State University of New York at Fredonia

# FACILITIES MASTER PLAN
CAPITAL PLAN YEARS 2013-2023
Phase Four : Concept Alternatives

**FINAL PROOF SET**
**MAY 9, 2011**

**Prepared for:**

STATE UNIVERSITY CONSTRUCTION FUND

and

SUNY FREDONIA

**Project No: 05823**


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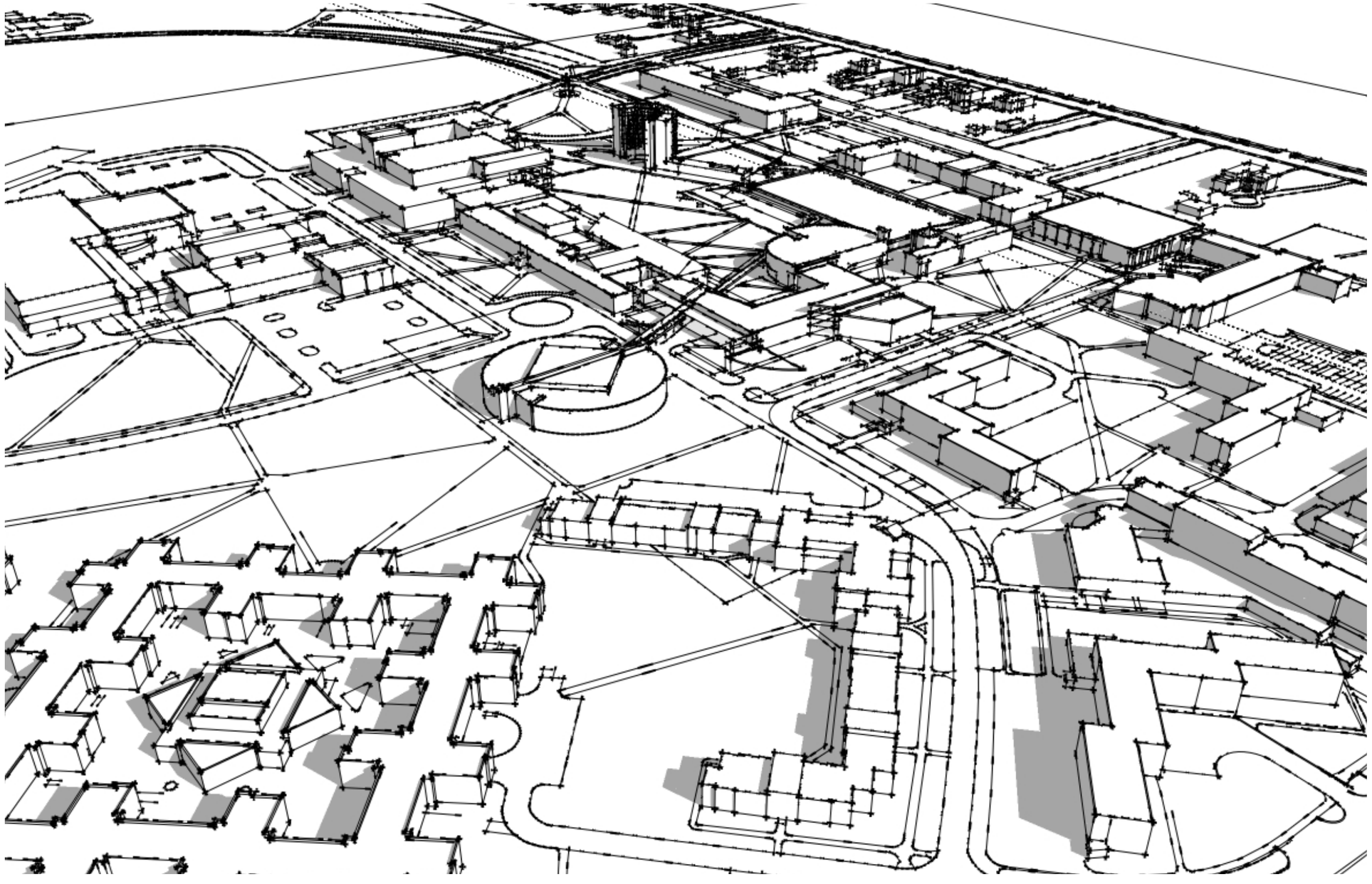


# Summary Findings

Informed by the findings of Phase I, II and III, the following Phase explores campus and facility alternatives and evaluates the various impacts and opportunities for meeting program needs and priorities, responding to facilities conditions assessments and deferred maintenance, identifying campus development opportunities and, ultimately, preserving and enhancing the unique character of the existing campus.

The Facilities Master Plan proposals, though physical in nature, are all based on the programmatic assessment that recognizes severe limitations in some programmatic space and facility conditions in spite of Fredonia's reputation for excellence. These limitations are most notable in the inventory of general use classrooms; the College has not added new teaching space to in nearly 40 years. With the physical assessments and space data as a guide, the Facilities Master Plan seeks to identify ways to create teaching spaces that are characterized by the following:

- The proper station size and seat totals;
- Optimal orientation and layout;
- State of the art technology to support current pedagogies;
- Flexibility and attention to the ways in which students learn and interact within the classroom today, as distinct from when the existing inventory was built;
- The proper type and mix of specialty teaching spaces that meet the particular demands of the College's current academic offerings and trends.

With the creation of new and appropriately designed learning environments, the Facilities Master Plan also explores the opportunity to repurpose some of the less successful and poorly designed classrooms for uses better suited to their size, configuration and physical characteristics – many of which were not initially intended to be used as classrooms.

In addition to the primary goal of focusing on new classroom spaces for the campus, the Facilities Master Plan also explores other programmatic needs recognizing that learning occurs in many types of campus spaces beyond the traditional classroom. Other programmatic goals include:

- Satisfying student service priorities that have grown far beyond the original spaces – particularly through decades of enrollment growth and changing student needs and profiles;
- Promoting flexible uses and cross disciplinary opportunities in all buildings regardless of their academic purpose;
- Creating state-of-the-art specialized instructional spaces that support current pedagogies and Fredonia's unique culture – particularly the performing and visual arts and the sciences;
- Developing a Facilities Master Plan response that emphasizes social interaction at multiple scales for both indoor and outdoor spaces.

The following Phase explores alternatives that utilize different approaches and proposals, but are all governed by the common goals that are summarized as follows:

**1 -** To **enhance existing strengths** of the campus, and the unique qualities of SUNY Fredonia including:

- The strength and clarity of the Pei-Cobb Facilities Master Plan;
- The iconic nature of the campus architecture from the Pei-Cobb plan as well as a recognition of the importance of older buildings such as Mason and Fenton Halls;
- The importance of the campus landscape, in particular the mature honey locust groves of the original Dan Kiley-designed landscape;
- The strong pedestrian nature of the core campus and the character of the residential precincts, including their close proximity to the main campus.

**2 -** To **build upon the success of recent improvements** and to leverage opportunities created by ongoing and proposed initiatives including:

- The success of University Commons and its role in shifting the 'center' of campus toward the south and the grove;
- The proposed Science Building and its participation in this new center, the importance of the grove and the removal of parking from the core campus;
- The proposed improvement to the Williams Center and its focus on improving its immediate pedestrian environment and the spine connector;
- The proposed addition to the Rockefeller Arts building and the opportunities it presents to improve the rear façade of that complex, as well as potentially contribute to a new landscape corridor on the current Varsity Drive.

**3 -** To improve upon the less successful aspects of the Pei-Cobb Master Plan including:

- The central quadrangle and the less than hospitable areas including the Reed Library and Maytum steps, the amphitheater, the Spine and the plaza between Maytum Hall, Symphony Circle and Rockefeller Arts Center;
- To improve the overall qualities of the pedestrian environment quality and safety with an emphasis on shifting parking and roadways away from the core campus and improving accessibility to and between buildings;

**4 -** To improve pedestrian paths and building entrances that are highly utilized but as designed do not reflect their importance - particularly Thompson Hall and Reed Library;

**5 -** To identify existing program spaces and distribution that are not suitable for their uses, or poorly located, and to explore potential repurposing and relocation of such uses;

**6 -** To **prioritize existing facility improvements** that focus on deferred maintenance, improving energy performance, occupant comfort and the quality of the instructional environments;

**7 -** To reduce campus traffic impacts by relocating core campus parking to the vicinity of Ring Road, improving campus shuttle service and exploring potential policy regulations regarding student parking permits on the core campus in an effort to discouraged on-campus traffic;

**8 -** To promote landscape strategies to reduce impervious surfaces and incorporate innovative and sustainable storm water management practices;

**9 -** To explore the potential for new development and landscape improvements that reinforce and enhance new pedestrian corridors/ quadrangles between Fenton Halland Reed Library and Mason Hall and the Athletic complex;

**10 -** To explore the strategic siting of new buildings in a way that reinforces all of the goals stated above, including reinforcing and improving the principles of the original Facilities Master Plan.

While the variations in the ensuing chapter are delineated in physical plans that include new building opportunities, strategic building additions, campus landscape and roadway improvements and existing facility improvements, all of the schemes are ultimately driven by and founded upon programmatic needs and the goal of advancing the academic mission of Fredonia. The strength of the physical campus and the College's academic excellence are well documented in previous chapters. Preserving and enhancing both are essential to the overall goals of the Facilities Master Plan and, ultimately, the advancement of Fredonia's mission, competitiveness and its exemplary reputation as a place for creativity, research and a strong community of learning.

## Summary

1 - Enhance existing strengths of the campus;

2 - Build upon the success of recent improvements;

3 - Improve upon the less successful aspects of the Pei-Cobb Master Plan;

4 - Improve pedestrian paths and building entrances;

5 - Identify existing program spaces and distribution;

6 - Prioritize existing facility improvements;

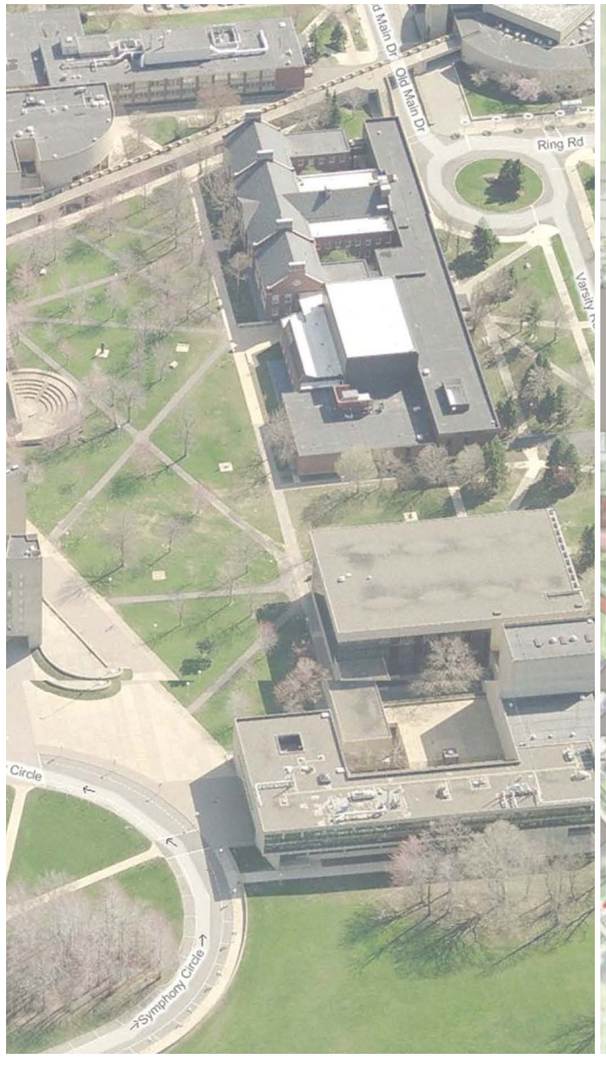
7 - Reduce campus traffic impacts by relocating core campus parking;

8 - Promote landscape strategies;

9 - Explore the potential for new development and landscape improvements;

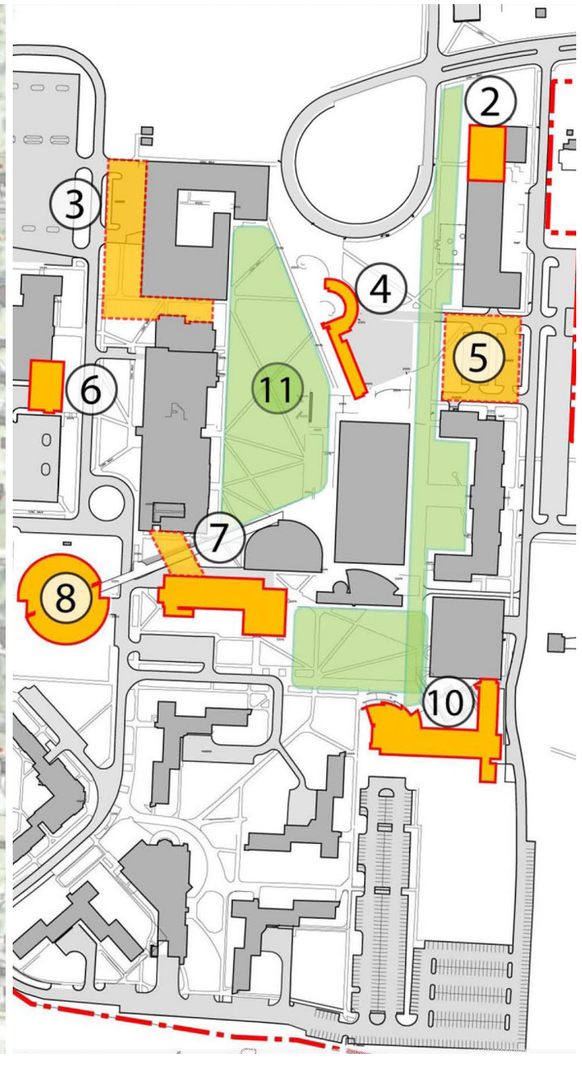
10 - Explore the strategic siting of new buildings.

## Scales of Master Plan Consideration




SPECIFIC PROGRAM AND FACILITIES NEEDS

CAMPUS IMPROVEMENTS




ONGOING / PLANNED IMPROVEMENTS

A slide from the 08/09/2010 Stering Committee presentation, explaining the multi-scaled approach to campus planning.

# Summary of Recomendations / Conclusions

The conclusions of the Facilities Master Plan are based on the analysis of campus space inventory and use patterns, the suitability and condition of the physical plant and the projected changes in programs. Informing this analysis is a quantitative and qualitative evaluation of existing facilities, and the extent to which they are enabling the College to fulfill its mission today and in the future.

The facilities of the College of Fredonia can continue to serve the institution reasonably well for the foreseeable future with the proper focus on strategic renovations, deferred maintenance, a calibration of existing program spaces, the implementation of current, ongoing initiatives and the strategic and 'backfill' of available space from these upcoming improvements. However, given the steady and significant growth that the College has experienced over the past 40 years, without the addition of any new academic facilities the existing space inventory will remain challenged to serve the College sufficiently, let alone satisfy projected enrollment increases. The lack of adequate space, along with the demands created by changes in curriculum and current pedagogies, makes the repurposing of existing facilities costly and challenging given the age of the existing buildings and the inflexibility of much of the physical plant.

To satisfy the current shortage of space, projected growth needs and the additional demands of an aging inventory, the Master Plan recommends two new strategically sited and programmed facilities for both academic and student space. These new facilities will also enable the right-sizing and repurposing of existing program space to better serve current departmental profiles and demands. The recommended strategic initiatives, together with the new Science and Technology building and the proposed addition to the Rockefeller Arts Center, will provide Fredonia with much-needed, purpose-built space that will satisfy current pedagogies, equip the campus with state-of-the-art technology, and as present opportunities to transform an already remarkable campus environment.

A summary of the principal Facilities Master Plan recommendations are as follows:

## New Facilities:

**A new General Purpose Classroom Facility:**

A key component of the Facilities Master Plan recommendations is a new 75,000 gross square foot academic building to achieve the following goals:

- The creation of new general purpose classrooms to satisfy the current campus deficit of instructional space;
- The creation of purpose-built, right-sized classrooms with the latest technology in response to the profile of class sizes and preferred scheduling patterns;
- The design, configuration and furnishing of instructional space to accommodate current pedagogies with a focus on flexible learning styles, both formally and informally;
- The introduction of specialized instructional space not found on campus including case study rooms for the School of Business, specialized spaces for the College of Education, spaces for governance and specialized technology;
- The creation of departmental space for the newly established School of Business, providing the program with an identity and purpose-built, state-of-the-art space to satisfy its projected growth; and
- The creation of flexible, common space for study and student activities, social interaction and opportunities for non-traditional learning and out-of-classroom interactions.

The preferred siting of the new facility allows for direct connections to Fenton Hall, Thompson Hall and potentially the library. This improved connectivity is not only a campus planning goal, but allows for synergy and flexibility for departments in either academic building to potentially expand into and utilize the space in the new building – enabling better utilization, flexibility and backfill opportunities in the two highest density and most-used academic buildings on campus.

**A new Student Services / Academic Facility on the site of Jewett Hall:**

The Facilities Master Plan identifies a significant opportunity to redevelop the site currently occupied by Jewett Hall as a 100,000 gross square foot student service building to achieve the following goals:

- The creation of much needed space for student affairs functions and general student service space including student clubs, meeting and function rooms, rehearsal and performance space and assembly space. Even with planned renovations, the Williams Center fails to effectively satisfy all of the space demands for non-academic student activities;
- The consolidation of administrative functions that require student access and would benefit from the convenience of co-locating in a central, public building (e.g. student accounts, financial aid, registrar, etc.);
- The opportunity to provide additional academic space for the projected program needs of the Music Department. The proposed facility offers the potential to link directly to the southern end of Mason Hall, as well as McEwen which houses chorale classes. The incredible array of student music and dance groups, the demand for rehearsal and performance spaces and the cultural importance of the performing arts at Fredonia suggest that the overlap of space for the music department with a student activities facility is a logical synergy;
- The strategic importance of the Jewett Hall site as a central campus crossroads between student service and academic functions creates a unique opportunity to transform the campus environment, and extend the quality of the Honey Locust Grove and the Science Quad, through the creation of a public plaza on what is currently a surface parking lot;
- The opportunity to reconstruct a portion of the elevated spine between the Williams Center and the new building as well as create direct connections to Mason Hall and McEwen/Reed connection. The reconstruction of the spine in this location is an improvement upon an important element of the Pei-Cobb Master Plan which has deteriorated beyond repair and is not useable in winter.

## Conclusions

- The Master Plan recommends two new facilities:
  - A new 75,000 square foot Academic Building focused on providing state-of-art learning environments, purpose-built classrooms with specialized technology as well as program space for the School of Business and the potential for expansion of programs currently housed within Thompson Hall and Fenton Hall.
  - A new 100,000 square foot student services building on the current Jewett Hall site which will provide much needed space for student clubs, social space, assembly as well as administrative and support spaces that rely on student interface.
  - Both new facilities present unique opportunities to transform the campus by creating physical connections to adjacent buildings and creating opportunities to transform important components of the campus public realm.

## Comprehensive Strategic Renovations

In addition to the new academic student service facilities, the Master Plan recommendations include the comprehensive renovation of three principle academic buildings:

**Houghton Hall**

With the completion of the new Science and Technology Building scheduled for 2013, Houghton Hall will present renovation and backfill opportunities with space vacated by Chemistry and Science Education. With the renovation, which will include program space for Physics, Geoscience and Computer Science, along with a connection to the new science facility, Houghton Hall will become an important anchor to the Science Quad and will provide quality research and instructional space while accommodating the projected program needs for the sciences.

**Fenton Hall**

As the second oldest facility on the Fredonia campus, Fenton Hall is in need of comprehensive systems and envelope improvements – the first phase of which is scheduled to begin in 2011 with window replacement. Subsequent phases will include HVAC distribution replacement as well as some programmatic re-purposing of existing space. The new classrooms provide by the new academic facility will enable some existing Fenton Hall classrooms to be converted to departmental space including flexible spaces such as reading rooms, study lounges and conference rooms of which there is a shortage in Fenton Hall currently. Given the presence of the humanities in Fenton Hall, there is also an opportunity to relocate the History Department from Thompson Hall, where it is currently located. With a goal of physically linking with the new academic building, Fenton Hall will also benefit from flexibility in its need for departmental space and its direct access to state-of-the-art teaching facilities.

**Mason Hall**

As the oldest and most intensively used and specialized facilities on campus, the Facilities Master Plan also recommends that the Mason Hall Complex undergo a comprehensive renovation. With a complex history of incremental growth and physical transformation, Old Mason and New Mason are in need of systems upgrades, more sophisticated humidity and temperature controls, and acoustical treatments and sound isolation throughout. The Music program's reputation for excellence is supported by its facilities, particularly the Rauch Recital Hall and recording studios and the new rehearsal room addition. Yet the older spaces within the Mason complex are in need of significant renovations which can improve the function and performance of the facility as well as the utilization rates, since many spaces are limited in their use because of inadequate mechanical systems and controls, technology shortcomings, adjacency and/or acoustical issues. With existing space deficiencies as well as projected growth within the Music department, Mason Hall will also benefit from the opportunity to connect to a new student service facility. This new building provides the potential for additional program space and the opportunity to utilize flexible and assembly space for rehearsal and performance.

## Longer Term Phased Renovations

**Thompson Hall**

As one of the most intensely used buildings on campus, Thompson Hall, while generally in good condition will, over time, require a phased approach to renovations and systems upgrades. Several Facilities Master Plan recommendations involve backfilling and re-purposing departmental and instructional space within Thompson Hall in an effort to reduce the density of the building. Included in this effort is the goal of de-commissioning some of the office space located in the windowless, core of the buildings – rooms that were initially intended to be file and storage as opposed to occupied spaces. The phased approach to re-purposing and backfilling program space suggests that over time, the building can gradually undergo a full renovation. Included in the recommendations for the building are:

- Re-purposing the space recently vacated by the Day Care facility as additional clinical, and office space for Communication Disorders and Sciences and the Youngerman Clinic.
- Following the completion of the new academic facility, spaces currently occupied by the School of Business can be backfilled to satisfy additional departmental growth needs by the College of Education, and other departments such as Sociology and Psychology.
- Space for the History Department will also be available following the proposed relocation to Fenton Hall.
- The creation of right-sized, purpose-built classrooms in the new facility will enable the re-purposing of several Thompson Hall classrooms that are neither of optimal capacity, dimension or orientation.

## Strategic Building Additions:

**A Thompson Hall Entrance Addition**

Related to the longer term renovations to Thompson Hall, and in recognition of the importance of the building as the largest academic facility on campus, the Facilities Master Plan also proposes a modest entry addition to the southwest corner of the building. The siting of the addition is in response to the strong path of pedestrian traffic that approaches the building from the Main Quad and along the north/south corridor between Reed Library and Fenton Hall. Conceptually, the Facilities Master Plan explores a transparent volume that is intended to be in contrast to the opaque and unfriendly nature of the architecture of Thompson Hall. The proposed location of the addition on the corner of the building, in addition to being a site response, also allows for opportunities to provide social space within the building, adjacent to the large lecture hall located in this corner and potentially as an expansion of the café/lounge space in the building. The goal of the addition is also to improve visibility, accessibility, and a sense of identity for the building and the departments housed within it.

**An Expanded Gymnasium in Dods Hall**

The Facilities Master Plan recommends and explores options for expanding seating capacity in the Dods Hall Gymnasium. As a wood flooring surface, the gym is the ideal location for basketball and volleyball. However, it does not have adequate seating capacity for competitions. As a result, these sports must use the Steele Field House and its multi-purpose rubber flooring, a less than ideal surface for non-field sports. The Facilities Master Plan proposes a restructuring of the gym volume to create adequate seating as well as space for expanded team rooms and a direct connection to the Natatorium so that Dods Gym events can utilize its expansive lobby and conference room.

**A Service Complex Addition**

The space utilization study of the Facilities Master Plan suggests that the campus has a significant deficit in space for Campus Support and Services. While some of this deficit can be satisfied by incorporating some service space into each new building, there is still a need to expand the existing service complex –a facility built to service a much smaller student population, a smaller physical plant and a much less ambitious scale of food service. Some space in the service complex will be made available by the planned re-purposing of the decommissioned central plant, but over time, additional expansion will be necessary

to accommodate existing needs and projected campus growth. An expanded service complex will also enable the relocation of some support space currently occupying valuable space, or contributing to vehicular/pedestrian conflicts on the main campus, particularly in some of the residence halls (e.g. custodial services in Alumni Hall).

