliminate parking for unknown/unscreened vehicles (e.g. general public) within 100' of the building.
- Eliminate parking and vehicle circulation immediately adjacent to the building for all vehicles except emergency vehicles and vehicles critical to the operation of the event.
- Use temporary checkpoints or screening operations in order to enforce road closures and/or traffic redirections.

### 6.3.3 Fences / Walls (N/A)

- Not applicable.

# 6. Event Spaces and Venues continued

## 6.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (H)

- Design for vehicle interdiction with HVM solutions and/or landscaping features that are impact-rated according to ASTM F2656 or equivalent international standard (e.g. IWA 14:2013 or PAS 68) or engineered to provide equivalent performance to these standards.
- The layout of the HVM measures should create a continuous perimeter around vulnerable parts of the event space, such as areas where crowds gather for ingress / egress, areas of extensive glazing, etc.
- For new buildings, consider raising the first floor above grade in order to avoid vehicle access.
- Consider products or mitigation solutions such as: bollards, berms, planters, swales, adapted signage and wayfinding elements, topography and level changes (e.g. retaining walls, steps), seating / benches, etc.

## 6.3.5 Hostile Vehicle Mitigation (HVM) (Temporary) (H)

- Provide HVM measures that seek to create a continuous anti-vehicle perimeter around vulnerable parts of the event space, such as areas where crowds gather for ingress / egress, areas of large, seated crowds, or critical back-of-house and/or operations spaces.
  - The measures can be combined with temporary fencing or hoarding for ticketed / managed events.
  - The temporary HVM measures should be deployable HVM products or other measures that are either impact-rated and/or assessed by a qualified professional for performance against a hostile vehicle attack.
  - The HVM measures should be impact tested according to ASTM F2656 or equivalent international standard (e.g. IWA 14:2013, etc.).

## 6.3.6 Traffic Calming (H)

- Divide pedestrian and vehicular traffic. Provide measures to slow vehicles on roads such as speed bumps, landscaped islands, expanded crossing areas, appropriate signage, etc.
- Use strategies to provide defensive zones for pedestrian crossing, such as islands with waiting areas, expanded curb waiting areas at crossings, etc.
- Use chicanes or other redirection and narrowing of lanes to slow traffic before it arrives near the Event venue.

# Outdoor Gathering Area Typical Zoning

## 1. UCONN CAMPUS PUBLIC SPACES

## 2. SEMI-PUBLIC SPACES & BUILDINGS

### Within UConn Campus Public Spaces

#### CAMPUS-WIDE SECURITY DESIGN INITIATIVES

- Emergency Blue Phone (L)
- Enforced Standoff (H)
- Fences/Walls recommended for ticketed events
- HVM, Permanent and/or Temporary (H)
- Traffic Calming (H)

#### Example Spaces:

- Student Union Mall

### At the Boundary of Public Gathering Spaces

#### BUILDING DESIGN

- Controlling Access to Vantage Points (H) (for buildings adjacent to Gathering Areas)

#### TECHNOLOGY DESIGN

- Access Control (H) for ticketed events
- IDS (L)
- VSS (H)

#### Example Spaces:

- Entrance to the Student Union Mall

### Within Semi-Public Spaces and Buildings

#### Example Spaces:

- Ticketed, Outdoor Events at the University

# 7. Outdoor Gathering

## 7.1 TECHNOLOGY

### 7.1.1 Access Control (H)

- For ticketed or attendance-managed events:
  - Limit the number of access / egress points.
  - Keep access / egress points away from areas where crowds are anticipated to gather.
  - Where possible, provide measures to prevent direct line-of-sight from screening locations to the location of main crowd via location or alignment of screening areas and/or via hoarding/fencing (whether temporary or permanent).
  - Coordinate screening and security at access points with event requirements from UConn Police Department (PD) and/or University Safety. These may include walk through metal detectors, hand-held metal detectors, bag restrictions, etc. facilitated by Event Security or UConn PD.
  - Provide infrastructure and facilities to support additional security presence if required by UConn PD and/or Event Security.

### 7.1.2 Intrusion Detection System (L)

- For outdoor venues with permanent buildings or facilities, design for forced door or held-open door alarm capability for all doors that are on access control.

### 7.1.3 Video Surveillance (H)

- Provide a level of surveillance coverage at main circulation points into and out of the gathering area (e.g. natural choke point between two buildings on a quad):
  - Observe level coverage across typical main ingress and egress routes, resolution of 40ppf.
- Provide a level of surveillance coverage in the main gathering area:
  - Detect level coverage across full gathering area, which should be achieved by cameras that are located either on standalone poles or on neighboring buildings or infrastructure.
  - Resolution of 20ppf minimum.

## 7.2 BUILDING

### 7.2.1 Controlling Access to Vantage Points (H)

- For Buildings at or adjacent to Outdoor Gathering Areas, provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.
- Provide monitoring contact to confirm closed position for roof access doors and a standalone audible alarm for held-open access to roof.

### 7.2.2 Forced Entry Hardening – Building Fabric (N/A)

- Not applicable.

### 7.2.3 HVAC – Air Intake Placement (N/A)

- Not applicable.

### 7.2.4 Specification of laminated glass (N/A)

- Not applicable.

### 7.2.5 Specification of Non-Flammable materials (N/A)

- Not applicable.

# 7. Outdoor Gathering continued

## 7.3 SITE

### 7.3.1 Emergency Blue Phones (L)

- For areas used for organized events, ensure that an Emergency Blue Phone is within line-of-sight of the main access routes to the area.
- Locate Emergency Blue Phones generally along paths or sidewalks at a distance not exceeding 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

### 7.3.2 Enforced Standoff (H)

- In general, seek to provide 100' of standoff from crowded outdoor gathering areas from busy vehicle circulation routes and parking.
- The following apply during organized outdoor event times; however, they may have permanent features or infrastructure required to achieve the design goal.
  - Locate all parking and unscreened vehicle circulation 100' or more away from the gathering space, with particular attention to accommodate routes of pedestrian travel. Enforce this with HVM, whether permanent or temporary.
  - Eliminate parking for unknown/unscreened vehicles (e.g. general public) within 100' of the gathering space.
  - Eliminate parking and vehicle circulation immediately adjacent to the gathering space for all vehicles except emergency vehicles and vehicles critical to the operation of the event.
  - Use temporary checkpoints or screening operations in order to enforce road closures and/or traffic redirections.

### 7.3.3 Fences / Walls (H)

- For ticketed / managed events:
  - Outdoor Gatherings should be provided with a 6' tall (minimum) anti-pedestrian fence that does not include anti-climb features (e.g. topping). Consider using a taller (8' or more) fence or walls for permanent outdoor gathering spaces that enclose ticketed venues.
  - Seek to eliminate gaps that would allow unauthorized access, paying close attention to the interface with other buildings/assets/infrastructure.
  - Limit the number of access and egress points and align their location with emergency services / event planning.

### 7.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (H)

- Design for vehicle interdiction with HVM solutions and/or landscaping features that are impact-rated according to ASTM F2656 or equivalent international standard (e.g. IWA 14:2013 or PAS 68) or engineered to provide equivalent performance to these standards.
- The layout of the HVM measures should seek to create a continuous perimeter around vulnerable parts of the event space, such as areas where crowds gather or areas of ingress and egress.
- Consider products or mitigation solutions such as: bollards, berms, planters, swales, adapted signage and wayfinding elements, topography and level changes (e.g. retaining walls, steps), seating / benches, etc.

# 7. Outdoor Gathering continued

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## 7.3.5 Hostile Vehicle Mitigation (HVM) (Temporary) (H)

- For events that create a more vulnerable setting for crowds at Outdoor Gathering areas, provide temporary HVM measures that seek to create a continuous anti-vehicle perimeter around vulnerable parts of the event space, such as areas where crowds gather for ingress / egress, areas of large, seated crowds, or critical back-of-house and/or operations spaces.
- The measures can be combined with temporary fencing or hoarding for ticketed / managed events.
- The temporary HVM measures should be deployable HVM products or other measures that are either impact-rated and/or assessed by a qualified professional for performance against a hostile vehicle attack.
- The HVM measures should be impact tested according to ASTM F2656 or equivalent international standard (e.g. IWA 14:2013, etc.).

## 7.3.6 Traffic Calming (H)

- Divide pedestrian and vehicular traffic. Provide measures to slow vehicles on roads such as speed bumps, landscaped islands, expanded crossing areas, appropriate signage, etc.
- Use strategies to provide defensive zones for pedestrian crossing, such as islands with waiting areas, expanded curb waiting areas at crossings, etc.
- Use chicanes or other redirection and narrowing of lanes to slow traffic before it arrives near the gathering area. These may be augmented by temporary versions of the same features (e.g. funneling) as needed for events.

# Landscape and Other Outdoor Typical Zoning

## 1. UCONN CAMPUS PUBLIC SPACES

Within UConn Campus  
Public Spaces

### CAMPUS-WIDE SECURITY DESIGN INITIATIVES

- Emergency Blue Phone (L)
- Enforced Standoff (L)
- Fences/Walls not necessary
- HVM, Permanent (M)
- Traffic Calming (M)

### BUILDING DESIGN

- Controlling Access to Vantage Points (L)

### TECHNOLOGY DESIGN:

- VSS (L)

# 8. Landscaped and Other Outdoor Areas

## 8.1 TECHNOLOGY

### 8.1.1 Access Control (N/A)

- Not applicable.

### 8.1.2 Intrusion Detection System (N/A)

- Not applicable.

### 8.1.3 Video Surveillance (L)

- Provide a level of surveillance coverage at main thoroughfares throughout the Storrs campus where it can be achieved through the pragmatic use of existing camera mounting locations, such as existing buildings:
  - Detect level coverage at routes of primary pedestrian and vehicular travel.
  - Resolution of 20ppf minimum.

## 8.2 BUILDING

### 8.2.1 Controlling Access to Vantage Points (L)

- For buildings in this context, provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.

### 8.2.2 Forced Entry Hardening – Building Fabric (N/A)

- Not applicable.

### 8.2.3 HVAC – Air Intake Placement (N/A)

- Not applicable.

### 8.2.4 Specification of laminated glass (N/A)

- Not applicable.

### 8.2.5 Specification of Non-Flammable materials (L)

- Evaluate the opportunity to use noncombustible materials for street furniture, landscaping features, and structures.
- Consider the use of integrated (immovable), noncombustible outdoor furnishings.

## 8.3 SITE

### 8.3.1 Emergency Blue Phones (B)

- Locate Emergency Blue Phones generally along paths or sidewalks at a distance not exceeding 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

### 8.3.2 Enforced Standoff (L)

- Consider Landscape design to discourage interaction between pedestrian and vehicle traffic.

### 8.3.3 Fences / Walls (N/A)

- Not applicable.

### 8.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (M)

- Design for vehicle interdiction with landscaping as a HVM solution. The proposed mitigation may or may not be impact-rated or tested.
- Design to deter hostile vehicle access via street furniture, landscaping, and untested measures. Seek to create a continuous line of mitigation measures that discourage hostile vehicle access with gaps minimized while considering project access requirements.

### 8.3.5 Hostile Vehicle Mitigation (HVM) (Temporary) (N/A)

- Not applicable.

### 8.3.6 Traffic Calming (M)

- Divide pedestrian and vehicular traffic. Provide measures to slow vehicles on roads such as speed bumps, landscaped islands, expanded crossing areas, appropriate signage, etc.



# Parking Areas Typical Zoning

## 1. UCONN CAMPUS PUBLIC SPACES

## 2. SEMI-PUBLIC SPACES & BUILDINGS

### Within UConn Campus Public Spaces

#### CAMPUS-WIDE SECURITY DESIGN INITIATIVES

- Emergency Blue Phone (L)
- Enforced Standoff (M)
- Fences/Walls not necessary
- HVM (B)
- Traffic Calming (H)

### At the boundary of Semi-Public Spaces and Buildings

#### BUILDING DESIGN

- Building Fabric (L)
- Controlling Access to Vantage Points (L)

#### TECHNOLOGY DESIGN

- Access Control (L)
- VSS (M)

#### Example Spaces:

- Boundary of Parking Area or Parking Structure

### Within Semi-Public Spaces and Buildings

#### TECHNOLOGY DESIGN

- VSS (M)

#### Example Spaces:

- Within parking structure

# 9. Parking

## 9.1 TECHNOLOGY

### 9.1.1 Access Control (L)

- Design for Card Access or Payment / Ticket Registration at Main Access / Egress Points.

### 9.1.2 Intrusion Detection System (N/A)

- Not applicable.

### 9.1.3 Video Surveillance (M)

- Provide a level of surveillance coverage at Access / Egress Points:
  - Identify level coverage across threshold (100% extents), resolution of 100ppf and in access stairwells for parking garages.
  - Observe level coverage to exterior of building (where applicable).
- Provide a level of surveillance coverage in main circulation areas and areas to congregate:
  - Observe level coverage throughout public areas of parking structures (100% extents) and Detect level coverage at external lots.
  - Resolution of 40ppf minimum.

## 9.2 BUILDING

### 9.2.1 Controlling Access to Vantage Points (L)

- Provide physical locks to roof access doors and/or roof access ladders to deter unauthorized use.
- For parking garages that have parking on the upper exterior of the space or where parking exists at an elevated position relative to the surroundings, consider the use of opaque walls or fencing to the external edges of the parking area to restrict views of the surrounding areas.

### 9.2.2 Forced Entry Hardening Building Fabric (L)

- For ground-level opaque elements, use materials that give the impression of strength to discourage opportunistic attempts at intrusion. Consider the use of materials should meet ASTM F 476 Grade 10 forced entry resistance requirements, adapted to suit the element.
- Doors shall meet ASTM F 476 Grade 10 at a minimum.

### 9.2.3 HVAC – Air Intake Placement (N/A)

- Not applicable.

### 9.2.4 Specification of laminated glass (N/A)

- Not applicable.

### 9.2.5 Specification of Non-Flammable materials (N/A)

- Not applicable.

# 9. Parking continued

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## 9.3 SITE

### 9.3.1 Emergency Blue Phones (B)

- Locate Emergency Blue Phones generally along paths or sidewalks at a distance not exceeding 1000' from another Emergency Blue Phone and within line-of-sight of another Emergency Blue Phone.

### 9.3.2 Enforced Standoff (N/A)

- Not applicable.

### 9.3.3 Fences / Walls (M)

- Provide an architectural pedestrian fence or low wall at the building or outdoor lot with no anti-climb rating or similar measures.

### 9.3.4 Hostile Vehicle Mitigation (HVM) (Permanent) (B)

- Consider installation of flexible delineator posts to guide vehicle traffic.
- Evaluate the benefit of bollards at primary pedestrian access points to/from the parking area considering how busy the parking area may be and the likelihood for interactions between vehicles and pedestrians in that area.
- Seek to provide large paths and resting areas for pedestrians to cross vehicle routes safely. If pedestrian routes are adjacent to high-speed vehicle routes, evaluate the benefit from bollards or fencing to discourage interaction between pedestrians and vehicles at locations away from safe crossing points.

### 9.3.5 Hostile Vehicle Mitigation (HVM) (Temporary) (N/A)

- Not applicable.

### 9.3.6 Traffic Calming (N/A)

- Not applicable.



# ATTACHMENT 6










# Buildings Grounds & Environment Committee




June 11, 2024

UConn Health Updates  
Facilities Development & Operations

# BOD / BOT BUDGET RESOLUTIONS






**Budget Resolutions for June BOT/BOD Meeting** - *projects in bold are being submitted to the Boards for the 1<sup>st</sup> time*

-  **CT-7 Inpatient & Research Renovations (Planning \$1,675,000)**
-  **Main Bldg. Lab (L) Area Renovations – 1st Flr (Planning \$11,900,000)**
-  **Surgery Center Operating #6 Renovation (Planning \$1,750,000)**
-  **ASB Data Center Generator and Power Improvements (Planning \$3,150,000)**
-  **IT Disaster Recovery Room (Planning \$1,370,000)**
-  **Parking Lots L1 & A5 Repavement (Design \$1,020,000)**
-  Building F & Building M Roof Replacement (Final \$1,615,000)
-  Cryo Electron Microscope Installation (Final \$TBD)
-  KB034 -036 Research Lab Renovation (Revised Final \$TBD)














**Note:** All projects have a degree of risk, primarily to scope and/or schedule and/or budget. Typically, projects in construction may have a risk to schedule and/or budget. Projects in planning and design may have a risk to scope and/or schedule and/or budget. In this report, the assessment of risk is shown with a green, yellow or red box as follows:  Least Risk  Some Risk  Most Risk




# Summary Project Status – Planning & Design

## Board Projects – Planning phase

-  CT-7 Inpatient & Research Renovations
-  Main Bldg. Lab (L) Area Renovations – 1st Flr
-  Surgery Center Operating #6 Renovation
-  Labor & Delivery Infant Protection System Replacement
-  UT-7 Pharmacy Fit-Out

## Board Projects – Design phase




-  ASB Data Center Generator and Power Improvements
-  Parking Lots L1 & A5 Repavement
-  IT Disaster Recovery Room
-  Building F & Building M Roof Replacement
-  Southington Clinic Expansion
-  Interventional Radiology Equipment Replacement & Renovation
-  Hybrid OR#2 Fit-Out
-  LINAC Unit Replacement
-  Parking Lots L1 & A5 Repavement
-  Outpatient Pavilion 3rd Floor Backfill
-  Outpatient Pavilion X-Ray & Blood Draw Relocation
-  Buildings E & K Roof Replacement
-  16 Munson Rd Emergency Lighting & Egress Upgrades

**Note:** All projects have a degree of risk, primarily to scope and/or schedule and/or budget. Typically, projects in construction may have a risk to schedule and/or budget. Projects in planning and design may have a risk to scope and/or schedule and/or budget. In this report, the assessment of risk is shown with a green, yellow or red box as follows:  Least Risk  Some Risk  Most Risk











# Summary Project Status: Bidding & Construction












## Board Projects – Bidding / Contract phase




-  Garage 1, 2 & 3 Electric Vehicle Charger Installation
-  KB034 -036 Research Lab Renovation
-  Cryo Electron Microscope Installation

## Board Projects – Construction phase

-  Muscular Skeletal Institute Rehabilitation Expansion
-  CG045-047 Anatomic Pathology & Autopsy Renovation
-  CT-7 Med Surg/Observation Unit Renovation
-  Central Sterile Washer & Sterilizer Replacement
-  New England Sickle Cell Institute Renovation
-  TB-121 Blood Bank Relocation
-  CGSB Data Center Cooling Upgrades
-  Fluoroscopy Equipment Replacement & Renovation

## Board Projects – Construction phase - *continued*

-  Muscular Skeletal Institute Chiller Replacement
-  Cadaver Lab Renovation & AHU Replacement
-  Transitional Nursery Renovation
-  Canzonetti (F) Building Wound Care Center Renovation
-  Replace Buildings F & H Hot Water Tanks
-  Main Bldg. Lab (L) Area Renovations – 2nd Flr
-  Cardio Catheterization (Cath) & Electro Physiology (EP) Lab Renovation
-  5 Munson Road Clinical Fit-Out
-  Psychiatry Seclusion Suite & Nurse Station Security Renovation
-  CGSB & ARB Autoclave & Washer Replacement
-  Replace Chilled Water Pump #4

**Note:** All projects have a degree of risk, primarily to scope and/or schedule and/or budget. Typically, projects in construction may have a risk to schedule and/or budget. Projects in planning and design may have a risk to scope and/or schedule and/or budget. In this report, the assessment of risk is shown with a green, yellow or red box as follows:  Least Risk  Some Risk  Most Risk

## Highlighted Project Updates

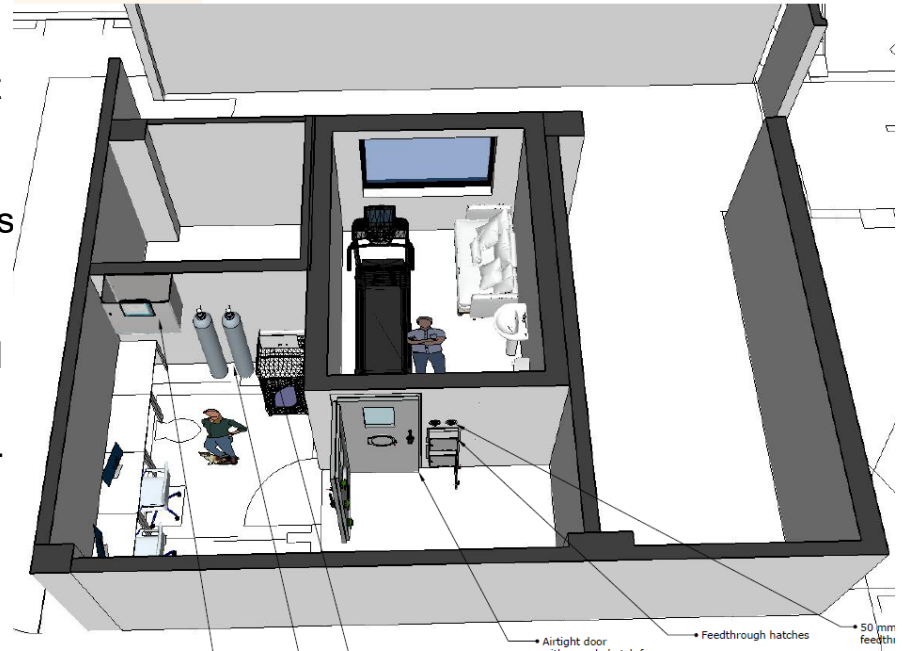
# CT-7 Inpatient & Research Renovations

**Scope:** This project will construct an enlarged Clean Supply room required for the CT-7 Inpatient unit and renovate space to accommodate a new metabolic chamber for research studies. The chamber is a controlled environment where subjects go through various different testing scenarios to measure their energy consumption (metabolism). The data gathered through these studies are used for research related to obesity, diabetes and other chronic disorders affecting the body's metabolism.

