



California State Polytechnic University, Pomona Master Plan

Bldg 98 Study + Transformations
18 April 2019



AGENDA

April 2019

Study Purpose:

To evaluate replacing Bldg 98-C/P with a new building or reinforcing/renovating the existing structure, including estimating the total cost associated with Bldg 98 seismic remediation (*demolition of Tower/Registration, CLA options, site restoration, temp facilities*).

1) Demolition of 98-Tower + Registration buildings

2) Strategies for 98 –CLA

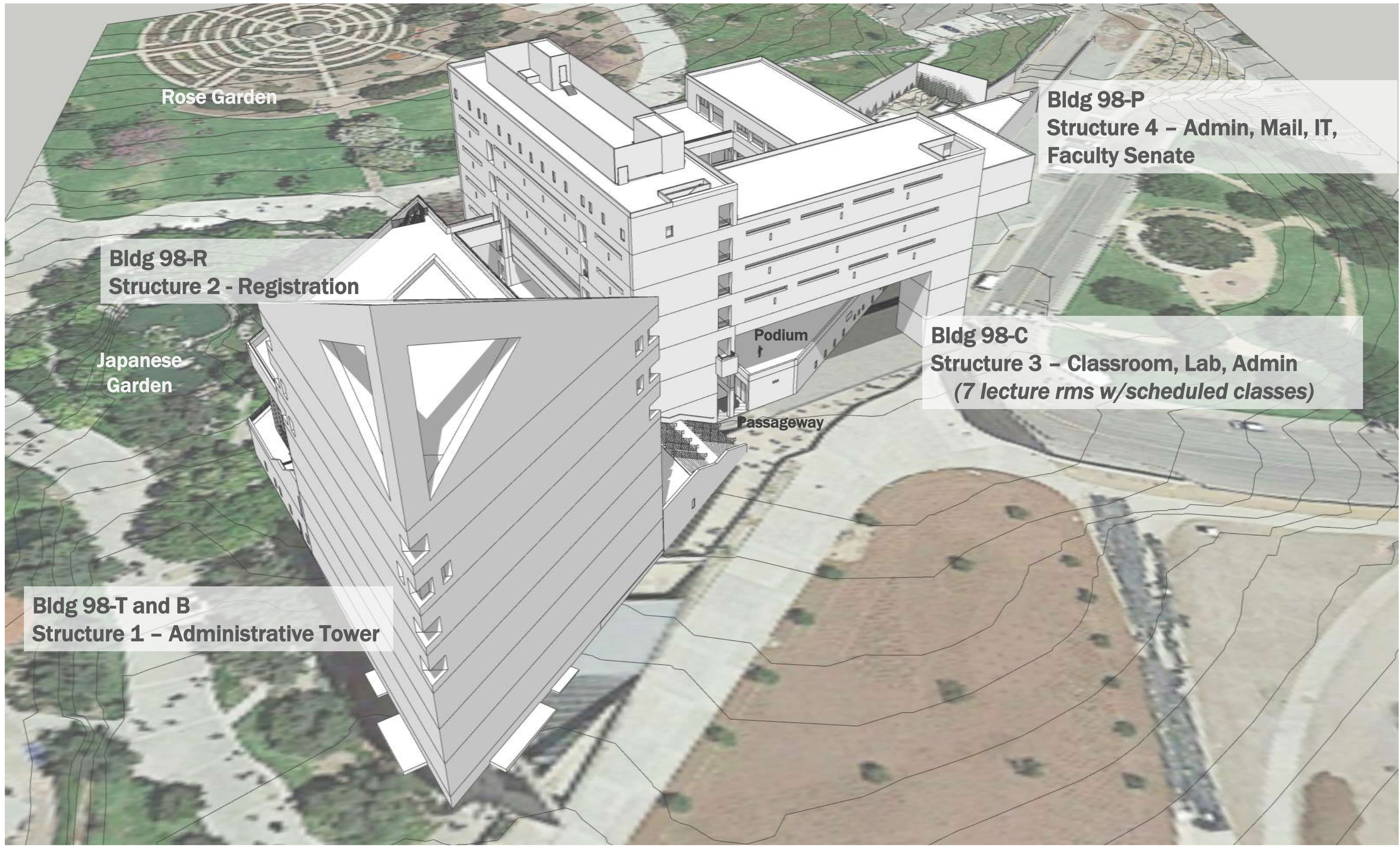
- Replace with a new building
 - Option 1: low building
 - Option 2: taller building
- Reinforce-Reconstruct existing building
 - Option 1: enclose atrium
 - Option 2: enclose podium + more roof

3) Precedents, Transformations, Sketch Concepts

4) Evaluation Considerations:

- cost, relocation logistics, time-sequence to completion
- potential uses, meeting academic space needs + ‘learn-by-doing’ intent
- campus impact + re-imagining a campus landmark

BLDG 98 STUDIES: EXISTING



Rose Garden

Bldg 98-P
**Structure 4 – Admin, Mail, IT,
Faculty Senate**

Bldg 98-R
Structure 2 - Registration

Bldg 98-C
**Structure 3 – Classroom, Lab, Admin
(7 lecture rms w/scheduled classes)**