## Future Expansion

While an addition is currently planned for the Rockefeller Arts Center to provide space for Dance and Theater Arts, the Facilities Master Plan also recognizes the need and potential for a future phase addition to satisfy the needs of the Department of Visual Arts and New Media. While the scope of the proposed addition will provide some studio space for visual arts, it will not satisfy all of the program needs and will not be connected directly to the visual arts wing of the facility. The Facilities Master Plan also explores the potential for a future phase to infill the space between the King Concert Hall and the new Mason rehearsal room addition, as a public atrium space connecting Varsity Drive to the main quadrangle. The opportunity also exists to extend an addition across the front of the building to create a new entrance and public gallery/arcade façade facing the quad and Symphony Circle. This modest intervention would improve the appearance, accessibility and challenging entry sequence of the campus' most public venue.

## Campus Site Improvements

Integral to all of the proposed facilities and additions described above, the Facilities Master Plan is governed by a broader set of principles and initiatives intended to preserve and enhance the existing campus landscape, one of the College's most enduring physical assets. The Facilities Master Plan recommendations are intended to achieve the following:

- Improve the overall quality of the campus landscape and promote a safe, pedestrian-friendly environment;
- Further advance the creation of thoughtfully designed outdoor spaces that encourage social interaction and recognize the importance of the public realm as a part of the total learning environment of the College;
- Mitigate proposed development and the associated parking and vehicular access;
- Discourage vehicular traffic by limiting access and regulating core campus parking;
- Enhance and contribute to a sustainable and healthy campus environment.

With these goals in mind, the Facilities Master Plan includes the following recommendations:

The closure of a segment of Old Main Drive between the University Commons and the Mason Hall/Williams Center drop off circle will result in a pedestrian zone in one of the most heavily travelled areas of the campus. This initiative will improve the physical environment of the campus as well as pedestrian safety. Related to this effort is the phased closure of Science Drive to vehicles, beginning with the implementation of the Science and Technology Building.

The Facilities Master Plan also recommends the transformation of Varsity Drive to access only by pedestrians and service vehicles in an effort to create a new landscaped quadrangle between the athletic facilities, the Rockefeller Arts Center, and Mason Hall. This initiative will also present an opportunity for the new Rockefeller Arts addition -and eventually a redeveloped Jewett Hall site- to act as anchors at either end of the corridor.

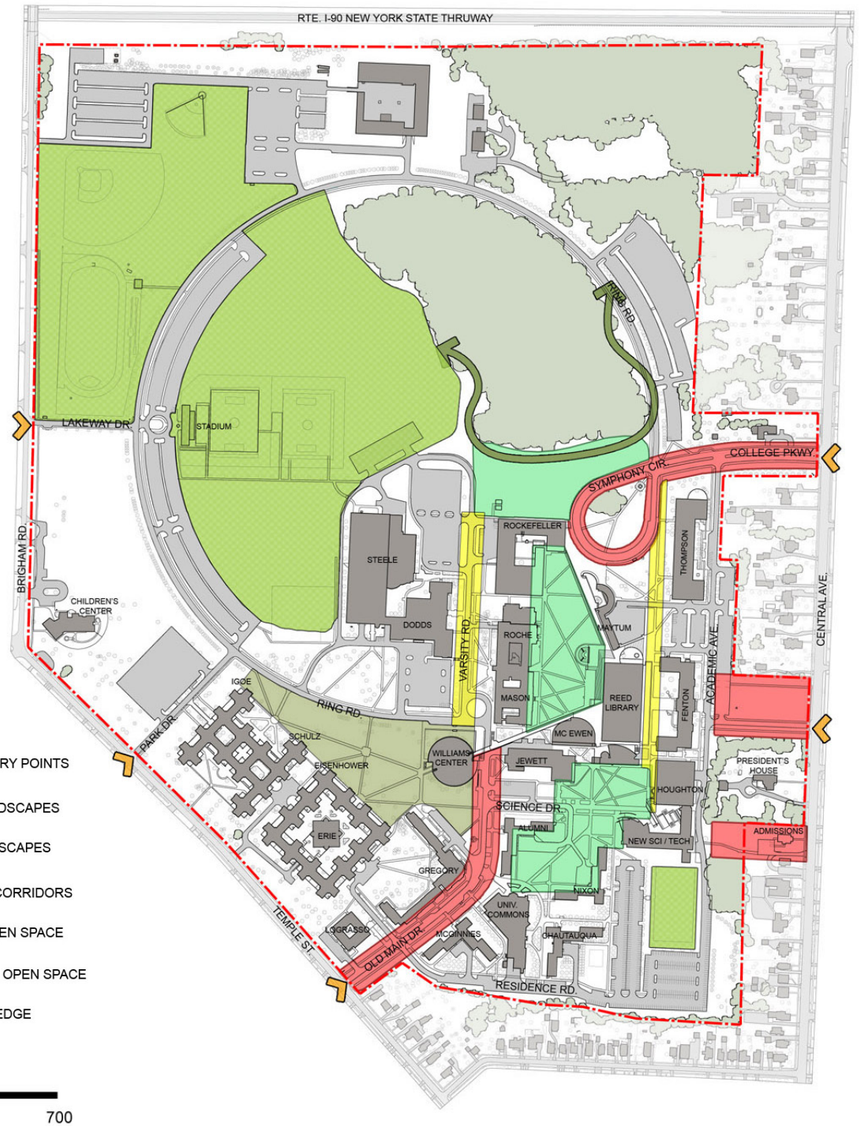
The Facilities Master Plan also recognizes the existing pedestrian space between Reed Library, Fenton Hall and Thompson Hall as an important landscape and pedestrian corridor. The recommendation to improve this well-travelled zone of the campus recognizes the increased significance this corridor will have when anchored by the New Science and Technology Building at its southern end and a new academic building and Thompson Hall addition at its northern end.

Recognizing that many of the original Pei-Cobb Master Plan site elements present challenges to maintenance, accessibility and aesthetics, the Facilities Master Plan explores the potential to improve the main quadrangle with a focus on reducing the impacts of the Maytum Hall and Reed Library steps, the amphitheater, and the Symphony Circle Plaza. Together with a look at enhancing and extending the mature landscape of the quad, the plan proposes a better integration between the more successful planted areas of the quad and the less-hospitable hardscape surfaces associated with the buildings.

The analysis and alternatives for the recommendations summarized above are described in greater detail in the sections that follow.

- The Master Plan recommends comprehensive renovations to three academic facilities: Houghton Hall, Fenton Hall and Mason Hall, with Jewett Hall serving as critical surge space, potentially for all three initiatives.
- The Master Plan recommends a number of strategic additions including a new entry to Thompson Hall, an expanded Dods Gymnasium, an addition to the Service Complex and a potential 2nd phase addition to Rockefeller Arts.
- A number of innovative landscape and site interventions are recommended in support of the proposed new facilities and additions and are informed by sustainability and pedestrian safety goals.

## Important existing spaces and corridors




Symphony Circle Lawn

Honey Locust Grove

Fenton Hall Lawn

Main Quad

# Landscape Analysis

The existing campus landscape is one of the assets of SUNY Fredonia, with its well maintained open spaces and the mature tree canopy of its unique honey locust groves. Future campus development should build upon these existing qualities, striving to preserve the most iconic landscapes, improve areas that lack character or pedestrian amenities, and create new pedestrian spaces that complement the recommendations of this Facilities Master Plan.

The campus landscape features several distinct categories of open spaces, each serving different functions and having different character. The diagram 'Important Existing Spaces and Corridors' illustrates the location of these campus landscapes.

## Campus Entry Points

Of the five formal entrances into the campus, the College Parkway and the Old Main Drive entrances stand out as the main entrances by appearance, use, and signage. The Lakeway Drive entrance has been given more prominence recently with the construction of the stadium, with the intent to serve as the main arrival point for athletic events.

## Arrival Landscapes

The arrival landscapes define the arrival experience into the campus core. They also present the first public face of the college to the surrounding community.

Off of Temple Street, the arrival on Old Main Drive presents a somewhat traditional appearance, overarched with the tall canopy of mature oaks and flanked on both sides with brick-clad residence halls. This is essentially the main day-to-day arrival corridor into the campus core, vibrant with vehicular and pedestrian traffic.

Off of Central Avenue, there are three distinct arrival landscapes: College Parkway, the Fenton Hall front lawn, and the Admissions Annex landscape. College Parkway is formally defined with a planted median, lighting with banners, and the magnificent columnar English Oaks lining both sides of the parkway; this corridor leads into the modernist north end of the campus core and is the main arrival for the Rockefeller Arts Center. The Fenton Hall front lawn offers a glimpse of one of the older campus buildings; the character of this space is formal and traditional, a rectangular lawn with a flagpole at its axis. The Admissions Annex landscape has a residential character, comparable to the surrounding neighborhood; however it is the first point of the campus walking tour for prospective students, and therefore very important for first impressions of the campus.

## Iconic Landscapes

The Honey Locust Grove, the Main Quad, and the Symphony Circle Lawn are the three Iconic Landscapes that define the campus core.

The most prominent and unique Iconic Landscape is the Honey Locust Grove, a dense grid of mature locust trees that extends from the Science Quad to the University Commons. The honey locusts offer a tall green canopy to walk under, dappled shade that allows grasses to grow on the ground, brilliant yellow fall color, and a rich branching pattern in winter. The preservation of the Honey Locust Grove character should be one of the college's imperatives in considering the future campus development.

The Main Quad is defined by Old Mason Hall with its annexes, and the principal buildings from the Pei-Cobb Facilities Master Plan consisting of the Reed Library, Maytum Administration Hall, and the Spine. Although the original Dan Kiley landscape plan called for a rectangular grid of paths and lawn, the existing Quad features intersecting paths at desire lines, and an informal planting scheme. The trees are mostly mature oaks and maples of average landscape value. Several contemporary sculptures offer visual interest in the landscape. However, there is a lack of places to sit or gather - except on the wide concrete steps of the Library that dominate the eastern edge of the Quad. The adjacent Amphitheater is isolated from the Quad with its tall surrounding wall, and it is rarely used. Because of the prominent location in the campus core, and its lack of amenities and accessibility, the Quad represents significant opportunities for improvements.

The Symphony Circle Lawn extends on the northern edge of the campus core, beyond Rockefeller Arts Center. A walk through the Rockefeller colonnade offers framed views of the landscape, and the large stainless steel sculpture at the top of the lawn has become a recognizable campus icon.

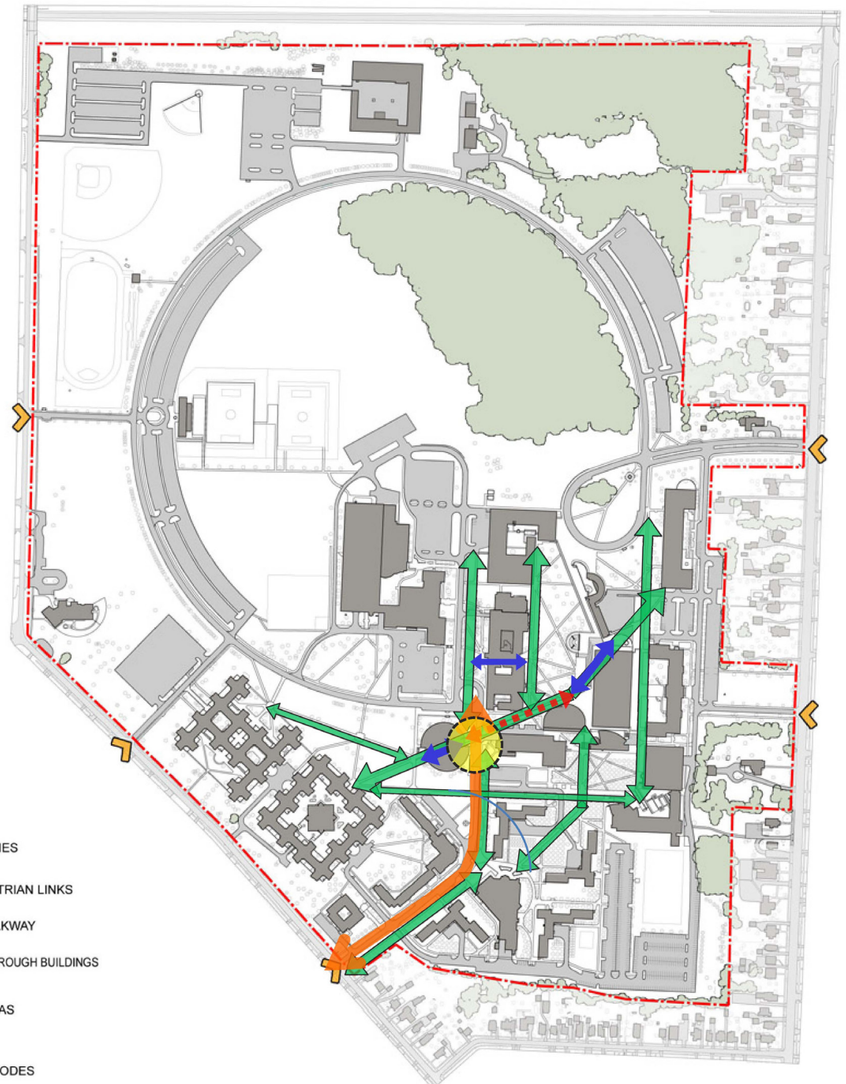
Varsity Drive Panorama

College Parkway

## Landscape Analysis

- The Suny Fredonia campus landscape environment is characterized by well-maintained, pedestrian-scaled landscape features, highlighted by the mature grove of honey-locust trees south of the main quadrangle.
- The Facilities Master Plan site analysis identifies a diverse set of arrival landscapes that provide prominent campus entry experiences.
- A number of important and well-defined pedestrian corridors exist on campus and are reinforced by the landscape.
- The residential precincts of the campus are well integrated to the landscape and buffered from the main campus, Ring Road traffic and parking by a well-defined open space.

## Pedestrian Circulation




### Important Corridors

The important corridors, extending in a north / south direction include the pedestrian path between Science Quad and Symphony Circle and the Varsity Road corridor.

The path from the Science Quad to Symphony Circle is an active pedestrian connection, serving the entrances to Houghton, Fenton, and Thompson Halls. Its current appearance is dominated by the wide gravel bed along the Reed Library façade, and a row of dated globe-shaped lights that are not energy efficient. This corridor would greatly benefit from landscape improvements such as planting, seatting, and new lighting.

The Varsity Road corridor extends from the Williams Student Center, to the Athletic building complex (Dodds and Steele Halls), and the performance Arts complex (Mason, Roche, Rockefeller). The space is currently dominated by the roadway, and the circulation flow from Old Main Road is interrupted by the rotary intersection with the Ring Road.

### Athletic open space

Natural grass athletic fields and a field turf stadium occupy the north-west quadrant of the College land. The wide expanse of open fields is bisected by the Ring Road with its planting of armstrong maples.

### Residential open space

The swath of land between the southwest student residences and Ring Road is an informal green open space, intersected by several pedestrian paths, with the most prominent being the connections to the Williams Center.

### Woodland Edge

The wooded area to the north of Rockefeller Arts Center is a vestige of the pre-campus landscape. The woodland edge complements the sloped lawn and the Symphony Circle arrival, and effectively shapes the northern edge of the campus core.

### Circulation

The 'Pedestrian Circulation Diagram' illustrates the perceived pattern of circulation in the campus core. In addition to the several north-south corridors, it is evident that there is a strong diagonal desire line from the Williams Student Center, along the Spine, and across (and underneath) the Reed stairs towards Thompson Hall. Segments of this diagonal go through buildings, which is a great convenience during inclement weather and also offers handicapped accessibility where it lacks on the site.

With the construction of the new Science Center, the east-west Science Drive corridor will gain prominence, along with the north-south corridor from the Science Quad to Thompson Hall. This is an opportunity to also strengthen the pedestrian core by reducing vehicular access on Science Drive.

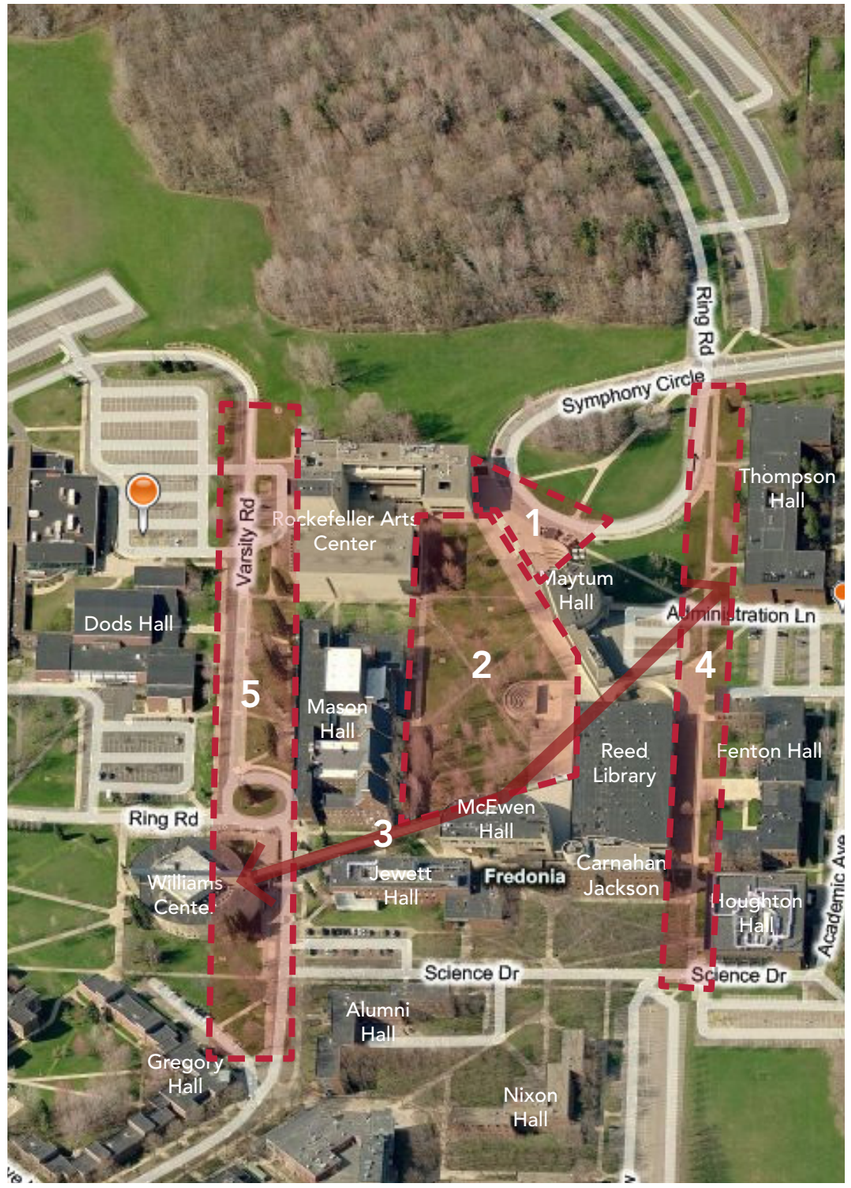
The diagram also highlights a conflict area between vehicular and pedestrian circulation, at the intersection of the Spine and Old Main Drive. If Old Main Drive is to terminate south of William Center, and everyday vehicular access is disconnected to the north of the Spine, there would be an opportunity to resolve the circulation conflict and strengthen the pedestrian core along Varsity Drive.

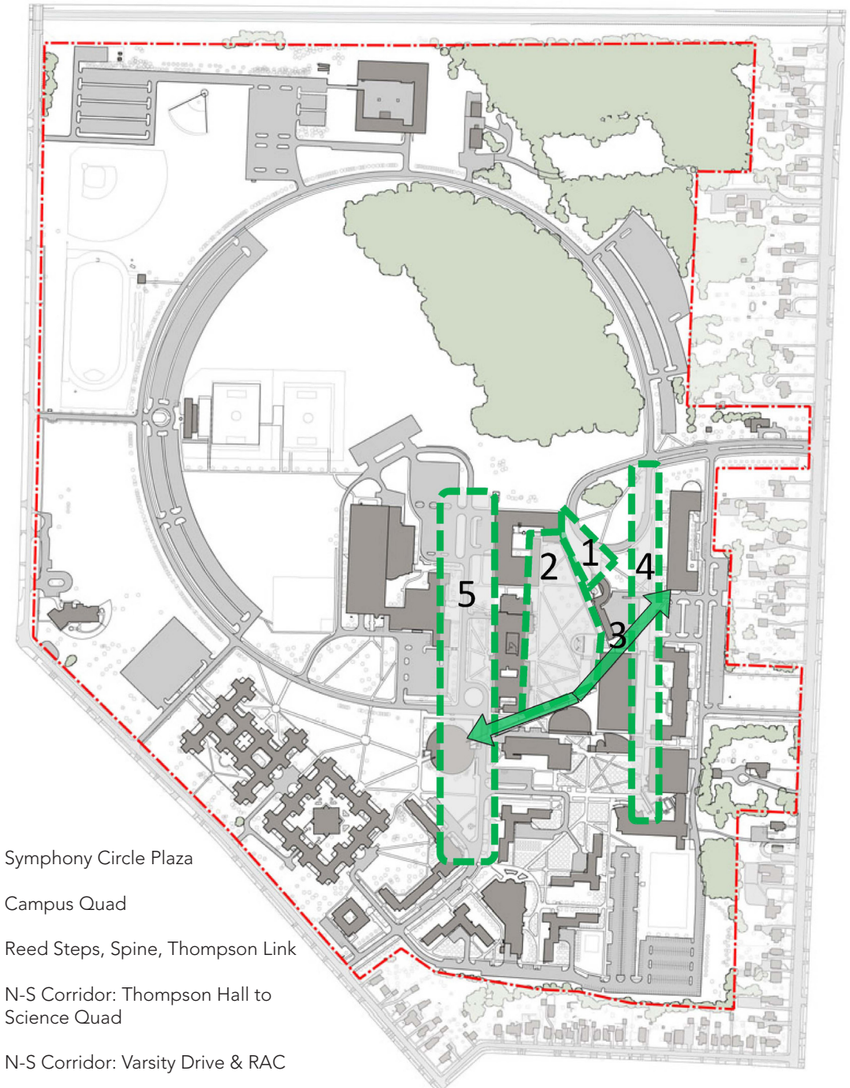
## Opportunities: Landscape

SUNY Fredonia enjoys a high quality of campus landscape environment, with its distinctive arrival landscapes and iconic spaces. However there is room for improvement, and the Facilities Master Plan identifies five areas that have greatest potential to enhance the use and enjoyment of the outdoor campus spaces. The 'Landscape Opportunity Areas' diagram identifies those five areas. Each of them is discussed in greater detail in Section E: Campus Planning & Concept Alternatives.

The improvements proposed in the landscape opportunity areas support the major planning themes of expanding the campus pedestrian core, enhancing existing strengths, and highlighting new initiatives. For instance, the proposed improvements provide solutions for handicapped accessibility at key locations such as the Main Quad; and reduce everyday traffic on Varsity Drive (while allowing service and emergency access), thereby expanding the pedestrian zone. Refined walkways, planting, new site lighting, and seating areas enhance existing strengths, such as the already strong north-south corridor that links the Science Quad with Symphony Circle. Proposed campus landscapes complement proposed building improvements, so that new buildings are better integrated into the campus fabric.