**Schedule:** Vendor RFP complete. Design and construction schedule: TBD

**Budget: \$1,675,000 (Planning).** Budget based on conceptual estimates. The Budget may change as the design is developed.

**Issues/Concerns:** None at this time



**Funding Source:** UConn 2000 Phase 3 DM,  
UCH Capital, UCH SOM Operating Funds  
& UConn Foundation

**UConn  
HEALTH**

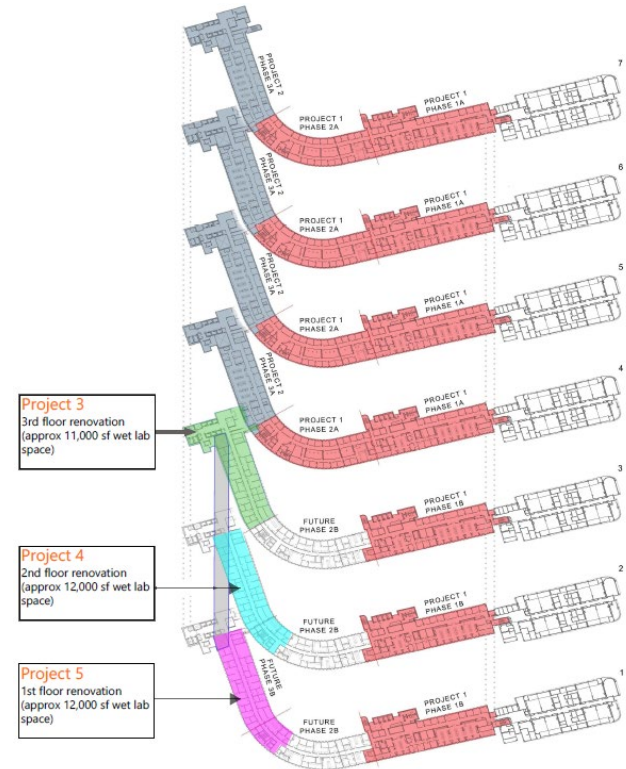
# Main Bldg Lab (L) Area Renovations - 1<sup>st</sup> Floor

**Scope:** This project continues to implement the lab renovation scheme developed under the Main Building Lab Area Master Plan. The design for the 1<sup>st</sup> floor Lab Renovations will be similar to the current 2<sup>nd</sup> Floor Lab Renovation project.

**Schedule:** Preparing RFP for design services. Design & Construction schedule: TBD

**Budget: \$11,900,000 (Planning).** Budget based on conceptual estimates. The Budget may change as the design is developed.

**Issues/Concerns:** None at this time



**Funding Source: FY23 GO DM, UCH Research  
IDC Capital & UCH SOM Operating Funds**

**UConn  
HEALTH**

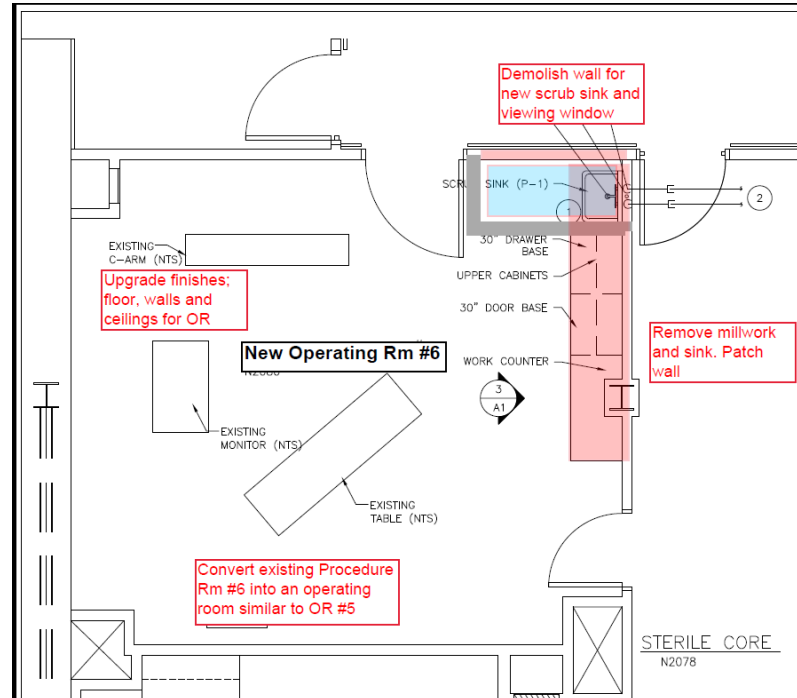
# Surgery Center Operating Room #6 Renovations

**Scope:** This project will convert an existing Procedure room into an Operating room and replace / upgrade all the existing outdated operating room light booms and make required air pressure modifications within the Surgery Center located in the Musculoskeletal Institute.

**Schedule:** Soliciting design proposals.  
Design & Construction schedule: TBD

**Budget: \$1,750,000 (Planning).** Budget based on conceptual estimates. The Budget may change as the design is developed.

**Issues/Concerns:** None at this time



Funding Source: UCH Capital **UConn**  
HEALTH

# ASB Data Center Generator and Power Improvements

**Scope:** The Administrative Services Building (ASB) is the site of the main UConn Health Data Center. This project will make improvements to the buildings emergency power distribution system, including the replacement of an existing exterior generator.

**Schedule:** Schematic Design work is complete.  
Tentative schedule: Design Complete - Oct 2024  
Bid/Contract: Nov / Dec 2024  
Construction duration: TBD

**Budget: \$3,150,000 (Planning).** Budget based on consultant estimates. The Budget may change as the design is developed.

**Issues/Concerns:** None at this time



**Funding Source: UConn 2000 Phase 3 DM,  
FY23 GO DM**

**UConn  
HEALTH**

# IT Disaster Recovery Room

**Scope:** This project will update the data systems and infrastructure within an existing tel/data room located in the John Dempsey Hospital to support UConn Health's Information Technology system recovery efforts to allow for business continuity in response to a major disruptive event.

**Schedule:** Schematic Design work is complete.  
Tentative schedule: Design Complete - Oct 2024  
Bid/Contract: Nov / Dec 2024  
Construction duration: TBD

**Budget: \$1,370,000 (Planning).** Budget based on conceptual estimates. The Budget may change as the design is developed.

**Issues/Concerns:** None at this time



Funding Source: FY23 GO DM **UConn**  
HEALTH

# Parking Lots L1 & A5 Repaving

**Scope:** The project will replace the parking lot pavement and upgrade storm drainage systems at staff parking lots L1 and A5.

**Schedule:** Preliminary design work underway.  
Construction schedule: TBD

**Budget: \$1,020,000 (Design).** Budget based on conceptual estimates. The Budget may change as the design is developed.

**Issues/Concerns:** None at this time



**Funding Source: FY23 GO DM** **UConn**  
**HEALTH**



# Building F & Building M Roof Replacement

**Scope:** The project will replace the roofs on the Canzonetti Pavilion (Bldg F) and the Daycare Center (Bldg M) that have reached the end of life and are in poor shape.

**Schedule:** Preliminary design work is underway. Goal is to have roof replacement occur over the summer / fall of 2024.

**Budget: \$1,615,000 (Final).** Budget based on conceptual estimates. The Budget may change based on actual bids received.

**Issues/Concerns:** Volatility in roofing materials could impact the project schedule and budget.



**Funding Source: FY23 GO DM**

**UConn  
HEALTH**

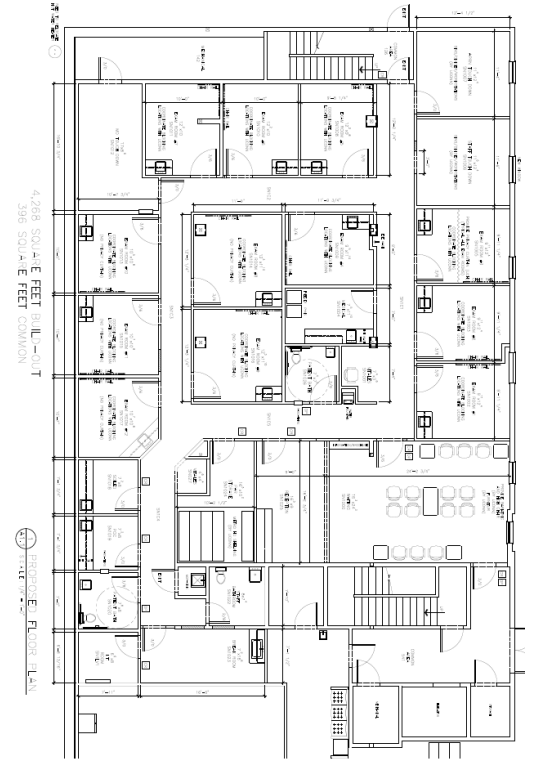
# Southington Clinic Expansion

**Scope:** This project will expand the Women's Health, Dermatology and ENT practices at the existing Southington clinic by leasing and fitting out a new 12 exam room clinic.

**Schedule:** The Landlord has determined they will not be able to provide the required design and construction services. A traditional design/bid/build process is being implemented. Design work is currently underway. Tentative schedule: Bid/Contract – Aug/Sep 2024  
Construction start/complete: TBD.

**Budget:** \$1,325,000 (Design). Budget is based on conceptual estimates. The Budget may change as the design is developed and bids received.

**Issues/Concerns:** The last-minute shift to a traditional design/bid/build project delivery has delayed the project completion.



**Funding Source:** UCH Capital **UConn HEALTH**

# Cryo Electron Microscope Installation

**Scope:** The Molecular Biology department was awarded a \$1,457,000 NIH grant to purchase a Cryo Electron Microscope for research activities. This project will construct the specialized room required to house the microscope.

**Schedule:** Design changes to coordinate with construction occurring in adjacent areas have pushed completion to April 2024.

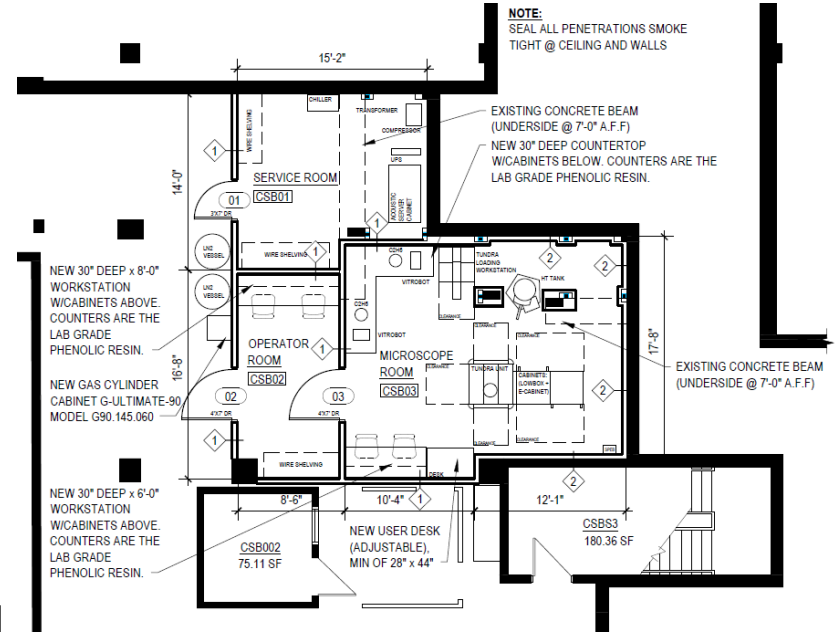
Bid/Contracting: May/June 2024

Construction start: July 2024 (tentative)

Construction complete: TBD

**Budget: \$TBD (Final).** The Final budget is based on upon actual bids received. The \$960,000 Design budget was based on consultant estimates.

**Issues/Concerns:** Delays in receiving the HVAC equipment will impact the schedule.



**Funding Source: UCH Research & IDC Capital**

**UConn  
HEALTH**

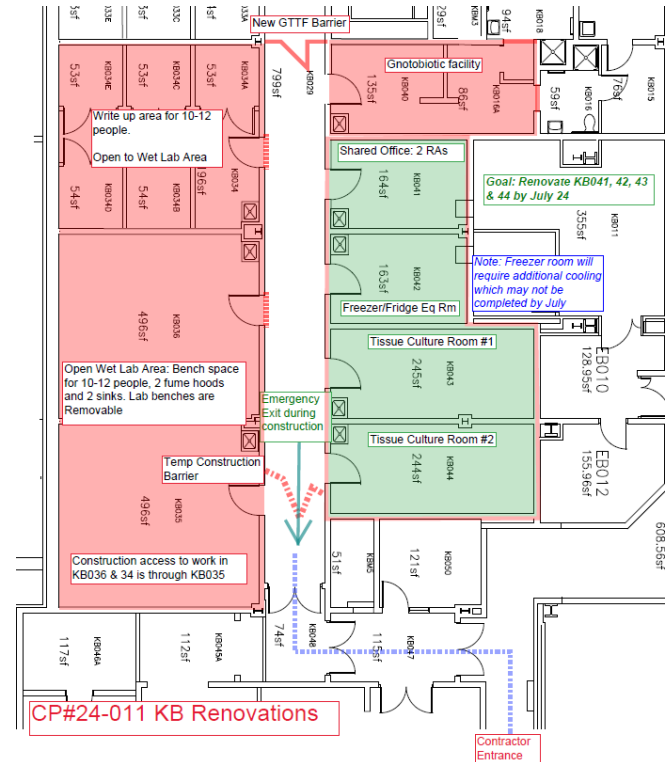
# KB034 - 036 Research Lab Renovation

**Scope:** This project will renovate approximately 2,500 sf of animal research / holding space located within the basement of the Transgenic Animal Facility (building K) to create a flexible/open wet research laboratory area.

**Schedule:** Design is underway and on schedule to be completed in May 24  
Bid / Contract: May / June 24  
Construction: TBD

**Budget:** *\$TBD (Revised Final)*. Budget is based upon bids received. The \$760,000 Final Budget was based on conceptual estimates.

**Issues/Concerns:** Volatility in construction materials could impact the project schedule and budget.



**Funding Source: UCH SOM  
Operating Funds**

**UConn  
HEALTH**

# Garage 1, 2 & 3 Electric Vehicle Charger Installation

**Scope:** UConn Health received grants from CT DEEP and Eversource to install (24) Level 2 electric vehicle (EV) charger stations in parking garages 1, 2 & 3

**Schedule:** The completion of design work was put on hold pending confirmation a proposed bill to ban the parking of electric vehicles in parking garages would be withdrawn. Garage 2 & 3 are being bid out as separate packages due to additional design work required for Garage 1.  
Bid / Contract: May/June 2024  
Construction: TBD

**Budget:** \$550,000 (Final) Budget based on bids received for Garage 2 & 3. The Budget may change based on bids received for Garage 1

**Issues/Concerns:** None at this time.



**Funding Source:** UCH Energy Conservation Pool, DEEP VW Grant & Eversource Rebate

# Outpatient Pavilion X-Ray & Blood Draw Relocation

**Scope:** This is an OP-3 Backfill enabling project to relocate program. The X-Ray relocation to OP-1 is being removed from the project scope. The revised scope will renovate space on the first floor of the Outpatient Pavilion for the relocation of Blood Draw services and the Medication Therapy Management program.

**Schedule:** The project is being redesigned to eliminate the relocation of the x-ray unit from the 3<sup>rd</sup> floor of the OP. The overall project schedule will be delayed by approximately 6 months. Construction Start / Finish: TBD

**Budget:** \$1,925,000 (Final). The redesigned project should be under budget.

**Issues/Concerns:** The OP3 Backfill project will be impacted by the delays on this project.



*Funding Source: UCH Capital*



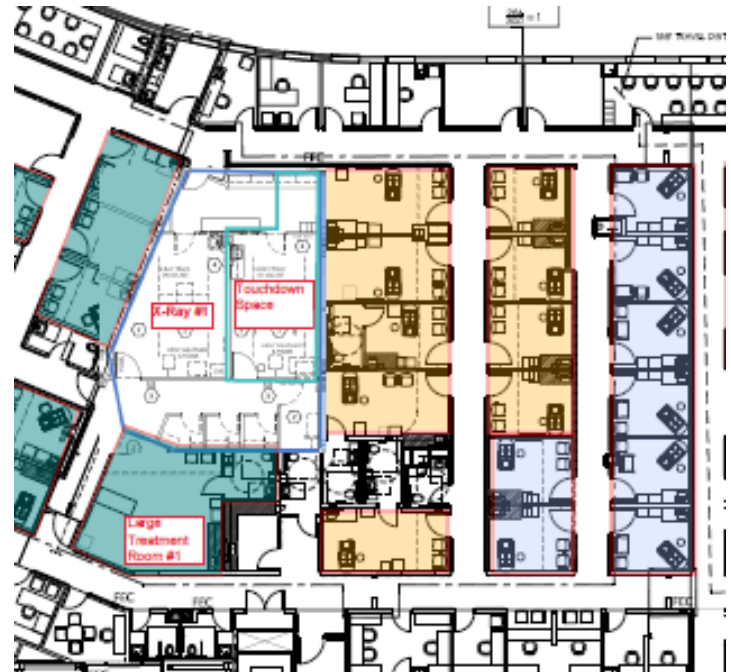
# Outpatient Pavilion 3rd Floor Backfill

**Scope:** This project will renovate portions of the 3<sup>rd</sup> floor to allow for the relocation and expansion of the Women's OB/GYN, Maternal Fetal Medicine (MFM) & Minimally Invasive Gynecologic Surgery (MIGS) clinical practices.