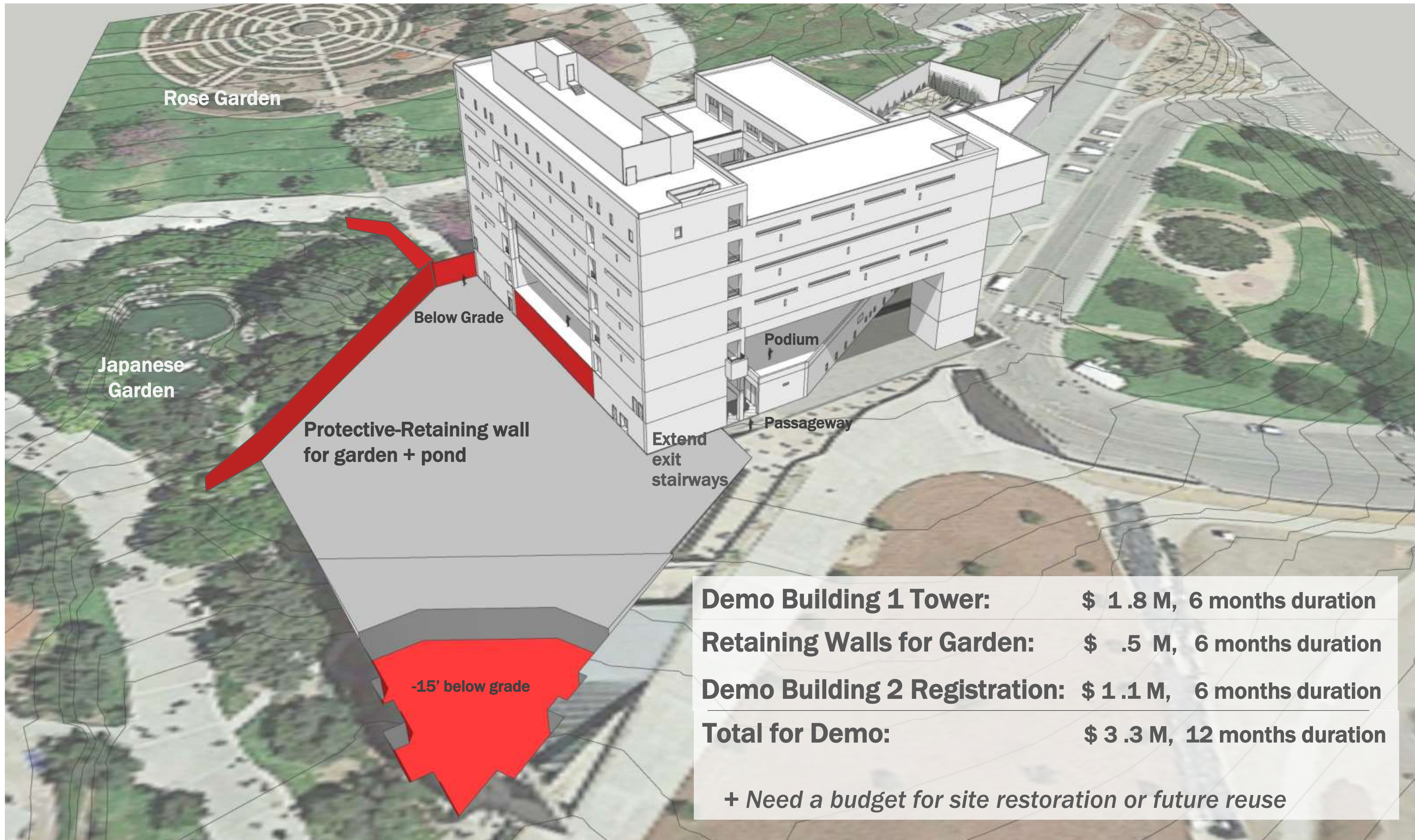
Japanese
Garden

Podium

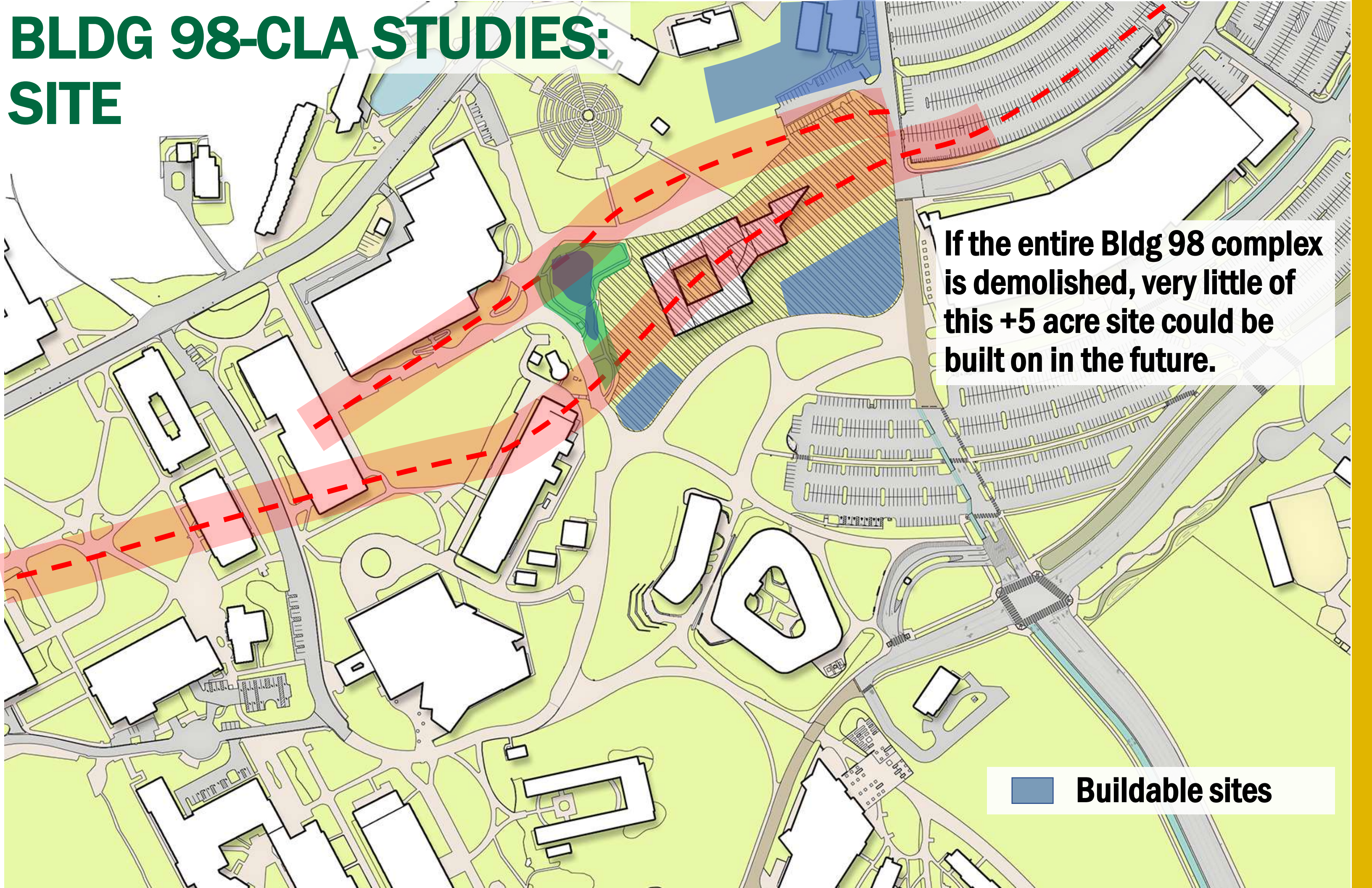
Passageway

Bldg 98-T and B
Structure 1 – Administrative Tower

BLDG 98-CLA STUDIES: DEMO REG BLDG



BLDG 98-CLA STUDIES: SITE



If the entire Bldg 98 complex is demolished, very little of this +5 acre site could be built on in the future.

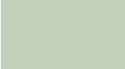



 **Buildable sites**

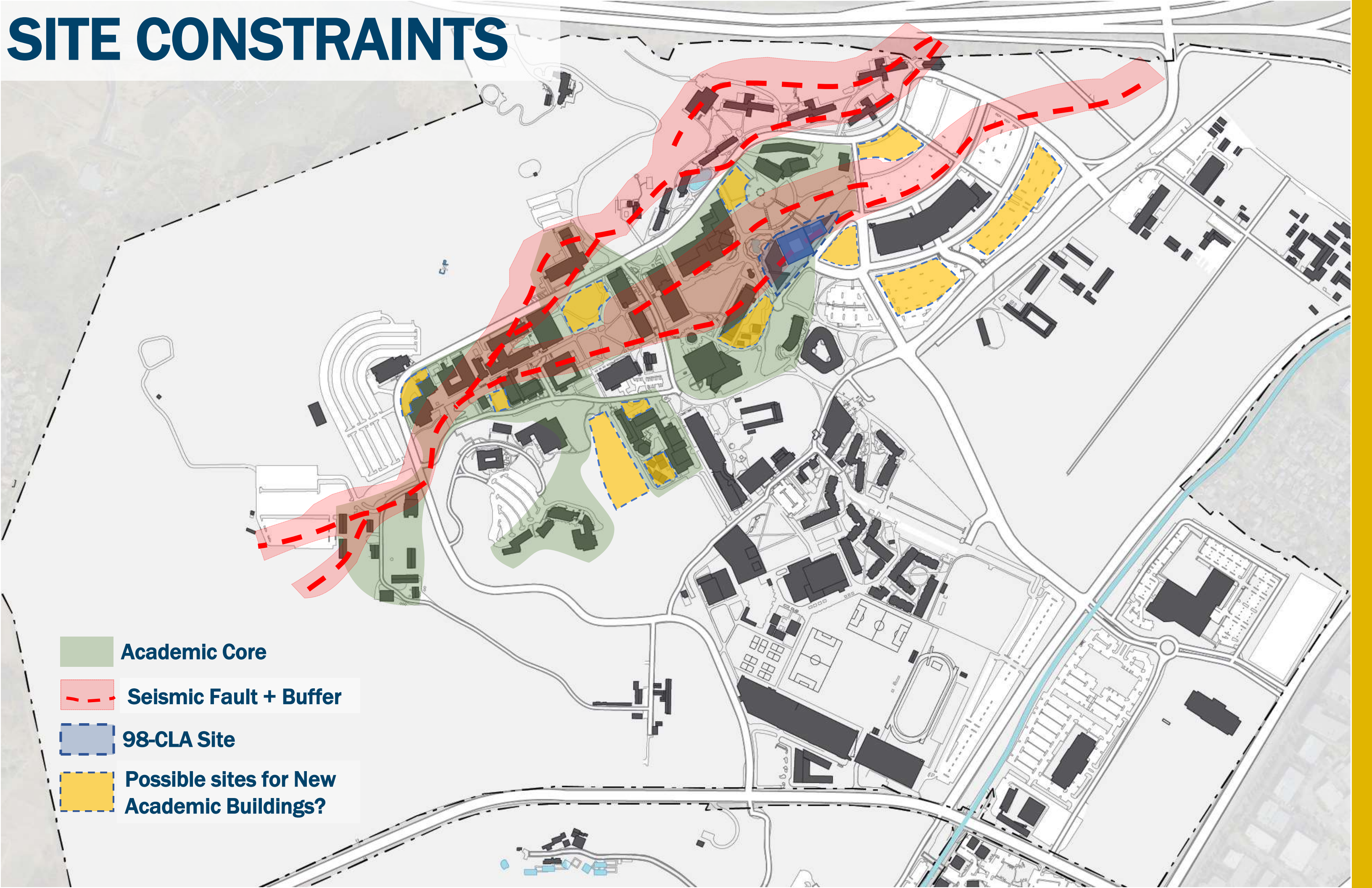
CIP-BLDG 98 Studies + Cost Analysis

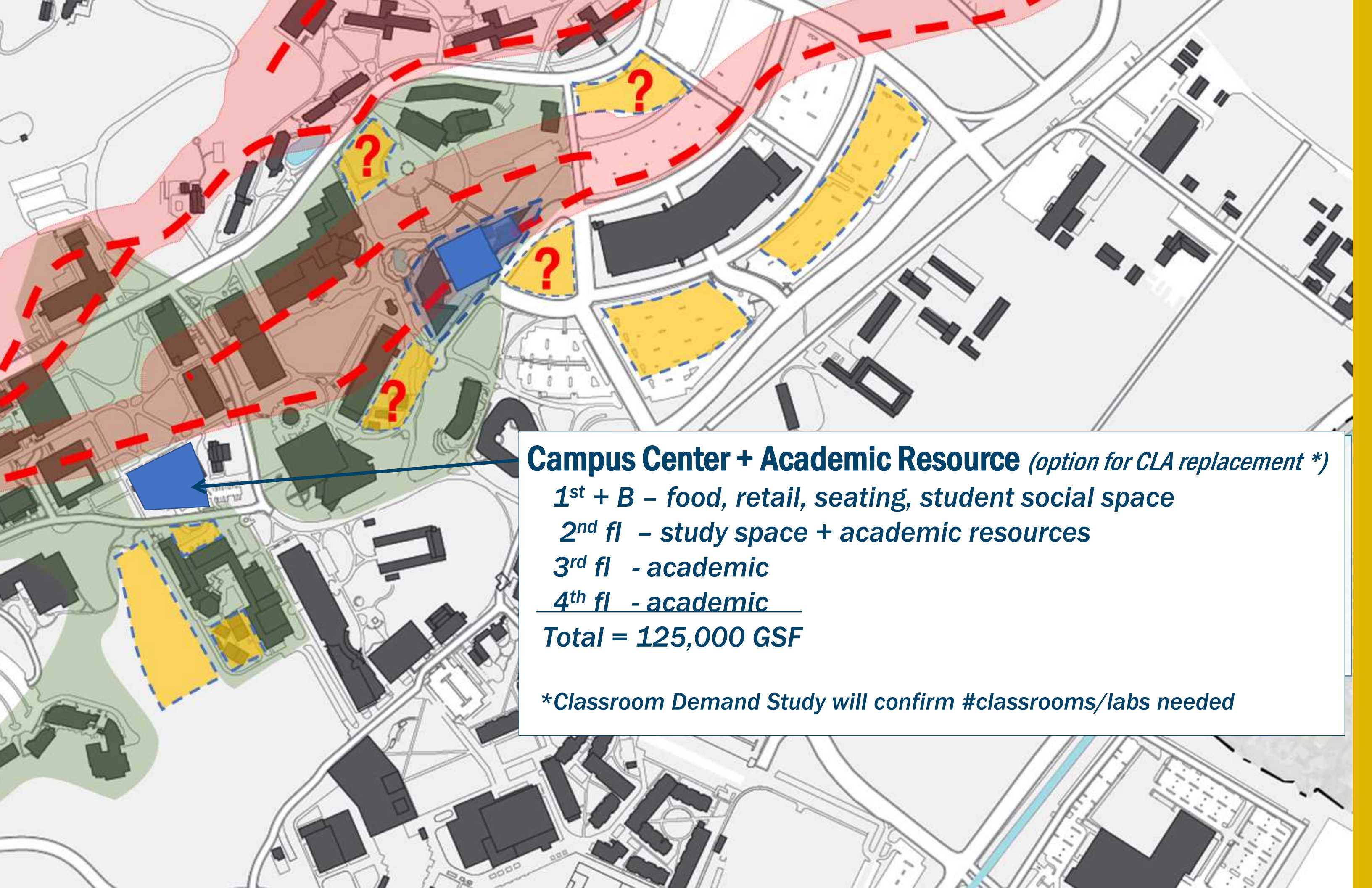
Strategies for Bldg 98 –CLA

1. Replace with a new building - *125,000 GSF est*

SITE CONSTRAINTS

-  Academic Core
-  Seismic Fault + Buffer
-  98-CLA Site
-  Possible sites for New Academic Buildings?