## Landscape opportunity areas




1 Symphony Circle Plaza

2 Campus Quad

3 Reed Steps, Spine, Thompson Link

4 N-S Corridor: Thompson Hall to Science Quad

5 N-S Corridor: Varsity Drive & RAC

N

0 100 300 700

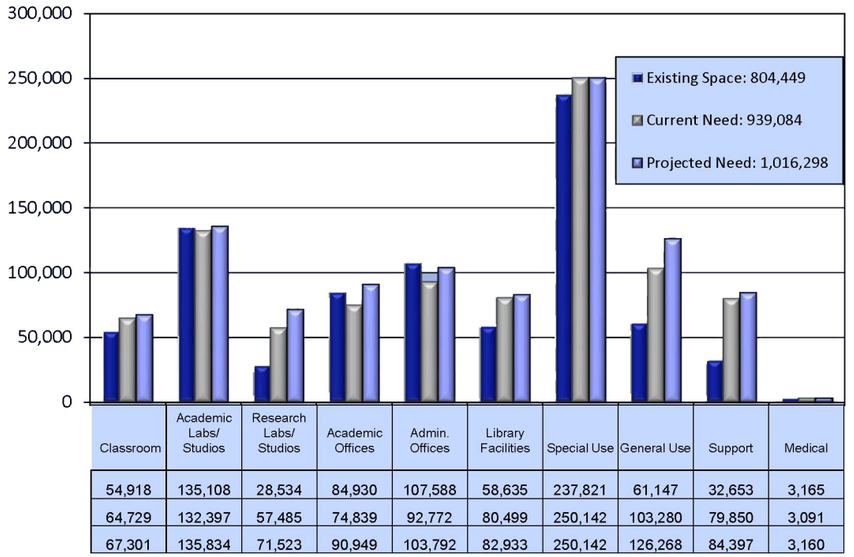
## FTE Changes

- SUNY Fredonia has witnessed a significant enrollment increase since the development of the current campus and projects a steady and sustained increase over the next decade.
- The SUNY Fredonia campus currently has 804,440 net assignable square feet of non-residential space, including off campus facilities.
- Phase III right-sizing exercises reveal the existing deficit of space on campus to be in excess of 130,000 net assignable square feet.
- Enrollment and personnel projections analysis suggest that in addition to current space deficiencies, projected needs reveal a deficit in excess of 80,000 net assignable square feet.

Current and Projected Undergraduate and Graduate FTE:
Fall 2009 to Fall 2023

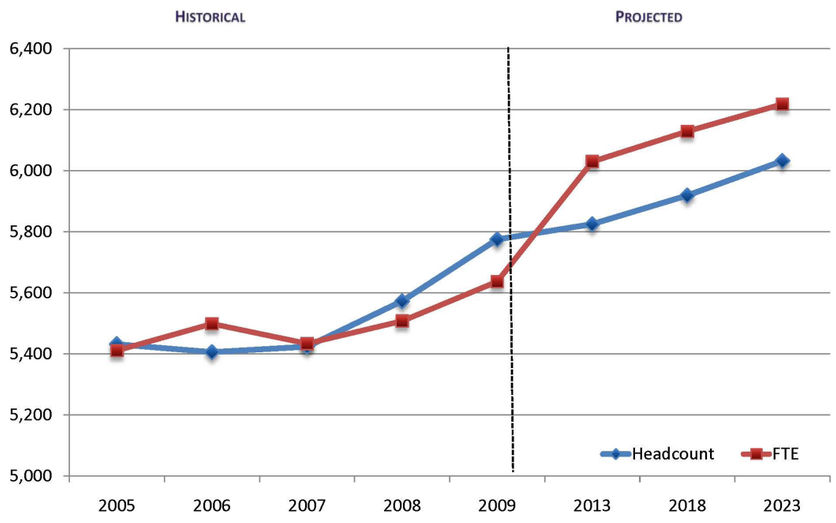
| | Actual Fall 2009 | Projected Fall 2013 | Projected Fall 2018 | Projected Fall 2023 | 2009 - 2023 Percent Change | 2009 - 2023 Number Change |
|---|---|---|---|---|---|---|
| **Undergraduate** | | | | | | |
| Full-time | 5,308.3 | 5,400.7 | 5,502.6 | 5,502.6 | 3.7% | 194.3 |
| Part-time | 67.7 | 41.3 | 41.3 | 41.3 | -39.0% | -26.4 |
| ***Total Undergraduate*** | **5,376.0** | **5,442.0** | **5,543.9** | **5,543.9** | **3.1%** | **167.9** |
| **Graduate** | | | | | | |
| Full-time | 187.9 | 195.2 | 213.4 | 227.0 | 20.8% | 39.1 |
| Part-time | 73.1 | 81.1 | 88.6 | 94.3 | 28.9% | 21.2 |
| ***Total Graduate*** | **261.0** | **276.3** | **302.0** | **321.3** | **23.1%** | **60.3** |
| ***Total FTE*** | **5,637.0** | **5,718.3** | **5,845.9** | **5,865.2** | **4.0%** | **228.2** |

Space Planning Projections
Proposed Changes by Space Category

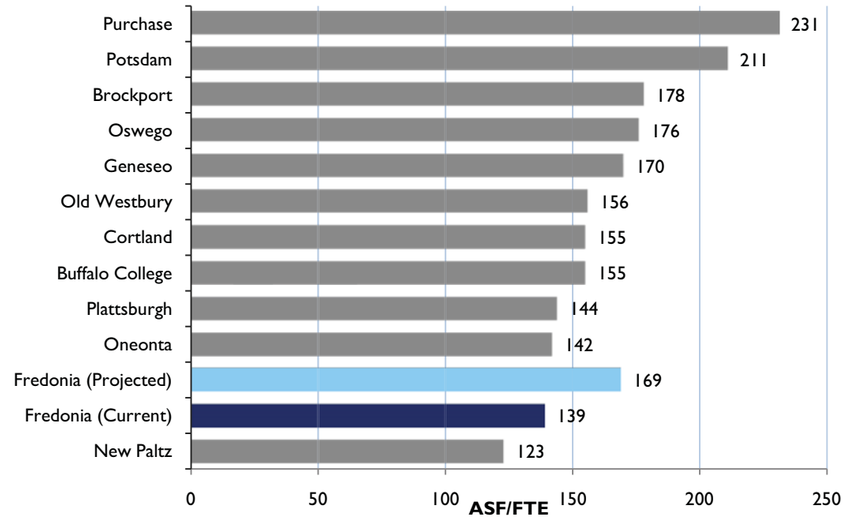



| Classroom | Academic Labs/ Studios | Research Labs/ Studios | Academic Offices | Admin. Offices | Library Facilities | Special Use | General Use | Support | Medical |
|---|---|---|---|---|---|---|---|---|---|
| 54,918 | 135,108 | 28,534 | 84,930 | 107,588 | 58,635 | 237,821 | 61,147 | 32,653 | 3,165 |
| 64,729 | 132,397 | 57,485 | 74,839 | 92,772 | 80,499 | 250,142 | 103,280 | 79,850 | 3,091 |
| 67,301 | 135,834 | 71,523 | 90,949 | 103,792 | 82,933 | 250,142 | 126,268 | 84,397 | 3,160 |

Enrollment: Campus Historical and Projected




SUNY Fredonia Campus ASF/FTE Compared to SUNY Peer Institutions



# Campus Growth

## FTE Changes: Summarizing Phase III

Phase III enrollment changes suggest a 4.2% FTE increase at SUNY Fredonia by the year 2023, to a total of 5,865. The analysis of existing space suggests a current need for an additional 129,000 net assignable square feet of space, with that number increasing to about 212,000 net assignable square feet to accommodate 2023 growth. With this growth, the campus would increase its size by approximately 21%. Space types indicating the most need include Research Laboratory, General Use, and Support, with special attention to assembly spaces. Right-sizing exercises suggest the need to substantially alter the profile of the existing classroom inventory. In addition to net increases in the number of both general and specialized instructional spaces.

A study of departmental space indicated space needs in several departments. With consideration of planned construction, the following departments were identified as having a 2023 space need:

- Business Administration
- Communication Disorders & Sciences (modest NASF)
- Education: Curriculum & Instruction
- Music
- Dance and Theater Arts

Programs in Chemistry, Geosciences, Physics, Theatre, and Visual Arts and New Media also demonstrated a need, some of which will be met with planned projects such as the Rockefeller Arts Addition and the Science and Technology Building.

Projected growth at SUNY Fredonia as recommended in Phase III is reflective of accepted standards for square footage per FTE in 4-year colleges. A system-wide comparison of current space at the University indicates that SUNY Fredonia has one of the smallest physical plants per FTE across the SUNY system. Projected facility expansion would bring the campus closer to the average NASF/FTE, but still well below that of its peer campuses with strong programs in the arts. This comparison shows that suggested growth is modest and justified to meet the needs of current instructional practices.

## Interpreting Phase III

The findings of Phase III: Analysis of Space Needs are used in a number of ways to establish a quantitative growth target for SUNY Fredonia. This target is established in concert with various qualitative conclusions drawn from interviews and observations collected during Phases I and II, allowing planning alternatives to be an accurate reflection of the unique needs of the campus that may or may not be reflected in empirical data. In addition, ongoing initiatives and planned projects are an important factor in the determination of the appropriate amounts of campus growth; these projects are considered in the proposed planning alternatives even when detailed programming and square footage information is not yet available.

Phase IV concept alternatives take into consideration the unique characteristics of SUNY Fredonia that were discovered through an extensive fact-finding phase at the start of the Facilities Master Plan. Observations and suggestions obtained during this phase indicate specific needs of the College and its programs. SUNY Fredonia's key programs in the arts pose challenges in facilities planning that go beyond quantitative considerations. The amount of space required of such programs is proportionally larger than other types of academic programs, and of such a specialized nature that these programs can appear to have excesses of space. Phase III's findings have been carefully calibrated to consider the unique needs of arts and music programs, without penalizing them for their relatively large space needs.

Suggestions made in Phase III include "right-sizing" of existing classrooms to adjust to current needs. In some cases, these actions are impractical or impossible due to constraints of existing structures. In addition, the sorts of updates that are required to bring existing classrooms up to current requirements of instruction are extensive, and difficult to retrofit. Because of the relatively high cost and impracticality of physically altering quantitatively the size and configuration of existing classrooms, a need for new state-of-the-art classroom space beyond the findings of Phase III is justified.

Finally, Phases I and II create an understanding of the overall quality of existing space at SUNY Fredonia; the concept alternatives presented in this phase combine phased improvement of existing space with the accommodation of established need from Phase III. Because of this, space needs established in Phase III are not considered independently; they are necessarily weighed against the need to update and surge existing spaces for renovation. Targeted program reallocation following new construction will allow the campus to grow incrementally, while either improving existing space that is vacated or taking it offline. For example, a strategy to permanently vacate windowless office space in Thompson Hall is a priority. As the campus grows, it must continue to consider the effect on all its existing buildings in this way, in order to maintain a consistent quality of space throughout the campus over time. The impact of such a campus-wide strategy is important to the overall atmosphere of the campus, but will result in more incremental net growth even as new buildings are built. The findings of this Facilities Master Plan in its entirety will enable the campus to grow intelligently, while improving the quality of all of its spaces over time.

## Space Needs

- A number of departments are found to have current and projected space shortages including the Education, Business, Visual Arts and New Media, Computer Sciences, Music and several of the Humanities.
- Space needs for Theater and the sciences will largely be satisfied by pending projects such as the New Science and Technology Building and the Rockefeller Art Center.
- In addition to academic space deficiencies, the space analysis identifies significant facilities needs for Student Services and Campus Support spaces.
- Changes in curriculum, College mission goals and a suitability analysis of existing facilities also inform the qualitative analysis of assignable space.

## Campus Use Precincts

# Evaluations: Campus and Buildings

## Campus Land Use

In general, campus program organization falls into three distinct zones: an academic core campus, residential zone, and athletic buildings and fields. The Academic Core is the most aesthetically prominent, with the campus' major academic buildings closely concentrated around a large landscape quad. The Academic Core occupies a fairly dense footprint at the eastern edge of the campus, set back from Central Avenue leading into downtown Fredonia. Secondary landscape spaces adjoin the outer edges of the Academic Core with the Residential Zone to its immediate south and west; residential areas of the campus are well connected with pedestrian paths and attractive landscape spaces. The Academic Core and Residential Zone comprise a walkable pedestrian core of the campus, in a location slightly south of the center of I.M. Pei's intended plan.

The pedestrian core is surrounded by a more open landscape of athletic fields and buildings, campus circulation, and wooded areas that form a backdrop to the highly-trafficked pedestrian areas. The Athletic Zone to the west and north of the Academic Core and Residential Zone forms a flexible buffer to the outer edges of the campus. This area has been frequently altered over time to accommodate changing needs of the campus, mostly related to parking and athletics. Potential building sites exist within these flexible areas to the north of the campus, but should be carefully considered for the ways in which they support goals of overall campus planning.

## Density

A key attribute to SUNY Fredonia's campus is its "walkability" and generally pleasant environment, due to the dense clustering of buildings and the attention paid to the spaces in between them. Residential areas are located near academic uses, promoting a living-learning environment and year-round occupation of landscape despite harsh winter conditions. Many buildings are connected with interior connectors, facilitated by their close proximity to each other.

The placement of new construction within the dense campus core is a critical consideration during site selection. The ability of the campus to maintain –and perhaps strengthen – its density can be accomplished through the strategic replacement of redundant circulation and surface parking with buildings. Such a strategy can be more difficult than building on available greenfield sites such as those in the northern portion of the campus, but it will serve to enhance the already exceptional pedestrian environment. Closely-concentrated buildings not only support the existing pedestrian core, but also lend themselves to facilitating additional "coatless" connections. With the addition of new interior connectors, the campus may one day be able to offer an entirely internally-connected campus.

## Parking and Circulation

The network of circulation at SUNY Fredonia provides drop-off and service access to all of its buildings, and convenient access to abundant parking lots both within the campus core and at its edges. Because every student is able to have a car on campus, and to park in any available space, there is a large amount of surface parking throughout the campus. All campus roads are open to the public, with no "service-only" drives. Large banks of parking are located at the perimeter of the campus, along the campus ring road and near residence halls. Parking on the interior of the campus core is in smaller lots and along campus drives, with mostly two-way roads connecting them.

There is no clear way to move from one side of the campus to the other; vehicles circulate through the center of the campus to public roads. This organization creates some redundancy in the roadway network, and it may not be necessary for all campus roads to be publicly accessed as they are today. In the future, access to major parking lots could be provided at the perimeter, with more limited vehicular access to the campus core. Such a strategy, as will be demonstrated in later sections, serves to enhance the pedestrian environment by reducing the number of cars that park and circulate through the campus core.

Phase I of this improvement included field investigations into parking and circulation patterns throughout the Fredonia campus. These investigations revealed that, contrary to any perceptions that additional parking may be required to offset future growth or eliminated parking, significant under-utilized parking is available. Lot 27, the Park and Ride Lot and the north end of Lot 7 had a cumulative total of over 300 vacant spaces during peak hour periods observed in April 2010.

These spaces can be utilized to offset future losses provided there is incentive to use them. Currently, busses serving the two Ring Road bus loops do not operate continuously, but wait in the Park-And-Ride lot for a telephone call requesting service. This requires students to call for service and wait for the bus to arrive. If these busses were to operate continuously, with 10-15 minute headways, vehicles would more readily utilize the more remote lots.

Since one of the primary initiatives for the SUNY Fredonia campus is to provide a pedestrian friendly core, it would be beneficial to promote usage of these underutilized lots through increased shuttle bus service.

A Jewett Hall corridor, an inflexible building layout and construction type that is difficult to repurpose.

A typical Houghton laboratory which is antiquated and in need of renovations.

The Diers Recital Hall in Old Mason is an example of a space that needs significant MEP systems, finishes and acoustical upgrades.

Thompson contains several offices within an internal core of space that have no access to natural light.

## Existing Buildings: Ongoing Issues & Considerations

As concept alternatives are developed for future growth at SUNY Fredonia, attention must be paid to ongoing maintenance improvements and initiatives that have already been scheduled or planned. Such improvements have been carefully prioritized by the campus to allow for successful building operations with minimal disruption, and when correctly planned allow the campus to grow comfortably. The concept alternatives do not attempt to change plans for major maintenance and capital improvements on the existing campus, but they do consider how they affect or contribute to the completion of other improvements.

In later chapters, each major capital improvement associated with existing buildings is outlined in detail by building. In brief, future facilities improvements in existing buildings include:

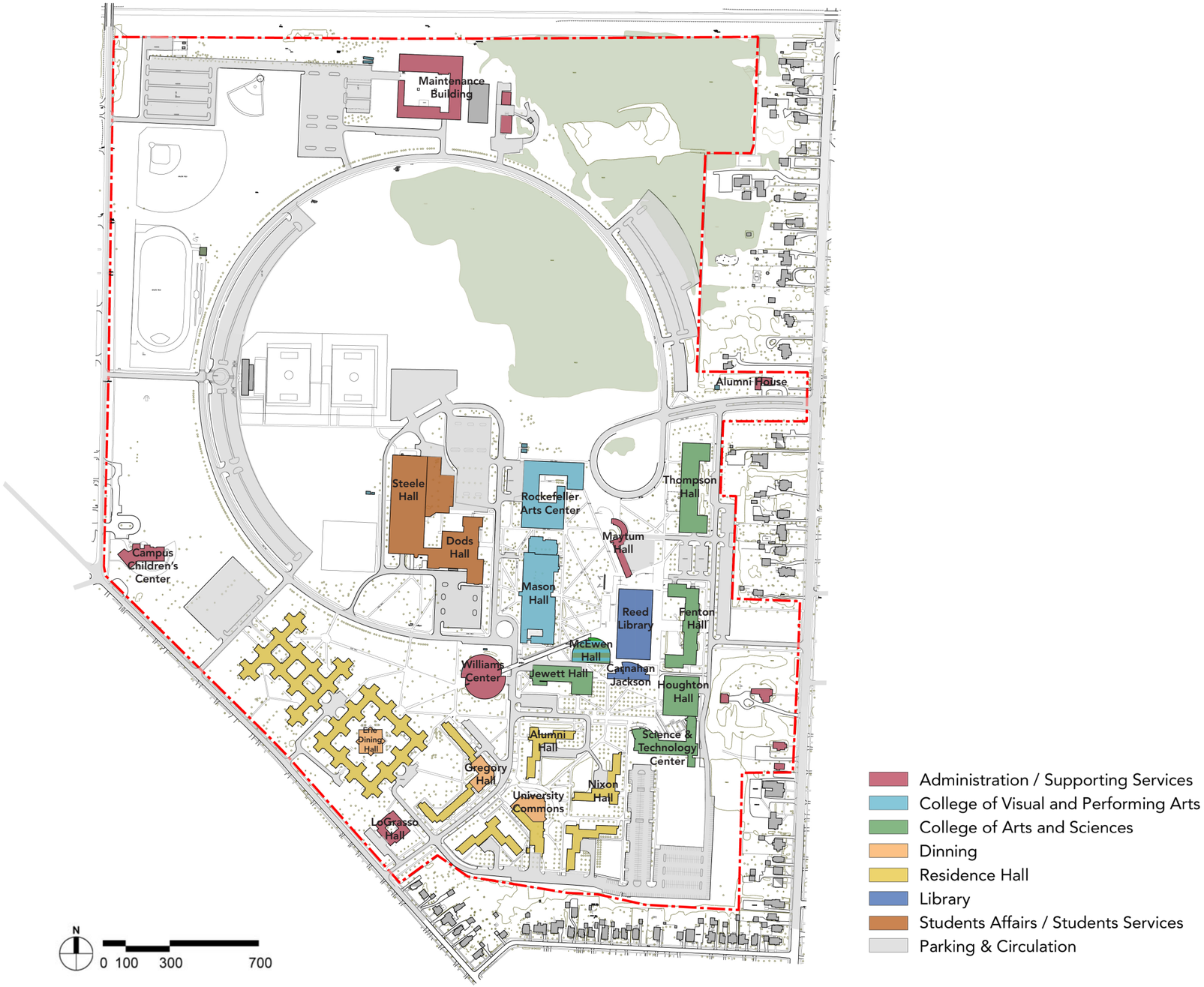
- Fenton Hall: full HVAC improvements for air conditioning, addition of sprinklers, window and roof replacement
- Houghton Hall: gut renovation
- Mason Hall: acoustics, humidity, ventilation, and classroom and recital hall improvements
- Thompson Hall: Day Care backfill, classroom and office renovations, improvements/addition to main entrance
- LoGrasso Hall: exterior cladding renovation
- Services Complex: program reconfiguration and backfill
- Steele Hall: air conditioning and HVAC improvements, window and roof replacement, sprinklers, exterior envelope renovation at Ice Rink

## Residential Use Zones

Residence halls are conveniently concentrated in the south and southwest portions of the campus, close to the Academic Core and nearby student life uses. These zones are characterized by fairly dense concentrations of 2- and 3-story halls, with adjacent landscape spaces and pedestrian paths connecting to important campus features. In general, the location and environment of the Residential Zone is well-planned and pleasant, contributing to the overall satisfaction of the College's resident population and the campus' reputation and first impression. However, common, unprogrammed space in residence halls has been taken up over time by non-residential uses including such disparate uses as Campus Police, various administrative offices, a television and radio station, and custodial services. These non-residential uses are generally found in what were formerly ground floor lounge and study areas of the residence halls. While the offices and other supporting functions are well accommodated in the residence halls, their presence produces issues of safety and security, access and scheduling, and vehicular access. In the future, the relocation of non-residential uses from residence halls (where feasible) should be a priority as newer, more appropriate space becomes available, allowing Residence Life to create more hospitable living-learning communities.


The scale of Fredonia's student housing is consistent across what are well-defined zones of residential clusters generally surrounded by healthy and pleasant landscape environments.

## Campus Buildings by Uses



## Building Use By College

The buildings comprising SUNY Fredonia's Academic Core are home to the broad variety of academic programs that are offered by the College, with compatible programs and majors co-located where possible. As the academic colleges transition to a new organizational structure, a clearer distinction of the arts from other Academic Programs will emerge, but will also begin to reflect the physical organization of the campus as it is today. Concept alternatives for the campus are cognizant of the new clarity that will exist as the organizational structure of the Colleges begins to align itself with the physical clustering of academic programs, and future recommendations serve to enhance this clarity. SUNY Fredonia's academic organization, both programmatic and physical, will allow the Colleges to more strongly distinguish themselves.

The following are brief descriptions of building use across the campus, organized by academic college. The organization reflects the College's plans to re-structure the makeup of the academic colleges, reshuffling programs from the current Colleges of Arts and Humanities and Natural and Social Sciences into the College of Visual and Performing Arts and the College of Arts and Sciences.

This organizational restructuring does not warrant or suggest a reshuffling of Academic Programs, which are generally well suited to their current locations and adjacencies.

## College of Visual and Performing Arts

SUNY Fredonia's key programs in the performing arts and music will be more prominently recognized with the College's new organizational structure creating the College of Visual and Performing Arts. The campus' physical organization already reflects this division of program, with specialized spaces in art and music occupying the western portion of the Academic Core, in the Rockefeller Arts Center and Mason Hall and its additions. Comprising half of the built edge of the Main Quad, the future College of Visual and Performing Arts is already highly-visible, indicating the importance of its programs at SUNY Fredonia.

The planned addition to the Rockefeller Arts Center will provide additional prominence and a physical connectedness for all programs within the College of Visual and Performing Arts. Careful consideration of the location, size, and function of public areas of the addition – especially the planned connector between the Rockefeller Arts Center and Mason Hall – is recommended to bring a more common "face" to the newly-formed college. Though main entrances to the addition have been discussed more often on the Varsity Drive side of the Rockefeller Arts Center, improvements to the entry sequence at Symphony Circle and the Academic Quad could be facilitated by a more substantial built connector between the two Schools with a presence on the quad. Such a connector is discussed in later sections with respect to major capital improvements; refer to Part E for more detailed discussion.

The potential redevelopment of Jewett Hall also proposes space for music to expand, enabled by the physical link to Mason Hall explored by the Facilities Master Plan. This potential, as well as a physical connection to McEwen Hall and a re-purposed Lecture Hall dedicated to music, further reinforces the prominence of the arts facilities on this side of the Campus.

## College of Arts and Sciences

The creation of a large College of Arts and Sciences, encompassing a broad range of subjects, reinforces the clear distinction at Fredonia between the arts and all other academic programs. This distinction is already physically apparent on campus in the clear division of the east and west parts of the Academic Core. Programs in the arts clearly occupy the west portion lining the Academic Quad, while many of the campus' other academic buildings line the eastern edges. In particular, the majority of teaching and academic office space for the future College of Arts and Sciences is currently located in Thompson and Fenton Halls, along the heavily travelled north-south pedestrian axis between Reed Library and the campus' eastern edge. A "Science Quad" will be made stronger after the construction of the new Science and Technology Center at the southern terminus of this pedestrian axis. Houghton and Jewett Halls, now home to the majority of programs in the sciences, will create additional edges to the Science Quad.