**Schedule:** The project is being redesigned to eliminate the relocation of the x-ray unit to the 1st floor of the OP. The project schedule will be delayed by approximately 6 months. Construction Start / Finish: TBD

**Budget:** \$4,250,000 (Final). It is estimated the redesigned project will result in \$500k of savings.

**Issues/Concerns:** The OP3 renovation work will be delayed until the OP1 work is completed.



*Funding Source: UCH Capital*

**UConn**  
HEALTH

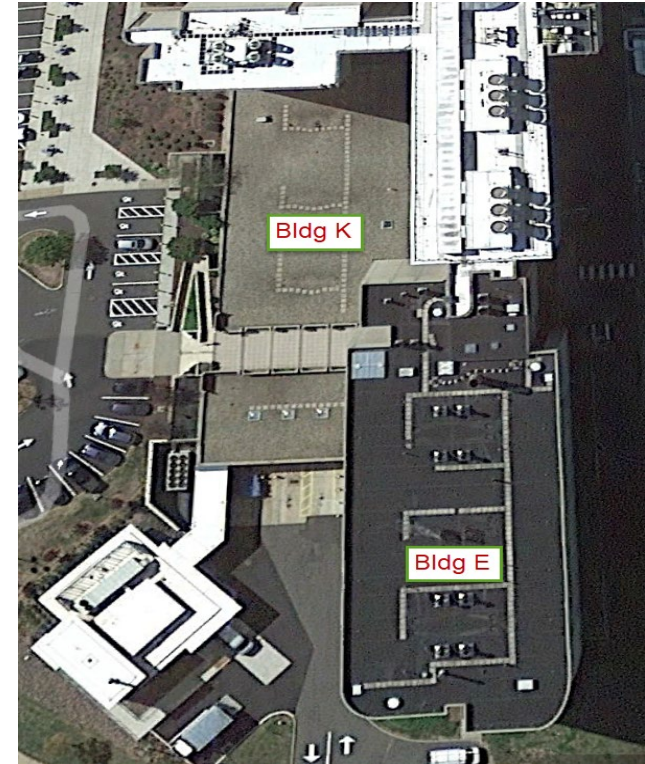
# Buildings E & K Roof Replacement

**Scope:** The project will replace the roofs on the Academic Research Building (E) and the Transgenic Animal Facility (K) that have been leaking and are in poor shape.

**Schedule:** Replacement of Building E roof has been completed. Design of Building K, including entry plaza walkway complete: July 24  
Bid/Contract: Aug/Sep 24  
Construction start: Oct 24

**Budget:** \$2,160,000 (Final). A Revised Final will be submitted if bids for Building K come in over budget.

**Issues/Concerns:** Volatility in roofing materials could impact the project schedule and budget.



*Funding Source: UConn 2000 Phase 3 DM*

**UConn**  
**HEALTH**



# TB-121 Blood Bank Relocation

**Scope:** This project will renovate shell space located on the Ground Floor of the University Tower to accommodate the relocation of the current Lab Medicine Blood Bank and replace the existing irradiator with a new x-ray blood irradiator.

**Schedule:** Material deliveries have delayed the start of construction. The completion date has been pushed out 1 month to August 2024.

**Budget:** \$1,075,000 (Revised Final). UConn Health is expecting to receive \$128,265 under a Federal CIRP award.

**Issues/Concerns:** Delays in the receipt of construction materials could continue to impact the completion of the project.



*Funding Source: UCH Capital, CIRP*

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HEALTH**

# Transitional Nursery Renovation

**Scope:** This project will create a Level 1 Transitional Nursery for 5 bassinets and an infant isolation room.

**Schedule:** Construction is complete and space is ready for occupancy.

**Budget:** \$1,800,000 (Final) Project is tracking under budget.

**Issues/Concerns:** None at this time



*Funding Source: UCH Capital* **UConn  
HEALTH**

# Canzonetti (F) Building Wound Care Center Renovation

**Scope:** The project will create a Comprehensive Wound Care Center (CWC) utilizing Hyperbaric Oxygen Therapy within the Canzonetti Building (F) that will be designed, furnished and operated by Restorix.

**Schedule:** Construction is complete and space is ready for occupancy.

**Budget:** \$1,225,000 (Final). Restorix is contributing \$350,000 to cover the cost of design and a portion of construction. Project is tracking under budget.

**Issues/Concerns:** None at this time.



*Funding Source: UCH Capital  
& Restorix Allowance*

**UConn  
HEALTH**

# 5 Munson Road Clinical Fit-Out

**Scope:** This project will relocate the Neurology, Neurosurgery and Spine clinics from the Outpatient Pavilion into leased space located at the newly constructed building known as 5 Munson Road to allow for much needed expansion of clinical programs within the Outpatient Pavilion.

**Schedule:** Construction is complete and all of the clinics are open including the adjacent radiology services.

**Budget:** \$9,344,000 (Revised Final). Metro Realty, the building landlord is responsible for approximately \$3.2m of the construction fit-out cost per the terms of the lease. Project is tracking under budget.

**Issues/Concerns:** None at this time.



**Funding Source: UCH Capital  
& Landlord Fit-Out Allowance**

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HEALTH**

# Muscular Skeletal Institute Chiller Replacement

**Scope:** This project will replace a 55 ton chiller and associated pumps that serves critical areas including the MRI, CT and IT data closets.

**Schedule:** Construction complete.

**Budget:** \$570,000 (Final) Project is tracking under budget.

**Issues/Concerns:** None at this time.



*Funding Source: UConn 2000 Phase 3 DM*

**UConn**  
HEALTH

# Psychiatry Seclusion Suite & Nurse Station Security Renovation

**Scope:** This project will renovate portions of the existing In-patient Psychiatry unit located in the Connecticut Tower to create a Seclusion suite for potentially violent patients and install security barriers at the existing Nurses Station to protect staff.

**Schedule:** The project construction is complete and final sign-offs from the Department of Health have been received.

**Budget:** \$1,197,000 (Revised Final). Project is tracking on budget.

**Issues/Concerns:** None at this time.



*Funding Source: UCH Capital*

**UConn**  
HEALTH

# Replace Chilled Water Pump #4

**Scope:** The project will replace the 450 hp pumps that provides chilled water to the Main Building complex.

**Schedule:** Construction is complete and the unit is operational.

**Budget:** \$642,000 (Final), Project is tracking under budget.

**Issues/Concerns:** None at this time



*Funding Source: UConn 2000 Phase 3 DM*

**UConn**  
**HEALTH**

# Campus Planning Design and Construction

## Appendix

**Funding Status**

**Project Metrics**

**Additional Detailed Project Updates**

**Upcoming Projects**



# Campus Planning Design and Construction

## FUNDING STATUS :

### FY24 CAPITAL POOL

- Approximately \$14.1 million allocated for FY24
- Pool used to fund requests for Clinical Equipment, IT and Capital Projects
- Approximately \$ 725,000 of uncommitted funds remaining

### DEFERRED MAINTENANCE, CODE COMPLIANCE & INFRASTRUCTURE IMPROVEMENTS

- Projects are reviewed and prioritized based on Guiding Principles.
- UConn 2000 Phase 3 DM Funding (FY22) \$25 million. Commitment of \$24.5 million to projects.
- GO Bond Funds for DM (FY23) \$40 million. Commitment of \$37.5 million to projects
- GO Bond Funds for DM (FY24) \$30 million. Planned allocations of \$27.25 million to upcoming projects.

# Campus Planning Design and Construction

## Capital Project Metrics:

Phase	Admin	DM	JDH	SODM	SOM	UMG	Total
Initiation	13	11	21	1	5	5	56
Pending Approval	2	1	0	0	0	0	3
A & E Selection	0	1	0	0	1	0	2
Design	6	17	7	0	4	4	38
Procurement	1	0	2	0	2	1	6
Construction	2	8	17	1	3	2	33
Substantially Complete	9	7	22	0	11	7	56
<b>Total</b>	<b>33</b>	<b>45</b>	<b>69</b>	<b>2</b>	<b>26</b>	<b>19</b>	<b>194</b>

### Project Data

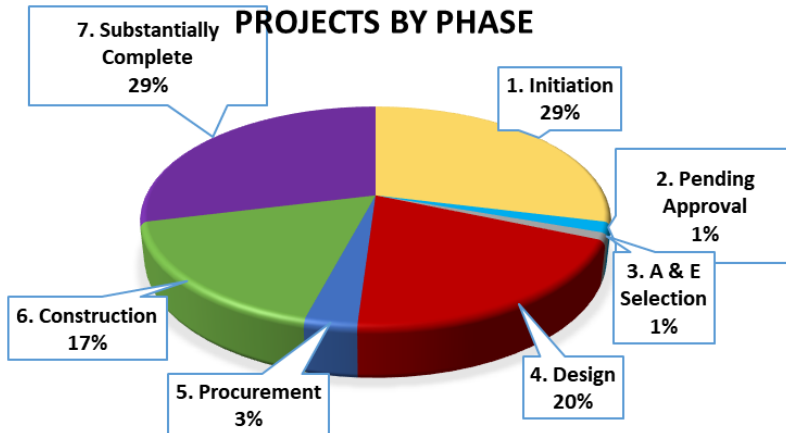
Project Total Last Report: 190

Projects Added: 9

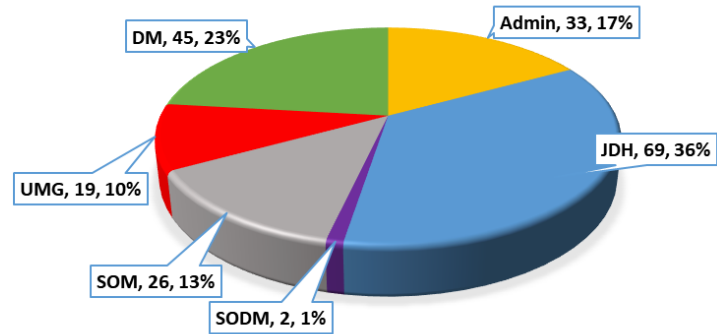
Projects Closed: 5

Data date: May 09, 2024

### PROJECTS BY PHASE



### PROJECTS BY DIVISION



# Campus Planning Design and Construction

## Detailed Project Updates

# UT-7 Pharmacy Fit-Out

**Scope:** This project will renovate shell space located on the 7<sup>th</sup> Floor of the University Tower to accommodate the relocation and expansion of the Pharmacy and thus free up much needed space to allow for the expansion & renovation of Lab Medicine.

**Schedule:** Responses to the Design RFP have been received but not reviewed. The continued demand for inpatient beds has prompted discussions regarding the best utilization of the space.

**Budget:** \$10,250,000 (Planning). Budget is based on Conceptual estimates and may change as project design is developed.

**Issues/Concerns:** Volatility in the availability of major HVAC systems could impact the project schedule and budget.

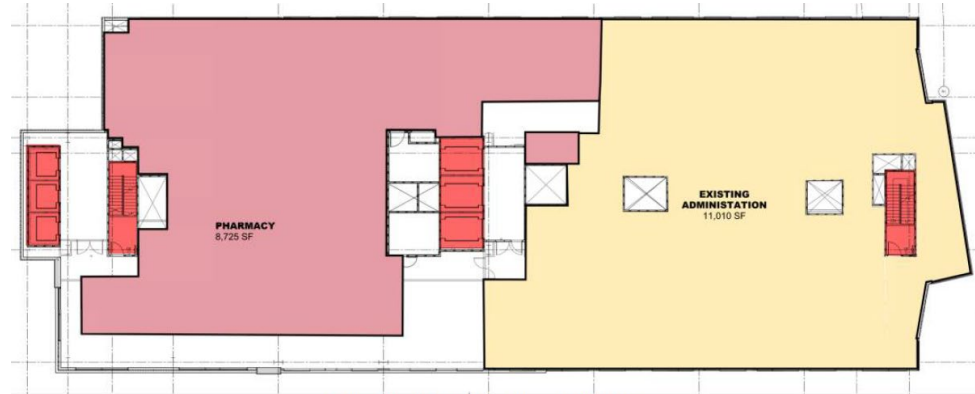


Figure 7: Option 1 Departmental Diagram

**Funding Source:** UCH Capital,  
FY23 GO DM

**UConn**  
HEALTH

# Labor & Delivery Infant Protection System Replacement

**Scope:** This project will replace the outdated infant protection system that serves the Labor & Delivery unit. The system is required by federal & state regulations to protect infants from abduction, elopement and discharges to the wrong family.

**Schedule:** Vendor selection is complete. Consultant to provide design work related to infrastructure support being hired.

**Budget:** \$760,000 (Planning). Budget based on conceptual estimates. The Budget may change as the design is developed.

**Issues/Concerns:** Continued volatility related to specialized electronic components could impact the project schedule and budget.



*Funding Source: UConn 2000 Phase 3 DM,  
FY23 GO Equipment funds*

**UConn**  
HEALTH

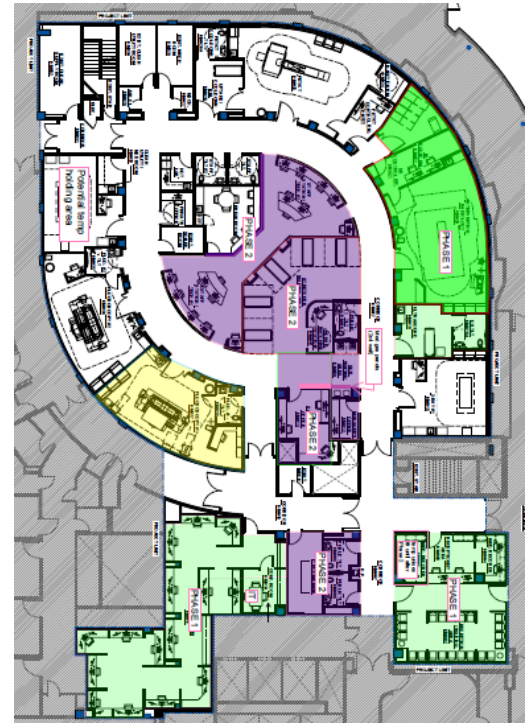
# Interventional Radiology Equipment Replacement & Renovation

**Scope:** This project will renovate the portions of the Radiology department and replace an outdated Interventional Radiology (IR) imaging unit in accordance with the UConn Health Radiology Master Plan.

**Schedule:** The conceptual design study has been completed. Design work is proceeding incorporating all options as alternates. Design Complete: Sep 24  
Bid/Contract: Oct/Nov 24  
Actual construction duration will be based upon the selected renovation option.

**Budget:** \$4,700,000 (Planning). Budget based on conceptual estimates. The Budget may change as the design is developed.

**Issues/Concerns:** The selected renovation option will determine the project schedule and cost.



*Funding Source: UCH Capital* **UConn  
HEALTH**

# Hybrid OR#2 Fit-Out

**Scope:** This project will fit-out a shelled operating room within John Dempsey Hospital to create a 2<sup>nd</sup> Hybrid Operating Room.

**Schedule:** Schematic Design work is underway.

Design Complete: Sept 24

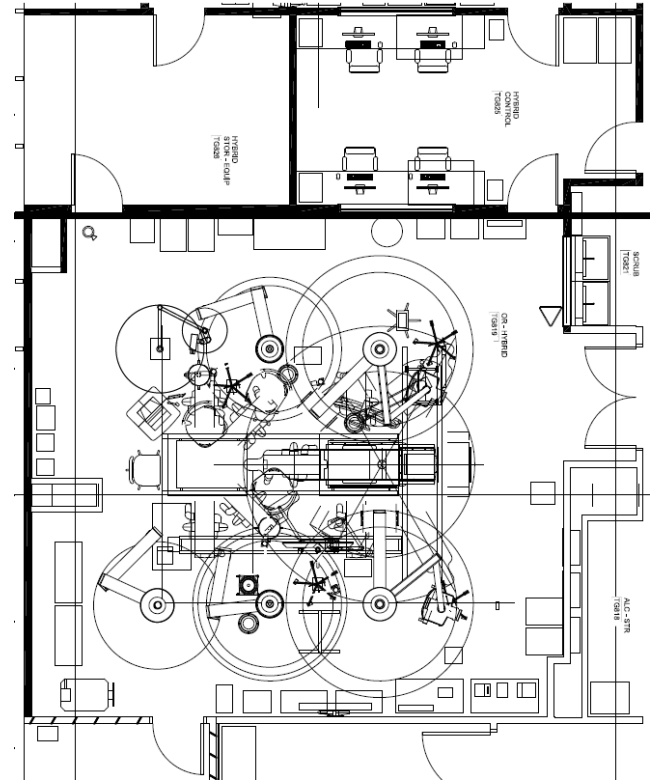
Bidding / Contracting: Oct/Nov 24

Construction Start: Dec 24

Construction Complete: TBD

**Budget:** \$7,100,000 (Planning). Budget based on conceptual estimates. The Budget includes the hybrid OR imaging equipment. The budget may change as the design is developed.

**Issues/Concerns:** Volatility in construction materials could impact the project schedule and budget.



*Funding Source: UCH Capital*

**UConn  
HEALTH**

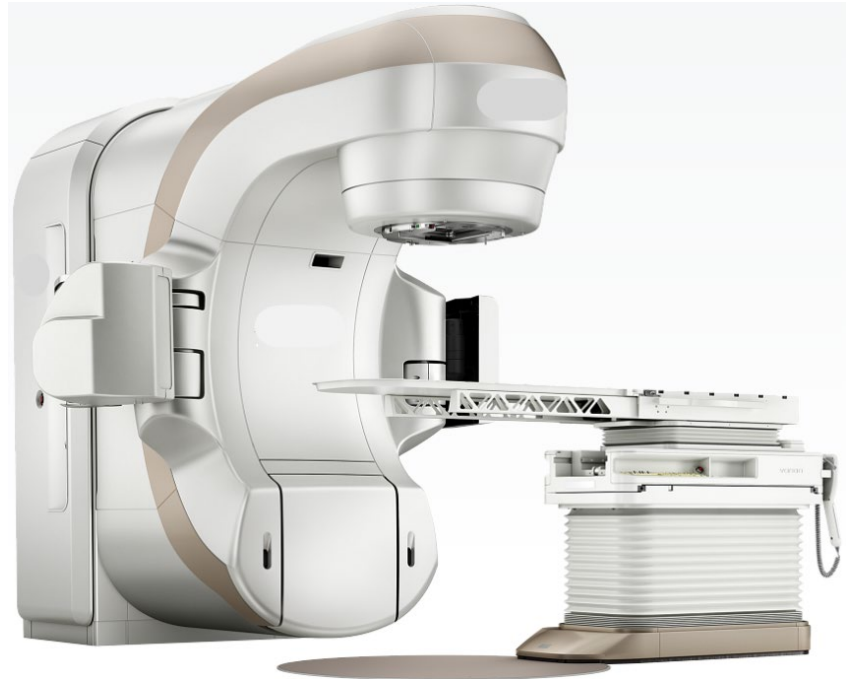
# LINAC Unit Replacement

**Scope:** This project will fit-out a shelled vault within the Neag Comprehensive Cancer Center to accommodate a new radiation therapy LINAC unit.

**Schedule:** Feasibility Study has been complete  
Design: April – August 24  
Bidding / Contract: Sept / Oct 2024  
Construction start: Nov 2024 (tentative)

**Budget:** \$4,985,000 (Design). Budget based on conceptual estimates and vendor equipment quotes. The Budget may change as the design is developed.

**Issues/Concerns:** Volatility in construction materials could impact the project schedule and budget.



*Funding Source: UCH Capital*

**UConn**  
HEALTH



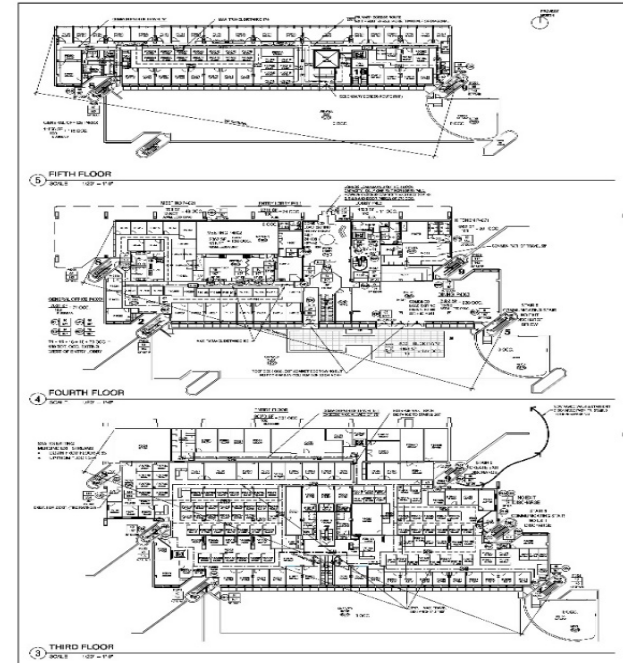
# 16 Munson Rd Emergency Lighting & Egress Upgrades

**Scope:** The project will address code violations issued by the UConn Fire Marshal related to the buildings emergency lighting and egress systems.