Campus Center + Academic Resource *(option for CLA replacement *)*

1st + B – food, retail, seating, student social space

2nd fl – study space + academic resources

3rd fl – academic

4th fl – academic

Total = 125,000 GSF

**Classroom Demand Study will confirm #classrooms/labs needed*

DESIGN FOR HUBS + COMMONS



Meet me in the Middle

- Interdisciplinary space
- Visible ground floor spaces
- Small study +gathering areas
- Large incubator or collaboration space
- Flexible, open areas
- Consolidated resources for faculty + students
- Active learning studios, classrooms, labs
- Maker-space shared by all colleges



CIP-BLDG 98 Strategies

➤ Replace with a new building - *125,000 GSF*

Mixed-Use Academic + Campus Student Center

5 story building

45,000 Campus Student Center

80,000 Academic Resource Building (*CLA replacement*)

125,000 Total Area

\$ 35 M Student Center

\$ 70 M Academic Resource Building

\$ 105 M Total Project Cost

\$ 15 M Demolition 98-CLA-P + Site Restoration/Landscaping

\$ 85 M Total Project Cost for Replacement Scenario

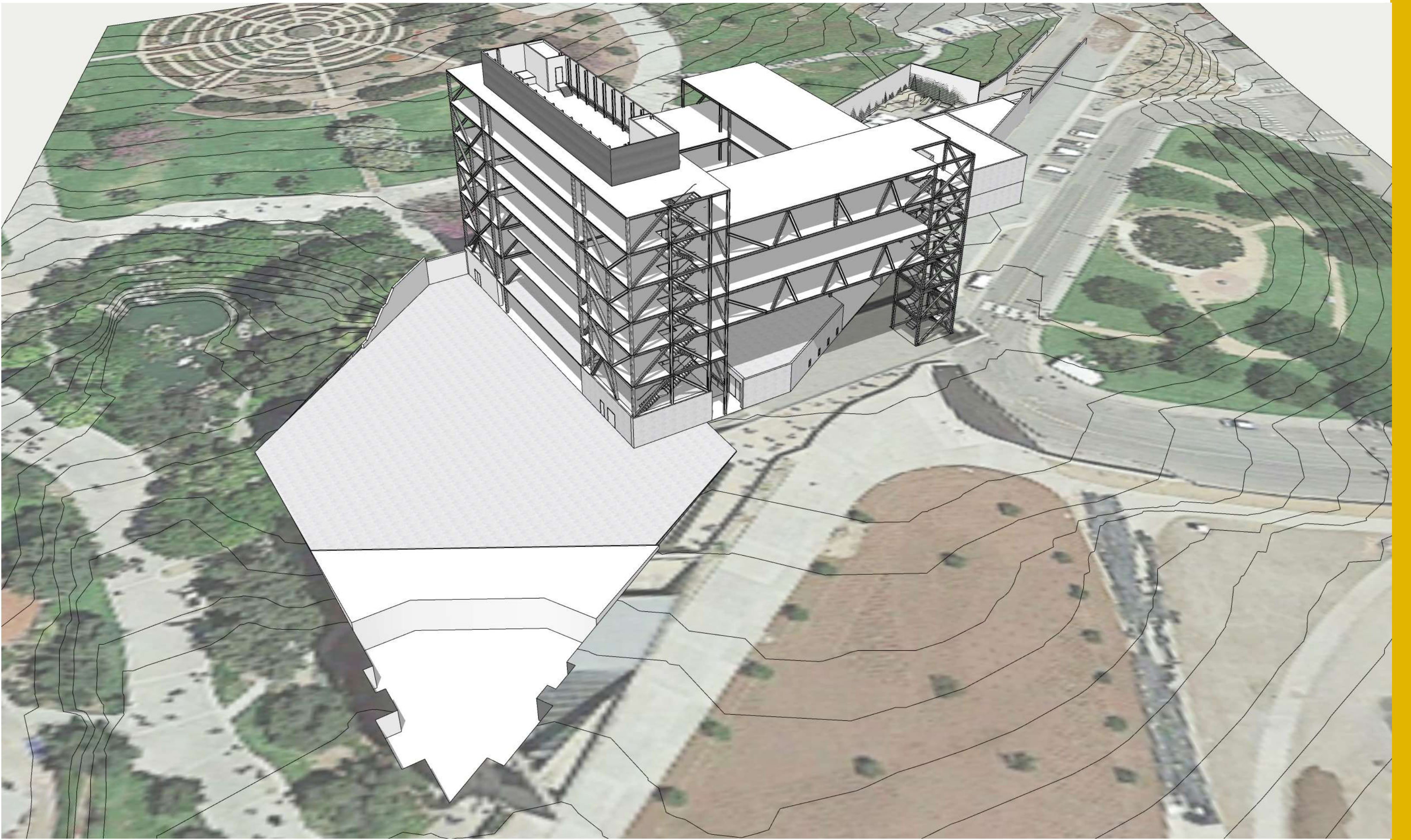
CIP-BLDG 98 Studies for Cost Analysis

Strategies for Bldg 98 –CLA

2. Reinforce-Reconstruct existing building – 100,000 gsf

** Need temporary facilities for 50-60 staff/faculty, Academic Senate, and classrooms-labs*

BLDG 98-CLA STUDIES: EXISTING STRUCTURE

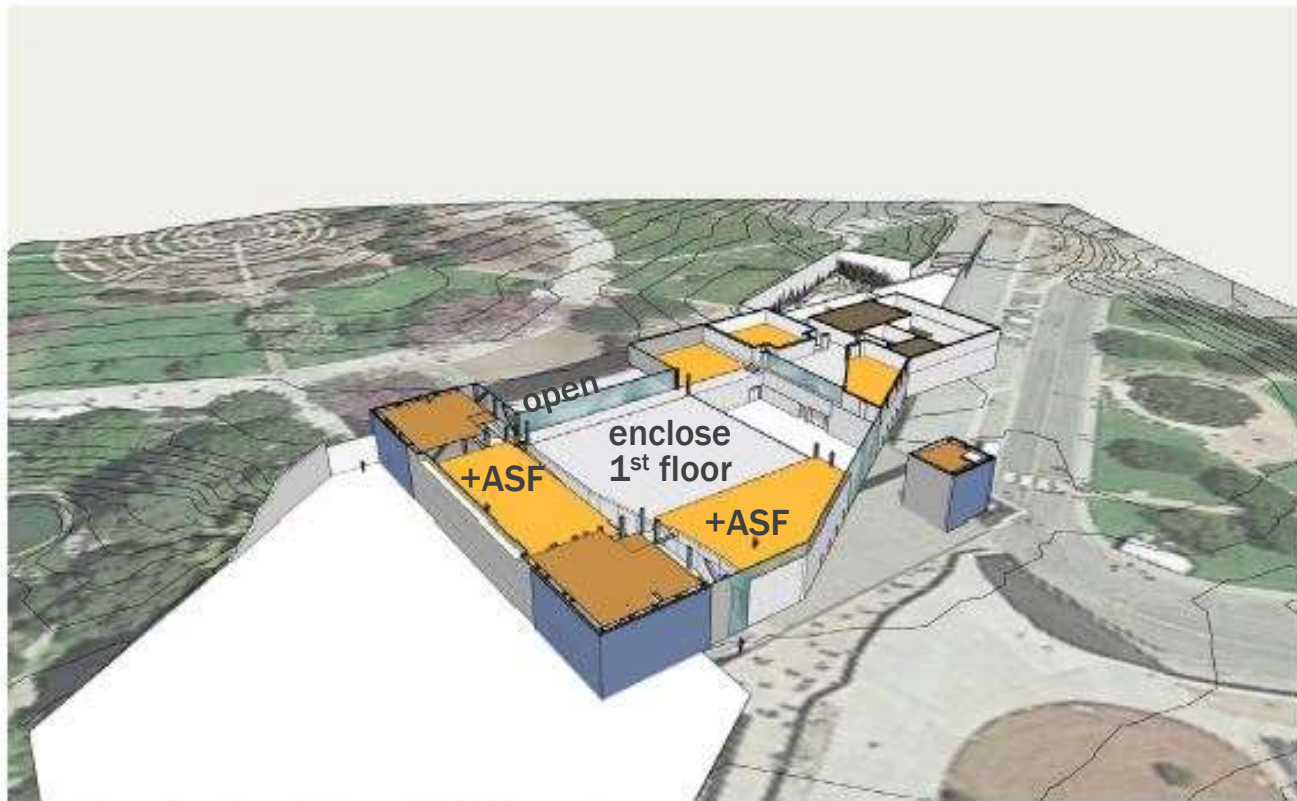


BLDG 98-CLA REINFORCE-RECONSTRUCT OPTION

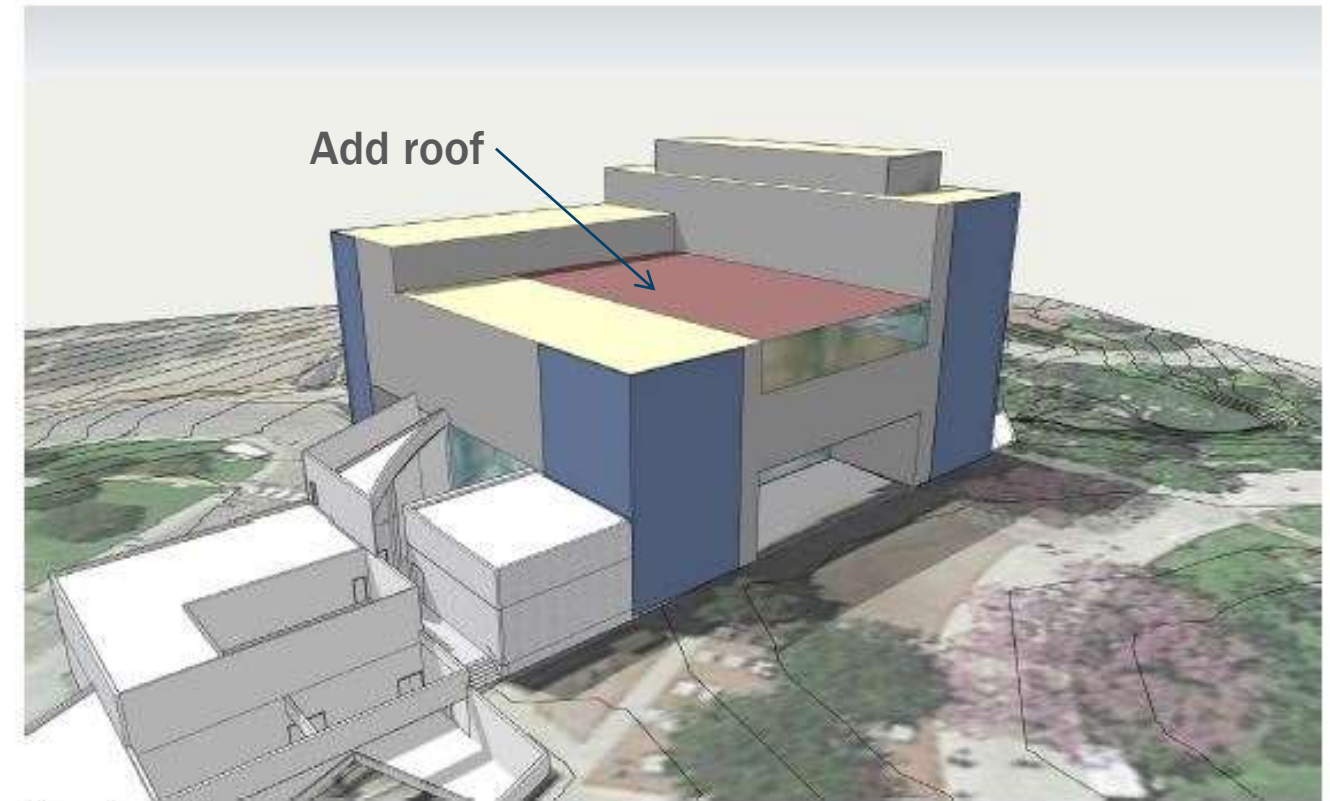


View from Southwest

- 61,700 SF New exterior walls/fenestration
- 8,430 SF New exterior walls/fenestration w/ add. Structure
- 23,500 SF Structural shear wall reinforcement
- 19,400 SF Re-roofing
- 9,550 SF New roof with structure
- 5,000 SF Exterior soffit
- 2,800 SF Exterior plaza/courtyard
- 72,000 SF Assignable Area (58,390 SF existing)
- 10,000 SF Level 1 added ASF

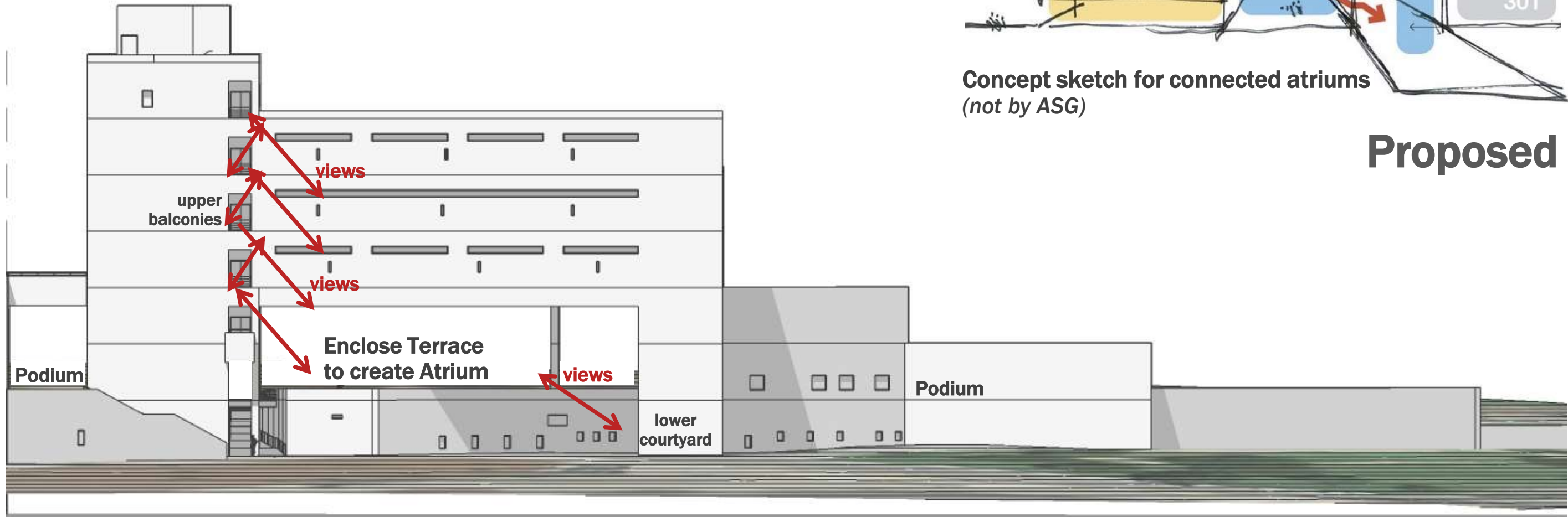
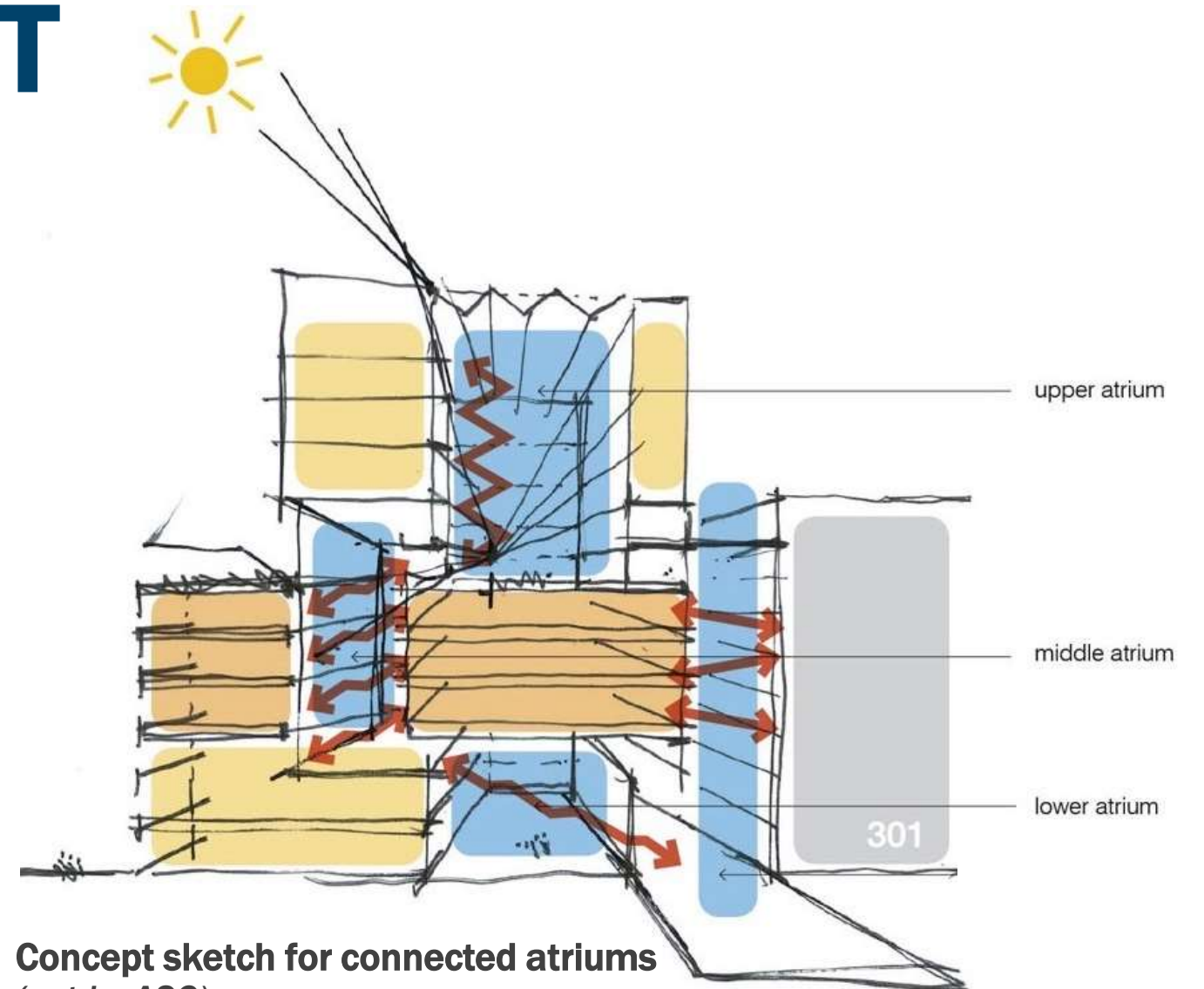