While the physical organization of academic buildings on campus is logical, some opportunities exist within and amongst the buildings themselves to reorganize program spaces for greater efficiency, improved adjacencies, and quality of academic and support space. Thompson Hall in particular offers the majority of instructional space and academic offices, but experiences great strain in accommodating the needs of contemporary instruction and in providing adequate meeting and office space. Additionally, a number of offices are located within internal, windowless spaces that were initially intended to be file, storage and office support functions, not occupied spaces.

As space in Thompson Hall is vacated for new or renovated space elsewhere, backfill strategies in the concept alternatives suggest a de-densification of the building, relocating windowless office space from the core to exterior walls and "right-sizing" classrooms for a more generous square footage per station. The building will also benefit from de-densification with the ability to add student study and gathering spaces and departmental reading rooms, and to clarify circulation and identity amongst the many academic programs housed there.

Following the completion of the Science and Technology Center, phased renovations will take place in Houghton and Jewett Halls. As these renovations happen, the College of Arts and Sciences will not only improve the quality of space within its buildings, it will be allowed to expand modestly.

## College of Education

The College of Education is housed entirely in Thompson Hall. While this location is convenient because of the interdisciplinary nature of the College's programs, it provides little opportunity for the College to distinguish its identity from that of the College of Arts and Sciences, and it contributes to and is compromised by the overcrowding of Thompson Hall. As one of SUNY Fredonia's largest and most reputable colleges, the College of Education is underserved in its current location, though the space it occupies is very well-used. As mentioned above, a de-densification of Thompson Hall is recommended for the benefit of all the programs within it; the College of Education would perhaps benefit the most from additional departmental study space, right-sized smart classrooms, specialty spaces for classroom instruction and efforts to distinguish programs' identities within the building.

Because of the public nature of some of its courses and programs, the College of Education could benefit from an entrance for visitors, separate from those utilized by academic functions. Such a "gateway" to the College could easily be provided as a modest addition to Thompson Hall, or could be incorporated into a new academic building if it housed similar programs with public components.

In general, the College of Education utilizes its space very well, and it is well-suited to a location comingled with programs from a broad range of disciplines. However, the College suffers from a lack of identity that does not reflect its importance to the SUNY Fredonia pedagogy and reputation.

## School of Business

The School of Business experiences similar identity issues to the College of Education as a smaller academic unit, housed along with – and generally undistinguished from – other Thompson Hall departments. Also similar to the College of Education, the School of Business has unique instructional needs for its pedagogy including high-tech classrooms and case study rooms, which have been unable to be accommodated in existing space on campus. The School's unique needs, along with the College's goal of addressing a growing popularity of business programs, make it a good candidate for accommodation in a new academic building. Relocating the School of Business to a new building gives it the presence on campus that it needs to realize the growth potential of this relatively new program. However, should a new academic building be delayed or programmed to meet other campus needs, the same alterations that are recommended for Thompson Hall for the College of Arts and Sciences and the School of Education are suggested, including the relocation of windowless offices and the addition of student gathering and study areas in order to increase the School's presence and identity within the building.

## Athletics and Recreation

Athletics and recreation uses occupy a zone directly west of the Academic Core, with associated fields and outdoor facilities between Varsity Drive and the campus' western edge. Academic athletics, along with the Dance Department, share facilities with recreational athletics in Steele and Dods Halls. These two buildings have received additions over time allowing athletics to grow, but creating some inefficiencies of circulation and programmatic proximity. The most notable deficiency in the overall programming of the athletics complex buildings is that recreational and academic athletics share facilities that should ideally be separated.

## General Academic-Related Functions

Student services and administrative functions are currently dispersed throughout the campus in various Pei-era buildings. A newly-renovated Maytum Hall will be home to many administrative offices and other functions to which students need intermittent access such as Student Accounts and Financial Aid. In addition, academic deans will return to offices on the 7th and 8th floors of Maytum Hall post-renovation. Maytum Hall is suitable for office space, but feels removed from the rest of the campus by virtue of its location and uninviting entrance. Visitation by students to Maytum Hall is affected by this perception, which is recognized in the College's decision to allow more student-focused functions like the Office of the Registrar and the Credit Union to remain permanently relocated from the building.

The Williams Center and Reed Library are other important student service and academic-related buildings on campus, and are located in close proximity to each other and to academic buildings. Their location and ease of access makes them more suitable for the functions that they house. The Williams Center was built as the student center following the I.M. Pei and Partners Facilities Master Plan, but for a far smaller student body than exists today at SUNY Fredonia. The facility provides study and meeting space, food service, and various services that are frequently visited by students and community members, yet it falls well short of satisfying the current needs of a large and actively engaged resident student population.

Because the Williams Center is now undersized to meet the needs of the College, buildings like Reed Library, along with the first floors of various residence halls, have seen their free space taken up by student service functions. The Office of the Registrar was temporarily located to Reed Library several years ago, and will remain until appropriate space becomes available. Campus Police is located on the second level of Gregory Hall, a residence hall, because its advantageous location allows access to most of the campus quickly and easily. These two examples indicate the dilemma that the College faces with regard to the amount of services space it currently has, but also the recognition that such services spaces are appropriately located in the most central locations possible. Concept alternatives provide suggestions for the consolidation of student services functions in the future, with a general effort to relocate such uses from residence halls where feasible.

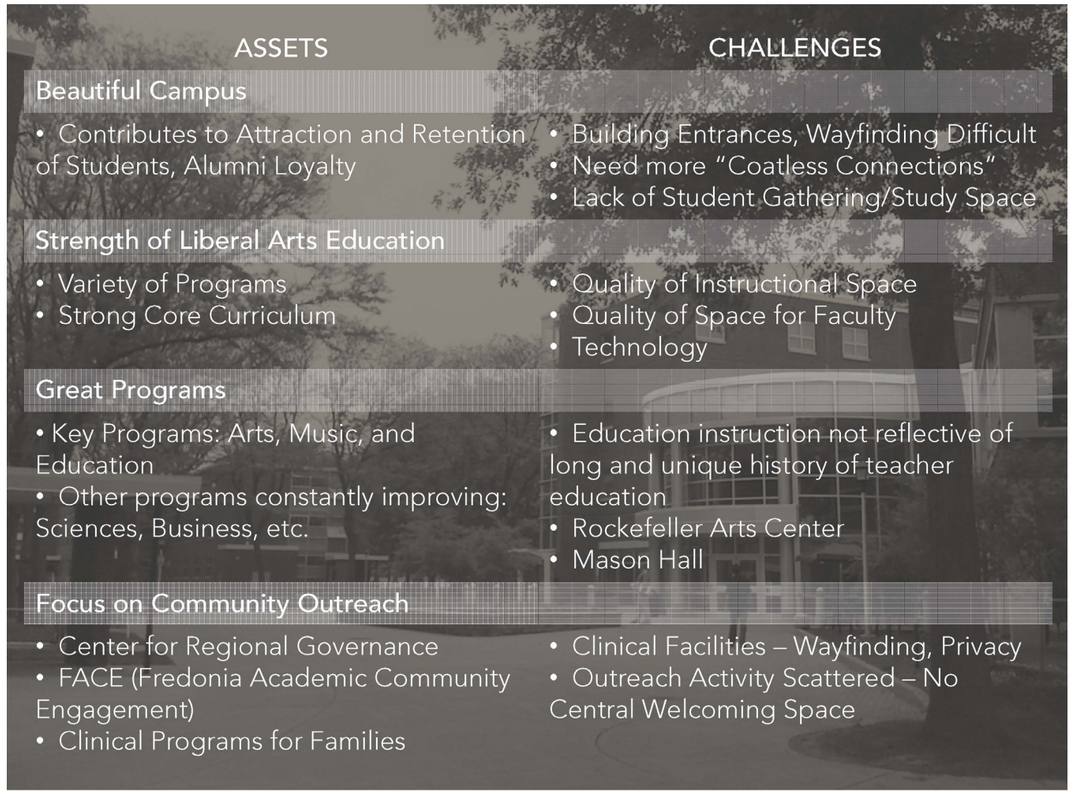
## Campus Operations

The Supporting Services Complex at the far northern edge of the campus along Ring Road currently houses most uses associated with campus operations. The complex is undergoing plans for renovation and program relocation following the removal of a significant amount of equipment associated with the de-commissioned central plant, which will allow more room and better arrangement of functions. The area surrounding the Supporting Services Complex serves vehicular access fairly well, and is also home to a number of temporary trailers which provide surge space for the Maytum Hall renovations.

Some campus support functions are better located closer to the heart of the campus. This is apparently true of the Faculty Student Association (FSA), currently located in Gregory Hall, which supports the various food service outlets throughout the campus. However, some other service functions are located in residence halls, and do not require close proximity to buildings or students in the campus core. Concept alternatives suggest that a larger Supporting Services Complex can remove these programs from residence halls.

## Building Use: Summary

- Academic departments and uses across Fredonia's broad array of campus facilities are generally found to be well suited to their campus location, proximity and facility.
- Fredonia's new academic organizational restructuring, which creates the College of Visual and Performing Arts and the College of Arts and Sciences, mirrors a logical proximity of academic buildings associated with each College on the east and west sides of the main quad.
- The College of Education is a major use within Thompson Hall but lacks a departmental identity within the building which houses several departments and is densely populated with a range of academic uses, research institutes and support and general purpose classrooms.
- The recent establishment of the School of Business, and the program's increasing popularity and need for specialized instructional space, suggests that the School is a good candidate for relocating to a new facility which would give the School an increased profile and the benefit of purpose-built instructional space.
- Administrative and Student Services functions are dispersed across the campus with concentrations in Maytum Hall (Administration) and the Williams Center (Student Affairs), both facilities with limitations in growth and flexibility.




A list of observations obtained through interviews and campus tours at the end of Phase I: Campus Profile. Presented April 20, 2010.

# Development Guidelines

Successful planning for SUNY Fredonia's future must be informed by the many assets and challenges that the campus faces as it exists today. The College's reputation as a walkable, residential campus providing both a strong liberal arts education and distinctive programs is essential to its competitiveness, and the ways in which the campus and its facilities support that reputation are critical. The following chapter outlines important themes of campus planning to be applied to the more specific concept alternatives and capital improvements included in this plan. Also included in this chapter are guidelines for the physical and aesthetic development of the campus, to be applied to very specific areas of opportunity identified for further study.

## Priorities for Campus Development

The many observations and interviews conducted in Phases I, II and III have established an understanding of the campus that is both qualitative and quantitative.  A strong set of priorities for campus development will guide SUNY Fredonia's decision-making for future improvements and initiatives. These priorities are most successful when applicable at a variety of scales, from the vantage point of the entire campus, to specific future initiatives, to creating a more holistic understanding of the context of current and planned initiatives.  The Facilities Master Plan examines all of these scales simultaneously in creating recommendations for growth.

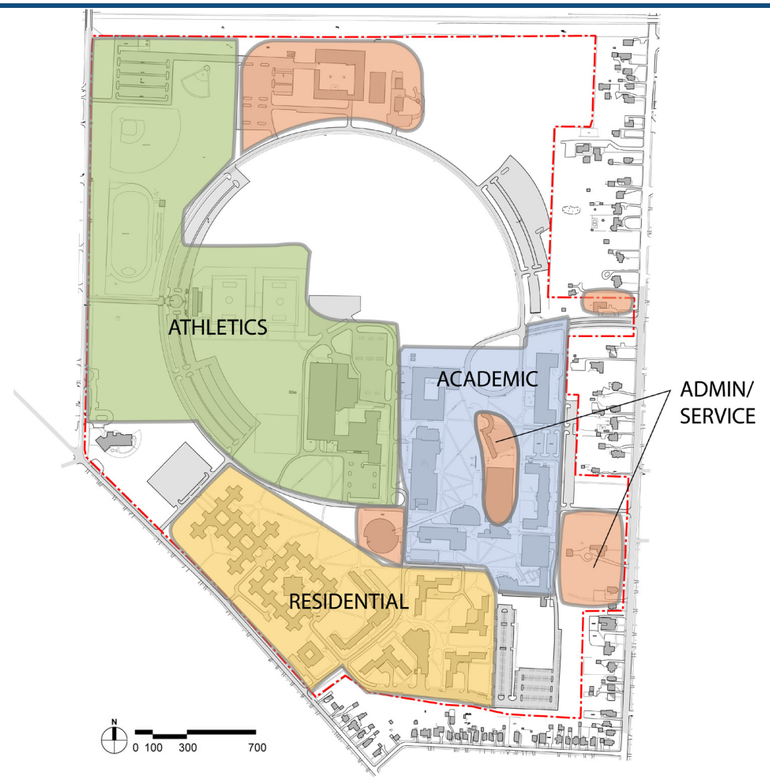
SUNY Fredonia's campus is already well-established, with a clear organization of use zones, buildings, and landscape elements dating back to the I.M. Pei and Partners Master Plan. In developing a set of themes for campus planning, an effort to maintain and enhance parts of the campus that are clearly-organized and successful is coupled with a rigorous investigation of facilities and campus issues to be improved upon through new construction and renovation. Analysis of the existing campus reveals not only the campus' strengths but also redundancies and issues to be resolved.

Analysis of general use zoning, along with an investigation into existing landscape and circulation patterns indicates that most activity occurs on the southern portion of the campus. This area, which includes the Academic Core, is characterized by dense clustering of buildings around well-developed landscape spaces. Clear use "zones" are present, with strong pedestrian connections between them. The fact that these spaces and paths are increasingly active toward  the campus' southern edge – occupying more or less half of the Ring Road southward – is an important trend in the development of the campus. The Facilities Master Plan recommends that this deliberately-planned density be supported by future development, as it contributes to the campus' strong first (and lasting) impressions as a pedestrian-friendly campus. Efforts to support dense development include the enhancement of existing circulation patterns, placement of new buildings close to existing ones, and perhaps the removal of circulation or parking areas that are redundant or disruptive to the pedestrian environment. By working within the dense campus core, future development is focused, and priorities are established that can be applied to both planned and future improvements. The result is an even more cohesive campus environment with a strong pedestrian zone, mature landscapes, and new improvements well-integrated with existing buildings and landscapes.

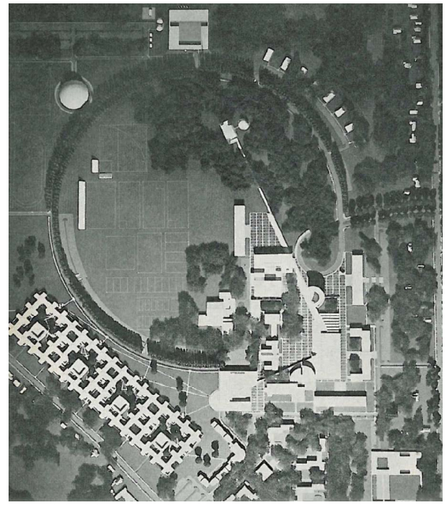
## Densify the Campus Core

The dense nature of the existing campus core is an asset to its strong and lasting first impressions as a cohesive, pedestrian-focused environment with high-quality landscapes and clear organization. The "walkability" of the campus is one of SUNY Fredonia's greatest strengths, and should be enhanced with future development. In planning future improvements, careful thought should be given to site selection in support of existing density, resisting the temptation to develop new improvements on more distant, readily available open sites on the campus. While selecting sites within the campus core requires more foresight, careful consideration of adjacencies and infrastructure, and potentially more cost and time associated with new improvements, it is essential to the campus' success that its existing strengths be maintained as growth occurs.

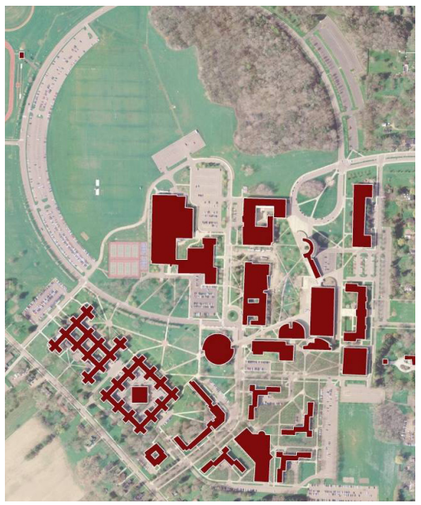
As a concept, the Facilities Master Plan recommends that development be focused on the southern portion of the campus in the future. If a line were drawn through the campus from the east at Symphony Circle to the west at the edge of the football fields, it would represent an imaginary border of future focus areas. The concept to "Halve the Circle" of the Ring Road follows this line and suggests that future investment be focused to the south of it, and that the northern half of the Ring Road be preserved as it exists, open for recreational fields, wooded landscapes, and potential campus-scale stormwater solutions. Using this strategy, future plans build upon the dense pedestrian characteristics of the campus core, but allow the open landscapes of the north to remain undisturbed.




The Fredonia campus is characterized by a logical arrangement of uses by campus zones with a strong, concentrated core of academic buildings.

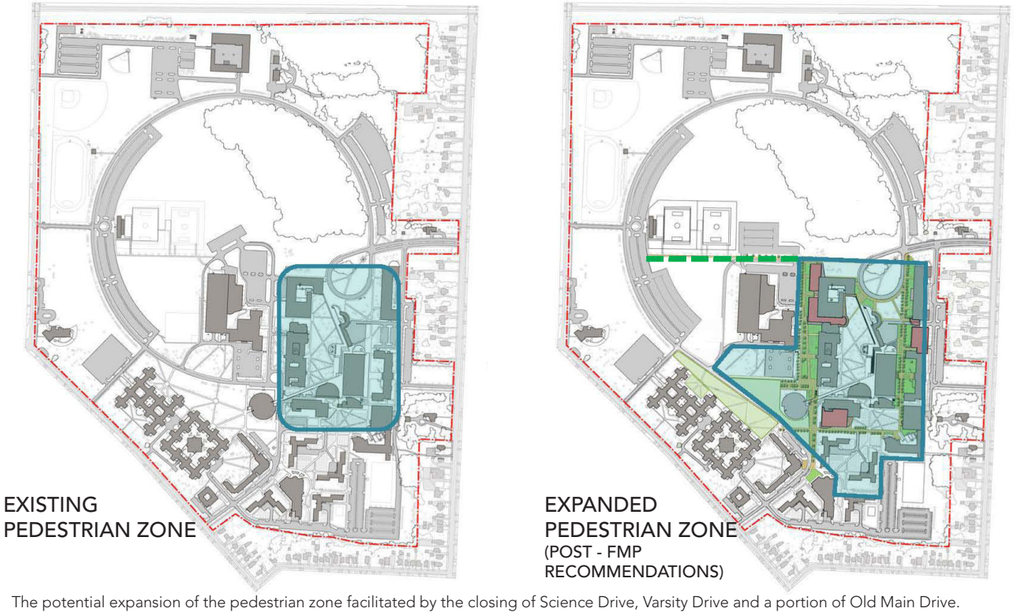


A model of the original campus Facilities Master Plan by I.M. Pei and Partners.  The main quadrangle, and the monumental buildings designed to surround it, was formally intended to be the center of the campus.



The existing campus is characterized by a strong residential zone, a mature landscape grove and the success of the University Commons redevelopment, all of which has contributed to the current center of the campus shifting to the south of the main quad, outside the sphere of the ring road.


A conceptual diagram illustrating the potential expansion of the pedestrian zone of the campus by the closure of selected core campus roadways.




The potential expansion of the pedestrian zone facilitated by the closing of Science Drive, Varsity Drive and a portion of Old Main Drive.

## Increase the Pedestrian Zone

By focusing future initiatives within the existing core campus of buildings and landscapes to the southern edge of the Ring Road, the pedestrian environment that exists today will benefit from increased activity. While the existing pedestrian zone is fairly well-developed, opportunities to increase its footprint and the quality and consistency of the pedestrian experience can be found re-evaluating vehicular circulation and parking. Today, vehicular circulation occurring through the center of campus disrupts the pedestrian's ability to walk from one side of the campus to the other without crossing roadways or parking lots. The zone in which pedestrian circulation can occur unencumbered can be increased through consideration of two factors: parking and vehicular circulation. A comprehensive parking plan with a goal of removing or limiting parking in the campus core and relocating it to perimeter lots can dramatically alter the amount of traffic circulating in the pedestrian zone. With a majority of vehicular traffic removed from this zone, a reconsideration of the roadway network within the campus core can effectively reduce the number of vehicles on campus even further. What were once essential vehicular routes can then be taken offline or converted to service-only drives. With this change, the character of former roadways can be altered to eliminate curbs, introduce consistent pedestrian-scale paving, and allow for service and emergency access while effectively removing roads. As a result, the footprint of the core campus pedestrian zone is increased dramatically without sacrificing ease of access to campus buildings and spaces by essential vehicles. By limiting or restricting public and student parking within the campus core, the number of pedestrians circulating the core will continue to increase.

Efforts to increase the pedestrian zone at SUNY Fredonia have already begun. In association with the construction of the new Science and Technology Building, Science Drive will be partially removed where it is no longer needed. As a short-term solution, part of the roadway will remain to allow access to the residence halls and Jewett Hall parking lot, but in the future might be converted to service-only or eliminated altogether. Nearby, the newly-configured Science Drive is a particularly problematic vehicular sequence directly at the heart of the pedestrian zone, as Old Main Drive meets the Williams Center loading and Mason Hall dropoff circle. Schemes for the elimination of this portion of Old Main Drive, the dropoff circle, and a small part of Ring Road are presented which maintain service, emergency, and delivery access, but convert this entire zone to pedestrian use. If such a scenario were enacted, the pedestrian zone would be dramatically extended, from the edges of the Main Quad across to the Williams Center and the residential landscape spaces beyond. In addition, a strong north-south axis from Varsity Drive to University Commons is introduced through the cohesive treatment of streetscape that would replace former roadways.

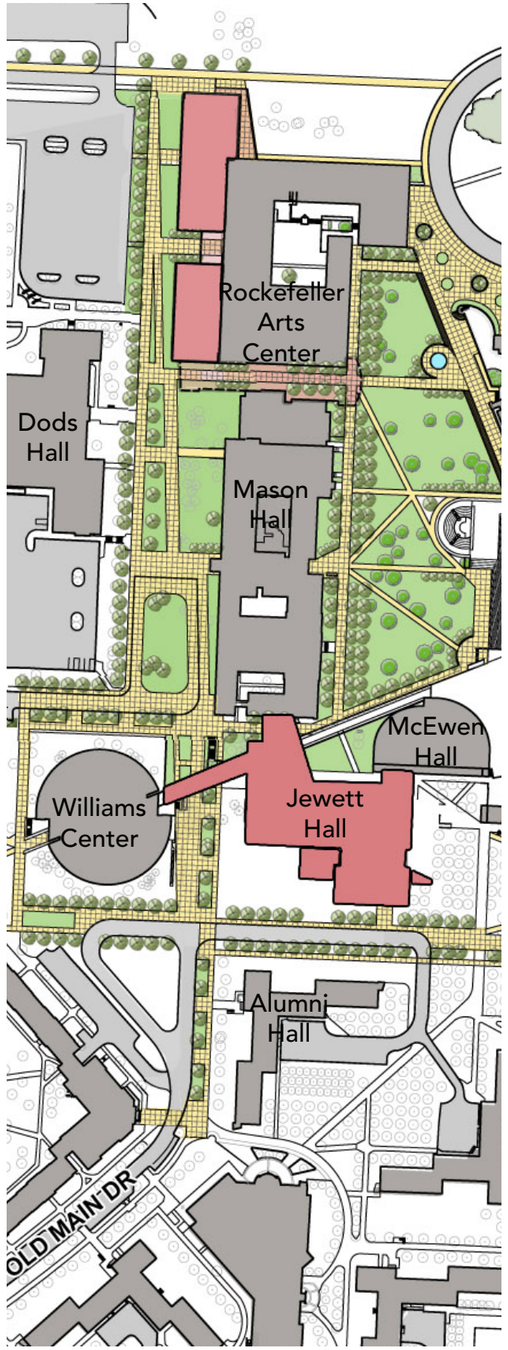
## Enhance Existing Strengths

The observations and analysis that were conducted in Phases I through III have produced a thorough understanding of SUNY Fredonia's unique assets and challenges. As plans for new capital improvements, renovations, and facilities improvements are made, they must be considered in the context of potential contributions to these strengths. The extent to which new planning takes into consideration its effects on the campus as a whole will determine the campus' ability to make incremental improvements over time, perhaps a more realistic pursuit than the wholesale improvement of the pedestrian environment, for example. With consensus on a cohesive Facilities Master Plan, new improvements will easily contribute to future goals by following principles and themes that benefit the entire campus, rather than individual improvements.