**Schedule:** Bids received and contract under review. Project scope being revisited with Fire Marshal to confirm alignment with long term utilization of the building

**Budget:** \$1,900,000 (Final). Current Design Budget is \$935,000. The Final Budget is based on actual bids received.

**Issues/Concerns:** Continued volatility in electrical gear could impact the project schedule.



Funding Source: UConn 2000 Phase 3 DM **UConn**  
HEALTH

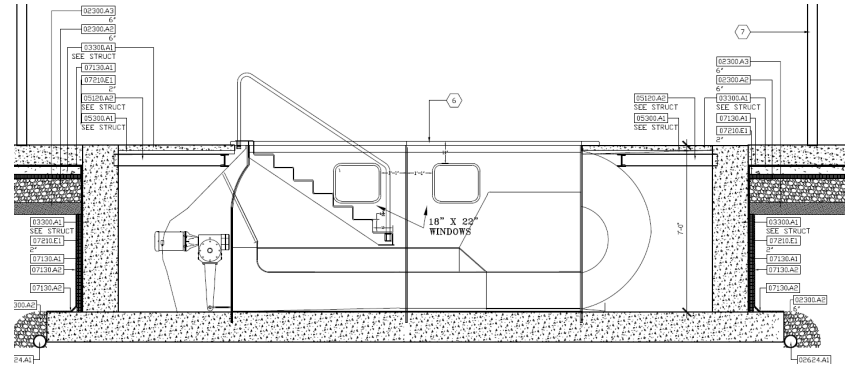
# Muscular Skeletal Institute Rehabilitation Expansion

**Scope:** This is an OP-3 Backfill enabling project to relocate program. This project will remove an existing water therapy pool to allow for expansion of Physical Therapy / Rehabilitation at the Muscular Skeletal Institute (MSI).

**Schedule:** Contractor mobilizing.  
Construction: May – September 2024

**Budget:** \$1,010,000 (Final). Bids received were favorable to the project budget.

**Issues/Concerns:** The OP3 Backfill project will be impacted by delays on this project.



*Funding Source: UCH Capital*

**UConn**  
HEALTH

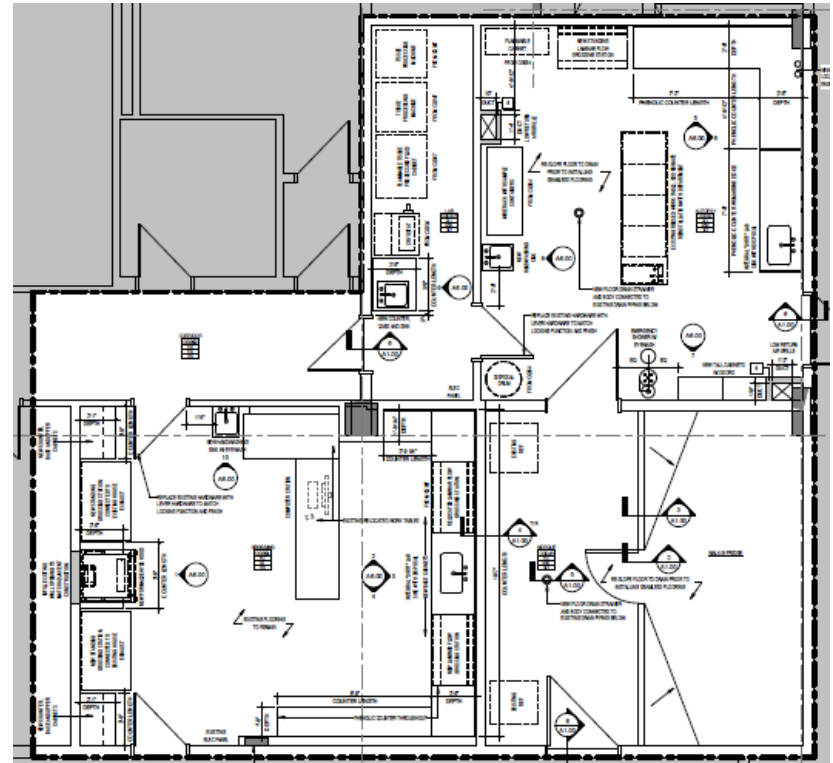
# CG045-047 Anatomic Pathology & Autopsy Renovation

**Scope:** The project will replace outdated equipment and renovate the Anatomic Pathology Lab and Autopsy area.

**Schedule:** Construction contract finalized.  
Construction: June 2024 – Mar 2025

**Budget:** \$1,175,000 (Final). The Final budget is based on upon actual bids received.

**Issues/Concerns:** Volatility in construction materials could impact the project schedule.



Funding Source: UCH Capital

**UConn**  
HEALTH

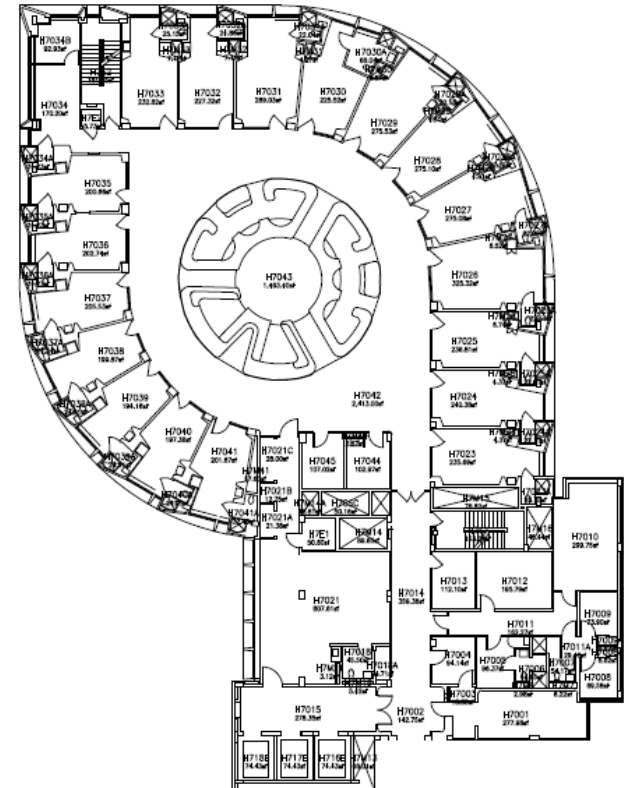
# CT-7 Med Surg / Observation Unit Renovation

**Scope:** Prior to the construction of the new John Dempsey Hospital the 7<sup>th</sup> floor of the Connecticut Tower was an inpatient unit. This project will implement upgrades necessary to reactivate the 7<sup>th</sup> floor as an inpatient / observation unit.

**Schedule:** The short term goal of activation of 13 beds/rooms for inpatient care occurred on January 11th. The long term plan of upgrading the patient monitoring, nurse call and IT systems is underway.

**Budget:** \$2,500,000 (Final). The project scope has been modified to include minimal construction. Majority of costs are related to furniture and equipment necessary to reactivate the floor as an inpatient unit.

**Issues/Concerns:** None at this time.



**Funding Source:** UCH Capital



# Central Sterile Washer & Sterilizer Replacement

**Scope:** The project will replace outdated equipment in the original Central Sterile Services area of the Connecticut Tower used to wash and sterilize instruments serving our medical and dental clinics and outpatient surgical services.

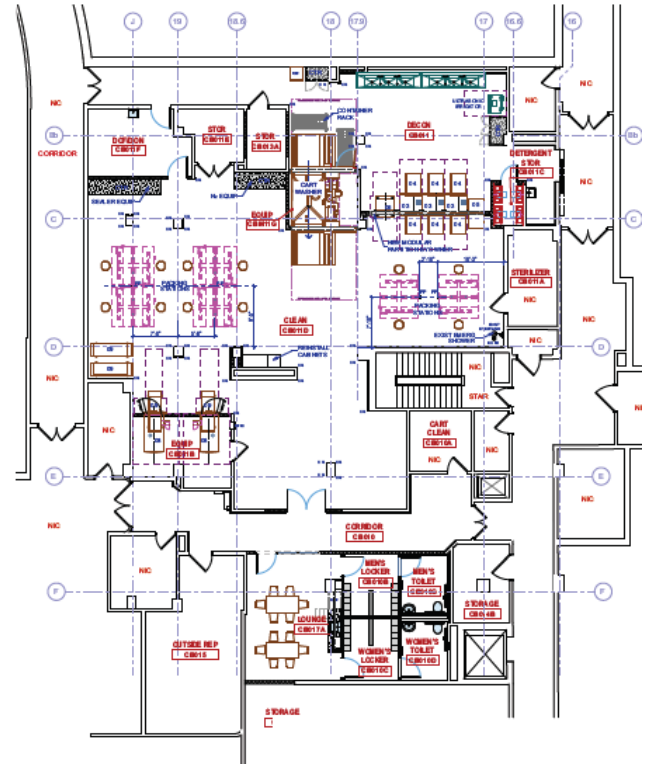
**Schedule:** Project will have 2 phases. Phase 1 Endoscopy Scope Washer Relocation and Phase 2 Central Sterile Equipment Replacement. Actual construction mobilization will be coordinated with the delivery date of the HVAC equipment.

On-site construction start: June 2024

Construction completion: June 2025

**Budget:** \$6,340,000 (Revised Final). The Revised Final budget is based upon actual bids received.

**Issues/Concerns:** The project schedule is tied to the actual delivery dates of the HVAC equipment. Delays in receiving the HVAC equipment will impact the schedule.



**Funding Source:** UCH Capital,  
UConn 2000 Phase 3 DM

**UConn  
HEALTH**

# New England Sickle Cell Institute Renovation

**Scope:** This project will renovate the 4<sup>th</sup> floor of the Connecticut Tower to accommodate the New England Sickle Cell Institute and Connecticut Blood Disorders clinics.

**Schedule:** Project is on schedule for a construction completion in September 2024.

**Budget:** \$4,865,000 (Final). The Final Budget is based on actual bids received.

**Issues/Concerns:** None at this time.



*Funding Source: UCH Capital  
UConn 2000 Phase 3 DM*

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# CGSB Data Center Cooling System Upgrades

**Scope:** This project will renovate the Cell & Genome Science Building Data Center cooling systems to provide additional capacity and redundancy in case of system failure.

**Schedule:** Manufacturing delays with the replacement HVAC unit has pushed the project schedule out 3 months. On site construction is scheduled to start in July 2024 with a completion in September 2024.

**Budget:** \$840,000 (Final). Project is on budget.

**Issues/Concerns:** Volatility in the availability of major HVAC systems could delay the delivery of the HVAC unit and further impact the project schedule.



*Funding Source: UConn 2000 Phase 3 DM* **UConn  
HEALTH**

# Fluoroscopy Equipment Replacement & Renovation

**Scope:** This project will replace an outdated fluoroscopy imaging unit and renovate the room to comply with Connecticut Department of Health guidelines.

**Schedule:** Project is on schedule for construction completion in August 2024.

**Budget:** \$745,000 (Final) Current Budget is based on actual bids received.

**Issues/Concerns:** None at this time.



*Funding Source: UCH Capital*

**UConn**  
HEALTH



# Cadaver Lab Renovation & AHU Replacement

**Scope:** This project will renovate the Cadaver Lab utilized by the School of Medicine, including the replacement of the outdated air handling unit.

**Schedule:** On-site construction is scheduled to start in May 2024 and be complete by August 2024. Construction start is being coordinated with the delivery of the replacement Air Handling Unit.

**Budget:** \$2,960,000 (Final). Project is on budget.

**Issues/Concerns:** Volatility in the availability of major HVAC systems could impact the delivery of the air handling unit and would postpone the project start / completion.



*Funding Source: FY22 DM*

**UConn**  
HEALTH

# Replace Buildings F & H Hot Water Tanks

**Scope:** The original domestic hot water tanks that serve the Connecticut Tower have reached the end of their useful life and will be replaced with instantaneous units powered by steam.

**Schedule:** The installation of the new hot water system is complete. Day 2 work related to the removal of abandoned equipment is on going and should be completed by July 2024.

**Budget:** \$845,000 (Revised Final). Project is tracking under budget.

**Issues/Concerns:** None at this time.



*Funding Source: UConn 2000 Phase 3 DM* **UConn**  
**HEALTH**

# Main Bldg. Lab (L) Area Renovations - 2nd Flr

**Scope:** This project continues to implement the lab renovation scheme developed under the Main Building Lab Area Master Plan. The design for the 2<sup>nd</sup> Lab Renovations is similar to the recently completed 3<sup>rd</sup> Floor Lab Renovation project.

**Schedule:** Construction is on schedule for an August 2024 completion.

**Budget:** \$10,200,000 (Final). Project is on budget.

**Issues/Concerns:** None at this time.



**Funding Source:** UConn 2000 Phase 3 DM, UCH Capital, UCH Research IDC Capital & UCH SOM Operating Funds

**UConn  
HEALTH**

# Cardio Catheterization (Cath) & Electro Physiology (EP) Lab Renovation

**Scope:** This project will renovate the existing Cardiac Imaging Surgical unit to comply with Connecticut Department of Health guidelines and replace outdated (2007) Cath and EP Lab imaging equipment.

**Schedule:** Phase 1 EP Lab construction is underway and is on schedule for a Go Live date of June 2024. The Phase 2 Cath Lab construction is on schedule to start in June 2024 with a Go Live in December 2024.

**Budget:** \$6,430,000 (Final) Project is on budget.

**Issues/Concerns:** The project schedule is tied to the actual delivery dates for roof top mechanical units. Delays in receiving these units will impact the schedule.



*Funding Source: UCH Capital* **UConn**  
HEALTH

# CGSB & ARB Autoclave & Washer Replacement

**Scope:** Research facilities located in the Cell and Genome Science Building (CGSB) and the Academic Research Building (ARB) utilize specialized autoclaves and washers to clean and sterilize laboratory instruments and containers. This project will replace the broken autoclaves and washers along with necessary support equipment.

**Schedule:** Installations of washers & autoclaves have been completed. The installation of the remaining Millipore units is on schedule for an April 2024 completion.

**Budget:** \$1,200,000 (Final). Project is tracking on budget.

**Issues/Concerns:** None at this time.



**Funding Source:** UCH Research  
& IDC Capital

**UConn**  
HEALTH

# Potential Future Projects – Clinical

## Clinical & Medical Equipment Projects over \$500k

CT TOWER RADIOLOGY NEW PET-CT SYSTEM	\$ TBD
LABOR & DELIVERY RENOVATION	\$ TBD
TORRINGTON CLINIC RELOCATION	\$ 4,800,000

*Potential Funding Source: UCH Capital*

# Potential Future Projects – Research

## Research Projects over \$500k

HIGH PERFORMANCE COMPUTING FACILITY NIH C-06 GRANT	\$ 12,000,000
NEW RESEARCH TOWER	\$ TBD

*Potential Funding Source: UCH Capital and/or UCH IDC Research Capital and/or Grants*

# Upcoming Projects – Deferred Maintenance

## Deferred Maintenance Projects over \$500k

CONNECTICUT TOWER INFRASTRUCTURE UPGRADES	\$ 9,850,000
MAIN COOLING TOWER CELL REPAIRS & PUMP REPLACEMENT	\$ 1,200,000
EXTERIOR COURTYARD WATERPROOFING	\$ 1,500,000
MAIN BUILDING (C) LOBBY REVOLVING DOOR REPLACEMENT	\$ 550,000
MAIN ENTRANCE LOT M1 & H1 IMPROVEMENTS	\$ 1,200,000

***Potential Funding Source: UConn 2000 Phase 3 DM, FY23 & FY24 DM GO Bond Funds***



# ATTACHMENT 7

June 26, 2024

TO: Members of the Board of Trustees

FROM: Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for Mirror Lake Improvements (Final: \$11,500,000)

RECOMMENDATION:

That the Board of Trustees approve the Final Budget of \$11,500,000, as detailed in the attached project budget, for the Mirror Lake Improvements project for Construction, an increase of \$7,500,000 over the previously approved budget. The project has completed its redesign and will construct safety, compliance and stormwater attenuation improvements identified in studies for the Roberts Brook watershed and a memorandum of understanding with CTDEEP. The Administration recommends that the Board of Trustees adopt the Resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$11,500,000 in UCONN 2000 bond funds for the Mirror Lake Improvements project.”

BACKGROUND:

Mirror Lake has been a beloved and historic campus landmark since 1922. After multiple decades of deferring maintenance of accumulating silt, sediment and pollutants, significant unmitigated development within its Robert Brook watershed resulting in an undersized stormwater facility since 1993, a damaged spillway with temporary repairs, and a dam that recently received an elevated hazard classification, various improvements to Mirror Lake to address these conditions are now essential. Numerous studies recently completed for Mirror Lake, including an unimplemented dredging plan in 2012, a campus master plan and water quality assessment in 2015, a campus drainage master plan in 2018, a dam inspection report in 2020, and a feasibility study in 2021 all concluded with recommendations for the University to make improvements to the lake and dam.

Permitting and design ensued in 2021 and became the basis of preconstruction activities with a Construction Manager that were completed in Fall 2022 but due to capital budget constraints the University deferred the Mirror Lake Improvements project and did not proceed with the construction contract. However, construction of the South Campus Residence Hall and

associated infrastructure continued within the Lake's watershed and require stormwater improvements for environmental compliance. The University subsequently requested a near-term, phased scope of work and an updated feasibility study that would be mutually satisfactory to CT DEEP and the University for short-term dam and stormwater improvements for the lake.

At the conclusion of several collaborative working meetings with CT DEEP through March 2023, an agreeable short-term scope of work was agreed upon and includes (1) interim improvements and repairs to the dam and spillway due to its hazard class and existing conditions, and (2) stormwater attenuation and water quality improvements associated with the construction of the two South Campus projects. Alternatives to attenuate stormwater from previous development in the watershed since 1993, a key component of the deferred Mirror Lake Improvements project, were also explored and submitted to CT DEEP for consensus.

This project finished its redesign and new permit applications were submitted. Bidding and the review of a draft GMP is complete. Work at this time is restricted to critical and essential improvements, including those necessary for construction of the Connecticut Residence Hall, South Campus Infrastructure, and the proposed School of Nursing, but future work at the lake will also be required. To keep the cost of work to a minimum at this time several bid alternates were not accepted including a qualitative, vegetative forebay, a lighted walkway and bridge connection across the dam, and new tree plantings and preservation of a notable tree.

This project will elongate the life of the lake and dam, and promote the wellness of the community, and is based upon the revised MOU for stormwater management within the Roberts Brook watershed with DEEP. Construction is anticipated to begin in the Spring 2025 and conclude by summer 2025.

The Final Budget is attached for your information.