View from Southwest - level 2 3D floor plan



View from Northeast

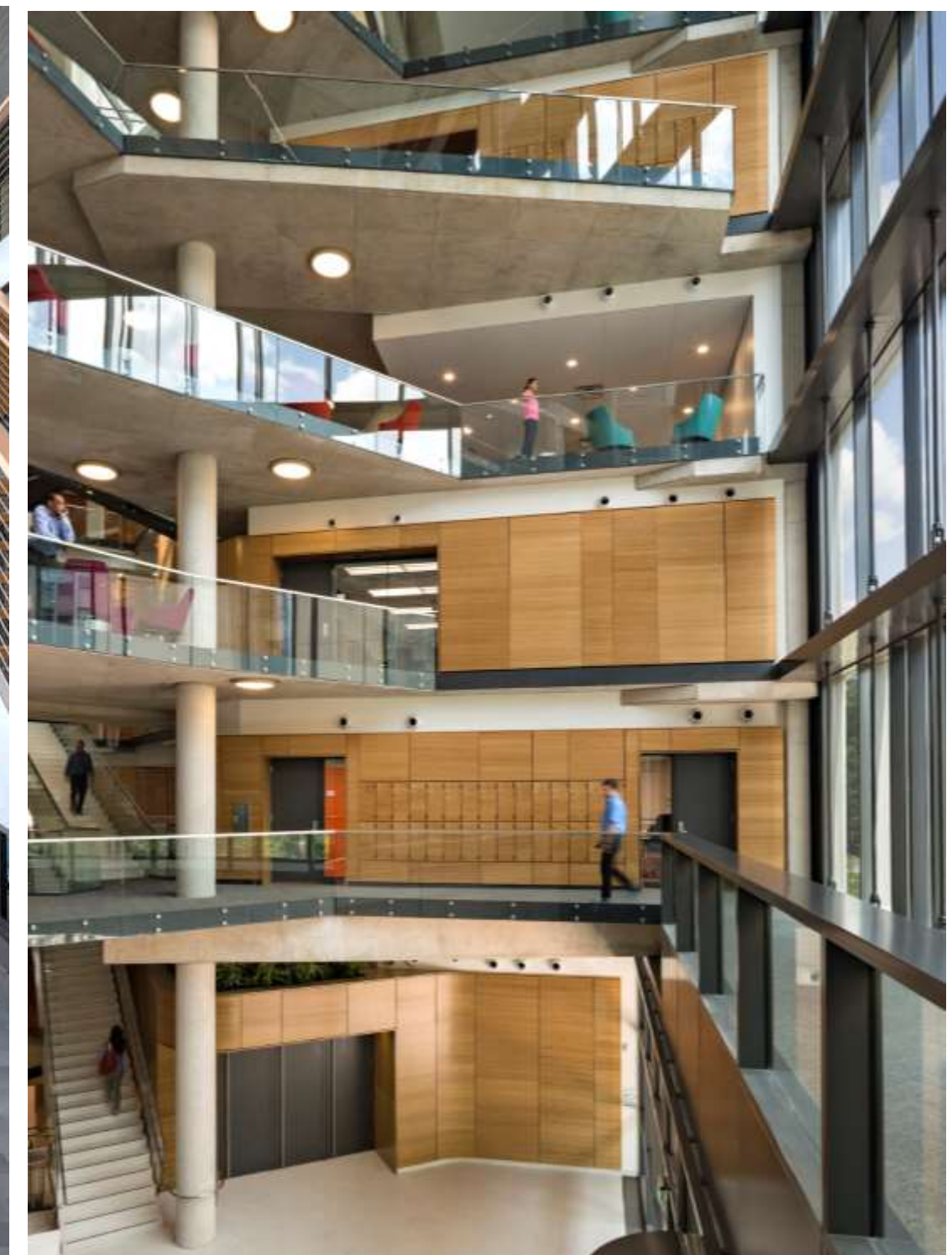
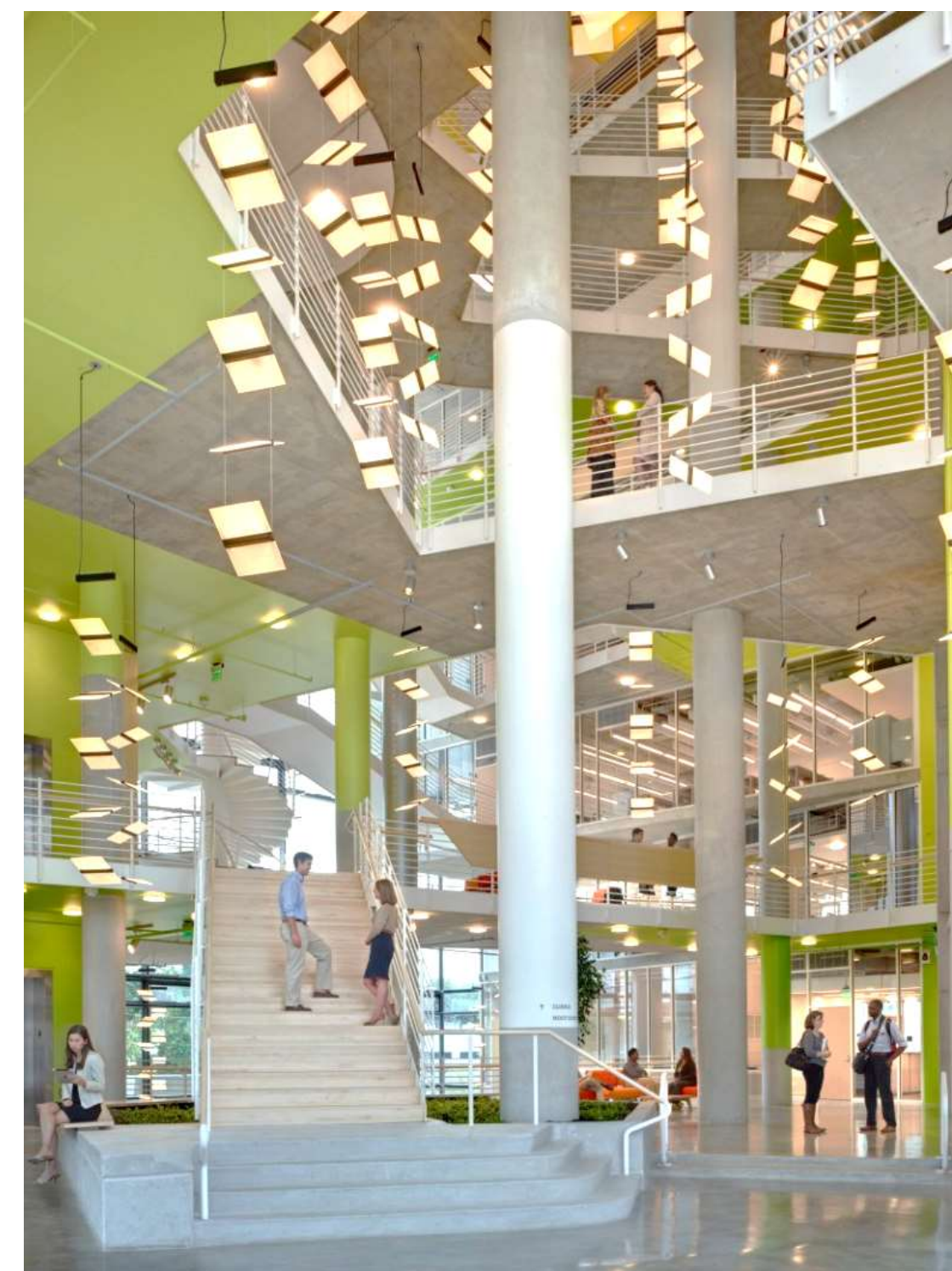
PODIUM TO ATRIUM CONCEPT



Proposed

Existing

PRECEDENT FOR ATRIUM SPACES



CIP-BLDG 98 STRATEGIES

➤ Reinforce + Reconstruct the exist building

90,300 GSF Bldg 98-CLA + P

11,700 GSF enclosed podium + courtyard w/roof over the central atrium

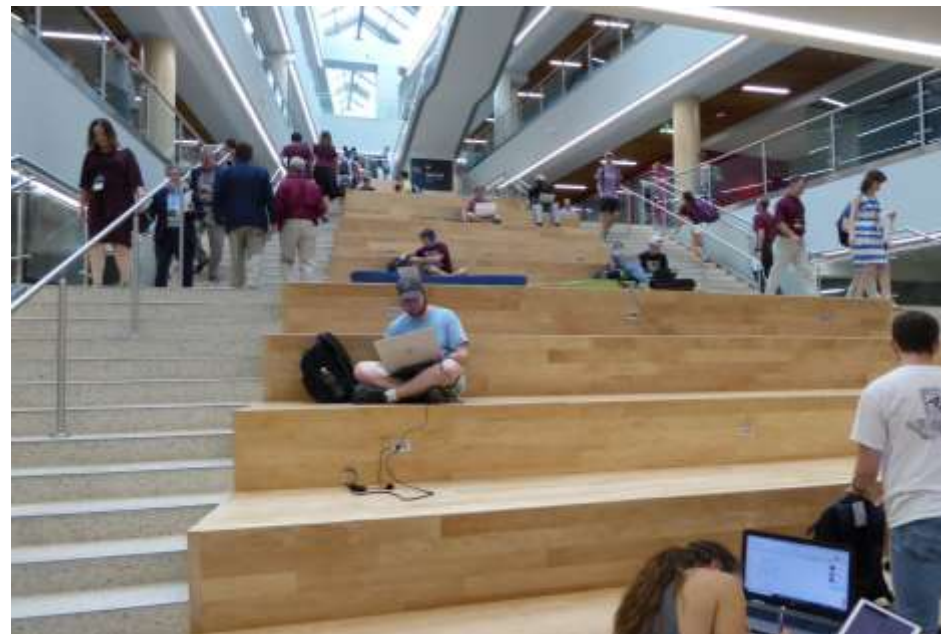
102,000 GSF Total Project Area

\$ 65 M Total Project Cost for Reinforce-Reconstruct Scenario

** Need temporary facilities for 50-60 staff/faculty, Academic Senate, and classrooms-labs*

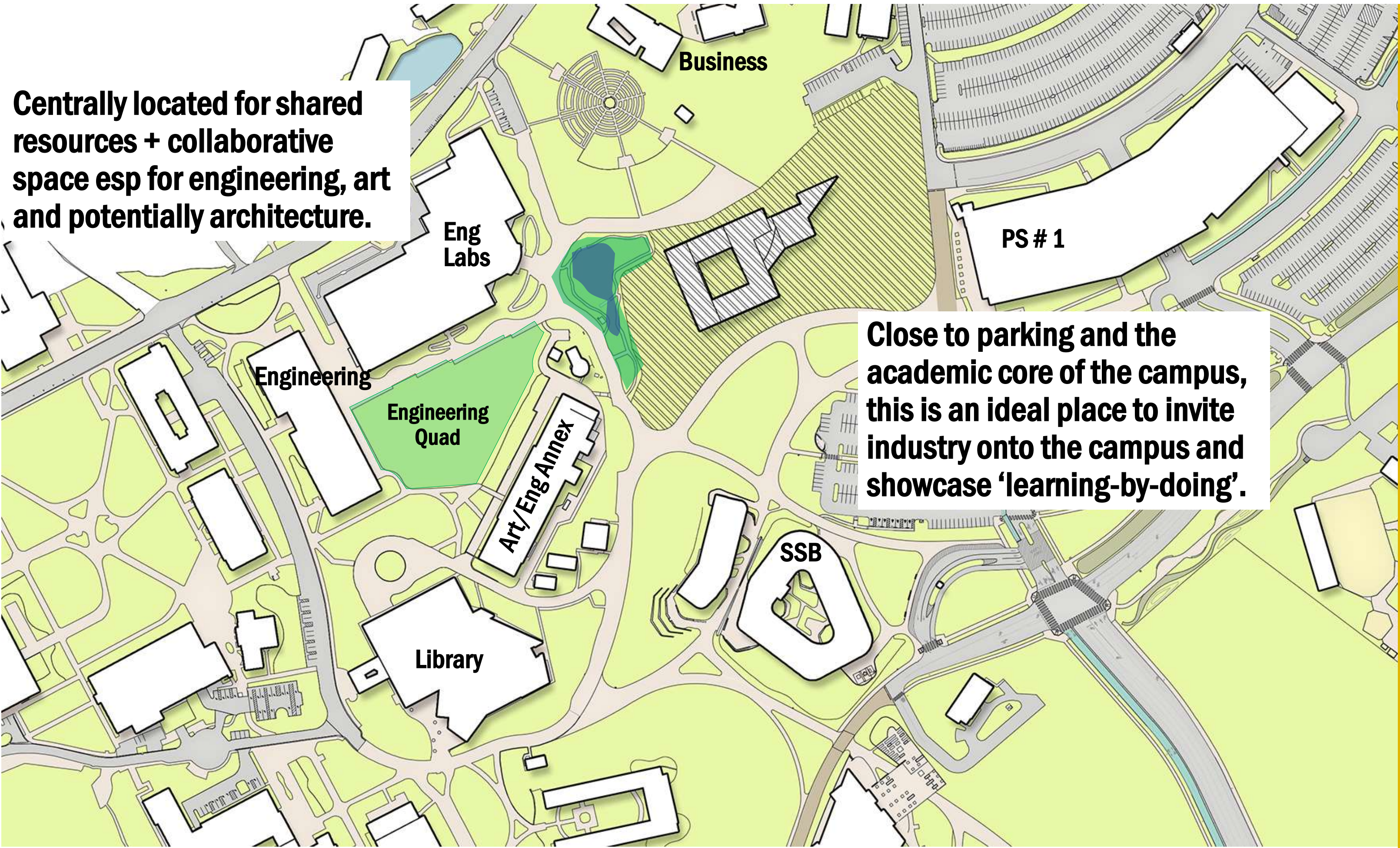
Transformation - *programmatic options for new uses*