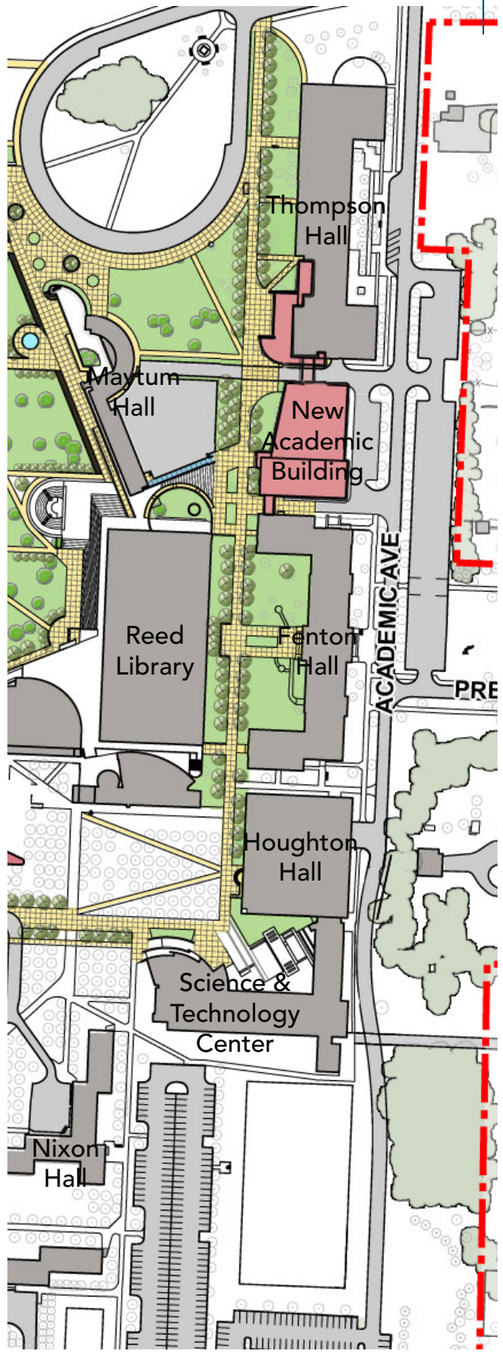
Several landscape and pedestrian spaces at SUNY Fredonia set themselves apart as strong organizing elements of the campus that should be preserved and enhanced. The Main Quad is already a prominent landscape element, as are the smaller honey locust groves to its south. These spaces create a variety of experiences on campus, and are important to the pedestrian experience. To the extent possible, future projects should do nothing to negatively alter these spaces, but should carefully consider the impact on them and create opportunities to improve them. For example, improvements that fortify the edges of these spaces can further define them and create additional visual interest. The planned Rockefeller Arts Center addition is a good example of an improvement that could have positive effects on the Main Quad through improvements to the connection it creates to Mason Hall. Similarly, a new building or renovation at the future "Science Quad" at Jewett Hall will further define the honey locust grove's western edge and create the feeling of an "outdoor room".

The Facilities Master Plan is particularly focused on existing pedestrian corridors as unifying campus elements. One such corridor with latent potential is the north-south axis between Houghton Hall at the south and Thompson Hall at the north. This axis sees heavy student traffic during class times and is bordered by most of the major academic buildings that a majority of students utilize: Reed Library, Houghton, Fenton, and Thompson Halls. The FMP suggests that this north-south corridor be improved, and that small and large capital improvements focused on increasing activity within it be planned. In addition to creating opportunities for building sites along the corridor, the path itself should be improved with consistent landscape treatment for its entire length, punctuated by outdoor gathering spaces at building entrances. An opportunity for such a space exists today between Reed Library and Fenton Hall, where a raised gravel area currently fills a large area adjacent to the sidewalk. If this space and the courtyard at Fenton Hall's entrance were considered together, a grander outdoor gathering space could be created alongside the north-south walk.

Similarly, a latent north-south axis exists on the other side of the Main Quad, between Mason Hall and the athletics complex at Varsity Drive. This axis is also fairly heavily used by pedestrians, but its current design is more focused on the needs of vehicular traffic, loading and parking. With the aforementioned elimination of public vehicular access at Varsity Drive, this north-south corridor becomes a second key pedestrian connector between campus use zones. It is also possible to extend the length of this axis to University Commons with the removal of the Varsity Drive traffic circle, uniting now-separate paths from residential areas, the Williams Center, and the complex of arts buildings at the northern edge of the Main Quad. As the Varsity Drive north-south corridor becomes established, improvements along it become important providers of visual interest and activity. Most notably, the Rockefeller Arts Center addition will be highly visible along this axis. Smaller initiatives such as the conversion of the old pool at Dods Hall to a fitness center and a plaza at the Williams Center will create an active, heavily-travelled corridor. Finally, a renovation to or new building at the site of Jewett Hall enforces this node of activity, and provides a dynamic approach to the campus from Old Main Drive.




A potential new landscaped, pedestrian-only corridor between the Williams Center and the Rockefeller Arts Center addition.




An improve landscape corridor between the Reed Library and Fenton Hall with the new Science and Technology building serving as a terminus at the southern end.

The recent completion of the University Commons has shifted the perceived center of campus toward the south, along with student activity, campus visitors and significant pedestrian traffic.

The proposed Science and Technology Building will further reinforce the recalibration of campus activity within the zone south of the Main Quad (rendering by Mitchell Giurgola Architects).

## Build Upon New & Successful Improvements

As SUNY Fredonia continues to develop, new improvements will enhance the campus environment by adding outdoor activity areas, contemporary interior spaces, and state-of-the-art facilities. Some such transformative improvements are University Commons and the new Science and Technology Building. University Commons has become a hub of student activity during day and nighttime hours, and an amenity to the Village of Fredonia with its ground floor coffee shop. The plaza and outdoor spaces in front of University Commons are perhaps equally important to the success of the building improvements, very popular during warmer months for gathering and impromptu performances. The Science and Technology Building draws from the successes of University Commons, opening itself to the campus with a courtyard open adjacent to the existing honey locust grove, associated with the building but attracting students of all majors to this uniquely-programmed learning space. The University Commons improvement is a major factor in the shifting of the center of the Campus toward the south, a trend that will be further reinforced by the New Science Building.  In the future, these two improvements will work together as activity nodes at the termini of important pedestrian circulation routes, within sight of one another punctuating the landscape.

With successful improvements like University Commons and the Science and Technology Building comes the opportunity to highlight them through improvements to the landscape surrounding them, view corridors to them, and pedestrian circulation in their vicinity. The north-south axes mentioned in the previous section would certainly add to the visual prominence of these improvements, and would be strengthened by their presence at the terminus of the views they create. Other planned improvements such as the Rockefeller Arts Addition, Dods Hall Fitness Center, and future initiatives such as a new academic building and a services building at the site of Jewett Hall have the ability to be equally transformative. These improvements ought not be thought about in isolation, but should be considered as to their capacity to alter their surrounding environments. Similarly, as new construction continues to occur, improvements to the paths, landscapes, and existing buildings in their vicinity will only make them more successful.

## Areas of Need and Opportunity

The Facilities Master Plan identifies several areas of opportunity to be investigated in the concept alternatives. These opportunity areas are actual sites on the SUNY Fredonia campus, as shown in the accompanying map, and are derived from interviews, ongoing and planned improvements, and general recommendations of the FMP team. The establishment of specific sites of opportunity is important to implementing larger campus-wide initiatives over time, with each new improvement offering a chance to enhance the campus environment in line with overall goals.

Areas of opportunity include improvements sites that have been established by the campus prior to the Facilities Master Plan, as well as suggested areas of intervention that have emerged through the FMP process. Areas / improvements include:

**Improvements currently funded:**

- 200-bed residential townhomes
  - Site study underway
- Thompson Hall Day Care Backfill
- Rockefeller Arts Center Addition
  - Pre-design underway; proposed site to west of RAC, with connector to Mason Hall
- Maytum Hall Renovations –to be completed 2011
- Dods Hall: New Fitness Center
- Williams Center Redesign & Renovation
- New Science & Technology Center – to start construction 2011
- Expanded Parking

**Improvements not funded:**

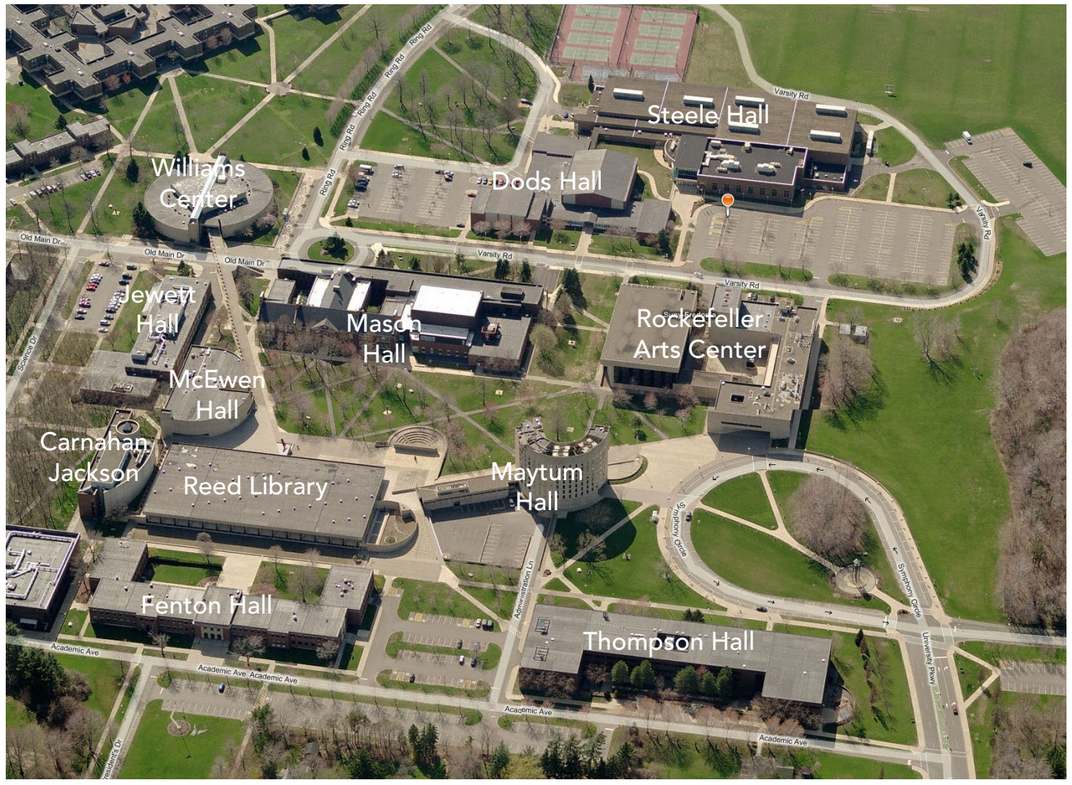
- New Academic Building
  - Between Thompson and Fenton Halls
- Potential Connection: Mason/Jewett/Spine
- Jewett Hall
  - Surge Space for Houghton Renovation
  - Potential Repurposing as Student Services
  - Possible Demolition and Replacement with new Student Services Building
- Houghton Renovation
- Main Quad Improvements
- Renovated / Backfilled Central Plant and Services Complex

## Areas of Needs & Opportinity


**1-** Potential Site: 200 beds new residential (townhomes)
**2-** Thompson Hall - Day Care Vacated in 2010
**3-** Rockefeller Arts Center Addition (site TBD)
**4-** Maytum Hall Renovations
**5-** Potential Site: New Academic Building
**6-** Dods Hall: New Fitness Center
**7-** Potential Connection: Mason/ Jewett/Spine
**8-** Williams Center Redesign & Renovation
**9-** Jewett Hall: Potential Repurposing
**10-** New Science & Technology Center
**11-** Houghton Renovation
**12-** Main Quad Improvements
**13-** Expanded Parking
**14-** Renovated / Backfilled Central Plant and Services Complex

The elevated spine connecting to the Williams Center above Old Main Drive. The spine remains a prominent physical element of the campus and a symbol of the Pei-Cobb Master Plan, but is in a severely deteriorating condition.

A blend of traditional and contemporary architectural styles on the campus contributes to a rich and diverse physical environment.




The 9-story Maytum Hall is distinct within what is otherwise a two to three story campus.

## Physical Guidelines

The SUNY Fredonia campus has a distinct physical character that was carefully conceived by the I.M. Pei and Partners Facilities Master Plan, and has evolved to create the unique environment that exists today. New improvements must be designed to interact with this environment in positive ways, enhancing the presence of existing buildings not by hiding or overpowering them, but by fitting into the existing context. The Facilities Master Plan does not recommend strict design guidelines, but suggests an approach to design that will facilitate a more seamless transition as new improvements come on line.

## Height and Massing

Though the architectural styles of buildings at SUNY Fredonia vary, they do have a consistent scale and footprint, with a relatively small range of building heights. Except for Maytum Hall's towering 9-story structure, all buildings on campus are two or three stories. Though floor-to-floor heights vary slightly, this consistency of height on a relatively flat campus provides a legible scale to campus edges and outdoor spaces.

Massing of buildings at SUNY Fredonia is somewhat dependent on the era that the building was built. Older structures such as Fenton Hall and Old Mason Hall are narrower double-loaded corridor buildings with regularized window patterns. Buildings of the I.M. Pei and Partners era have much larger footprints and more massive concrete exteriors, with large expanses of glass. These two very different massing types coexist well at SUNY Fredonia, and because they are both part of the campus aesthetic, they provide some flexibility to future projects as to which characteristics to choose from in the design of new buildings. Perhaps the most important factor to consider in the massing of new buildings is the ways in which they address existing buildings and spaces. Careful consideration and respect should be given to existing view corridors, strong pedestrian connections, and prominent entrances to existing buildings. The massing and orientation of new buildings should support such campus elements, while adding their own unique character to them. Through massing, new buildings can also recognize latent possibilities for the creation of campus connections or other contextual interaction with existing space.

## Density

Along with the consistency of height and recognizable massing on campus, the proximity of buildings to each other is an important character-defining feature of SUNY Fredonia. As mentioned in previous sections, efforts to consolidate the development of new buildings to the denser southern portion of the campus will be most consistent with the way that SUNY Fredonia has evolved since the I.M. Pei and Partners Master Plan. Wherever possible, infill sites between buildings, or over underutilized existing spaces within the campus core, are preferable to those that lie on the outskirts of the campus.

Site selection for new buildings is just one way that density can be strengthened on campus. Efforts to eliminate surface parking and redundant vehicular circulation not only improve the pedestrian environment and clarify the roadway network; they also liberate prime building sites near existing activity areas. Though building on disturbed sites such as roadways and surface parking is more difficult than building on open land and requires more advance planning, the overall impacts on the campus environment are much more beneficial, including the positive stormwater impacts.

## Parking & Circulation

It is the recommendation of this Facilities Master Plan that future development be allowed to occur without the addition of parking beyond the existing number of spaces. It is also recommended that a more defined policy for parking be created, establishing designated lots and permits for different types of users (resident, faculty, student, commuter, etc.) and limiting the amount of vehicular traffic through the campus core. By restricting the use of cars by students during class times, and designating lots for residents that are convenient to residence halls but located at the campus perimeter, vehicular traffic within the core will experience an immediate reduction. In addition, lots for faculty, staff and visitors within the core will be more clearly defined, with more available spaces and ease of access to those less familiar with the campus. Allowing the campus to grow without additional parking will begin to equalize the use of existing lots, especially those that are farther from the campus core.

A rethinking of the vehicular circulation system, especially within SUNY Fredonia's dense campus core, has the potential to eliminate redundant or underutilized roadways and create a larger and more accessible pedestrian zone. Some possibilities exist for the removal of existing roadways, allowing service and emergency-only access to vehicles. Such a strategy could dramatically change the character of some areas of the campus core from primarily vehicular zones to mostly pedestrian. Restricting vehicular access to authorized vehicles would not only reduce the amount of traffic on campus but could also improve safety. One particular area of intervention is located around the Williams Center, at the existing location of its loading dock. Loading is located directly adjacent to a main public entrance to the building, and a public roadway that has poor visibility at crosswalks leading from the building. SUNY Fredonia has plans in place to create a safer loading dock configuration, which will improve the current situation. However, if those plans were to be taken a bit further, loading could remain in its current location, but the dangerous intersection of pubic vehicles and pedestrians could be replaced with a fully paved pedestrian area. If other areas of the campus were rethought in this way, a more attractive, larger pedestrian zone would emerge.

## Materials and Aesthetics

The SUNY Fredonia campus has a very distinct character because the majority of its buildings were built in the same era, planned and designed by I.M. Pei and Partners. The Pei and Partners influence is a constant presence, from building aesthetics to dramatic landscape gestures such as plazas and the iconic Spine. However, the campus is not homogenous in character; its other buildings from before and after the I.M. Pei and Partners era add a diversity of material, texture, and scale. New buildings interact with this diversity, combining features of the variety of aesthetics on campus.

As recorded in previous phases, the aesthetically-striking buildings of the I.M. Pei and Partners era are characterized by cast-in-place concrete in the "Fredonia buff" color, large expanses of glass, and sophisticated (sometimes confusing) relationships with their context. In contrast, older buildings such as Fenton and Mason Hall are traditional academic buildings of brick and stone, with individual windows and symmetrical orientations. New buildings need not imitate either aesthetic, but should be carefully conceived with attention to their immediate contexts. As new buildings are designed, creating compatible relationships between new and existing buildings are of utmost importance.

## Physical Guidelines: Summary

- The roadways, landscapes and buildings established by the I.M. Pei and Partners Campus Facilities Master Plan remain dominant characteristics and organizing elements of the campus, however the campus benefits from a diversity of architectural styles from several eras.
- In spite of a modern, monumental expression of much of the campus architecture, the overall scale and density of the campus is traditional and walkable.
- The increased presence of parking and vehicular circulation within the core campus challenges the overall quality of the environment as well as pedestrian safety.
- The reduction of surface parking on the core campus, as proposed by the new science building and other Facilities Master Plan proposals, can be mitigated by a higher concentration of Ring Road parking, limiting student access to core campus lots, and increasing the stops and frequency of the campus shuttle to better serve the satellite parking lots.

# Landscape

Within the context of the Campus Facilities Master Plan, the term "Landscape" includes not only the campus planting, but also the entire open space with its walkways, plazas, quadrangles, lawns, groves, plant beds, activity nodes, and "leftover spaces" between buildings. The campus landscape has been integral to the conception of the current campus, and is an integral part of the spatial considerations of this Facilities Master Plan. The key Master planning themes that apply to the development of campus buildings apply to the campus landscape as well. Following is a review of landscape development guidelines in relationship to the key planning principles of this Facilities Master Plan.

## Densify the Campus Core

Locating new building improvements in the campus core will result in closer distances between buildings, which should encourage more walking and less driving as a desired outcome. But it may also result with more impervious area, as the footprint of new buildings and associated paving may take over currently green open land. More impervious area means more storm water runoff must be managed to slow down its discharge and remove its pollutants. There is not an abundance of space within the SUNY Fredonia campus core that could be used for standard storm water treatment practices (SMPs) such as retention ponds. Treating core campus runoff with catchment areas beyond the core will require long storm sewage pipes from new projects to remote ponds or other treatment areas.

Another aspect of the 'Densify the Campus Core' principle, as it relates to the landsape, is to avoid new development within the "iconic" campus landscapes. These landscapes have become important for the visual experience and character of the campus, therefore any major development impacts should be carefully considered.

Therefore, the landscape development guidelines that support the 'Densify' principle include:

- Aim for zero-net increase in impervious area for any new development projects. This could be achieved by locating new development at already disturbed sites, such as on the location of an existing building or parking lot. Use of porous paving could also help achieve this guideline.

- Avoid creating retention ponds within the campus core. Utilize alternative SMPs that do not take up so much open space as retention ponds such as bio-retention areas (rain gardens), and sub-surface storage and infiltration galleries.

- Avoid development within the open spaces that have become recognizable campus icons: the Honey Locust grove, the Main Quadrangle, the woodlot within Ring Road, and the lawn between RAC and the woodlot.

## Increase the Pedestrian Zone

The physical manifestation of this master planning principle is the elimination of some existing vehicular roads and parking areas from the campus core.

Landscape development guidelines that relate to the "Increase the Pedestrian Zone" master planning principle include the following:

- Utilize pedestrian-friendly landscape and hardscape treatment of new pedestrian areas that have been created by the elimination of previous vehicular infrastructure.

- Ensure that the new pedestrian environment allows for limited service, and emergency vehicle traffic. Snow plowing is especially important in the SUNY Fredonia environment, and the landscape design should not impede the efficient clearing of the key circulation paths.

- Provide universal site accessibility. Maintain alternative ADA access through buildings. Prioritize improvements to ADA accessibility around the Reed Library – its entrance, upper terrace, the Amphitheater, and the Maytum paved plateau.

- Highlight the hierarchy of circulation with pavement width. Recommended widths are 16-feet for main pedestrian paths, and 8-feet for regular paths. These widths allows for service and snow plowing equipment to pass.

## Enhance Existing Strengths

The SUNY Fredonia campus already has an overall strong spatial structure, well defined circulation patterns, and a variety of attractive open spaces. Future campus development should build upon these existing qualities, striving to preserve the character of the most iconic landscapes, enhance areas that lack character or pedestrian amenities, and create new and attractive pedestrian spaces.

Landscape development guidelines related to the "Enhance Existing Strengths" principle include:

- Preserve the integrity of the Honey Locusts Grove. New development should avoid impact to this iconic landscape. Maintain the health and promote the longevity of the existing trees in the grove, by limiting foot traffic to existing paved paths, and systematic maintenance. When substantial decline is noted, replace entire sections of the grove with new honey locust planting of 3 - 3 1/2" caliper trees, planted on a similar grid pattern.
- Reduce extents of paving in the campus core: at the Reed Library plaza at the bottom of the steps; Symphony Circle plaza; consider greening the steps and the upper deck plaza between Reed and McEwen
- Maintain the attractive campus planting. Diversify the planting palette for more variety and for winter interest.
- Enhance pedestrian spaces with attractive paving, pedestrian amenities, art, and new environmentally-friendly site lighting.
- Enhance the user comfort in open spaces. Provide adequate site visibility; adequate site lighting; shade and more green spaces at large plazas; more seating.
- Continue the consistent use of attractive site furnishings, signage, and outdoor art.