Attachment

## CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET:**      **FINAL**

**PROJECT NAME:**      **MIRROR LAKE IMPROVEMENTS**

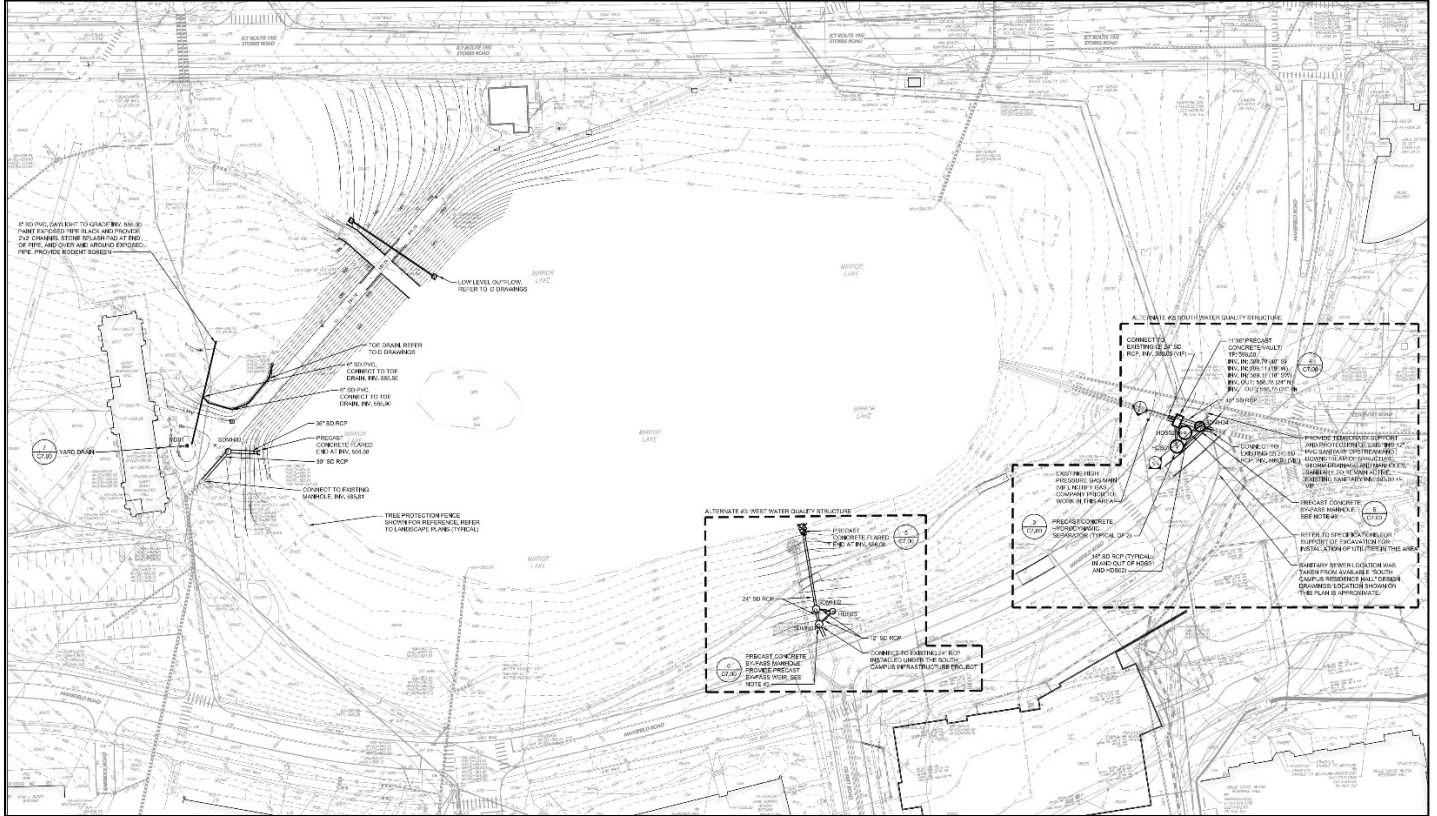
	<b>APPROVED PLANNING 3/23/2020</b>	<b>APPROVED REVISED PLANNING 10/5/2020</b>	<b>APPROVED DESIGN 10/27/2021</b>	<b>APPROVED REVISED DESIGN 3/30/2022</b>	<b>APPROVED REVISED DESIGN 4/19/2023</b>	<b>PROPOSED FINAL 6/26/2024</b>
<b><u>BUDGETED EXPENDITURES</u></b>						
	PRC	PRC				
CONSTRUCTION	\$ -	\$ -	\$ -	\$ 500,000	\$ 300,000	\$ 7,235,000
DESIGN SERVICES	45,000	300,000	1,250,000	1,700,000	2,980,000	3,045,000
TELECOMMUNICATIONS	-	-	-	-	-	100,000
FURNITURE, FIXTURES AND EQUIPMENT	-	-	-	-	80,000	30,000
CONSTRUCTION ADMINISTRATION	-	-	-	-	-	200,000
OTHER AE SERVICES (including Project Management)	2,000	14,000	50,000	80,000	150,000	200,000
ART	-	-	-	-	-	-
RELOCATION	-	-	-	-	-	-
ENVIRONMENTAL	-	-	125,000	80,000	80,000	80,000
INSURANCE AND LEGAL	1,000	1,000	5,000	5,000	10,000	10,000
MISCELLANEOUS	-	-	-	-	-	-
OTHER SOFT COSTS	-	-	-	-	-	-
<b>SUBTOTAL</b>	<b>\$ 48,000</b>	<b>\$ 315,000</b>	<b>\$1,430,000</b>	<b>\$ 2,365,000</b>	<b>\$3,600,000</b>	<b>\$10,900,000</b>
PROJECT CONTINGENCY	<u>\$12,000</u>	<u>\$60,000</u>	<u>\$170,000</u>	<u>\$235,000</u>	<u>\$400,000</u>	<u>\$600,000</u>
<b>TOTAL BUDGETED EXPENDITURES</b>	<b><u>\$ 60,000</u></b>	<b><u>\$ 375,000</u></b>	<b><u>\$ 1,600,000</u></b>	<b><u>\$ 2,600,000</u></b>	<b><u>\$ 4,000,000</u></b>	<b><u>\$ 11,500,000</u></b>
<b><u>SOURCE(S) OF FUNDING*</u></b>						
UCONN 2000 BOND FUNDS	<u>\$ 60,000</u>	<u>\$ 375,000</u>	<u>\$ 1,600,000</u>	<u>\$ 2,600,000</u>	<u>\$ 4,000,000</u>	<u>\$ 11,500,000</u>
<b>TOTAL BUDGETED FUNDING</b>	<b><u>\$ 60,000</u></b>	<b><u>\$ 375,000</u></b>	<b><u>\$ 1,600,000</u></b>	<b><u>\$ 2,600,000</u></b>	<b><u>\$ 4,000,000</u></b>	<b><u>\$ 11,500,000</u></b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

# MIRROR LAKE IMPROVEMENTS

Project Budget (Final)

June 26, 2024



Proposed Interim Improvements from Draft Feasibility Study

# ATTACHMENT 8

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June 26, 2024

TO: Members of the Board of Trustees

FROM: Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for PBB Research Support Expansion (Design: \$ 1,000,000)

RECOMMENDATION:

That the Board of Trustees approve the Design Budget of \$1,000,000, as detailed in the attached project budget, for the Pharmacy Biology Building (PBB) Research Support Expansion project. This reflects an increase of \$505,000 to the previously approved Planning budget of \$495,000. The Administration recommends that the Board of Trustees adopt the Resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$1,000,000 in UCONN 2000 Bond Funds for the Design Phase of the PBB Research Support Expansion project.”

BACKGROUND:

The University’s Animal Care facility must evolve to accommodate the growing research requirements of both current and incoming faculty, while also enhancing its support to the University community. To achieve this goal, this project will renovate approximately 3,850 net square feet (nearly 5,000 GSF) of existing “shell space” within the Pharmacy Biology building to facilitate the expansion of the adjacent animal care facility.

The proposed interior expansion includes additional procedural rooms and animal holding areas. The design approach prioritizes flexibility, allowing seamless transitions between different room functionalities with minimal disruption, such as converting procedure rooms into holding areas or vice versa. Consequently, the renovated space will integrate with the existing animal care facility, effectively extending its capabilities. The scope of work encompasses demolition/rework, new labs, installation of new mechanical, electrical, plumbing, and fire protection systems as necessary, and the introduction of a redesigned sewage ejection system.

The proposed renovations will play a critical role in attracting new faculty members and enhancing UConn’s competitiveness in grant competitions. Consequently, the project will contribute to elevating the quality of research at the University, aligning with the strategic plan’s objective of fostering excellence in research, innovation, and engagement.

The Planning Phase of the PBB Research Support Expansion project has been completed and design is estimated to be complete by spring 2025. Construction is anticipated to start in summer 2025 and end in spring 2026.

The Design Phase Budget is attached for your information.  
Attachment



## CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET:        DESIGN**

**PROJECT NAME:        PBB RESEARCH SUPPORT EXPANSION**

<u>BUDGETED EXPENDITURES</u>	<u>APPROVED PLANNING 2/13/2024</u>	<u>PROPOSED DESIGN 6/26/2024</u>
	PRC	
CONSTRUCTION	\$ -	\$ 100,000
DESIGN SERVICES	400,000	775,000
TELECOMMUNICATIONS	-	-
FURNITURE, FIXTURES AND EQUIPMENT	-	-
CONSTRUCTION ADMINISTRATION	-	-
OTHER A/E SERVICES (including Project Management)	-	-
ART	-	-
RELOCATION	-	-
ENVIRONMENTAL	-	-
INSURANCE AND LEGAL	5,000	15,000
MISCELLANEOUS	10,000	10,000
OTHER SOFT COSTS	-	-
<b>SUBTOTAL</b>	<b>\$ 415,000</b>	<b>\$ 900,000</b>
PROJECT CONTINGENCY	80,000	100,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b><u>\$ 495,000</u></b>	<b><u>\$ 1,000,000</u></b>
<b><u>SOURCE(S) OF FUNDING</u></b>		
UCONN 2000 BOND FUNDS	<u>\$ 495,000</u>	<u>\$ 1,000,000</u>
<b>TOTAL BUDGETED FUNDING</b>	<b><u>\$ 495,000</u></b>	<b><u>\$ 1,000,000</u></b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

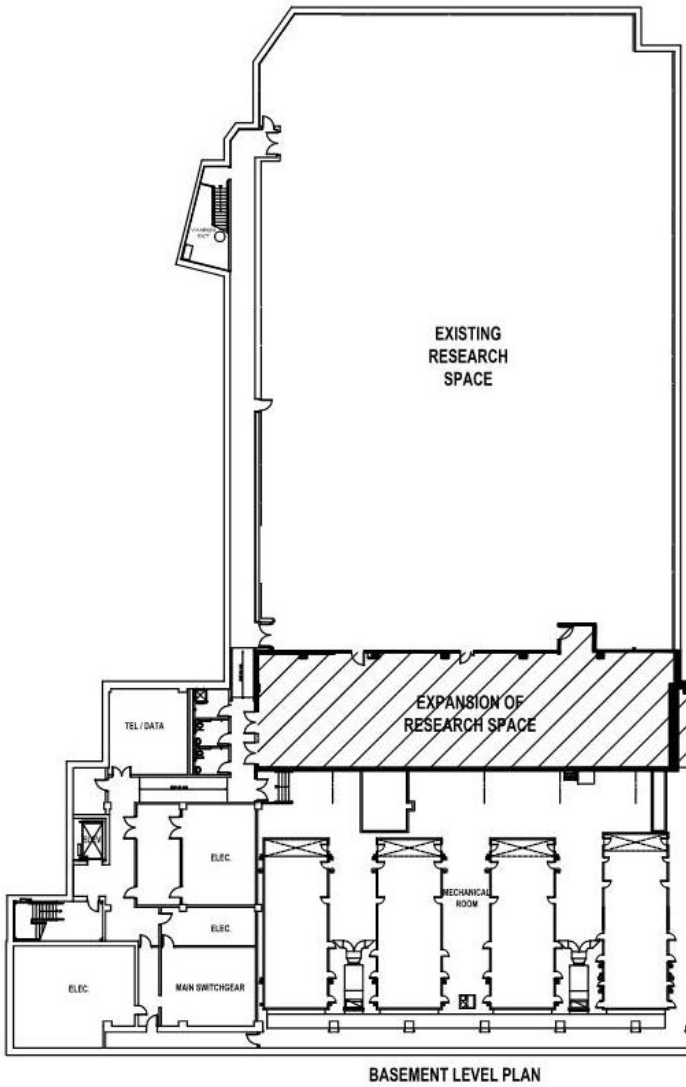
BOT 6.26.24

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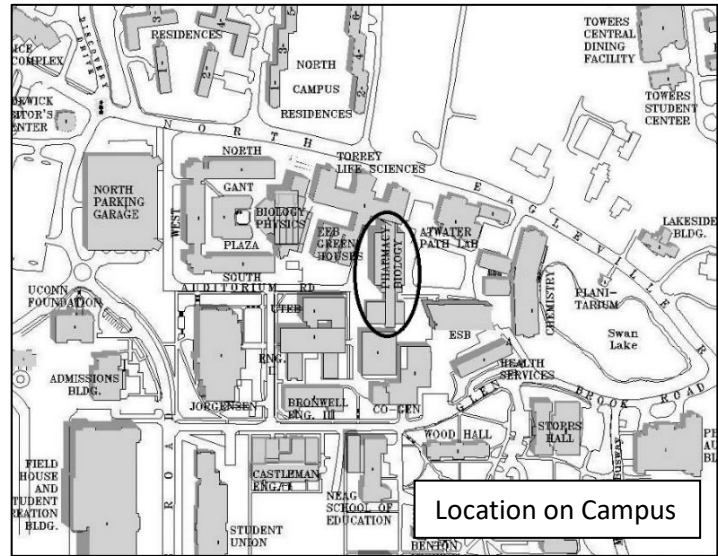
# PBB Research Support Expansion Project Budget (DESIGN) June 26, 2024



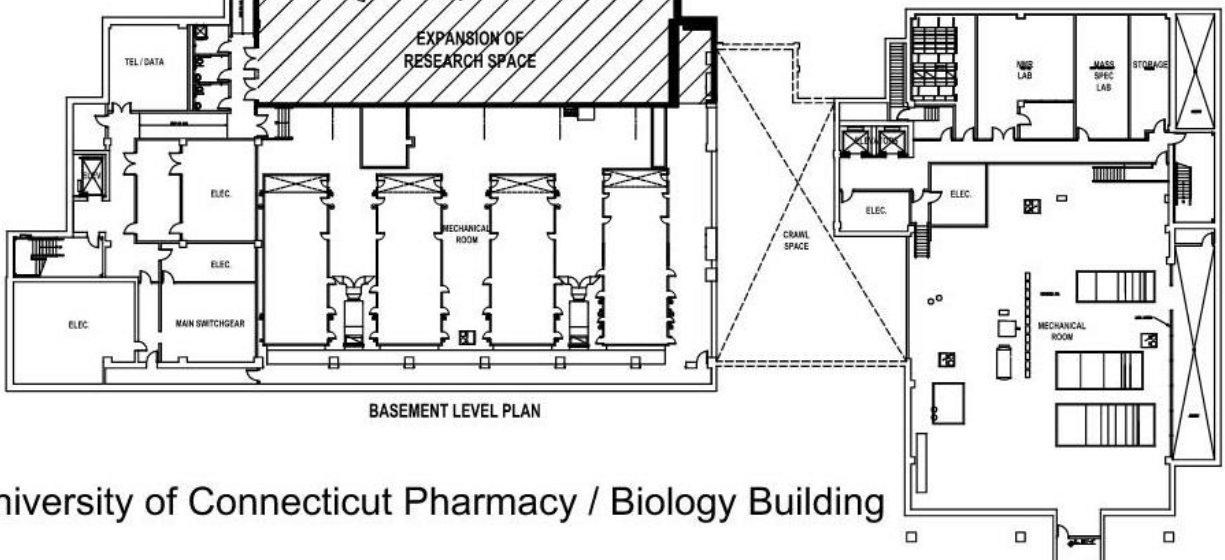
Street view of Pharmacy/Biology Building



BASEMENT LEVEL PLAN



Location on Campus



# ATTACHMENT 9

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June 26, 2024

TO: Members of the Board of Trustees

FROM: Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for Werth Residence Tower High Humidity Mitigation  
(Final: \$8,500,000)

RECOMMENDATION:

That the Board of Trustees approve the Final Budget of \$8,500,000 as detailed in the attached project budget for the Werth Residence Tower High Humidity Mitigation project, for Construction. This reflects an increase of \$7,000,000 to the previously approved Design budget of \$1,500,000. The Administration recommends that the Board of Trustees adopt the Resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$1,500,000 in University Funds and \$7,000,000 in UCONN 2000 bond funds for the Werth Residence Tower High Humidity Mitigation project.”

BACKGROUND:

Werth Residence Tower is an approximately 350 room, 8-story residence hall, which opened in 2016, and was constructed using the design/build method. Since opening, UConn has reported concerns of condensation on the windows and ceilings immediately adjacent to the in-room HVAC system. Approximately 30% of the rooms have issues with excessive humidity and condensation, with no apparent pattern identified from semester-to-semester. In order to provide a better student success journey for our students in Werth Tower, we propose to mitigate the humidity conditions in the building.

A forensic MEP engineering firm was hired to investigate the HVAC system and develop a plan to remedy this situation. Multiple mockups of potential solutions were installed in student rooms in the summer 2023 and data from sensors was collected bi-weekly through the summer, fall and winter. All indications are that increasing dry air flow directly to the rooms is the only solution that reduces the humidity significantly.

An engineering firm was hired to design a long-term solution that introduces dry air directly into the student rooms. Due to long lead times for procurement of equipment, the final modifications to the HVAC system cannot be completed until the summer 2025. As an interim measure, to help lower the humidity level in the building for this upcoming year, temporary dehumidifiers were installed in the corridors of the seven floors housing students and will remain in place for the 2024-2025 academic year.

The original building designers and contractors have been put on legal notice regarding the repairs and replacements being undertaken to correct the high humidity conditions.

The Final Budget is attached for your information.

Attachment

## CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET:**      **FINAL**

**PROJECT NAME:**      **WERTH RESIDENCE HALL HIGH HUMIDITY MITIGATION**

	<b>APPROVED PLANNING 5/21/2021</b>	<b>APPROVED REVISED PLANNING 6/6/2023</b>	<b>APPROVED REVISED PLANNING 9/14/2023</b>	<b>APPROVED REVISED PLANNING 12/6/2023</b>	<b>APPROVED DESIGN 2/24/2024</b>	<b>PROPOSED FINAL 6/26/2024</b>
	PRC	PRC	PRC			
<b><u>BUDGETED EXPENDITURES</u></b>						
CONSTRUCTION	\$ -	\$ 100,000	\$ 185,000	\$ 285,000	\$ 845,000	\$ 6,500,000
DESIGN SERVICES	60,000	150,000	200,000	500,000	500,000	630,000
TELECOMMUNICATIONS	-	-	-	-	-	40,000
FURNITURE, FIXTURES AND EQUIPMENT	-	-	-	-	-	130,000
CONSTRUCTION ADMINISTRATION	-	-	-	-	-	650,000
OTHER AE SERVICES (including Project Management)	-	-	-	-	-	50,000
ART	-	-	-	-	-	-
RELOCATION	-	-	-	-	-	-
ENVIRONMENTAL	-	-	-	-	-	-
INSURANCE AND LEGAL	-	5,000	5,000	5,000	5,000	5,000
MISCELLANEOUS	10,000	20,000	25,000	25,000	25,000	15,000
OTHER SOFT COSTS	-	-	-	-	-	-
<b>SUBTOTAL</b>	<b>\$ 70,000</b>	<b>\$ 275,000</b>	<b>\$ 415,000</b>	<b>\$ 815,000</b>	<b>\$ 1,375,000</b>	<b>\$ 8,020,000</b>
PROJECT CONTINGENCY	10,000	35,000	50,000	110,000	125,000	480,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 80,000</b>	<b>\$ 310,000</b>	<b>\$ 465,000</b>	<b>\$ 925,000</b>	<b>\$ 1,500,000</b>	<b>\$ 8,500,000</b>
<b><u>SOURCE(S) OF FUNDING</u></b>						
UNIVERSITY FUNDS	\$ 80,000	\$ 310,000	\$ 465,000	\$ 925,000	\$ 1,500,000	\$ 1,500,000
UCONN 2000 BOND FUNDS	-	-	-	-	-	7,000,000
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 80,000</b>	<b>\$ 310,000</b>	<b>\$ 465,000</b>	<b>\$ 925,000</b>	<b>\$ 1,500,000</b>	<b>\$ 8,500,000</b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

# ATTACHMENT 10

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June 26, 2024

TO: Members of the Board of Trustees

FROM: Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for Babbidge Library Stairs and Doors (Final: \$771,760)

RECOMMENDATION:

That the Board of Trustees approves the Final Budget of \$771,760 as detailed in the attached project budget, for interior improvements to the Homer Babbidge Library. The Administration recommends that the Board of Trustees adopt the Resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$771,760 in University Funds for the Babbidge Library Stairs and Doors project and approve the request for a waiver of the three-stage budget approval process to allow construction to proceed in accordance with sole source procurement procedures.”