- CLA should model new space types + standards for 'learning-by-doing'
- Classrooms, studios or labs should be set-up + scheduled for project-based instruction
- Programs could include architecture, art, industrial design, engineering (*undergraduate + graduate*) as well as CEU programs which connect to business and industry
- Include project and study space w/various sizes of rooms, studios as well as informal work areas
- Include instructional space 'sandbox' for faculty development of 'best practices' for new apps, tech/AV, etc.
- Consider options for flex space to accommodate project-based research space
- Model a new approach to faculty work space, flexible, integrated, collaborative (sim to industry)
- Main floor could include flex space for reviews/juries, for student group presentation, for showcasing work, and for hosting 'industry + university' conferences, symposiums, partnering events; could provide maker spaces for shared use



BLDG 98-CLA STUDIES: SITE

Centrally located for shared resources + collaborative space esp for engineering, art and potentially architecture.



Close to parking and the academic core of the campus, this is an ideal place to invite industry onto the campus and showcase 'learning-by-doing'.

But is TRANSFORMATION possible?

YES!

Transformations

ASG Projects – Case Studies in Transformation



Bryan Hall – Engineering (BEFORE)
Washington University St. Louis



Bryan Hall – Engineering (AFTER)
Washington University St. Louis



Science Mall (BEFORE)
Kent State University



Science Mall Addition (AFTER)
Kent State University



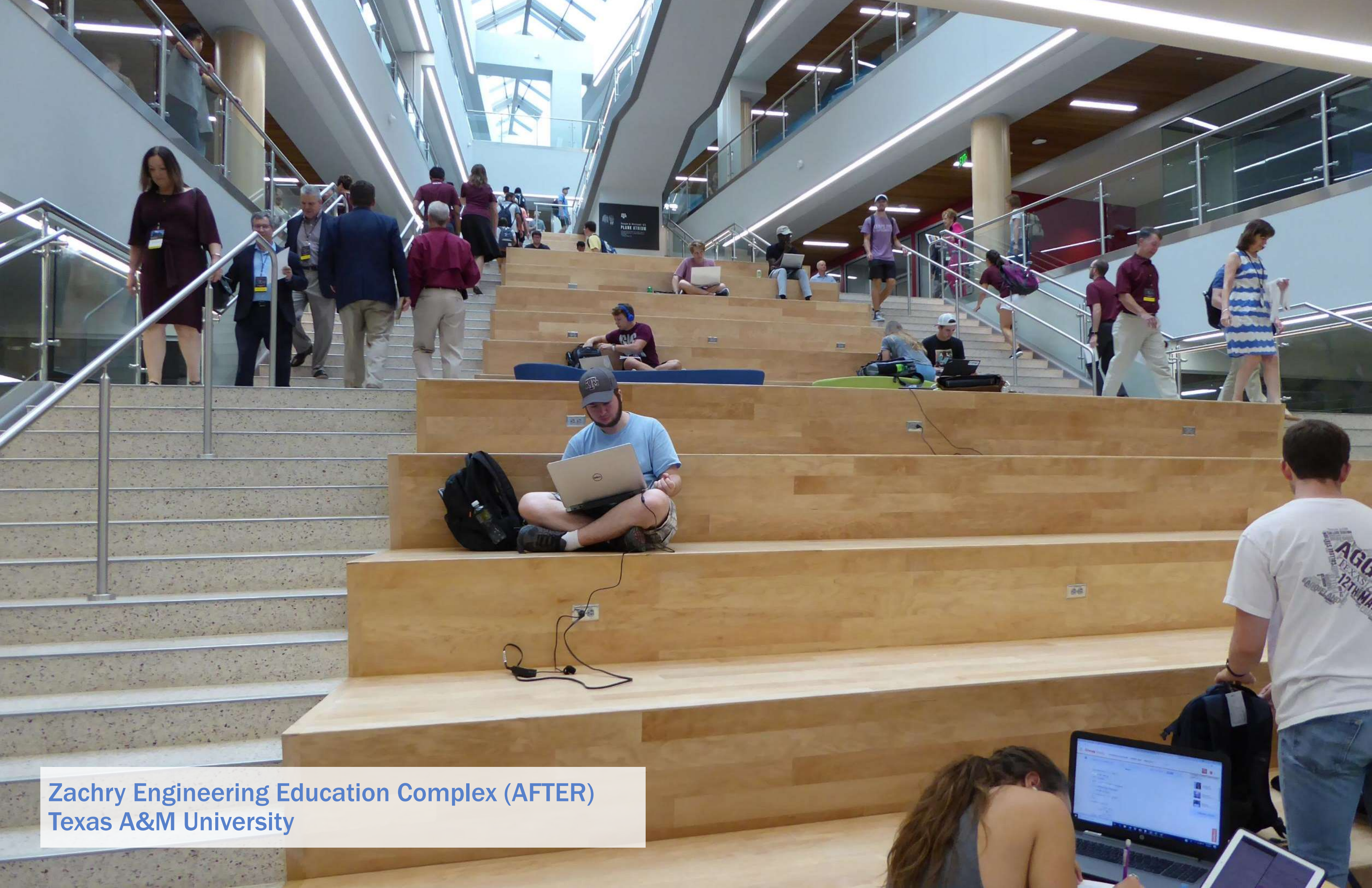
Zachry Engineering Education Building (BEFORE)
Texas A&M University



Zachry Engineering Education Expansion (AFTER)
Texas A&M University



Zachry Engineering Education Building Atrium (BEFORE)
Texas A&M University



Zachry Engineering Education Complex (AFTER)
Texas A&M University

Students walked through these service yards behind the Engineering Building from this parking area



Engineering Quad (BEFORE)
Texas A&M University

same parking area



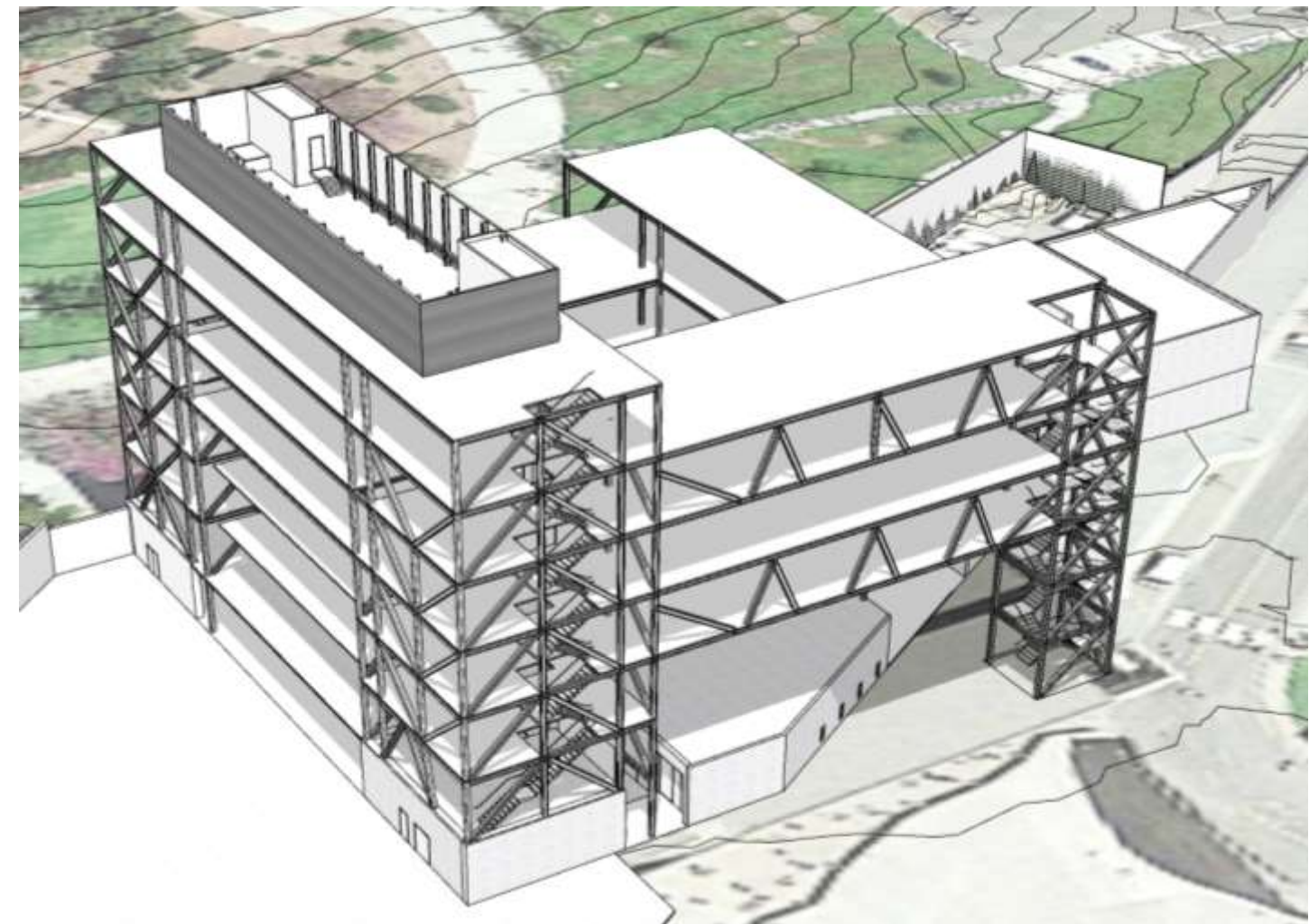
Engineering Quad (AFTER)
Texas A&M University