## Highlight New and Successful Improvements

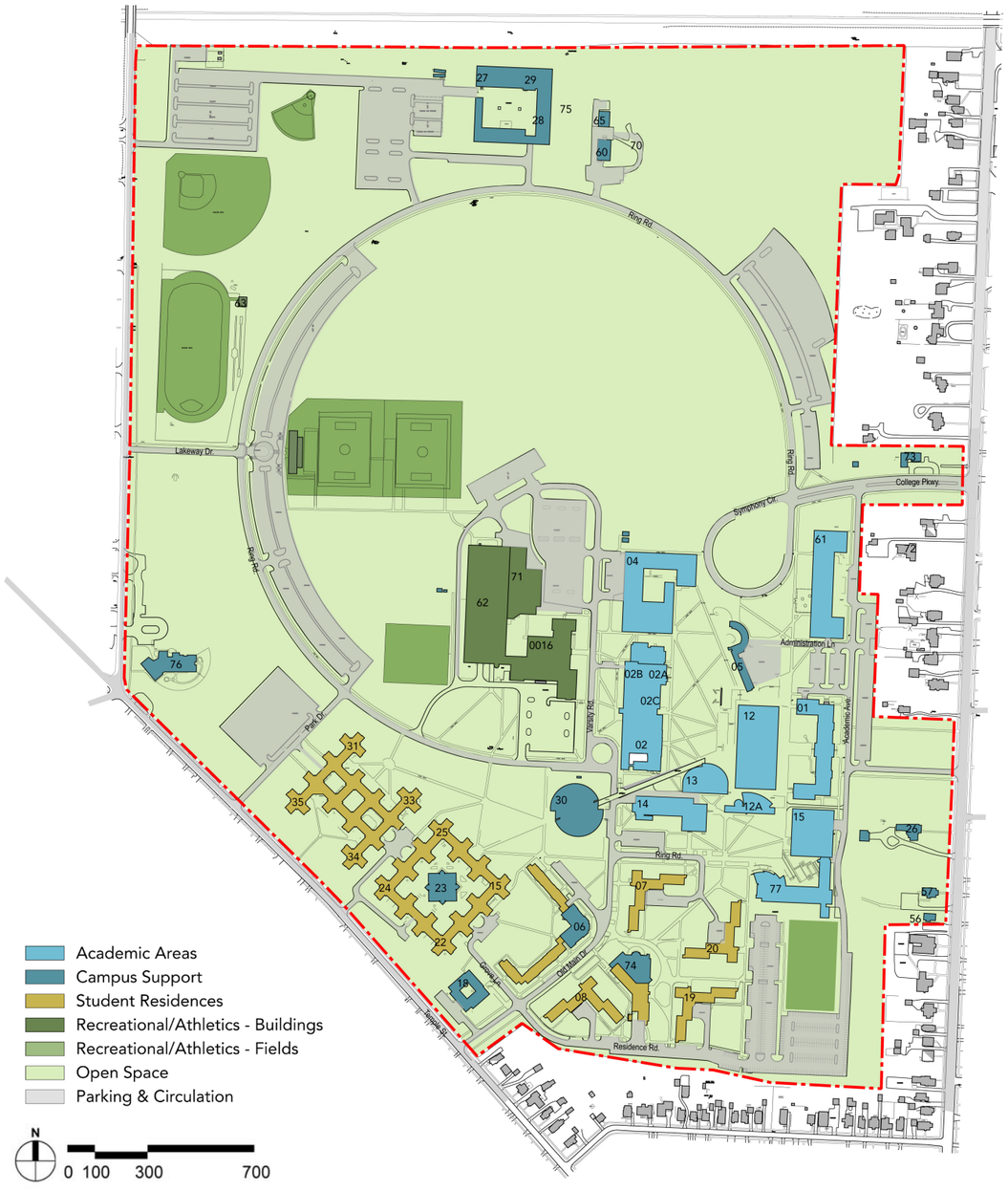
Landscape development guidelines that relates to this master planning principle are the following:

- Compliment the buildings with attractive plazas and planting areas.
- Provide landscape elements that are suitable in scale and aesthetics and provide continuity with the surrounding campus landscape.

## Landscape Materials and Aesthetics

- Utilize palette of materials that is compatible with the existing environment, and provides continuity of style and aesthetics.
  - Use of asphalt paving should be limited to roadways and parking areas.
  - Use cement concrete pavement as the typical material for walkways and sidewalks. Continue the use of the 'Fredonia Buff' color additive for cement concrete pavements.
  - Introduce new complementary pavement materials, such as concrete pavers and granite, at key locations such as plazas and sitting areas for variety.
  - Increase the use of porous paving materials.
  - Continue the consistent use of the standard metal campus bench, trash receptacles, recycling centers, and bicycle racks.
  - Continue the consistent use of standardized site signage and wayfinding.
  - Use a consistent design of marked crosswalks and handicap curb cuts.
  - Use granite curbing wherever curbing is required.
  - Select new standard site lighting fixtures – parking and roadway lights, and pedestrian-scale lights. The new fixtures should be energy efficient and "dark-sky friendly," to minimize spillover of light towards the sky. Systematically replace the existing pedestrian globe lights with the new luminaries.
- Planting materials guidelines
  - Create consistent guidelines for planting of new trees – minimal size, a list of recommended species and minimal sizes.
  - Diversify the existing planting palette with disease-tolerant species suitable to the climate zone.
  - Increase the use of planting with winter interest – plants that retain their fruit or foliage in winter, plants with interesting bark, branching pattern, or winter color.
  - Increase the use of ornamental native vegetation to reduce maintenance requirements.
  - Increase the use of bio-retention storm-water management practices.
- Aesthetics
  - Complement the contemporary aesthetics of the existing built environment.
  - Continue the program of introducing sculpture and art into the landscape. Provide signage identifying the art pieces and their author.

## Campus Uses Diagram




| BLDG | NAME | CONST DT. | GSF |
|---|---|---|---|
| 56 | Admissions Annex | 1910 | 1,963 |
| 07 | Alumni Hall | 1958 | 43,994 |
| 73 | Alumni House | 1932 | 4,031 |
| 04 | Rockefeller Arts Center | 1968 | 119,687 |
| 60 | Butler | 1967 | 4,080 |
| 76 | Campus Children's Center | 2010 | 14,271 |
| 12A | Carnahan Jackson | 1991 | 43,866 |
| 27 | Central Heating Plant | 1967 | 11,828 |
| 19 | Chautauqua Hall | 1963 | 45,055 |
| 24 | Disney Hall | 1967 | 51,750 |
| 12 | Daniel A. Reed Library | 1968 | 80,861 |
| 16 | Dods Hall | 1963 | 82,591 |
| 25 | Eisenhower Hall | 1967 | 51,750 |
| 23 | Erie Dining Hall | 1967 | 23,881 |
| 57 | Fenner House | 1860 | 4,175 |
| 01 | Fenton Hall | 1953 | 72,759 |
| 29 | Food Service | 1967 | 13,474 |
| 72 | Foundation House | 1920 | 6,745 |
| 06 | Gregory Hall | 1951 | 72,940 |
| 21 | Grissom Hall | 1967 | 51,750 |
| 34 | Hemingway Hall | 1970 | 55,125 |
| 35 | Hendrix Hall | 1970 | 56,685 |
| 15 | Houghton Hall | 1968 | 73,981 |
| 63 | HPE Storage | 1983 | 896 |
| 31 | Igoe Hall | 1970 | 55,125 |
| 14 | Jewett | 1963 | 65,530 |
| 22 | Kasling Hall | 1967 | 51,750 |
| 18 | Lograsso | 1967 | 24,445 |
| 28 | Maintenance | 1967 | 26,419 |
| 02 | Mason Hall | 1961 | 12,760 |
| 02A | Mason Hall Annex | 1961 | 12,760 |
| 02B | Mason Hall Addition | 1972 | 50,500 |
| 02C | Mason Recital Hall | 2004 | 23,191 |
| 05 | Maytum Hall | 1968 | 53,242 |
| 13 | McEwen Hall | 1968 | 50,894 |
| 08 | Mcginnies Hall | 1960 | 45,063 |
| 20 | Nixon Hall | 1963 | 45,991 |
| 26 | President Residence | 1910 | 9,931 |
| 70 | Salt Storage | 2000 | 1,200 |
| 33 | Schulz Hall | 1970 | 55,125 |
| 77 | Science and Technology Center | 2012 | 91,962 |
| 62 | Steele Hall (Field House) | 1982 | 91,734 |
| 71 | Steele Hall Natatorium | 2002 | 91,734 |
| 65 | Stockade Storage | 1989 | 2,400 |
| 75 | Storage Bldg (Campus Storage) | 2007 | 5,000 |
| 61 | Thompson Hall | 1973 | 136,400 |
| 74 | University Commons | 2006 | 91,368 |
| 30 | Williams Center | 1970 | 90,380 |

# Campus Planning & Concept Alternatives

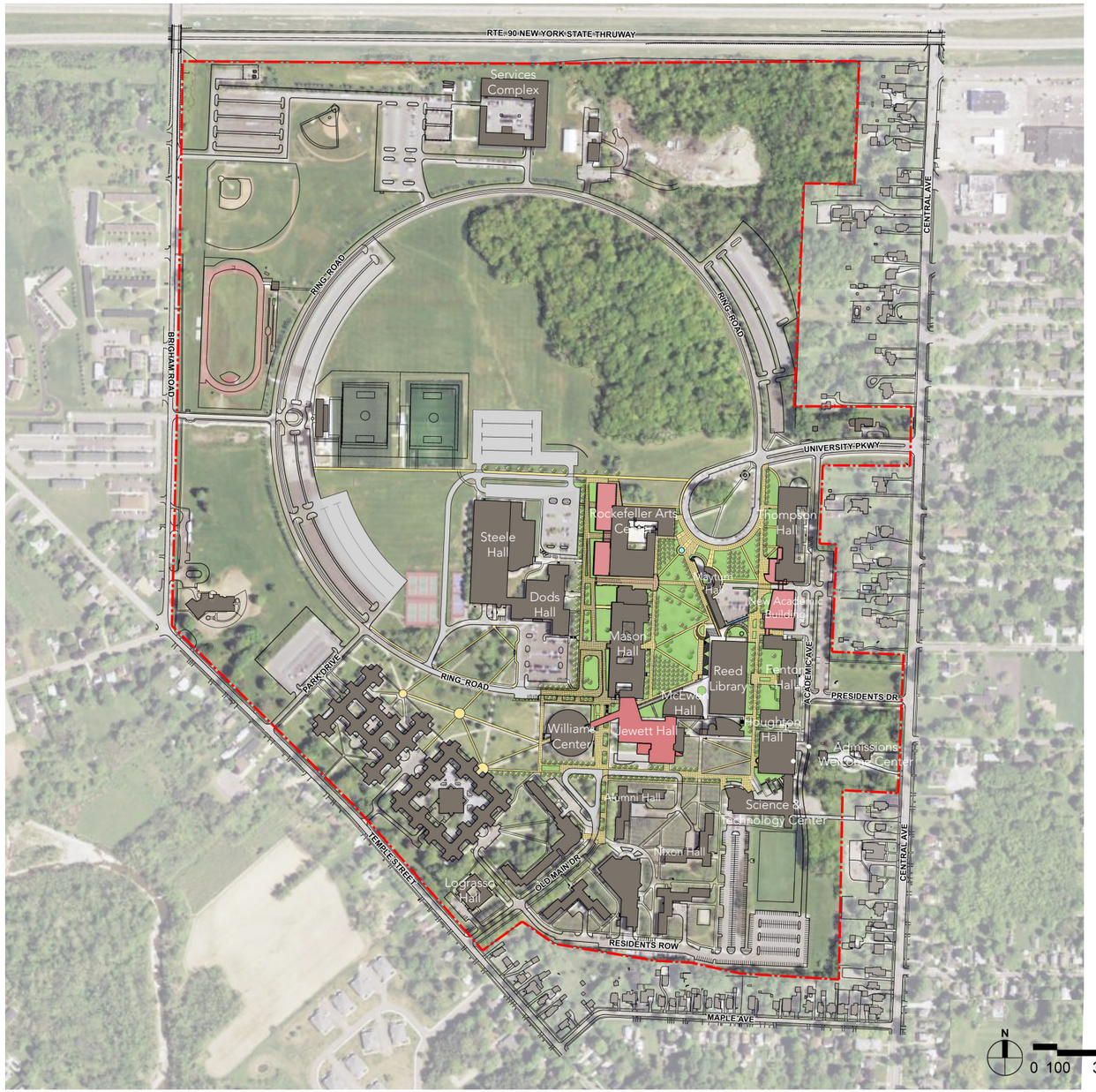
The Facilities Master Plan is organized into a collection of improvements including renovations, new capital Improvements, and infrastructure improvements, which are then assembled into Concept Alternatives for the entire campus. This comprehensive list of improvements is a record of both planned and proposed initiatives to be undertaken through 2023 and beyond. The concept alternatives combine improvements into feasible campus-wide planning schemes, and propose phased schedules for completion that take into account the optimal sequencing of implementation.

## Several Capital Improvements

Plans for improvements to SUNY Fredonia's facilities were already well-established at the commencement of the Facilities Master Plan. The concept alternatives synthesize existing goals and objectives of the campus with long-range initiatives. An understanding of existing and planned projects is of utmost importance to the creation of realistic campus planning schemes for the future.

The following pages examine existing SUNY Fredonia buildings, and present issues and needs of these buildings as they continue to serve the campus. The need for renovation and infrastructure improvements to each of these buildings is well known by those familiar with the campus and its facilities; this chapter provides clear recommendations for improvements implementation, including sequencing, utilities considerations, and the establishment of surge space if necessary. In this way, the improvements proposed for each building do not exist in isolation, but are part of a larger plan for the phased improvement of the entire campus.

## A Campus Planning Concept Alternative



Building No. 15 Building No. 2

## Houghton Hall

Building No: 15
GSF: 73,981
ASF: 53,203
Const. Type: Reinforced Concrete / Masonry
Const. Year: 1968
Uses:

- Campus Wide Facilities
- Chemistry & Biochemistry
- Chief Academic Office
- Chief Administrative Office
- Geology
- Instruction General
- Physics
- Student Union

### Houghton Hall

Houghton Hall, along with Jewett Hall, is the home to SUNY Fredonia's science departments. Built in 1968, Houghton Hall contains labs, teaching spaces and offices. A significant addition to the south of Houghton Hall, the new Science and Technology Center is currently being designed to greatly expand the laboratory capabilities of the College.

### Mechanical/Electrical

Houghton Hall is in need of significant renovation to the MEP/FP systems infrastructure. This renovation will include a new generator. Programming needs to be completed before renovation can begin, at which time, Jewett can serve as a swing space.
Following the completion of the New Science and Technology Center, Houghton Hall will be renovated and will to continue to serve as a Science facility.

### Suitability

Houghton Hall was designed as a teaching facility for the sciences as part of the I.M. Pei and Partners Master Plan. In concept it is well-suited to its use: adequately sized labs are arranged around the perimeter of the building with a central core and a continuous corridor in the middle. The structure of the floors is a precast concrete beam system, which allows large spans of open space for the labs. However, like many of the older buildings on campus, Houghton Hall lacks the flexibility and diversity of spaces needed in a contemporary science facility. While lab space is adequate, support space is poor. Computer rooms, lecture rooms and other non-laboratory teaching spaces are lacking or absent. Building systems also cannot satisfy the demands of today's laboratory environments. The College is addressing the building's shortcomings by building a new facility attached to Houghton at the south, which will greatly improve the capabilities of SUNY Fredonia's departments of science.

## Mason Hall

Building No: 2
GSF: 32,407
ASF: 21,014
Const. Type: Load Bearing Masonry, Steel
Const. Year: 1940
Uses:

- Auxiliary Service Corporation
- Campus Wide Facilities
- General Library
- Music - General Operations

### Mason Hall

Completed in 1941, Mason Hall stands as the oldest building on the SUNY Fredonia campus – the first structure to be built on the land acquired in 1930 by the Fredonia Normal School. Built of red brick in the Georgian style, Mason was designed as a facility for music instruction. While still serving the same purpose today, Mason Hall has grown considerably. Three additions have been built to the north and west of its original footprint, (see buildings 2A, 2B and 2C), expanding the gross area of SUNY Fredonia's music facility from 32,000 to 118,000 gsf.

Mason Hall will likely require a comprehensive look at all parts of the hall: Old Mason; New Mason and Mason Annex. This study should make recommendations regarding programmatic improvements, special layouts, acoustical treatments, and interior improvements. Rauch Recital Hall and the new rehearsal room addition is on stand-alone systems

The exterior of the building is load-bearing red brick with wood detailing at the cornice, doors and windows. The masonry is generally in good condition. However, skin replacement is needed for brick tiebacks.

Renovation plans for Mason Hall do not anticipate a complete relocation of academic programs, but rather a phased approach to the renovation with the potential for Jewett Hall to serve as swing space. Alternatively, a new Student Services Building on the site of Jewett proposed additional space for the Music department, some of which could also accomodate surge space for Mason renovation. Rather, trailers will likely be utilized for surge space.

### Mechanical/Electrical

The MEP Systems in the building are in need of major upgrades. There is inadequate lighting, electrical distribution, Fire alarm and lack of proper ventilation. Additionally, the old steam system requires replacement. The plumbing infrastructure for the building is original and in need of replacement. Boiler and chiller plants are in good condition however the system is steam and should be converted when the building is renovated. Old Mason has a new steam boiler in basement while the rest of Mason draws hot water from Jewett.
The building requires a new sprinkler system and a generator.

Mason Hall will likely require a full replacement of HVAC and plumbing systems. The introduction of air conditioning will likely require a stand-alone chiller

### Suitability

Mason Hall was originally designed as a building for instruction in music and has served that purpose ever since. While it was once able to satisfy the programmatic demands of the music department, the building's age and inherent limitations of construction now make it poorly suited for general music instruction. As in many other academic buildings at SUNY Fredonia, general-purpose classrooms are not equipped with "smart" technology, and infrastructure upgrades will be required to bring such technology to existing space in Mason. In addition, although numerous small practice rooms exist, Mason Hall lacks adequate space for small group and ensemble rehearsals. The building is not air conditioned, and the mechanical system is unable to provide appropriate temperature and humidity controls, creating serious issues with instrument tuning. Sound attenuation between rooms is poor and the bearing wall construction limits flexibility for plan changes. The large Diers Recital Hall provides a very good location for large band and orchestral rehearsals and small performances, but requires acoustical upgrades. Generally, the building would be better suited for use as offices and non-performance classrooms. Given its age, a significant interior renovation is necessary to bring the building up to current standards. Mason's connections to its various additions make it a poor candidate to serve any other department but Music.

**Building No. 16** **Building No. 1**

## Dods Hall

Building No: 16
GSF: 82,591
ASF: 49,460
Const. Type: Steel Construction / Masonry
Const. Year: 1963

Uses:

- Campus Wide Facilities
- Custodial Services
- Health And Physical Education
- Theatre Arts

### Dods Hall

Dods Hall is the oldest of SUNY Fredonia's three athletic buildings. It sits to the west of the Mason Addition and establishes the "front door" of the athletic complex as it faces the academic core of the College's campus. Constructed in 1963, Dods houses offices, classrooms and a gymnasium with basketball courts and bleachers. Fredonia is beginning the design process for converting the area once occupied by the facility's old pool into a Student's Fitness Center.

Recent additions to Dods hall include: lighting replacement, funded through a NYSERTA grant, a new sprinkler system, and a new chiller.

The gymnasium is inadequately sized which contributes both to underutilization and to overcrowding when it is in use. Expansion of the gymnasium should meet Division III athletic standards, particularly basketball. An expansion of the gymnasium would be the ideal time to do a complete systems upgrade. The locker rooms require a total renovation.

### Mechanical/Electrical

Dods Hall electrical, plumbing and HVAC systems have exceeded their useful life and are in need of upgrading. Without renovation or significant repairs, an increase in maintenance and associated costs can be expected. While the boiler and chiller plants are in good condition, another chiller should be provided to the gym and locker rooms to provide cooling for the summer camp program. A recently installed chiller will provide cooling to offices, classrooms and new fitness center

### Suitability

While once an appropriately designed collegiate gymnasium, Dods Hall is, by today's standards, poorly suited to serve as SUNY Fredonia's main athletic building. Its location, both on the campus and at the center of the athletic complex, is well-suited to the function it serves, but the age of the facility renders most of its rooms inadequate. Locker rooms, showers and offices are all in need of renovation. Offices are small and storage space is at a minimum. More significantly, the gymnasium does not meet the necessary standards for Division 3 basketball competition, and is used only for practice and recreation. Current fitness rooms and weight rooms have been located in areas not originally designed for such functions and the old pool area is poorly utilized due to existing bleachers that have not been removed. A strategic addition to Dods Hall has been discussed to address issues of NCAA basketball standards. An enlargement of Dods existing basketball facility would allow proper walk-off space adjacent to courts and acceptable flooring surface not currently available in the Field House. Feasibility of such an addition has not been thoroughly studied. Separate renovation projects to address the pool area and create a varsity weight room are in process and should improve Dods Hall, but the larger fact of its deficiencies due to age remains.

## Fenton Hall

Building No: 1
GSF: 72,759
ASF: 40,925
Const. Type: Load Bearing Masonry, Steel / Masonry
Const. Year: 1953

### Fenton Hall

Fenton Hall, completed in 1951, sits directly to the east of Reed Library and houses classrooms and offices for departments in the liberal arts. The two-story structure is the second oldest academic building on campus. It faces one of the primary entrances to the college, presenting a neoclassical entrance to those arriving from Central Avenue. The pathway between Fenton Hall and Reed Library is also one of the most travelled pedestrian routes on campus.
Fenton Hall has a high priority improvement to replace windows. This improvement is funded and scheduled for summer 2011.

### Mechanical/Electrical

Fenton Hall's MEP/FP systems are in poor condition. Some spaces do not even receive enough ventilation as required by code. The electrical systems are inadequate for a classroom building and need to be upgraded. A new generator should be added as well. The addition of a new sprinkler system is recommended.
Renovations to Fenton Hall's HVAC system will require extensive general construction work. Central air conditioning needs to be introduced into the building. Additionally, radiators, piping and the distribution system are all in need of major repair or renovation.

### Suitability

Fenton Hall has long served as a building for general instruction in the liberal arts, housing faculty offices and classrooms. Designed in classic "Old Main" fashion, Fenton Hall has a central entrance and wings to either side. Because it is built with load-bearing walls at its central corridor, the dimension from the corridor to the exterior is fixed. This inherent structural configuration makes Fenton Hall well-suited for small to mid-sized classrooms and seminar rooms, but poorly suited to office configurations. Also, the interior space in the corners of Fenton's wings create relatively large areas without access to natural light – spaces poorly suited for offices or seminar rooms. While Fenton Hall is not ideally suited to its use, it historical character and central location to other academic buildings still suggests its best programmatic assignment is to serve instruction in the liberal arts. A full interior renovation would be required to make the building more effective.

Uses:

- President's Office
- Academic Planning
- Auxiliary Service Corporation
- Campus Wide Facilities
- Central Duplicating & Printing
- Chief Academic Office
- Chief Administrative Office
- College Affairs
- Computer & Information Sciences
- Counseling/Academic Advising
- Dean, Special Programs
- Educational Communications
- English
- Food Service-FSA Contract
- I&DR Equip/Space Steward.(PSI)
- Instruction General
- Interdisciplinary Studies
- Lifelong Learning & Special Prog
- Mathematics
- Modern Languages
- Philosophy
- Publications
- Student Union

Building No. 13 Building No. 4

## McEwen Hall

Building No: 13
GSF: 50,894
ASF: 29,513
Const. Type: Reinforced Concrete / Concrete
Const. Year: 1968
Uses:

- Auxiliary Service Corporation
- Campus Wide Facilities
- Communications
- Educational Communications
- Food Service-FSA Contract
- I&DR Equip/Space Steward.(PSI)
- Visual Arts & New Media

### McEwen Hall

McEwen Hall sits adjacent to Reed Library, one of the original structures of the I.M. Pei & Partners Facilities Master Plan. The building houses large lecture rooms for general use and studios for the campus radio station. McEwen Hall is linked at the ground level to Reed Library, and also has access to the Spine, where pedestrians can enter from the raised plaza in front of Reed Library or walk to the Williams Center.

### Mechanical/Electrical

McEwen is in need of an entire upgrade of air handling units and distribution. This building will require extensive general construction work as the majority of the ductwork is buried below the structure, is corroded and will require extensive re-ducting and new shafts. At present the college is looking at introducing air conditioning in one computer lab as a temporary solution.

### Suitability

McEwen Hall provides SUNY Fredonia with four large-format tiered lecture halls, a large computer room for general student use, and offices for student-run media outlets. McEwen Hall's functions make sense given its central location on campus, and the building's lecture rooms are clearly designed to serve their programmatic purpose (though they are in need of major upgrades due to their age). However, the building as a whole is highly inefficient, with large amounts of area given to circulation. Any future assignment for McEwen Hall should include making better use of this excess space, possibly building on such ideas as the café on the lower level of the building that activates the circulation zone where McEwen Hall connects to Reed Library.

## Rockefeller Arts Center

Building No: 4
GSF: 119,687
ASF: 82,663
Const. Type: Reinforced Concrete / Concrete
Const. Year: 1968
Uses:

- Campus Wide Facilities
- Fine Arts Activities
- Student Union
- Theatre Arts
- Visual Arts & New Media

### Rockefeller Arts Center

The Rockefeller Arts Center provides SUNY Fredonia with an impressive combined facility for instruction and performance in theater, dance and music, as well as studios and galleries for the fine arts. Designed as part of the I.M. Pei & Partners Facilities Master Plan to be the focus of the campus upon entry from Central Avenue, the building serves not just the College community, but the greater region as well. The King Concert Hall, suited for large orchestral performances, creates one of the most impressive interior spaces on campus, and fine arts studios capitalize on views overlooking the wooded area inside Ring Road. An addition to increase instructional space is planned to commence design in 2010.