BACKGROUND:

The project involves three main components:

- Demolition of the existing defunct and decommissioned escalator between the Plaza and Lower Levels and replacement with a bluestone staircase, similar to the work performed one level up in the 1999 interior improvement project.
- Removal and replacement of six storefront doorways at the elevator lobbies on the 2<sup>nd</sup>, 3<sup>rd</sup>, and 4<sup>th</sup> Levels to comply with building code.
- Removal and replacement of the storefront entry doorways at the Plaza Level to comply with energy code.

This project aligns with the strategic initiative Excellence in Research, Innovation, and Engagement.

Attachment



## CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET: FINAL**

**PROJECT NAME: BABBIDGE LIBRARY STAIRS AND DOORS**

<u>BUDGETED EXPENDITURES</u>	<b>PROPOSED FINAL 6/26/2024</b>
CONSTRUCTION	\$ 638,000
DESIGN SERVICES	63,600
TELECOMMUNICATIONS	-
FURNITURE, FIXTURES AND EQUIPMENT	-
CONSTRUCTION ADMINISTRATION	-
OTHER AE SERVICES (including Project Management)	-
ART	-
RELOCATION	-
ENVIRONMENTAL	-
INSURANCE AND LEGAL	-
MISCELLANEOUS	-
OTHER SOFT COSTS	-
<b>SUBTOTAL</b>	<b>\$ 701,600</b>
PROJECT CONTINGENCY	70,160
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 771,760</b>
<u><b>SOURCE(S) OF FUNDING *</b></u>	
UNIVERSITY FUNDS	\$ 771,760
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 771,760</b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

*BOT 6.26.24*

*FO502282*

BABBIDGE LIBRARY STAIRS & DOORS UPGRADE  
Project Budget (Proposed FINAL)  
JUNE 26, 2024



# ATTACHMENT 11

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June 26, 2024

TO: Members of the Board of Trustees

FROM: Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for Innovation Partnership Building (IPB) Renovations for the  
Center for Clean Energy Engineering (C2E2) (Final: \$24,000,000)

RECOMMENDATION:

That the Board of Trustees approves the Proposed Final Budget of \$24,000,000 as detailed in the attached project budget, to relocate C2E2 to the Innovation Partnership Building. The additional \$18,600,000 is to fully fund the construction of Phase 2. The Administration recommends that the Board of Trustees adopt the Resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$24,000,000 in UCONN 2000 Bond Funds for the design of the entire project and construction of Phase 1 & 2 and approve the request for a waiver of the three-stage budget approval process to allow construction to proceed.”

BACKGROUND:

This project involves renovation of labs, offices, and shell space in the Innovation Partnership Building. The work includes customizing office areas, building new labs in shell spaces and revising the layout of existing labs to accommodate new equipment. The project will entail the relocation of equipment, labs, and staff from C2E2 to create necessary accommodations for research staff in IPB. The total project costs are anticipated to be \$24,000,000. This project aligns with the strategic initiative Excellence in Research, Innovation, and Engagement.

Attachments

## CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET:**       **FINAL**

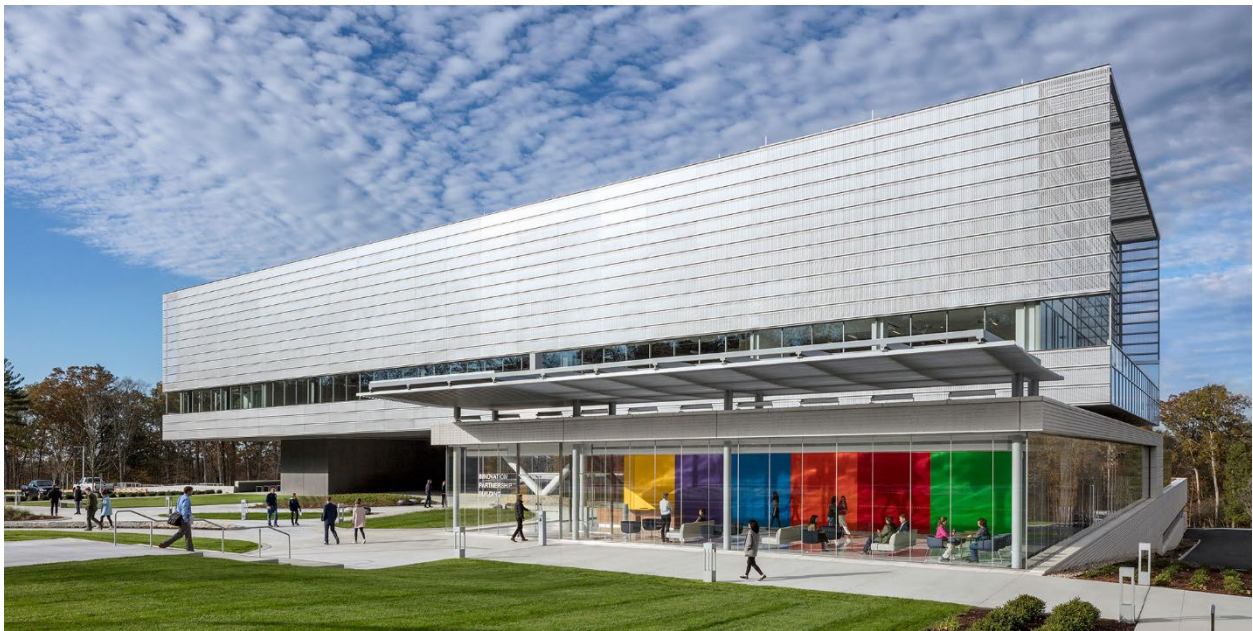
**PROJECT NAME:**       **INNOVATION PARTNERSHIP BUILDING (IPB) RENOVATIONS FOR THE CENTER FOR  
CLEAN ENERGY ENGINEERING (C2E2)**

<u>BUDGETED EXPENDITURES</u>	<b>PHASE 1 PRC 9/14/2023</b>	<b>PHASE 2 APPROVED DESIGN 10/25/2023</b>	<b>PHASE 1 FINAL 12/6/2023</b>	<b>PHASE 2 PROPOSED FINAL 6/26/2024</b>
CONSTRUCTION	\$ -	\$ -	\$ 3,612,000	\$ 20,000,000
DESIGN SERVICES	368,000	1,288,000	1,288,000	2,000,000
TELECOMMUNICATIONS	-	-	-	-
FURNITURE, FIXTURES AND EQUIPMENT	-	-	-	-
CONSTRUCTION ADMINISTRATION	-	-	-	-
OTHER AE SERVICES (including PM)	-	-	-	-
ART	-	-	-	-
RELOCATION	-	-	-	-
ENVIRONMENTAL	-	-	-	-
INSURANCE AND LEGAL	-	-	-	-
MISCELLANEOUS	-	-	-	-
OTHER SOFT COSTS	-	-	-	-
<b>SUBTOTAL</b>	<b>\$ 368,000</b>	<b>\$ 1,288,000</b>	<b>\$ 4,900,000</b>	<b>\$ 22,000,000</b>
PROJECT CONTINGENCY	32,000	112,000	500,000	2,000,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 400,000</b>	<b>\$ 1,400,000</b>	<b>\$ 5,400,000</b>	<b>\$ 24,000,000</b>
<b><u>SOURCE(S) OF FUNDING*</u></b>				
UCONN 2000 BOND FUNDS	\$ 400,000	\$ 1,400,000	\$ 5,400,000	\$ 24,000,000
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 400,000</b>	<b>\$ 1,400,000</b>	<b>\$ 5,400,000</b>	<b>\$ 24,000,000</b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

BOT 06.26.24  
300254/TL2547

INNOVATION PARTNERSHIP BUILDING (IPB)  
RENOVATIONS FOR THE CENTER FOR CLEAN ENERGY  
ENGINEERING (C2E2)  
Project Budget (Final)  
June 26, 2024



# ATTACHMENT 12

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June 26, 2024

TO: Members of the Board of Trustees

FROM: Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for Andover Infrastructure and Software Upgrade Phases I  
Through V (Revised Final: \$4,355,439)

RECOMMENDATION:

That the Board of Trustees note the approval of the Revised Final Budget of \$4,355,439 as detailed in the attached project budget, for the Andover Infrastructure and Software Upgrade Phases I through V for Construction. The increase of \$500,000 to the Project Budget is to establish a fifth phase for FY25, furnishing and installing controllers for four additional facilities at the Storrs campus and upgrading the main BMS server. The Administration recommends that the Board of Trustees adopt the Resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees note the approval of the use of \$4,355,439 in University Funds for the Andover Infrastructure and Software Upgrade Phases I through V project.”

BACKGROUND:

UConn monitors buildings through the Andover Building Management System. This system controls and monitors the buildings’ mechanical and electrical equipment such as ventilation, lighting, power systems, fire systems, and security systems. Its useful life is ending. The system needs to be upgraded to the next-generation EcoStruxure Building Operation System over several years to securely facilitate the exchange of data from both ESC and third-party energy, lighting, HVAC, fire safety, security, and workplace management systems to create future-ready smart buildings.

This project has multiple phases. Currently the cost of the entire project is estimated at around \$8M. The sequence of building upgrades in a particular phase will vary depending upon the funding availability and building access. Sixty-nine campus buildings have already been updated as part of Phases I, II, III & IV. Phase V will add four more facilities in FY25 and upgrade the main BMS server. This project will align with the strategic initiatives of Wellness of People and Planet and Seven World-Class Campuses, One Flagship University.

The Revised Final Budget is attached for your information and reflects an increase of \$500,000 to the previously approved Final Budget of \$3,855,439.



## CAPITAL PROJECT BUDGET REPORTING FORM

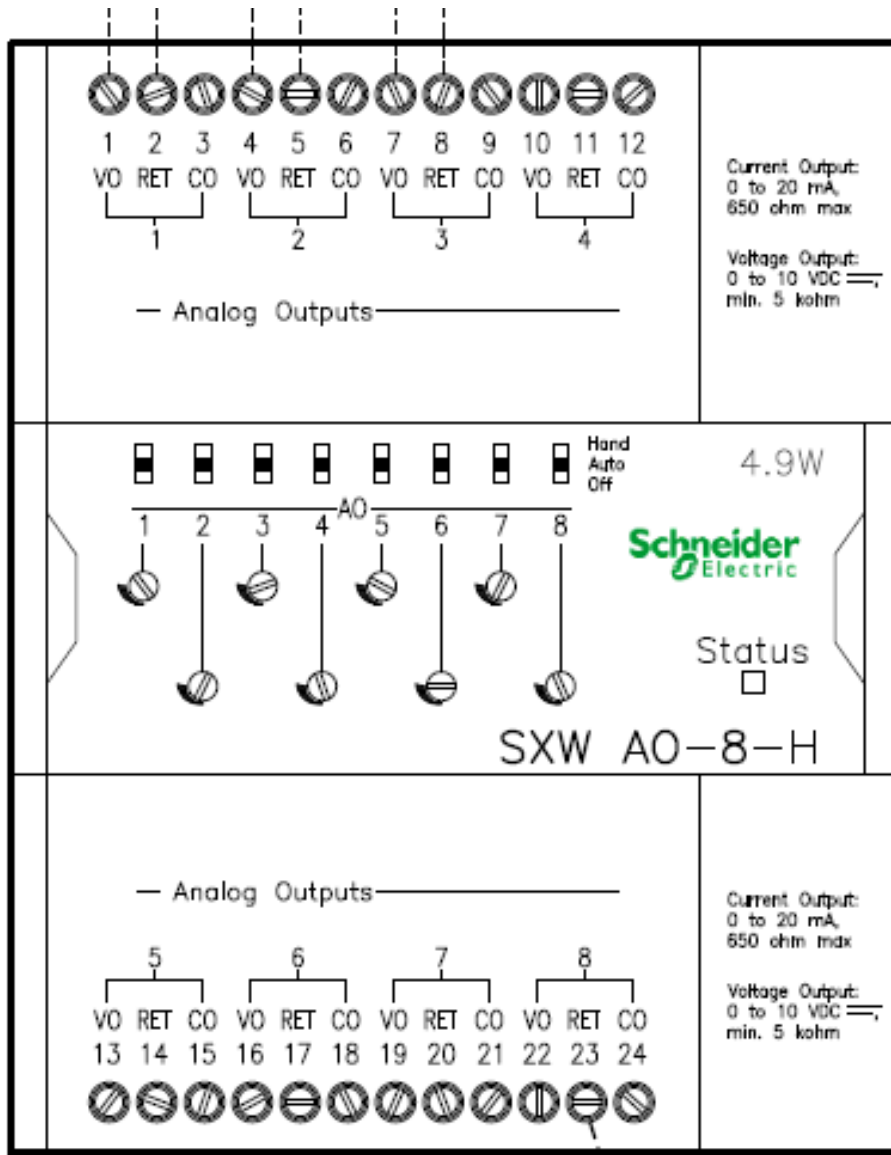
**TYPE BUDGET:**        **REVISED FINAL**

**PROJECT NAME:**        **ANDOVER INFRASTRUCTURE AND SOFTWARE UPGRADE - PHASES I THROUGH V**

<u>BUDGETED EXPENDITURES</u>	<b>PHASE I &amp; II APPROVED FINAL 2/24/2021</b>	<b>PHASE I,II&amp;III APPROVED FINAL 4/27/2022</b>	<b>Phase I,II&amp;III APPROVED FINAL 6/28/2023</b>	<b>Phase I, II, III, &amp; IV APPROVED FINAL 10/25/2023</b>	<b>Phase I Through V PROPOSED REVISED FINAL 6/26/2024</b>
CONSTRUCTION	\$ 2,314,000	\$ 3,011,400	\$ 3,480,439	\$ 3,503,439	\$ 3,959,000
DESIGN SERVICES	-	-	-	-	-
TELECOMMUNICATIONS	-	-	-	-	-
FURNITURE, FIXTURES AND EQUIPME	-	-	-	-	-
CONSTRUCTION ADMINISTRATION	-	-	-	-	-
OTHER AE SERVICES (including PM)	-	-	-	-	-
ART	-	-	-	-	-
RELOCATION	-	-	-	-	-
ENVIRONMENTAL	-	-	-	-	-
INSURANCE AND LEGAL	-	-	-	-	-
MISCELLANEOUS	-	-	-	-	-
OTHER SOFT COSTS	-	-	-	-	-
<b>SUBTOTAL</b>	<b>\$ 2,314,000</b>	<b>\$ 3,011,400</b>	<b>\$ 3,480,439</b>	<b>\$ 3,503,439</b>	<b>\$ 3,959,000</b>
PROJECT CONTINGENCY	282,000	334,600	-	352,000	396,439
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 2,596,000</b>	<b>\$ 3,346,000</b>	<b>\$ 3,480,439</b>	<b>\$ 3,855,439</b>	<b>\$ 4,355,439</b>
<b><u>SOURCE(S) OF FUNDING*</u></b>					
UNIVERSITY FUNDS	\$ 2,596,000	\$ 3,346,000	\$ 3,480,439	\$ 3,855,439	\$ 4,355,439
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 2,596,000</b>	<b>\$ 3,346,000</b>	<b>\$ 3,480,439</b>	<b>\$ 3,855,439</b>	<b>\$ 4,355,439</b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

**ANDOVER INFRASTRUCTURE AND SOFTWARE UPGRADE**  
**PHASE I THROUGH V**  
**Project Budget (Proposed FINAL)**  
**JUNE 26, 2024**



# ATTACHMENT 13

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June 26, 2024

TO: Members of the Board of Trustees

FROM: Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

Anne D'Alleva  
Provost and Executive Vice President for Academic Affairs

RE: Program Budget for Wired Access Layer Cabling  
(Final \$2,000,000)

RECOMMENDATION:

That the Board of Trustees approve the final budget of \$2,000,000, as detailed in the attached program budget, to execute the facilities and wiring deficiencies related to the Wired Access Layer Infrastructure Refresh. The administration recommends that the Board of Trustees adopt the resolution below.

RESOLUTION:

“Be it resolved that the Board of Trustees approve the use of \$2,000,000 in UCONN 2000 bond funds for the wiring and related construction needed to continue the Wired Access Layer Infrastructure Refresh project and approve the request to waive the three-stage budget approval, allowing work to proceed immediately.”

BACKGROUND:

In 2019, ITS initiated the Wired Access Layer Refresh (WALR) project to completely refresh the wired and wireless portion of the data network on all campuses. This large-scale update was necessary to address end-of-life equipment, facilities, fiber optics, and copper cabling and effectively update the University's foundation for all connectivity. There are widely different lifespans for network equipment (5-8 years) and facilities and cabling (25-30 years). Therefore, the construction portion, which will address facilities and cabling deficiencies, will remain a project for which we request funding annually. Network equipment, deployed at the beginning of the project, is now end-of-life, and the scheduled refresh of network equipment is being treated as deferred maintenance.

To continue work on the facilities and wiring the wired access layer refresh, we are requesting \$2,000,000 funded by UCONN 2000 bonds. The funds requested for FY25 will be used to update the remaining Law School buildings, including Mackenzie Hall, and North Campus Residence Halls. There will also be targeted updates to address acute deficiencies in several other buildings, including dining halls, the Volleyball Center, and Wilbur Cross.

## CAPITAL PROGRAM BUDGET REPORTING FORM

**TYPE BUDGET:        FINAL**

**NAME: WIRED ACCESS LAYER INFRASTRUCTURE - CABLING FY25**

<u>BUDGETED EXPENDITURES*</u>	<u>PROPOSED FINAL 6/26/2024</u>
CONSTRUCTION	\$ 810,000
DESIGN SERVICES	90,000
TELECOMMUNICATIONS	846,000
CONSTRUCTION ADMINISTRATION	60,000
OTHER AE SERVICES (including Project Management)	80,000
ART	-
RELOCATION	-
ENVIRONMENTAL	-
INSURANCE AND LEGAL	-
MISCELLANEOUS	12,000
OTHER SOFT COSTS	-
<b>SUBTOTAL</b>	<b>\$ 1,898,000</b>
PROJECT CONTINGENCY	102,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b><u>\$ 2,000,000</u></b>
 <u>SOURCE OF FUNDING**</u>	
UCONN 2000 BOND FUNDS	<u>\$ 2,000,000</u>
<b>TOTAL BUDGETED FUNDING</b>	<b><u>\$ 2,000,000</u></b>

\*\*This budget reflects the University's current intended source(s) of funding for this phase. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

BOT 06.26.24  
VARIOUS IT PROJECT #S

# ATTACHMENT 14

# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Executive Vice President for Health Affairs and CEO of UConn Health

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health CT-7 Inpatient & Research Renovations  
(Planning: \$1,675,000)

## RECOMMENDATION:

That the Board of Trustees approve the Planning Budget in the amount of \$1,675,000 as detailed in the attached project budget for the UConn Health CT-7 Inpatient & Research Renovations Project.

## RESOLUTION:

“Be it resolved that the Board of Trustees approve of the use of \$1,675,000 from UConn Health School of Medicine Operating funds, UConn 2000 Phase III Deferred Maintenance, UConn Health Capital and UConn Foundation funds for the UConn Health CT-7 Inpatient & Research Renovations Project.”