BLDG 98 Studies

Exterior Sketch Concepts

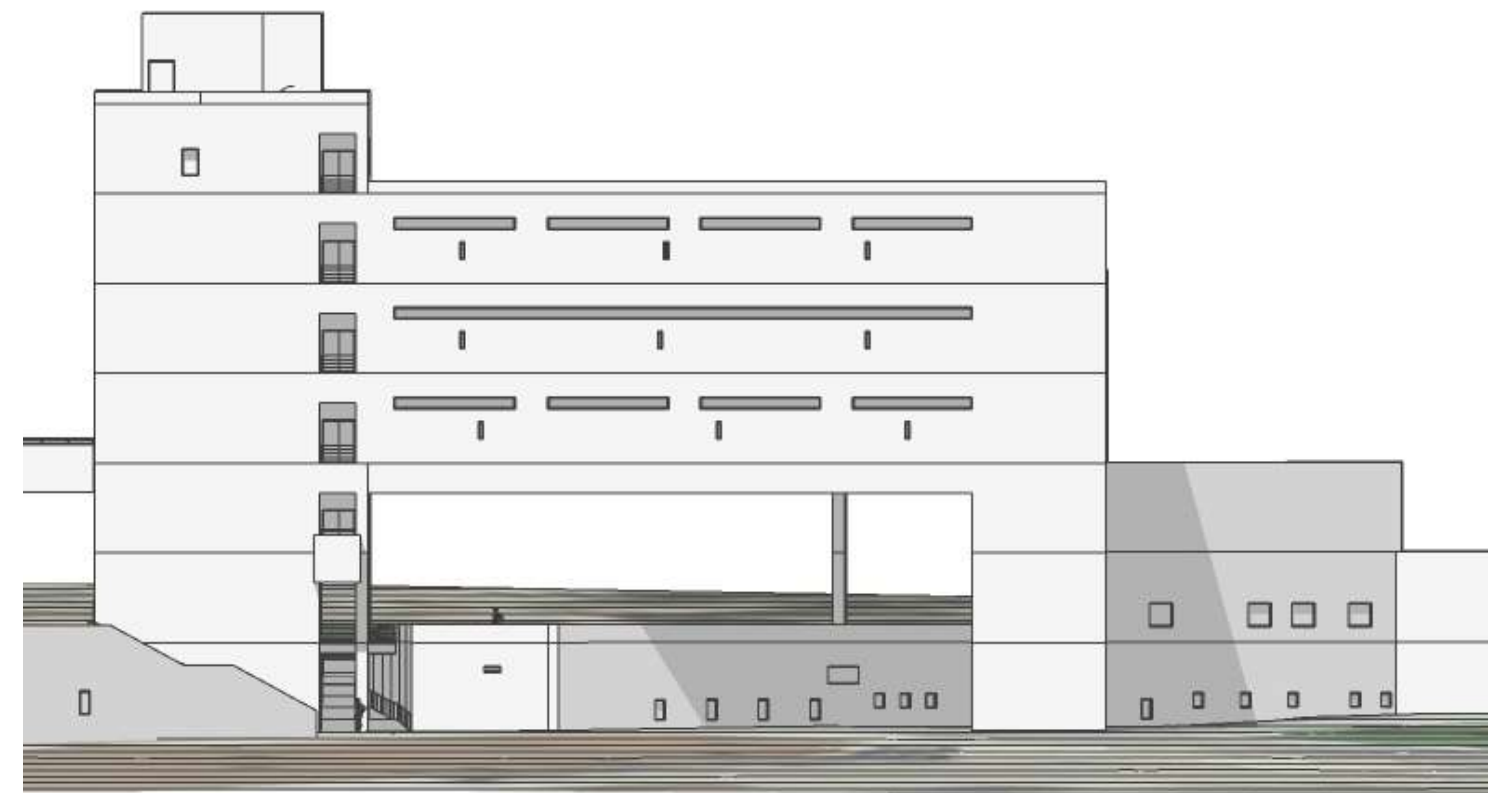
FAÇADE STUDY - EXISTING



Existing Structure



View from SSB

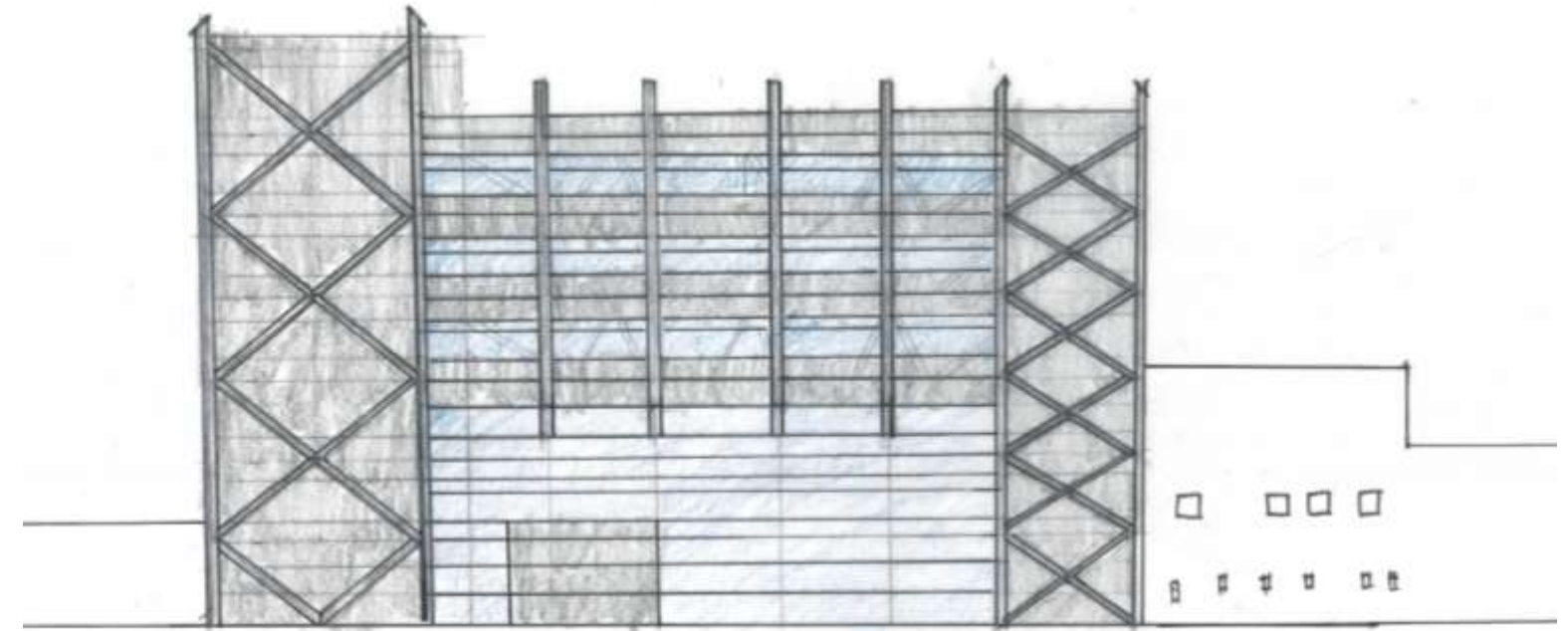


South Facade

FAÇADE STUDY



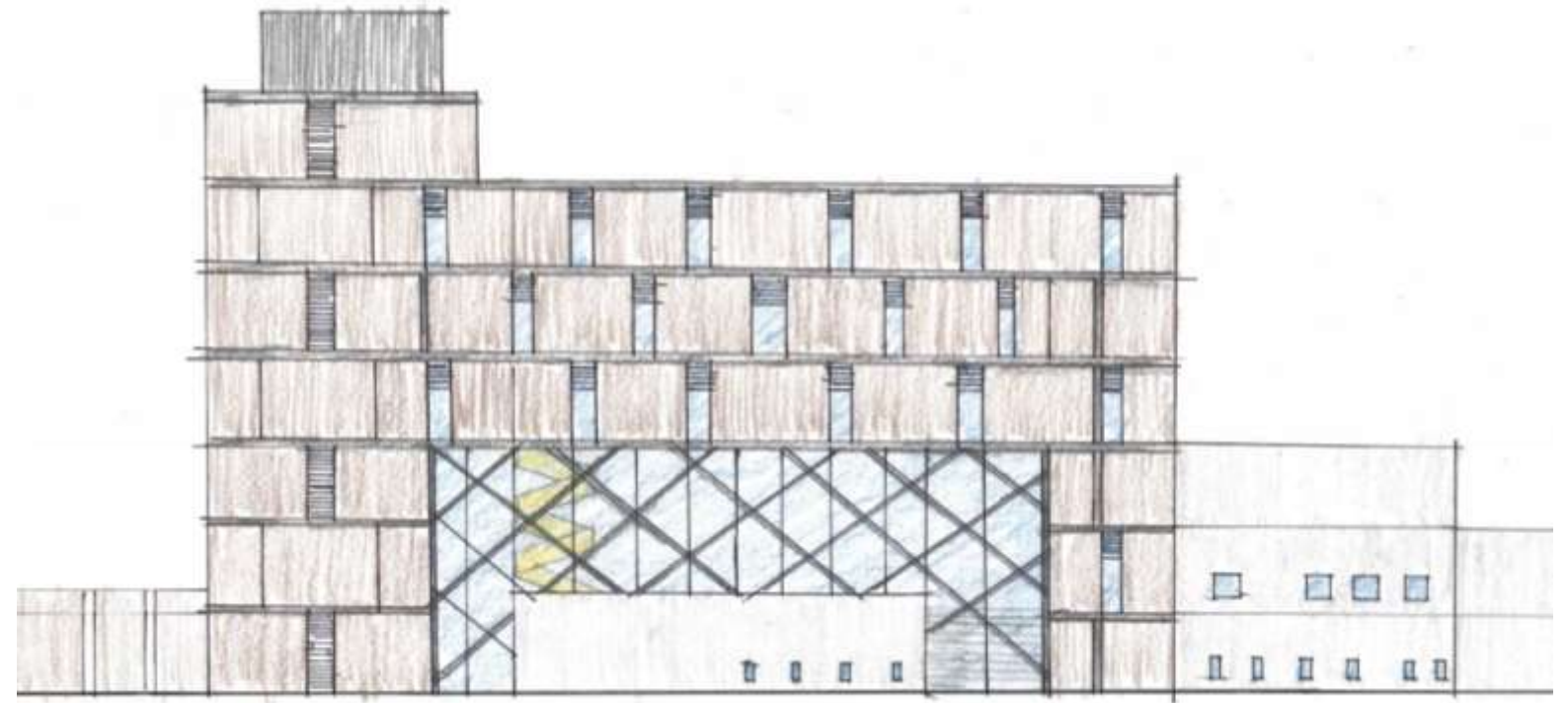
Concept: expressed seismic reinforcing



PRECEDENT: EXTERIOR ENCLOSURE



FAÇADE STUDY

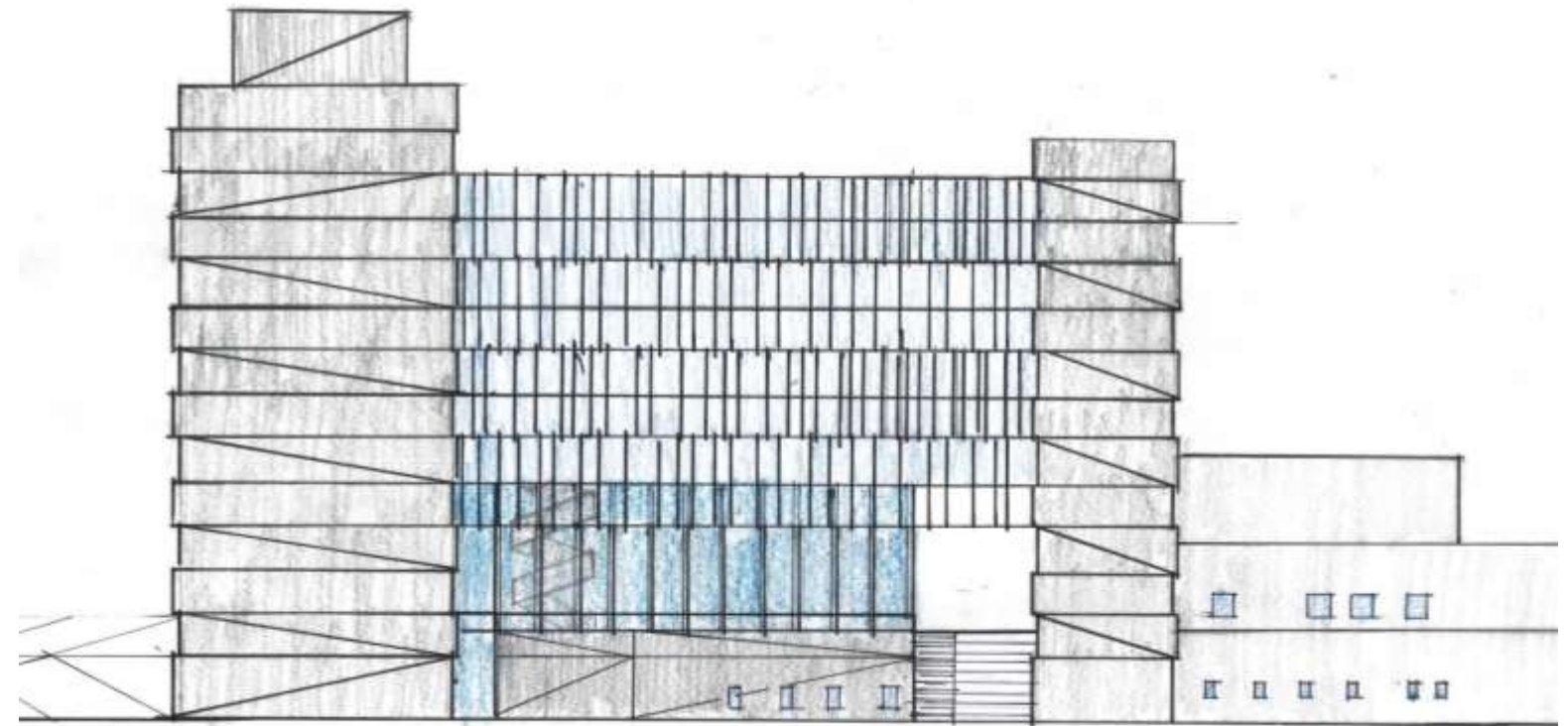


Concept: glassy atrium, exterior sim to College of Business

PRECEDENT: EXTERIOR ENCLOSURE

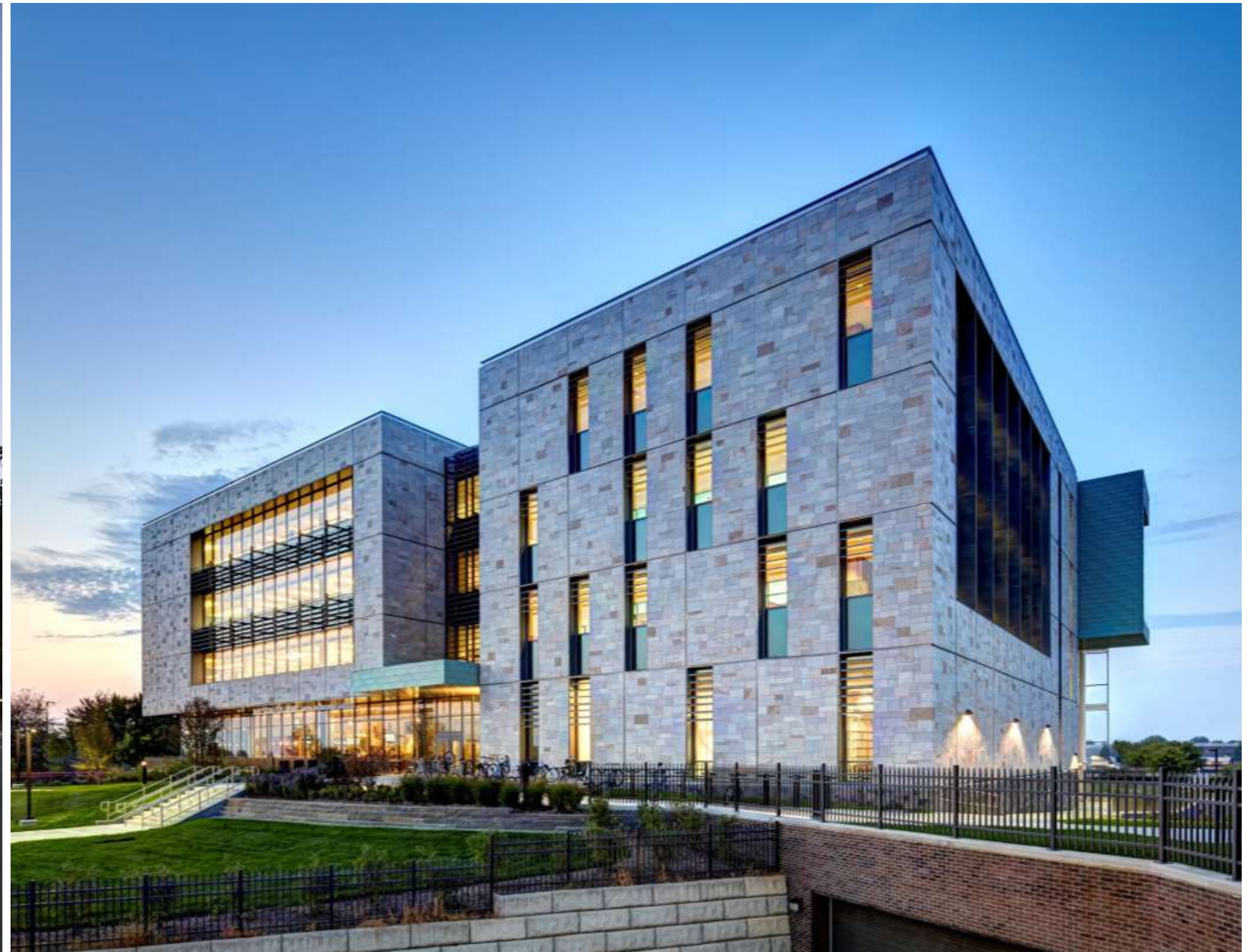


FAÇADE STUDY



Concept: solid towers + open, glassy interior space

PRECEDENT: EXTERIOR ENCLOSURE



CIP-BLDG 98 Study Summary

- Cost of the **Reinforce-Repurpose-Renovate** option is **LESS** than **New Replacement** option
- Timeline to complete and to occupy the building is the same roughly for both options, but w/replacement adds 1yr for demo/site restoration
- Relocation logistics
 - 50,000 asf for offices, mostly IT (*bldg. for lease or purchase identified adjacent to campus*)
 - classrooms + 1 computer lab, about 7,000 asf (*in proposed new shared classroom bldg*)
- Either choice has a huge impact on campus character
- Replacement + total demolition results in a large site with limited usability in a prime location
- Transformation could bring industry onto campus with shared project + maker spaces