### Mechanical/Electrical

The MEP Systems for the building are in generally good condition however the systems are nearing the end of their useful life. There are portions of the building that are not air conditioned however the proposed RAC addition is intended to introduce air conditioning into the building . There have been alterations that have added air conditioning to various spaces but the systems are not integrated. The building also requires a replacement of air handling units, electrical upgrades and plumbing upgrades. A new generator is required. A new sprinkler system should be installed.

### Suitability

When considering the Rockefeller Arts Center's primary programmatic functions, the building is generally well-suited for its use as the campus fine and performing arts facility. King Concert Hall provides an excellent venue for large ensemble performances and the Bartlett Theater is well-equipped to serve undergraduate and professional theatrical performances. The fine arts studios for drawing, sculpture and painting are also generally well-suited to their use, though dance studios are substandard.

Where Rockefeller Arts becomes less suitable is in addressing the complexities of operations within some of the primary programmatic functions. The Center was designed as a performance facility; instruction in theatre arts and dance was not a part of the original intention of the building. For this reason, many instructional spaces are overcrowded or inadequate because they have been retrofitted for their current use. For example, the Scene Shop is used for instruction in addition to its original purpose – production and storage of elaborate theatre sets. Drafting rooms and computer labs equipping the theatre programs with the latest technologies have been inserted into storage rooms. Also, aside from limitations within specific areas, moving between the different program spaces is cumbersome, making communication between departments difficult. Lastly, as a building designed more than 40 years ago, Rockefeller Arts lacks teaching spaces to accommodate electronic arts and digital-based arts. SUNY Fredonia's plans to begin designing an addition to the complex should address this programmatic shortcoming.

Building No. 12 Building No. 18

## Reed Library

Building No: 12
GSF: 80,861
ASF: 42,480
Const. Type: Reinforced Concrete / Concrete
Const. Year: 1968
Uses:

- Academic Computing
- Chief Academic Office
- Computer Services
- Dean-Natural and Social Sciences
- Educational Communications
- Freshman Seminar
- General Library
- Registrar

### Reed Library

Reed Library is the centerpiece of the I.M. Pei & Partners Facilities Master Plan, visible from almost every other academic building in the area. Facing Mason Hall and the academic quadrangle to the west, the front entrance to Reed Library, with its monumental stairs, extensive glazing and monolithic convex roof, provides a striking iconic image for the college. Inside the library, the spacious stack and reading room area creates one of the most impressive interior rooms on campus.

## Mechanical/Electrical

The HVAC distribution and controls at Reed Library are near the end of their useful life. This work will require complete replacement of two air handling units, and distribution. The construction required to replace this system is extensive. Ductwork is assumed to be corroded, and the existing supply of ductwork is in tunnels that are buried in the structure. At present the relief air goes through the roof through gravity relief vents which are old and not functioning properly.

Reed Library is tied into the Maytum Loop, but office partitioning has resulted in several spaces that are not cooled and require proper ductwork and air handling. The chiller for Carnahan Jackson is nearing end of useful life and could be replaced or more likely abandoned and tied into Maytum loop.


## Suitability

Reed Library was originally designed to serve as the main library for the SUNY Fredonia campus, the function which it still serves today. While much of Reed Library was appropriately designed for its programmatic function, trends in undergraduate library usage and the rise of electronically stored information have made several of the building's original premises obsolete. Large areas of book stacks are no longer required (or used) and demand for computer work stations has greatly increased. Furthermore, academic libraries now often serve as campus social centers, usually with significant areas of comfortable seating and amenities such as study spaces and cafes. Given these trends, Reed Library is not making the best use of its space, and is in need of reprogramming and upgrades to its interior. Opportunities exist to reduce the number of stacks, take advantage of its flexible open plan for workstation and seating accommodations, and capitalize on the power of its grand space as well as its central location. Any future planning for programming Reed Library should take into account such possibilities.

## LoGrasso Hall

Building No: 18
GSF: 24,445
ASF: 6,391
Const. Type: Load Bearing Masonry and Steel
Const. Year: 1967
Uses:

- Custodial Services
- Lifelong Learning & Special Prog
- Student Counseling
- Student Health Services
- VP Student Affairs


### LoGrasso Hall

LoGrasso Hall was designed as the student health services building in 1967 and still serves that function today. Located at the edge of campus close to the student residences, LoGrasso is a one-story brick building with an interior courtyard, accessible only from the building.

## Mechanical/Electrical

The building MEP systems are generally in good condition. The boiler is in good condition and does not need to be replaced. However, the building needs a new HVAC system, which would require two new air handling units, a 30 ton air cooled chiller, DX cooling units and an air handler. Despite this work, the existing ductwork is expected to be able to remain.

## Suitability

LoGrasso Hall was originally designed as the student health clinic and still serves that purpose today. In general it is well-suited to its use, allowing adequate space for exam rooms and staff. Hospital rooms with adjoining bathrooms are no longer used for overnight patients; these rooms have been repurposed for various other clinical functions. A small courtyard in the middle of the building provides a nice amenity to the building – one that could be capitalized on should student health services move to another location in the future. Counseling Services and International Education are additions to the originally-designed program for the building. Though Counseling Services is a compatible use, the shared waiting room with the Health Center is not ideal for privacy. International Education is better suited in a more central campus location. LoGrasso Hall is located equidistant to the main residential complexes on campus, which is helpful to the function it serves. However, this central location places it at one of the gateways to campus – a site that in the future may better serve a different programmatic purpose with a more welcoming public component.

## Thompson Hall

Thompson Hall is the largest academic building on campus at 135,000 gross square feet. Designed in a late modernist style and executed in dark brown brick with minimal fenestration, the three story monolithic structure extends from the parking area next to Fenton Hall to the main campus entrance at University Way. It contains classrooms and offices for SUNY Fredonia's programs in education.

## Mechanical/Electrical

The boiler plant at Thompson Hall is in good condition. Additionally, the chiller is also good condition, however the cooling tower is in need of replacement.

The Thompson Hall air handling units and ductwork distribution require upgrade. This work would require renovation of ceilings, lighting, and other related features.

The bathrooms are currently not all handicapped accessible and should be modified to be compliant with ADA standards.

## Thompson Hall

| | |
|---|---|
| Building No: | 61 |
| GSF: | 136,400 |
| ASF: | 72,578 |
| Const. Type: | Steel Construction/ Masonry |
| Const. Year: | 1973 |

## Suitability

Thompson Hall is poorly suited for use as a building for academic instruction. Certain inherent characteristics prevent the building from satisfying the programmatic needs of several functions in the College of Education and the Department of Communications Disorders and Sciences. For example, observation rooms for clinical instruction and research are shared between the two programs, which not only limits the time available for observation, but is also not ideal because of privacy and security concerns. The building's plan configuration leaves it with large amounts of windowless interior space, constrained by inflexible service elements and of a dimension that is neither suited for offices nor classrooms. Many classroom spaces are unsuitable because of disproportionate room dimensions and low ceiling heights for their designed occupancy. On the second floor, many rooms on the exterior of the building also lack windows. The corridors are very long, poorly lit and lack identifying features to distinguish differences in departments or programs. Because of weak relationships to the surrounding campus context, Thompson's primary entrance is seldom used, with most visitors to the building entering at a side entrance beside the building's loading dock.

Thompson's poor suitability is particularly problematic given its size. It is the largest academic building on campus and highly ineffective. It also is home to many academic departments and their faculty and staff, many of whom inhabit windowless offices that were originally intended as storage rooms. In a future reassignment of Thompson Hall program, extensive renovations to the building's plan configuration will be required in order to improve the experience of the building and provide enhanced learning environments.

Uses:

- Academic Computing
- Administration - Student Affairs
- Assessment
- Business Administration
- Business Manager
- Campus Wide Facilities
- Chief Academic Office
- Child/Day Care
- Communication Disorders & Science
- Communication Disorders Reimb
- Copy Center
- Dean of College of Education
- Dean, Special Programs
- Economics
- Education, Department of
- Educational Communications
- EOP Administration
- EOP Tutoring
- Faculty Support Staff Savings
- History
- I&DR Equip/Space Steward.(PSI)
- Liberty Partnerships
- Multicultural Affairs
- Native American Project
- Off-Campus Supervised Teaching
- Political Science
- Psychology
- Reading Clinic Reimbursable
- Research Administration
- Research Grants
- School Of Business
- Sociology/Anthropology
- Student Union

**Building No. 71 & 62**

## Steele Hall Natatorium

Building No: 71
GSF: 38,782
ASF: 22,002
Const. Type: Steel Construction
Const. Year: 2002
Uses:

- Health And Physical Education
- Recreational Facilities Reimburs

## Steele Field House

Building No: 62
GSF: 91,734
ASF: 62,226
Const. Type: Steel Construction / Masonry
Const. Year: 1982
Uses:

- Auxiliary Service Corporation
- Health And Physical Education
- Recreational Facilities Reimburs
- Student Union

### Steele Field House

The Field House at Steele Hall sits adjacent to Dods Hall, fronting the athletic fields to the west and connecting to Dods Hall at its southern end. Built in 1982, the Field House is home to SUNY Fredonia's ice rink, field house, training rooms and locker rooms. It is also connected to the Steele Hall Natatorium (Building 71) to the north, forming an interior courtyard with the back of Dods Hall.

## Steele Hall Natatorium

The Steele Hall Natatorium is a 2004 addition to Steele Hall which created a transparent and attractive new entrance to the existing field house and rink and also added an exceptional swimming facility to the SUNY Fredonia campus. A large open lobby offers direct views to the swimming and diving areas, while at night the building's extensive glazing provides a glow of activity within the athletic complex.

Commencement exercises are held in Steele, elevating the importance of the building and demanding that it be comfortable in the warm spring weather. The flooring is worn and needs to be replaced.

## Steele Hall Ice Rink

The ice rink has an uninsulated envelope with no vapor barrier which has resulted in serious condensation issues which is beginning to cause deterioration to the structural steel. A dehumidification system has been installed which alleviates some moisture, still condensation occurs due to envelope issues and structural damage will likely continue. The main air distribution system is not dehumidified and must be shut down in summer. Possible envelope improvements could be combined with expanded bleachers, team rooms, support and mechanical upgrade projects. The refrigeration system is new, but refrigerant should be replaced with a more environmentally friendly system.

### Mechanical/Electrical

The ice rink and track HVAC systems need to be replaced. Currently, there are six large units mounted on the roof. The college would prefer a new penthouse unit and new air handling units with heat recovery and chiller/tower to provide cooling. Air conditioning is currently not a part of the Steele Hall system. In addition to temperature control, the college would like to be able to control humidity. The new air handling units will allow the four existing Dectron dehumidifiers to operate properly.

In addition, a NYSERTA grant has provided funding for lighting replacement.

### Suitability

**Steele Field House**
The Field House at Steele Hall was originally designed as a field house and ice rink, with supporting locker room and training spaces, and it still serves that function today. The building is generally suitable for its use, though certain shortcomings in its design impact the quality of the facility. The Field House has a synthetic floor which prevents the basketball court in the infield from qualifying as an acceptable NCAA court for competition. The Field House also has poor storage capabilities for athletic equipment, which is scattered around the track. The support spaces and locker areas for the facility as a whole are under-sized and aging. Any future reassignment of the building should consider more efficiently configuring the support spaces.

**Steele Hall Natatorium**
The Steele Hall Natatorium was designed for its specific purpose and is well-suited to meet its programmatic needs. The building provides an excellent venue for Division III swimming and diving competitions as well as an amenity for intramural and recreational users on campus. The Steele Hall Natatorium also provides Steele Hall and the athletic complex with a bright, open and highly visible entry. Given the specific nature of the Steele Hall Natatorium, any future programmatic re-assignment would be difficult.

## Carnahan Jackson Center - Addition to Reed Library

Building No: 12a
GSF: 43,866
Const. Type: Steel Construction / Masonry
Const. Year: 1991
Uses:

- General Library
- Learning Center

### Carnahan Jackson Center

The Carnahan Jackson Center was constructed in 1991 as an addition to the Reed Library, expanding stack capacity for Reed and created specialized program spaces. It also houses SUNY Fredonia's Writing Center. The four story building provides a gateway to Reed Library and the rest of core academic campus from Science Drive.

### Mechanical/Electrical

The MEP Systems for the building are generally in good condition. The Chiller is at the end of its useful life and is oversized for the load. The building needs a new fire alarm system upgrade.

### Suitability

The Carnahan-Jackson Center, which upon its construction 15 years ago, was well-suited to its program, is now beginning to become obsolete and poorly suited as a special-purpose addition to Reed Library. Conceived as an addition designed to provide stack space, rooms for special collections, private study areas and an undergraduate Writing Center, only the Writing Center remains truly relevant to library programming at a contemporary university. Electronic storage of information and the rise of computer-based research methods have made both the stack areas and study rooms less important to students. The Writing Center is well-used, and the special collections are fixed programmatic elements, but much of Carnahan-Jackson's space could be better and more efficiently used. If future reassignment were to be considered, Carnahan-Jackson's location at the heart of the campus core would be an important factor in determining program, in addition to the needs of the Colleges.

### Fenner House

Designed in an early Victorian style, Fenner House was constructed in 1860 and occupied by the University in 1964. Originally constructed as a private residence, Fenner House serves as SUNY Fredonia's Admissions Office.

### Mechanical/Electrical

The existing MEP systems are basically residential quality and are generally in good condition.

### Suitability

Fenner House was originally designed as a 19th century residence and now serves as the Admissions Office for SUNY Fredonia. Fenner house is generally suitable for an admissions office, though the age of the building, the size of its rooms and the bearing wall construction of the house greatly limit flexibility. The Victorian styling of the building contrasts significantly with SUNY Fredonia's architecture, but also presents a welcoming image for those who first visit the University. Any future reassignment for Fenner House is limited given the building's age and residential characteristics.

## Fenner House

Building No: 57
GSF: 4,175
Const. Type: Wood Frame, Masonry
Const. Year: 1860
Uses:

- Admissions
- Buildings-Structural Maint

**Building No. 23** **Building No. 14**

## Erie Hall Dining

Building No: 23
GSF: 23,881
Const. Type: Load Bearing Masonry with Steel
Const. Year: 1967
Uses:

- Food Service-FSA Contract

### Erie Dinning Hall

The Erie Dining Hall was one of two original dining halls in the residential complex of the I.M.Pei & Partners Master Plan. It is now the only one still operating. Despite its age and the success of the recently opened Marché at the renovated University Commons, Erie Dining Hall still attracts crowds of students. It is particularly convenient to the occupants of the surrounding residence halls

### Mechanical/Electrical

The building has had some mechanical upgrades in the past with a new air handling unit and cooling tower. The plumbing sanitary sewer has also been upgraded. The existing plumbing, HVAC and electric system infrastructure is nearing the end of its useful life and requires upgrade. The dining hall kitchen infrastructure also needs upgrade based on life expectancy.

### Suitability

The Erie Dining Hall was designed to serve half of the residential complex constructed as part of the I.M. Pei & Partners Master Plan. The building has dining rooms organized around a central kitchen and serving area, like many collegiate dining halls of its era. A terrace off of one of the dining rooms provides a potential outdoor eating area and is scheduled for a renovation in 2011. The Erie Dining Hall is able to satisfy its programmatic needs adequately, but it lacks some of the amenities now considered standard in food service facilities at many universities. Open serving stations with individual food preparation, trayless service, and sustainable practices such as composting are all lacking at Erie Dining Hall. Any future renovation should take into account such trends in food service.

## Jewett Hall

Building No: 14
GSF: 65,530
Const. Type: Load Bearing Masonry / Wood
Const. Year: 1963
Uses:

- Biology
- Campus Wide Facilities
- Chief Academic Office
- Communications
- General Library
- Health And Physical Education
- Instruction General
- Stud

### Jewett Hall

Jewett Hall sits to the south of Old Mason and the raised concrete Spine, with its main entrance facing Science Drive. Built in 1961 as the school's first science building, Jewett pre-dates the I.M. Pei & Partners Master Plan, but is the campus' first late-modernist style building. It serves mostly the biological and natural sciences.

### Mechanical/Electrical

The MEP Systems are in fair to poor condition and have exceeded there useful life. The building being relegated to science includes many special HVAC, Plumbing and Electrical systems that have been added to or abandoned. The building includes environmental chambers. The building is getting a new emergency generator.

### Suitability

Jewett Hall was originally designed to serve as a campus science facility, the function which it still serves today. Due to its age and changes on the demands of teaching facilities in the sciences, Jewett Hall is no longer suitable as a building for instruction in undergraduate science. Limitations in the building's infrastructure and overall footprint make the building obsolete for laboratories. Future reassignment possibilities for Jewett are limited without significant renovation efforts. The central, double loaded corridor is efficient and the current labs are large enough to be converted to classrooms, but bearing wall construction and low floor-to-floor heights limits flexibility. Re-use of Jewett for student activities functions has been suggested, based on its location along the Spine and near the center of campus. However, the building's limitations of age and construction type inevitably present problems for effectively satisfying such a program.

## Maytum Hall

Building No: 05
GSF: 53,242
Const. Type: Reinforced Concrete
Const. Year: 2004

Uses:

- Academic Computing
- Administration - Student Affairs
- Admissions
- Business Affairs
- Business Manager
- Chief Academic Office
- Computer Services
- Counseling/Academic Advising
- Dean-Natural and Social Sciences
- Educational Communications
- Environmental Health & Safety
- Finance & Administration
- Financial Aids
- Freshman Seminar
- Human Resources
- Institutional Studies
- Mail and Messenger
- Purchasing
- Registrar
- Research Administration
- Sabbatical Replace,Dean Grad Pro
- Student Billing/Cashiering
- Student Union

### Maytum Hall

Along with Reed Library and the Rockefeller Arts Center, Maytum Hall stands as one of SUNY Fredonia's most iconic structures from the Pei Master Plan. Crescent shaped and nine stories tall, Maytum rises high above any surrounding buildings and is easily visible throughout campus. It is built of cast-in-place concrete, and sits halfway along the paved walkway between Rockefeller Arts and Reed Library. Maytum Hall houses administrative offices for the University. It is undergoing an extensive interior renovation on all floors, due to be completed in 2010.

### Mechanical/Electrical

The existing MEP Systems for the building are undergoing extensive renovations. The Building Systems except for the plumbing infrastructure will be in good to excellent condition when renovations are completed.

### Suitability

It is difficult to accurately assess Maytum Hall's suitability when it is undergoing such an extensive gut renovation. However, one basic aspect of Maytum Hall that will always affect its ability to satisfy programmatic requirements is its small footprint and its height. At 9 stories tall and with a typical floor of 6,285 square feet, it is difficult to fit a program of any significant size on one floor. Even if programmatic elements can be divided easily and distributed among floors, communication problems associated with such multi-floor divisions and potential absence of face-to-face interaction could be detrimental. How the Maytum renovation deals with its inherent shortcomings will be the key to making the building well-suited to its use.


### Williams Center

The Williams Center was the last cast concrete building constructed as part of the original Pei Master Plan. It is the terminal point of the Spine leading from Reed Library and serves as a student activities center for the campus. The building is a two-story cylinder, open in the middle, with student services and activities rooms placed around the perimeter. A large linear skylight illuminates the open central space. There is a cafeteria in the basement, which was renovated in 2009. The Williams Center is the subject of an ongoing design study for an extensive renovation, including modifications to the Spine.

### Mechanical/Electrical

The MEP Systems, except for the new boiler plant and chiller plant, are original and have exceeded their useful life. The air handling units and exhaust systems are all existing and require replacement. The existing distribution system which includes numerous reheat coils are plugged with dirt and thus do not supply sufficient airflow. The plumbing infrastructure is original and should be replaced. Certain toilet rooms have been upgraded however some of the original piping exists. There have been some electrical upgrades throughout the years but most systems are in need of upgrades.

There have been ongoing MEP upgrades throughout the building including the lower level food court, toilet rooms and multipurpose room renovations.

## Williams Center

Building No: 30
GSF: 90,380
Const. Type: Reinforced Concrete / Concrete
Const. Year: 1970
Uses:

- Business Affairs
- Computer Services
- Custodial Services
- Financial Aid
- Food Service-FSA Contract
- Lifelong Learning & Special Prog
- Student Billing/Cashiering
- Student Union

### Suitability

The Williams Center is no longer suitable as the main student activities center at SUNY Fredonia. Designed as a location for student services, clubs and agencies, the Williams Center lacks the amenities and support areas typical to a contemporary collegiate student center. It is fairly effective in accommodating groups for meetings and medium to large gatherings, but the demand on this building far outweighs the availability of space. The Williams Center was designed to accommodate a student body much smaller than that of SUNY Fredonia today, and its overuse has placed a strain on the facility's capabilities. Furthermore, the large open space at the center of the building is unable to serve as an effective flexible open space. The moveable partitions create a substandard space when used to enclose the central area, and the circulation through the building becomes obscured when the partitions are deployed. Acoustical separation between the perimeter offices and the central space are problematic.

**Building No. 27 / 28 / 29**

## Central Heating Plant

Building No: 27
GSF: 11,828
Const. Type: Steel Construction / Masonry
Const. Year: 1967
Uses:

- Utilities Plant

## Maintenance Building

Building No: 28
GSF: 26,419
Const. Type: Steel Construction / Masonry
Const. Year: 1967
Uses:

- Administration & Management M&O
- Buildings-Structural Maint
- Central Stores
- Equip-Bldg Sys-Util Dist Sys
- Grounds Maintenance
- Maint (Mechanical) Stores Clerk
- Motorized Equipment Maintenance

## Food Service

Building No: 29
GSF: 13,474
Const. Type: Steel Construction
Masonry
Const. Year: 1967
Uses:

- ASC-Laundry
- Food Service-FSA Contract

### Central Heating Plant

The Central Heating Plant is part of the larger Service Building complex on the western perimeter of the Ring Road designed as part of the I.M. Pei & Partners Master Plan. The Service Complex is a one-story cast in place concrete structure that houses the Maintenance Building (Building 28) and Food Services (Building 29) in addition to the former Central Heating Plant. These program functions are arranged around a parking courtyard open to vehicular circulation. Earthen berms slope up to cover the exterior walls of the building on the perimeter outside of the courtyard, burying all but a continuous clerestory window and roof element. The Central Heating Plant no longer functions to generate high temperature hot water to the campus and is instead used primarily for physical plant storage.

## Mechanical/Electrical

The existing High Temperature boilers were recently removed and replaced with a new boiler plant and domestic hot water plant. The other mechanical and electrical systems in the building are original and when a future use is found for the building these systems will require complete replacement.

### Maintenance Building

The Maintenance Building is part of the larger Service Building complex on the western perimeter of the Ring Road designed as part of the Pei Master Plan. The Service Complex is a one-story cast in place concrete structure that houses the former Central Heating Plant (Building 27) and Food Services (Building 29) in addition to the Maintenance Building. These program functions are arranged around a parking courtyard open to vehicular circulation. Earthen berms slope up to cover the exterior walls of the building on the perimeter outside of the courtyard, burying all but a continuous clerestory window and roof element. The Maintenance Building houses offices, shop and garage spaces for the campus facilities maintenance department.

## Mechanical/Electrical

The MEP Systems for the building are in need of replacement due to age except for the emergency power and fire alarm panel which is new. There have been many upgrades to various spaces however the systems are not integrated and thus a total replacement is needed.