## BACKGROUND:

This project will promote improve the Wellness of People and Planet and Excellence in Research, Innovation and Engagement by renovating space to accommodate an enlarged Clean Supply room required for the new Inpatient unit on CT-7 and construct a new metabolic chamber for research studies. A metabolic chamber is a controlled is a controlled environment where subjects go through various different testing scenarios to measure their energy consumption (metabolism). The data gathered through these studies are used for research related to obesity, diabetes and other chronic disorders affecting the body’s metabolism.

The Planning Budget is attached for your consideration. The Planning Budget is based on conceptual estimates and may change as the project design is developed. This Planning Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

# CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET: PLANNING**

**PROJECT NAME: UCONN HEALTH - CT-7 INPATIENT AND RESEARCH  
RENOVATIONS**

<b><u>BUDGETED EXPENDITURES</u></b>	<b><u>PROPOSED PLANNING 6/26/2024</u></b>
CONSTRUCTION	\$ 365,000
DESIGN SERVICES	60,000
TELECOMMUNICATIONS	20,000
FURNITURE, FIXTURES AND EQUIPMENT	1,060,000
CONSTRUCTION ADMINISTRATION	-
OTHER AE SERVICES (including Project Management)	5,000
ART	-
RELOCATION	-
ENVIRONMENTAL	10,000
INSURANCE AND LEGAL	-
MISCELLANEOUS	2,000
<b>SUBTOTAL</b>	<b>\$ 1,522,000</b>
PROJECT CONTINGENCY	153,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b><u>\$ 1,675,000</u></b>
<b><u>SOURCE(S) OF FUNDING*</u></b>	
UCONN HEALTH SCHOOL OF MEDICINE OPERATING FUNDS	925,000
UCONN 2000 PHASE III DM	300,000
UCONN HEALTH CAPITAL	200,000
UCONN FOUNDATION	250,000
<b>TOTAL BUDGETED FUNDING</b>	<b><u>\$ 1,675,000</u></b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.



UCONN HEALTH/IMPROVEMENTS  
UConn Health CT-7 Inpatient & Research Renovations  
Project Budget (Planning) \$1,675,000  
June 26, 2024



**Conceptual Floor Plan**

# ATTACHMENT 15

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# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Executive Vice President for Health Affairs and CEO of UConn Health

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health Main Building Lab Area Renovations – 1st Floor (Planning: \$11,900,000)

## RECOMMENDATION:

That the Board of Trustees approve the Planning Budget in the amount of \$11,900,000 as detailed in the attached project budget for the UConn Health Main Building Lab Area Renovations – 1st Floor Project.

## RESOLUTION:

“Be it resolved that the Board of Trustees approve of the use of \$11,900,000 from UConn Health School of Medicine Operating funds, Research IDC Capital and General Obligation DM Bond funds for the UConn Health Main Building Lab Area Renovations – 1st Floor Project.”

## BACKGROUND:

Two major projects under Bioscience Connecticut and subsequent projects in 2018 and 2022 were implemented to renovate the laboratory space located in the Main Building Lab (L) Area per the concepts developed under the 2009 Main Building Renovation Master Plan. This project will promote Excellence in Research, Innovation and Engagement by continuing to implement the Master Plan and renovate a section of the 1st floor to create open and flexible, state of the art wet lab research space similar to the work done on the previous floors.

The Planning Budget is attached for your consideration. The Planning Budget is based on conceptual estimates and may change as the project design is developed. This Planning Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

# CAPITAL PROJECT BUDGET REPORTING FORM

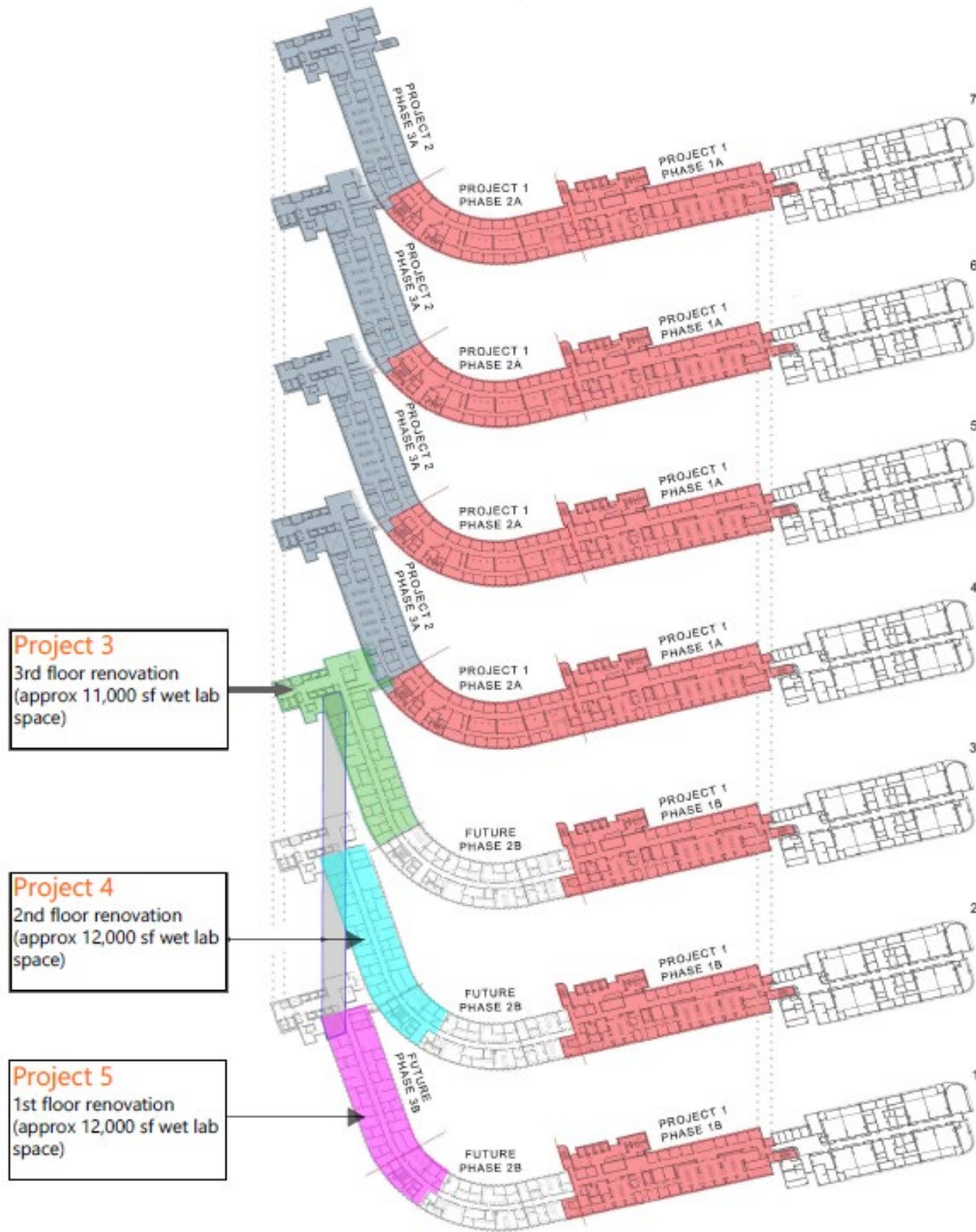
**TYPE BUDGET: PLANNING**

**PROJECT NAME: UCONN HEALTH - MAIN BUILDING (L) LAB RENOVATIONS - 1ST FLOOR**

<b><u>BUDGETED EXPENDITURES</u></b>	<b><u>PROPOSED PLANNING 6/26/2024</u></b>
CONSTRUCTION	\$ 9,700,000
DESIGN SERVICES	750,000
TELECOMMUNICATIONS	133,000
FURNITURE, FIXTURES AND EQUIPMENT	145,000
CONSTRUCTION ADMINISTRATION	-
OTHER AE SERVICES (including Project Management)	65,000
ART	-
RELOCATION	-
ENVIRONMENTAL	25,000
INSURANCE AND LEGAL	-
MISCELLANEOUS	-
<b>SUBTOTAL</b>	<b>\$ 10,818,000</b>
PROJECT CONTINGENCY	<u>1,082,000</u>
<b>TOTAL BUDGETED EXPENDITURES</b>	<b><u>\$ 11,900,000</u></b>
<b><u>SOURCE(S) OF FUNDING*</u></b>	
FY 23 STATE GO BOND FUNDS	7,350,000
UCONN HEALTH RESEARCH IDC CAPITAL	2,275,000
UCONN HEALTH SCHOOL OF MEDICINE OPERATING FUNDS	2,275,000
<b>TOTAL BUDGETED FUNDING</b>	<b><u>\$ 11,900,000</u></b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

UCONN HEALTH/IMPROVEMENTS  
UConn Health Main Building  
Lab Area Renovations – 1st Floor  
Project Budget (Planning) \$11,900,000  
June 26, 2024



**MASTER PLAN MAIN BUILDING LAB RENOVATIONS**

# ATTACHMENT 16

# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Executive Vice President for Health Affairs and CEO of UConn Health

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health Surgery Center Operating Room #6  
Renovations (Planning: \$1,750,000)

## RECOMMENDATION:

That the Board of Trustees approve the Planning Budget in the amount of \$1,750,000 as detailed in the attached project budget for the UConn Health Surgery Center Operating Room #6 Renovations.

## RESOLUTION:

“Be it resolved that the Board of Trustees approve of the use of \$1,750,000 from UConn Health Capital for the UConn Health Surgery Center Operating Room #6 Renovations.”

## BACKGROUND:

This project will promote and improve the Wellness of People and Planet by converting an existing procedure room into an operating room and replacing/upgrading all the existing outdated operating room light booms and making required air pressure modifications within the Surgery Center located in the Musculoskeletal Institute.

The Planning Budget is attached for your consideration. The Planning Budget is based on conceptual estimates and may change as the project design is developed. This Planning Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

Attachments

## CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET: PLANNING**

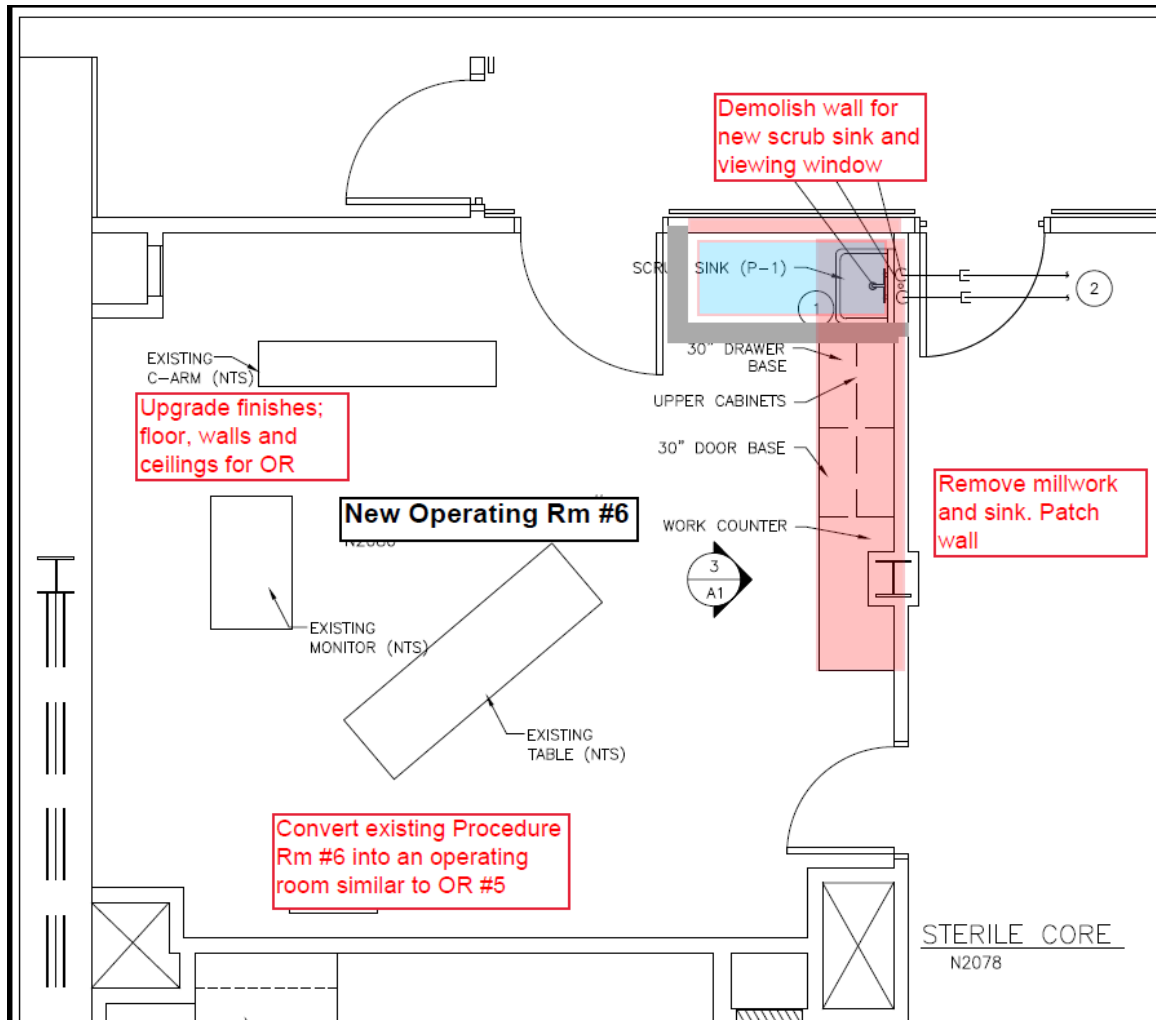
**PROJECT NAME: UCONN HEALTH - SURGERY CENTER OPERATING ROOM #6  
RENOVATIONS**

<u>BUDGETED EXPENDITURES</u>	<u>PROPOSED PLANNING 6/26/2024</u>
CONSTRUCTION	\$ 608,000
DESIGN SERVICES	120,000
TELECOMMUNICATIONS	15,000
FURNITURE, FIXTURES AND EQUIPMENT	840,000
CONSTRUCTION ADMINISTRATION	-
OTHER AE SERVICES (including Project Management)	5,000
ART	-
RELOCATION	2,000
ENVIRONMENTAL	-
INSURANCE AND LEGAL	-
MISCELLANEOUS	-
<b>SUBTOTAL</b>	<b>\$ 1,590,000</b>
PROJECT CONTINGENCY	160,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 1,750,000</b>
<u><b>SOURCE(S) OF FUNDING*</b></u>	
UCONN HEALTH CAPITAL	1,750,000
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 1,750,000</b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.



UCONN HEALTH/IMPROVEMENTS  
UConn Health Surgery Center  
Operating Room #6 Renovations  
Project Budget (Planning) \$1,750,000  
June 26, 2024



**Conceptual Floor Plan**

# ATTACHMENT 17

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# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Executive Vice President for Health Affairs and CEO of UConn Health

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health ASB Data Center Generator and Power Improvements (Planning: \$3,150,000)

## RECOMMENDATION:

That the Board of Trustees approve the Planning Budget in the amount of \$3,150,000 as detailed in the attached project budget for the UConn Health ASB Data Center Generator and Power Improvements Project.

## RESOLUTION:

“Be it resolved that the Board of Trustees approve of the use of \$3,150,000 from UCONN 2000 Phase III Deferred Maintenance and Fiscal Year 23 GO Bond funds for the UConn ASB Data Center Generator and Power Improvements Project.”

## BACKGROUND:

The Administrative Services Building (ASB) is the site of the main UConn Health Data Center. In order to maintain Farmington as part of our Seven World-Class Campuses, One Flagship University and maintain Excellence in Research, Innovation and Engagement; this project will make improvements to the building’s emergency power distribution system, including the replacement of an existing exterior generator that serves the campus-wide data center.

The Planning Budget is attached for your consideration. The Planning Budget is based on conceptual estimates and may change as the project design is developed. This Planning Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

Attachments

# **CAPITAL PROJECT BUDGET REPORTING FORM**

**TYPE BUDGET: PLANNING**

**PROJECT NAME: UCONN HEALTH - ASB DATA CENTER GENERATOR AND POWER IMPROVEMENTS**

<b><u>BUDGETED EXPENDITURES</u></b>	<b><u>PROPOSED PLANNING 6/26/2024</u></b>
CONSTRUCTION	\$ 2,500,000
DESIGN SERVICES	150,000
TELECOMMUNICATIONS	20,000
FURNITURE, FIXTURES AND EQUIPMENT	20,000
CONSTRUCTION ADMINISTRATION	-
OTHER AE SERVICES (including Project Management)	50,000
ART	-
RELOCATION	-
ENVIRONMENTAL	-
INSURANCE AND LEGAL	-
MISCELLANEOUS	10,000
<b>SUBTOTAL</b>	<b>\$ 2,750,000</b>
PROJECT CONTINGENCY	400,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b><u>\$ 3,150,000</u></b>
<b><u>SOURCE(S) OF FUNDING*</u></b>	
FY 23 STATE GO BOND FUNDS	3,000,000
UCONN 2000 PHASE III DM	150,000
<b>TOTAL BUDGETED FUNDING</b>	<b><u>\$ 3,150,000</u></b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

UCONN HEALTH/IMPROVEMENTS  
UConn Health ASB Data Center  
Generator & Power Improvements  
Project Budget (Planning) \$3,150,000  
June 26, 2024



Existing Generator

# ATTACHMENT 18

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# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Executive Vice President for Health Affairs and CEO of UConn Health

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health IT Disaster Recovery Room  
(Planning: \$1,370,000)

## RECOMMENDATION:

That the Board of Trustees approve the Planning Budget in the amount of \$1,370,000 as detailed in the attached project budget for the UConn Health IT Disaster Recovery Room Project.

## RESOLUTION:

“Be it resolved that the Board of Trustees approve of the use of \$1,370,000 from UCONN 2000 Phase III Deferred Maintenance and General Obligation DM Bond funds for the UConn IT Disaster Recovery Room Project.”

## BACKGROUND:

In order to maintain Farmington as part of our Seven World-Class Campuses, One Flagship University; this project will update the data systems and infrastructure within an existing tel/data room located in the John Dempsey Hospital to support UConn Health’s Information Technology system recovery efforts to allow for business continuity in response to a major disruptive event. This project will make improvements to the building’s emergency power distribution system, including the replacement of an existing exterior generator that serves the campus wide data center.

The Planning Budget is attached for your consideration. The Planning Budget is based on conceptual estimates and may change as the project design is developed. This Planning Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

Attachments

# CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET: PLANNING**

**PROJECT NAME: UCONN HEALTH - IT DISASTER RECOVERY ROOM**

<u>BUDGETED EXPENDITURES</u>	<u>PROPOSED PLANNING 6/26/2024</u>
CONSTRUCTION	\$ 995,000
DESIGN SERVICES	110,000
TELECOMMUNICATIONS	140,000
FURNITURE, FIXTURES AND EQUIPMENT	.
CONSTRUCTION ADMINISTRATION	-
OTHER AE SERVICES (including Project Management)	-
ART	-
RELOCATION	-
ENVIRONMENTAL	-
INSURANCE AND LEGAL	-
MISCELLANEOUS	.
<b>SUBTOTAL</b>	<b>\$ 1,245,000</b>
PROJECT CONTINGENCY	125,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 1,370,000</b>
<u>SOURCE(S) OF FUNDING*</u>	
FY 23 STATE GO BOND FUNDS	1,260,000
UCONN 2000 PHASE III DM	110,000
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 1,370,000</b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.



UCONN HEALTH/IMPROVEMENTS  
UConn Health IT Disaster Recovery Room  
Project Budget (Planning) \$1,370,000  
June 26, 2024



Conceptual Layout

# ATTACHMENT 19

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# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Chief Executive Officer and Executive Vice President for Health Affairs

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health Parking Lots L1 & A5 Repaving  
(Design: \$1,020,000)

RECOMMENDATION:

That the Board of Trustees approve the Design Budget in the amount of \$1,020,000 for the UConn Health Parking Lots L1 & A5 Repaving project.