- Retaining the structure (*with significant embodied carbon*) in the **Reinforce-Repurpose-Renovate** option is a much more sustainable approach



**Transforming 98CLA
has the power to
transform the character
of the center of campus.**

BLDG 98 Study – Sources, Reference Reports

- CPP Master Plan, Building 98 Design Study Cost Model, Capital Projects Group w/Ayers Saint Gross, April 2019
- Facility Conditions Assessment, Cal Poly Pomona, ISES Corporation, June 2018
- Final Feasibility Study, HMC Architects, October 31, 2013
- COMET4 Facility Report, California State Polytechnic University, Pomona, April 23, 2010
- Geologic Fault Investigation CLA Replacement And Master Plan Infill, GEOCON, September 12, 2011
- Seismic Reevaluation, Cal Poly Pomona CLA Building, Englekirk & Sabol, Inc. May 1, 2008
- Feasibility Study for CLA Building (98) Seismic Upgrade & Renovation at CPP, PCM, September 25, 2008
- Geotechnical Investigation Parking Structure, GEOCON, May 21, 2003
- Geologic Fault Map + Combined Campus Fault Study, California State Polytechnic University, GEOCON, May 31, 2001
- Geologic And Seismic Hazards Study Proposed Classroom Laboratory Administration Building, Ryland Associates, May 15 1989
- Amended Geotechnical Investigation Proposed Engineering Laboratories Replacement Building 17, PETRA, July 20, 1998
- Interim Design Center Expansion Study, CPP ARC, January 2017

(list may be incomplete)