RESOLUTION:

“Be it resolved that the Board of Trustees approve of the use of \$1,020,000 from General Obligation DM Bond Funds for the UConn Health Parking Lots L1 & A5 Repaving project and; approve the request for a waiver of the three-stage budget approval process, to allow bidding to occur as soon as project design work is completed.”

BACKGROUND:

In order to maintain Farmington as part of our Seven World-Class Campuses, One Flagship University; this project will replace the parking lot pavement and upgrade storm drainage systems at staff parking lots L1 and A5 over the Summer/Fall of 2024.

The Design Budget is attached for your consideration. The Design Budget is based on estimates and may change based on actual bids received. This Design Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

Attachments

## CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET: DESIGN**

**PROJECT NAME: UCONN HEALTH - PARKING LOTS L1 & A5 REPAVEMENT**

<u>BUDGETED EXPENDITURES</u>	<u>PROPOSED DESIGN 6/26/2024</u>
CONSTRUCTION	\$ 675,000
DESIGN SERVICES	160,000
TELECOMMUNICATIONS	-
FURNITURE, FIXTURES AND EQUIPMENT	-
CONSTRUCTION ADMINISTRATION	-
OTHER AE SERVICES (including Project Management)	12,000
ART	-
RELOCATION	-
ENVIRONMENTAL	-
INSURANCE AND LEGAL	-
MISCELLANEOUS	2,000
<b>SUBTOTAL</b>	<b>\$ 849,000</b>
PROJECT CONTINGENCY	171,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 1,020,000</b>
<u><b>SOURCE(S) OF FUNDING*</b></u>	
FY 23 STATE GO BOND FUNDS	\$ 1,020,000
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 1,020,000</b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

UCONN HEALTH/IMPROVEMENTS  
UConn Health Parking Lots L1 and A5 Repaving  
Project Budget (Design) \$1,020,000  
June 26, 2024



AERIAL VIEW OF PARKING LOTS

# ATTACHMENT 20

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# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Executive Vice President for Health Affairs and CEO of UConn Health

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health Building F & Building M Roof Replacement  
(Final: \$1,615,000)

RECOMMENDATION:

That the Board of Trustees approve the Final Budget in the amount of \$1,615,000 for the UConn Health Building F & Building M Roof Replacement project.

RESOLUTION:

“Be it resolved that the Board of Trustees approve of the use of \$1,615,000 from General Obligation DM Bond Funds for the UConn Health Building F & Building M Roof Replacement project.”

BACKGROUND:

The Canzonetti Building (Building F) and the Daycare Center (Building M) roofs have reached the end of their service life. The roofing membrane has deteriorated beyond the scope of normal maintenance and a full replacement is required. In order to maintain Farmington as part of our Seven World-Class Campuses, One Flagship University and improve the Wellness of People and Planet; these roofs will be replaced with a sustainable/high solar reflectance EPDM membrane system over the Summer/Fall of 2024.

The Final Budget is attached for your consideration. The Final Budget is based on estimates and may change based on actual bids received. This Final Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

Attachments

## CAPITAL PROJECT BUDGET REPORTING FORM

**TYPE BUDGET: FINAL**

**PROJECT NAME: UCONN HEALTH - BUILDING F & BUILDING M ROOF REPLACEMENT**

<u>BUDGETED EXPENDITURES</u>	<u>APPROVED DESIGN 2/28/2024</u>	<u>PROPOSED FINAL 6/26/2024</u>
CONSTRUCTION	\$ 1,302,000	\$ 1,302,000
DESIGN SERVICES	163,000	53,000
TELECOMMUNICATIONS	-	-
FURNITURE, FIXTURES AND EQUIPMENT	-	-
CONSTRUCTION ADMINISTRATION	-	-
OTHER AE SERVICES (including Project Management)	-	-
ART	-	-
RELOCATION	-	-
ENVIRONMENTAL	-	-
INSURANCE AND LEGAL	-	-
MISCELLANEOUS	-	-
<b>SUBTOTAL</b>	<b>\$ 1,465,000</b>	<b>\$ 1,355,000</b>
PROJECT CONTINGENCY	150,000	260,000
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 1,615,000</b>	<b>\$ 1,615,000</b>
 <u>SOURCE(S) OF FUNDING*</u>		
FY 23 STATE GO BOND FUNDS	\$ 1,615,000	\$ 1,615,000
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 1,615,000</b>	<b>\$ 1,615,000</b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.



UCONN HEALTH/IMPROVEMENTS  
UConn Health Building F & Building M  
Roof Replacement  
Project Budget (Final) \$1,615,000  
June 26, 2024



**BUILDING F (CANZONETTI BUILDING) ROOF**



**BUILDING M (DAYCARE CENTER) ROOF**

# ATTACHMENT 21

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# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Executive Vice President for Health Affairs and CEO of UConn Health

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health Cryo Electron Microscope Installation  
(Final: \$TBD)

## RECOMMENDATION:

That the Board of Trustees approves the Final Budget in the amount of \$TBD for the UConn Health Cryo Electron Microscope Installation project.

## RESOLUTION:

“Be it resolved that the Board of Trustees approves of the use of \$TBD from UConn Health Research IDC Capital for the UConn Health Cryo Electron Microscope Installation project.”

## BACKGROUND:

The Molecular Biology department was awarded a \$1,457,000 NIH grant to purchase a Cryo Electron Microscope for research activities. In order to operate properly the electron microscope requires very specific environmental parameters including seismic, vibration, humidity and temperature. This project will promote Excellence in Research, Innovation and Engagement by constructing the specialized climate-controlled rooms required to house the electron microscope.

The Final Budget is attached for your consideration. The Final Budget is based on actual bids received. This Final Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

Attachments

# CAPITAL PROJECT BUDGET REPORTING FORM

**DRAFT**

**TYPE BUDGET: FINAL**

**PROJECT NAME: UCONN HEALTH - CRYO ELECTRON MICROSCOPE INSTALLATION**

<b><u>BUDGETED EXPENDITURES</u></b>	<b><u>APPROVED PLANNING 6/28/2023</u></b>	<b><u>APPROVED DESIGN 9/27/2023</u></b>	<b><u>PROPOSED FINAL 6/26/2024</u></b>
CONSTRUCTION	\$ 700,000	\$ 700,000	
DESIGN SERVICES	113,000	113,000	
TELECOMMUNICATIONS	35,000	35,000	
FURNITURE, FIXTURES AND EQUIPMENT	2,000	2,000	
CONSTRUCTION ADMINISTRATION	-	-	
OTHER AE SERVICES (including Project Management)	5,000	5,000	
ART	-	-	
RELOCATION	4,000	4,000	
ENVIRONMENTAL	8,000	8,000	
INSURANCE AND LEGAL	-	-	
MISCELLANEOUS	5,000	5,000	
<b>SUBTOTAL</b>	<b>\$ 872,000</b>	<b>\$ 872,000</b>	<b>\$ -</b>
PROJECT CONTINGENCY	88,000	88,000	
<b>TOTAL BUDGETED EXPENDITURES</b>	<b>\$ 960,000</b>	<b>\$ 960,000</b>	<b>\$ -</b>
<b><u>SOURCE(S) OF FUNDING*</u></b>			
UCONN HEALTH RESEARCH IDC CAPITAL	\$ 960,000	\$ 960,000	
<b>TOTAL BUDGETED FUNDING</b>	<b>\$ 960,000</b>	<b>\$ 960,000</b>	<b>\$ -</b>

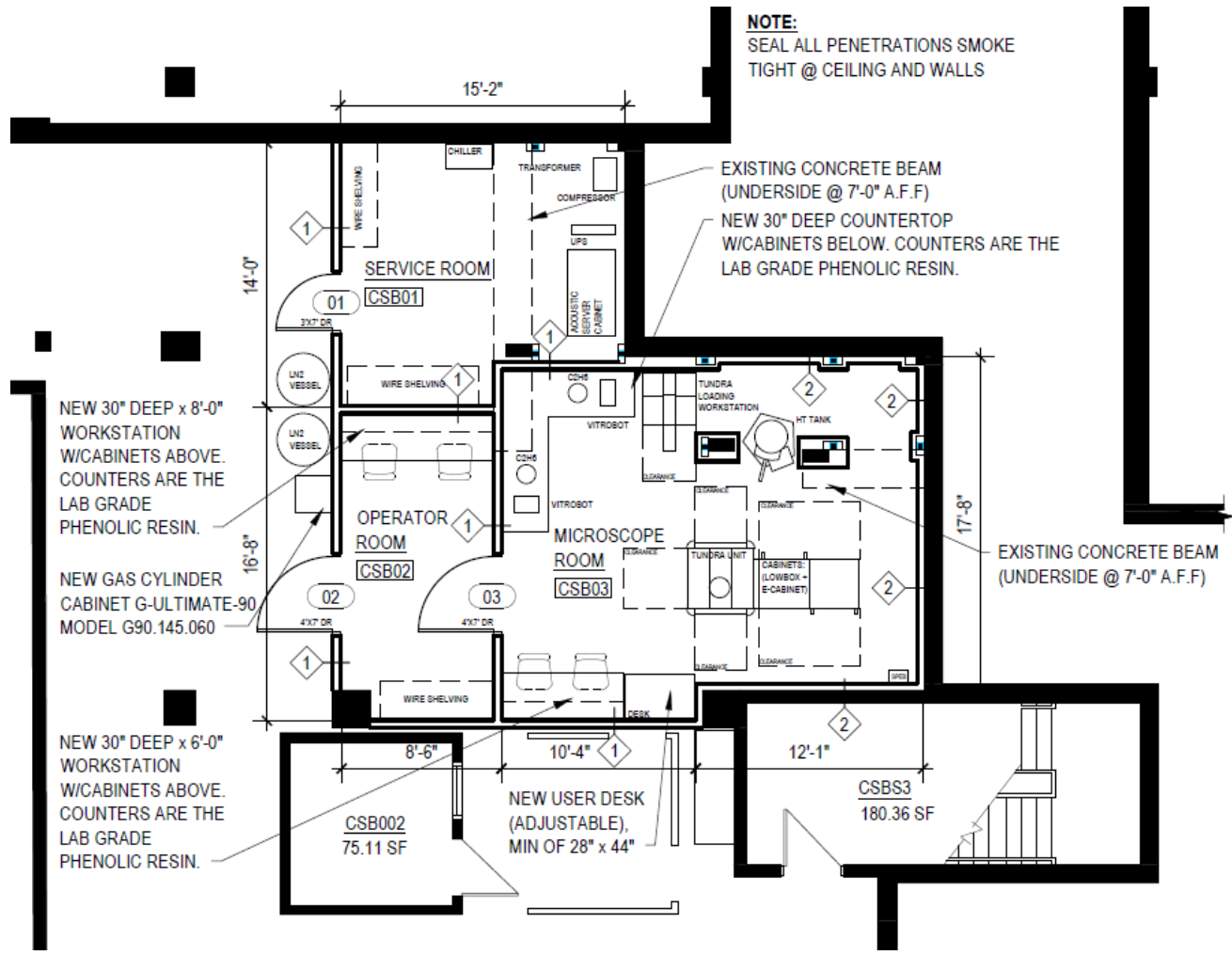
\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.

# UCONN HEALTH/IMPROVEMENTS

## UConn Health Cryo Electron Microscope Installation

### Project Budget (Final) \$TBD

### June 26, 2024



**Conceptual Floor Plan**

# ATTACHMENT 22

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# UConn HEALTH

June 26, 2024

TO: Members of the Board of Trustees

FROM: Andrew C. Agwunobi, MD, MBA  
Executive Vice President for Health Affairs and CEO of UConn Health

Jeffrey P. Geoghegan, CPA  
Executive Vice President for Finance and Chief Financial Officer

RE: Project Budget for the UConn Health KB034-036 Research Lab Renovation  
(Revised Final: \$TBD)

## RECOMMENDATION:

That the Board of Trustees approve the Revised Final Budget in the amount of \$TBD as detailed in the attached project budget for the UConn Health KB034-036 Research Lab Renovation Project.

## RESOLUTION:

“Be it resolved that the Board of Trustees approve of the use of \$TBD from UConn Health School of Medicine Operating Fund for the UConn Health KB034-036 Research Lab Renovation Project.”

## BACKGROUND:

This project will promote Excellence in Research, Innovation and Engagement by renovating approximately 2,500 sf of animal research/holding space located within the basement of the Transgenic Animal Facility (building K) to create a flexible/open wet research laboratory area for the new head of the Department of Surgery.

The Revised Final Budget is attached for your consideration. The Revised Final Budget is based on actual bids received. This Revised Final Budget is anticipated to be approved by the UConn Health Board of Directors at their meeting on June 10, 2024.

Attachments

# CAPITAL PROJECT BUDGET REPORTING FORM

**DRAFT**

**TYPE BUDGET: REVISED FINAL**

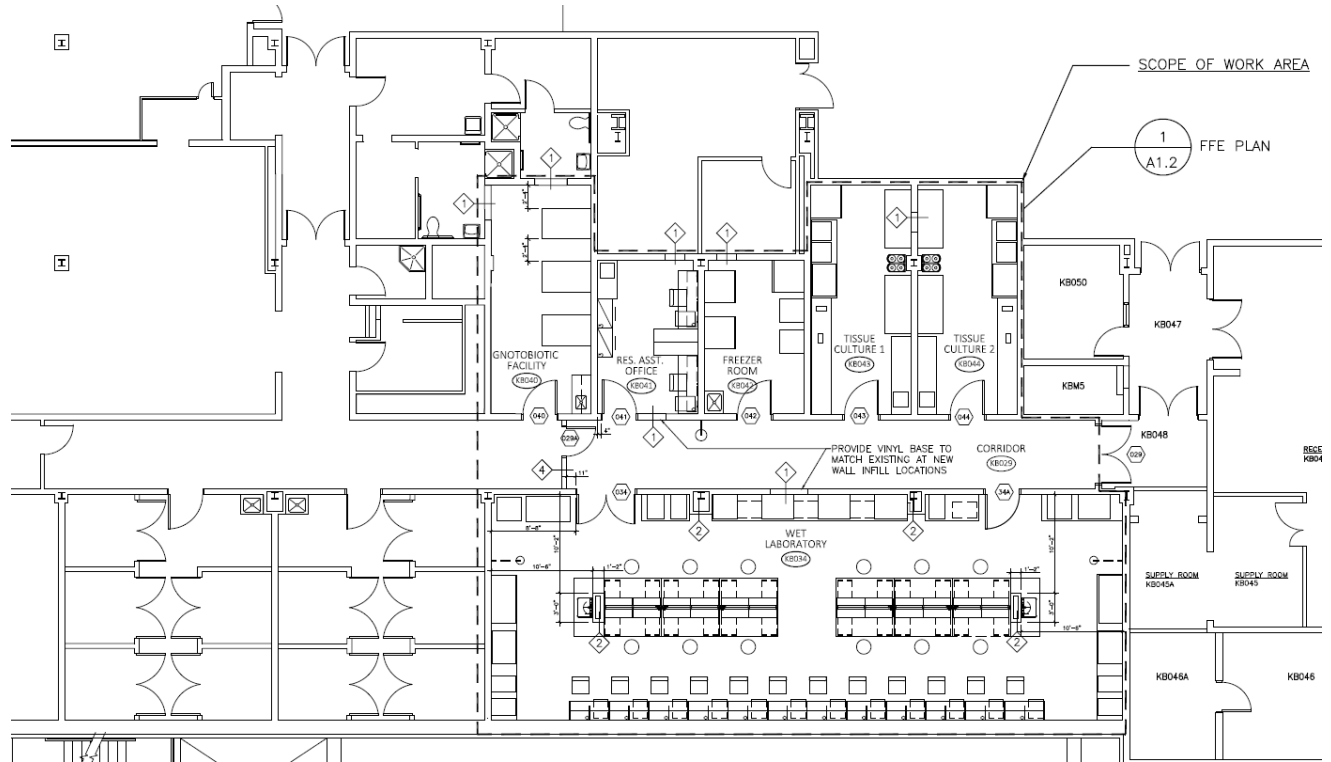
**PROJECT NAME: UCONN HEALTH - KB034-036 RESEARCH LAB RENOVATION**

<b><u>BUDGETED EXPENDITURES</u></b>	<b>APPROVED FINAL <u>2/28/2024</u></b>	<b>PROPOSED REVISED FINAL <u>6/26/2024</u></b>
CONSTRUCTION	\$450,000	
DESIGN SERVICES	65,000	
TELECOMMUNICATIONS	35,000	
FURNITURE, FIXTURES AND EQUIPMENT	100,000	
CONSTRUCTION ADMINISTRATION	-	-
OTHER AE SERVICES (including Project Management)	10,000	
ART	-	-
RELOCATION	-	-
ENVIRONMENTAL	-	-
INSURANCE AND LEGAL	-	-
MISCELLANEOUS	-	-
<b>SUBTOTAL</b>	<b>\$660,000</b>	<b>\$ -</b>
PROJECT CONTINGENCY	100,000	
<b>TOTAL BUDGETED EXPENDITURES</b>	<b><u>\$760,000</u></b>	<b><u>\$ -</u></b>
<b><u>SOURCE(S) OF FUNDING*</u></b>		
UCONN HEALTH SCHOOL OF MEDICINE OPERATING FUNDS	760,000	
<b>TOTAL BUDGETED FUNDING</b>	<b><u>\$760,000</u></b>	<b><u>\$ -</u></b>

\* This budget reflects the University's current intended source(s) of funding for the specified project. The University may adjust this funding plan in order to ensure compliance with applicable federal and state law(s) or to strategically utilize all fund sources, within the approved budget amount, as appropriate.



UCONN HEALTH/IMPROVEMENTS  
UConn Health KB034-036 Research Lab Renovation  
Project Budget (Revised Final) \$TBD  
June 26, 2024



**Proposed Floor Plan**

# ATTACHMENT 23

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UNIVERSITY PLANNING,  
DESIGN & CONSTRUCTION

## Summary of Individual Change Orders Greater Than 3% of Project Cost

Period: 03/16/2024 - 05/15/2024

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During the period between March 16, 2024 and May 15, 2024 no individual project's construction change order value equaled or exceeded 3% of the project cost.

# ATTACHMENT 24

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# University Planning, Design & Construction UCONN 2000 Code Correction Program

## Exception Report

31-May-24

### Summary

<b><i>TOTAL NUMBER OF OPEN PROJECTS</i></b>	<b><i>0</i></b>
<b><i>NUMBER OF DISCREPANCIES CORRECTED AND PENDING FINAL INSPECTION BY OFMBI</i></b>	<b><i>0</i></b>
<b><i>NUMBER OF DISCREPANCIES COMMITTED TO BE CORRECTED BY ORIGINAL CONTRACTOR</i></b>	<b><i>0</i></b>
<b><i>NUMBER OF OPEN DISCREPANCIES REMAINING TO BE CORRECTED</i></b>	<b><i>0</i></b>

						Number of Projects In Progress	0
<u>Project #</u>	<u>Building</u>	<u>Discrepancies</u>		<u>Corrected/</u>	<u>Correction by</u>	<u>Balance</u>	<u>Status/Projected Completion</u>
		<u>Cited</u>	<u>Corrected</u>	<u>Pending Inspection</u>	<u>Original Contractor</u>		
						0	
<i>Totals</i>		0	0	0	0	0	

## Program Summary

<i>TOTAL NUMBER OF OPEN PROJECTS</i>	<i>0</i>
<i>TOTAL NUMBER OF CITED DISCREPANCIES IN REMAINING OPEN PROJECTS</i>	<i>0</i>
<i>NUMBER OF CORRECTED AND APPROVED DISCREPANCIES IN REMAINING OPEN PROJECTS</i>	<i>0</i>
<i>NUMBER OF DISCREPANCIES CORRECTED AND PENDING FINAL INSPECTION BY OFMBI</i>	<i>0</i>
<i>NUMBER OF DISCREPANCIES COMMITTED TO BE CORRECTED BY ORIGINAL CONTRACTOR</i>	<i>0</i>
<i>NUMBER OF OPEN DISCREPANCIES REMAINING TO BE CORRECTED</i>	<i>0</i>