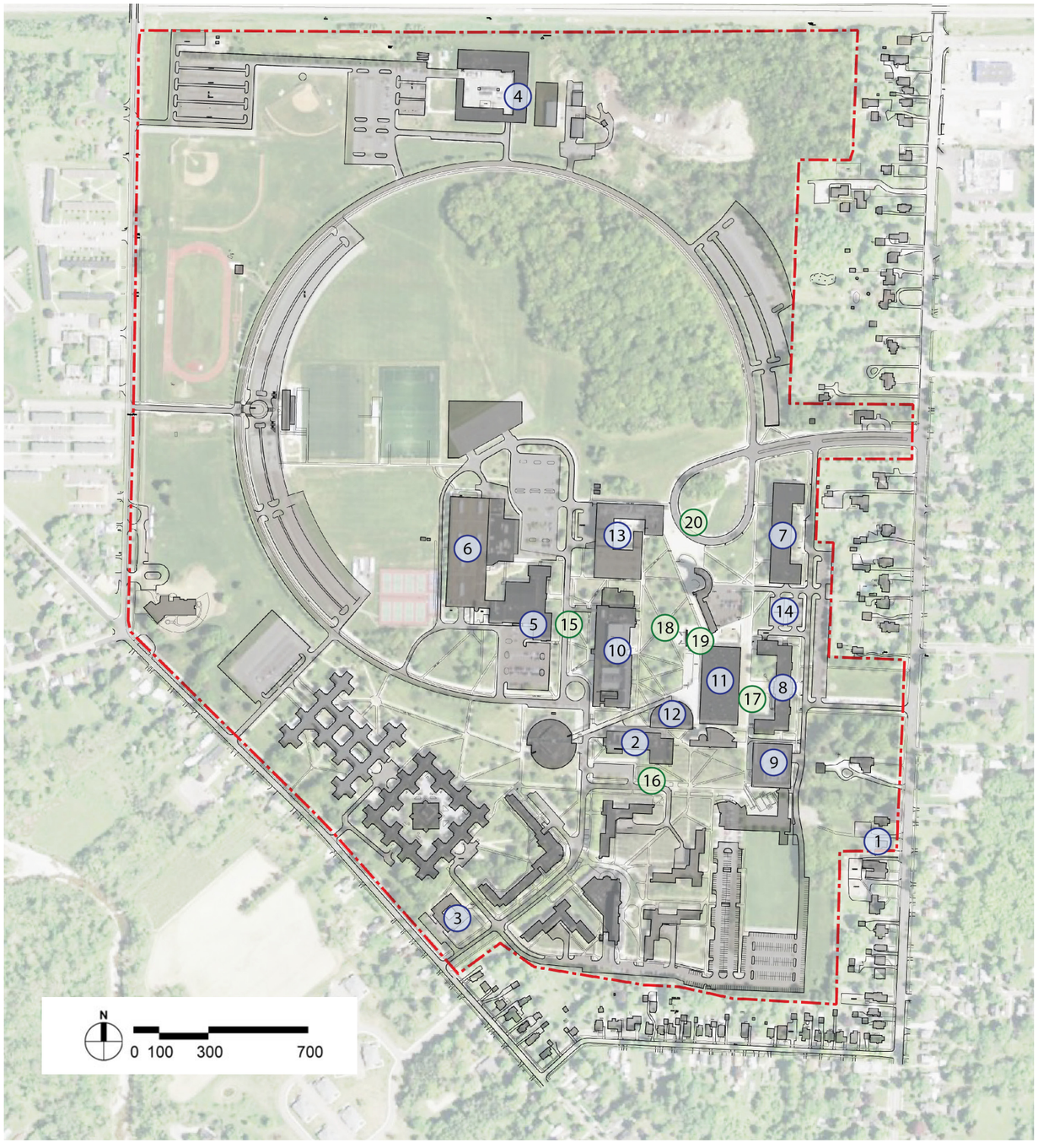
### Food Service

Food Service is part of the larger Service Building complex on the western perimeter of the Ring Road designed as part of the Pei Master Plan. The Service Complex is a one-story cast in place concrete structure that houses the Maintenance Building (Building 28) and the Central Heating Plant (Building 27) in addition to Food Service. These program functions are arranged around a parking courtyard open to vehicular circulation. Earthen berms slope up to cover the exterior walls of the building on the perimeter outside of the courtyard, burying all but a continuous clerestory window and roof element. Food Service is essentially the campus commissary, housing a kitchen, a bakery and storage areas for advanced preparation of food for the dining halls on campus. It also contains offices for food service management.

## Mechanical/Electrical

The existing MEP systems are in need of replacement due to age and the condition of the systems. All of the food service infrastructure is existing. There have been various minor alterations to the existing systems over the years.

## Campus Capital Improvements




## Summary of Major Capital Improvements 2010 - 2023

1. **New Admissions Welcome Center**
2. **Jewett Hall** - Option 1 - Renovation / Repurposing as Student Services Facility

   Jewett Hall - Option 2 - New Addition for Student Services

   Jewett Hall - Option 3 - New Building for Student Services / Classrooms and Music Department Expansion
3. **LoGrasso Hall** Mechanical Improvements
4. **Service Complex** Reconfiguration / Renovation
5. **Dods Hall** Renovation and Expanded Gymnasium
6. **Steele Hall** Field House and Ice Rink Renovation
7. **Thompson Hall** - Phase 1 - Renovation: Day-care Backfill for Clinical Space

   Thompson Hall - Phase 2 - Renovation: Misc. Classroom Backfill

   Thompson Hall - Phase 3 - Full Renovation of Classrooms, Offices

   Thompson Hall New Entry Addition
8. **Fenton Hall** Renovation
9. **Houghton Hall** Renovation
10. **Mason Hall** Renovation
11. **Reed Library** Renovation
12. **McEwen Hall** Renovation
13. **Rockefeller Arts Center** Addition

    Rockefeller Arts Center Renovations

    Rockefeller Arts Center Phase II Addition
14. **New Classroom Building**

## Campus Landscape and Infrastructure Improvements

15. **Varsity Drive** Pedestrian Improvements
16. **Old Main / Science Drive** Pedestrian Improvements
17. **North South Pedestrian Corridor** - Fenton/Library/Thompson
18. **Main Quad** Renovation
19. **Library Steps / Amphitheater** Improvements
20. **Symphony Circle Plaza** / Landscape Improvements
21. **Underground Electrical Upgrades**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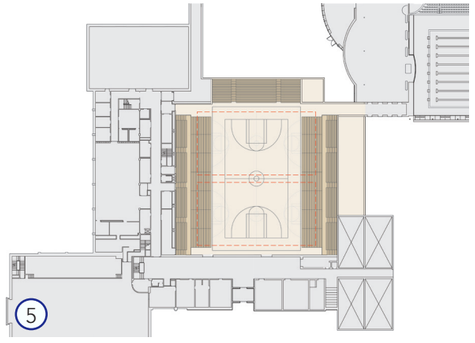
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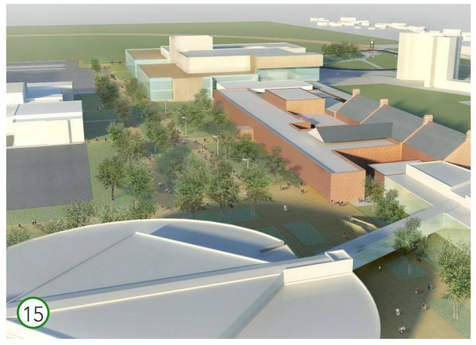
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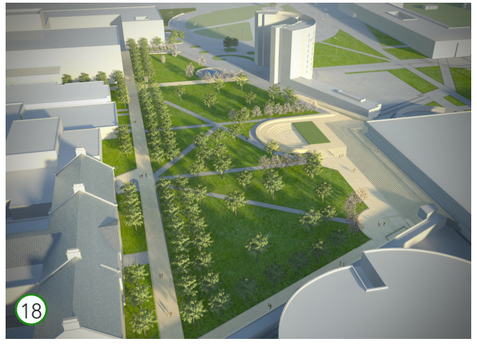
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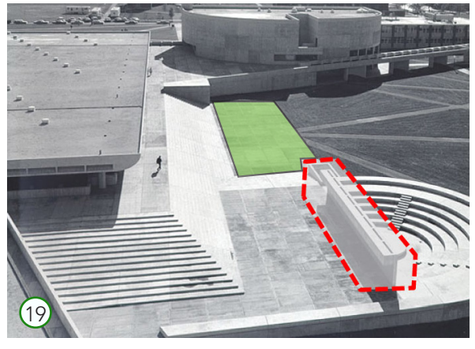
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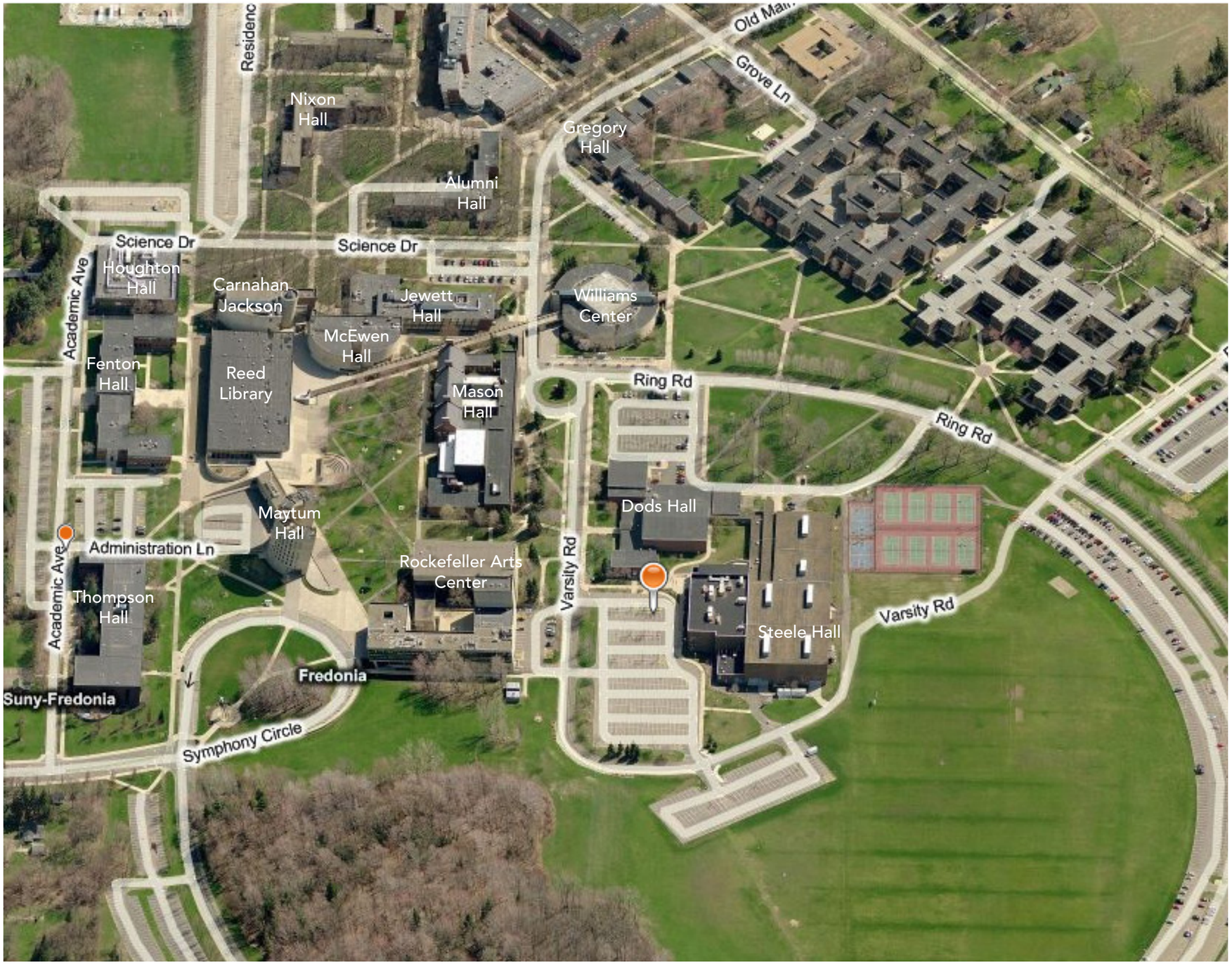



## Major Capital Improvements 2010 - 2023

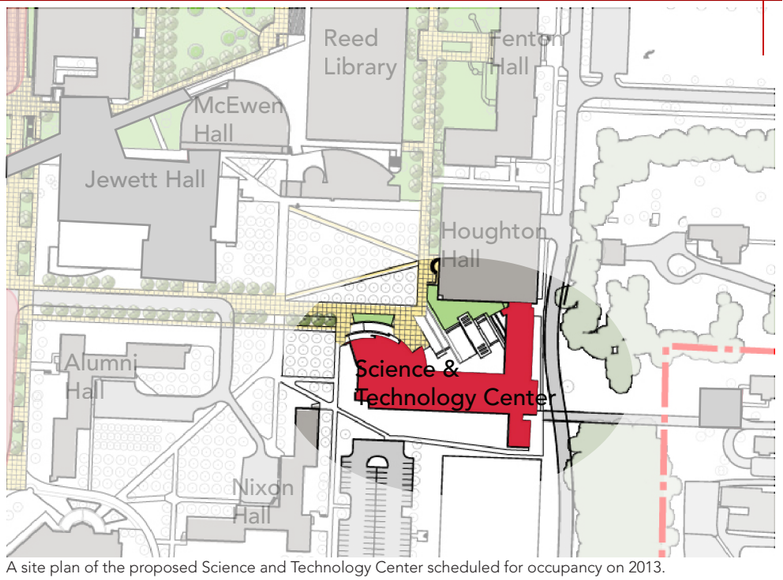
The growth projected for SUNY Fredonia in Phase III: Analysis of Space Needs can be combined with the need for qualitative improvements to existing space in the creation of realistic goals for new capital improvements to be implemented over the next 15 years. These goals are supported not only by the analysis provided in Phase III, but also the findings of the Campus Profile and Assessment of Conditions, which not only establish the basis for recommended improvements to existing facilities, but also make clear their shortcomings and help to determine where new construction is more feasible to suit campus needs.

The following pages describe each major capital improvement proposed in the Concept Alternatives. Improvements include new construction and additions to existing buildings, major renovations, and infrastructure and landscape initiatives. All of the proposed improvements have been carefully considered as to their value to the pedagogy and their support of the overall goals and assets of the campus. Where practical, options for the configuration of these improvements are presented.

## Science and Technology Center

With an expected completion date of Fall 2013, the Science and Technology Center has been programmed and designed and is well on its way to breaking ground in the spring of 2011. This 92,000 gsf facility will be the first academic building to be built at SUNY Fredonia since 1973, and as such will provide much-needed state-of-the-art teaching spaces for the sciences. In addition, the design of the building is an important project in initiating design principles that are important not only to the sciences, but to other academic disciplines as well. For example, the building will incorporate innovative classroom configurations that allow for flexibility of instruction and pedagogy. Such a classroom type does not currently exist on campus, though efforts have been made in other programs to retrofit existing classrooms for greater flexibility. The Science and Technology Center also incorporates more informal study and social spaces into its design, a type of space that is at a shortage elsewhere on campus. Finally, the building's massing provides for a courtyard adjacent to its main entrance that will be a multi-use outdoor space providing instructional opportunities as well as gathering space for students of all disciplines. The Science and Technology Center will serve to set a standard for new construction at SUNY Fredonia that is responsive to current needs of academic instruction and supportive of an active living-learning campus environment.

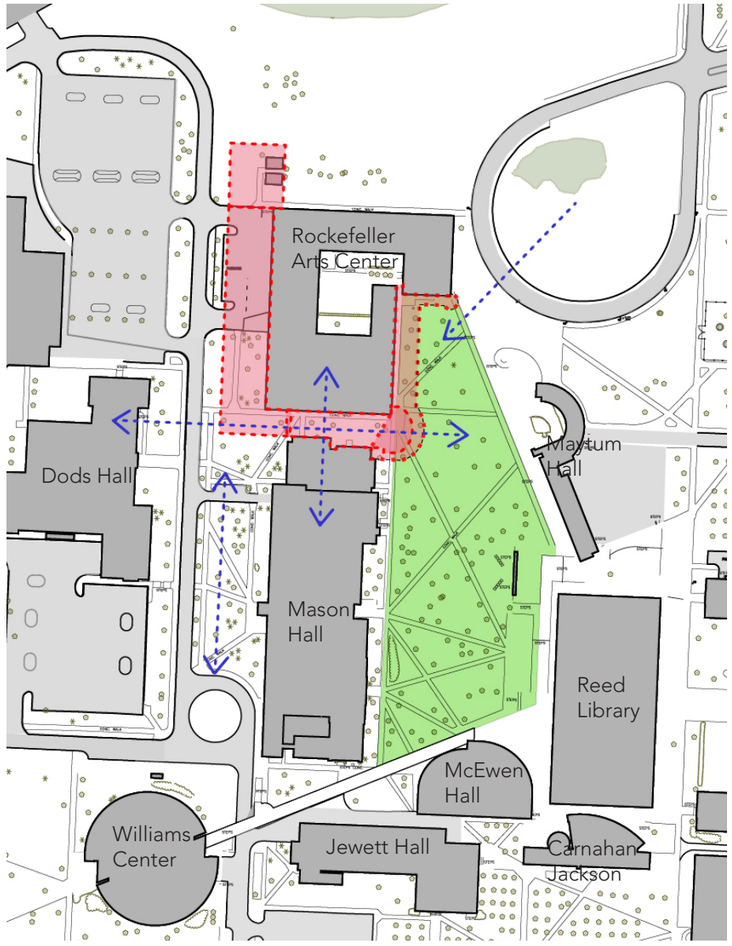
While the design of the Science and Technology Center itself is largely complete, the Facilities Master Plan makes a number of suggestions as to its relationships to its surroundings and the extent to which it affects and is affected by them. Opportunities present themselves to improve the context around the building with potential improvements to nearby pedestrian and vehicular circulation systems and landscape features. A key opportunity that comes from the construction of the facility is to partially eliminate Science Drive, which currently runs east to west from Old Main Drive to the commuter parking lots that will become the site of the Science and Technology Center. Because the siting of the building makes a connection from Old Main Drive to Academic Avenue no longer possible, Science Drive becomes unnecessary. Its removal allows for a continuous connection between honey locust groves to the north and west of the new building, already an important pedestrian zone. Science Drive cannot be completely eliminated, however, because of the need to provide access to the small Jewett Hall parking lot and to the non-residential uses such as Custodial Services and Veterans Affairs located in Alumni and Nixon residence halls. The Facilities Master Plan recommends a general strategy to remove non-residential uses from residence halls, returning them to the social and study spaces they once were. If such a strategy were implemented at Alumni and Nixon Halls, and if Jewett Hall and its parking lot were replaced with a new facility (as will be discussed later in this chapter), Science Drive could be eliminated in its entirety, creating a dramatic extension of the pedestrian zone.



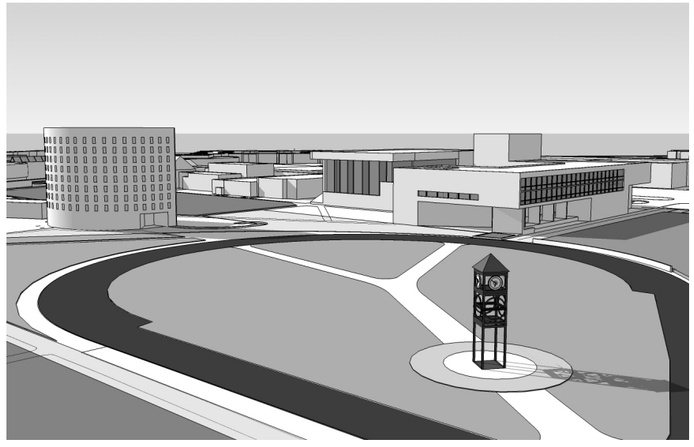

A site plan of the proposed Science and Technology Center scheduled for occupancy on 2013.

A rendering of the proposed Science and Technology Center by Michael Giurgola Architects

A conceptual rendering showing potential improvements to the Symphony Circle plaza and a future phase addition to the Rockefeller Arts Center which could become a focal point for the plaza and a new public entry to the building.




Conceptual diagram showing potential building additions to the Rockefeller Arts Center. Siting strategies include an extension of the Visual Arts wing, an infill atrium between King Concert and Mason Hall, and a new entry admission facing Symphony Circle.



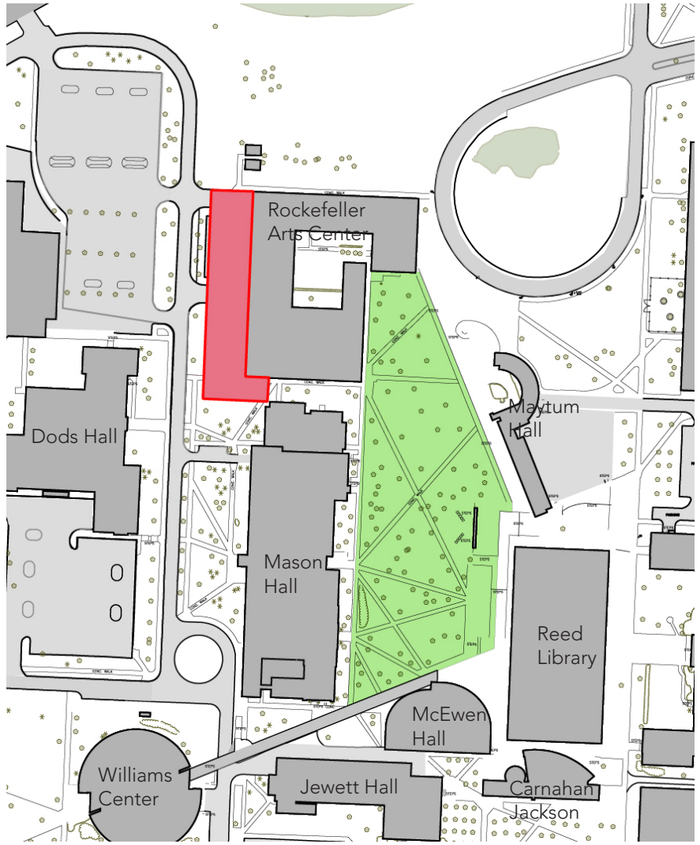
A view of the existing R.A.C. across Symphony Circle.

## Rockefeller Arts Center Addition

The planned addition the Rockefeller Arts Center is currently entering the programming and design process. The addition is expected to house dance studios, computer labs, ceramics and sculpture studios, and rehearsal space for theatre programs. It will also provide a link to its neighbor, Mason Hall, facilitating ease of access for rehearsals and performances by the School of Music in King Concert Hall and other facilities within the Rockefeller Arts Center. Perhaps one of the most important contributions that the Rockefeller Arts Center addition will make to the arts at SUNY Fredonia is to add a visual prominence to the complex of buildings in which its key programs reside.

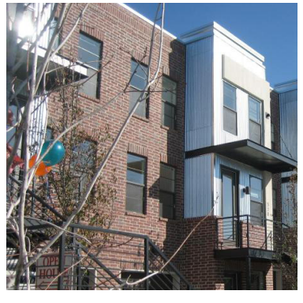
The addition, tentatively planned to be located on the west side of the Arts Center, enables a new approach to the building that could be simplified, with public gathering and reception spaces to supplement those in the existing building. Locating the addition on this side of the RAC also improves what is an uninviting façade and loading area, but the main approach for many users and patrons of the facility. Improvements to the approach from Varsity Drive and the western parking lots become an important aspect of the addition's influence on the existing campus; what is now a utilitarian roadway servicing buildings to the west of the Main Quad could become an "Avenue of the Arts", with main entrances to performance facilities in both Mason Hall and the Rockefeller Arts Center. As will be discussed later in this chapter, a set of major infrastructure improvements could even eliminate the need for Varsity Drive altogether, to be replaced by plazas and a new pedestrian corridor with views of the new addition.

A second important consideration to the building's massing is its relationship with the Main Quad to the east of the addition site. A connector to Mason Hall is a key programmatic component to the addition scope, but it might also be designed to add a visually-prominent entrance to the RAC from the quad. For instance, the connector could become more substantial than a simple corridor, creating a glazed "pass-through" from east to west that occupies the entire space between Mason Hall and the Rockefeller Arts Center, with a lobby and associated outdoor space where it meets the Main Quad. Taking the connector concept a step further, covered walkways could be introduced in association with the quad side of the connector, improving the approach to King Concert Hall by patrons utilizing the Symphony Circle drop-off. Planned quad improvements (discussed in detail later in this chapter) would then recognize the importance of views and approaches to the new entrance from Symphony Circle, creating a cohesive and dynamic campus entrance at the northern end of the quad. Designed in this way, the RAC addition would serve the needs not only of the future College of Visual and Performing Arts, but also add a visual interest and activity nodes to the Main Quad for the enjoyment of all SUNY Fredonia visitors.



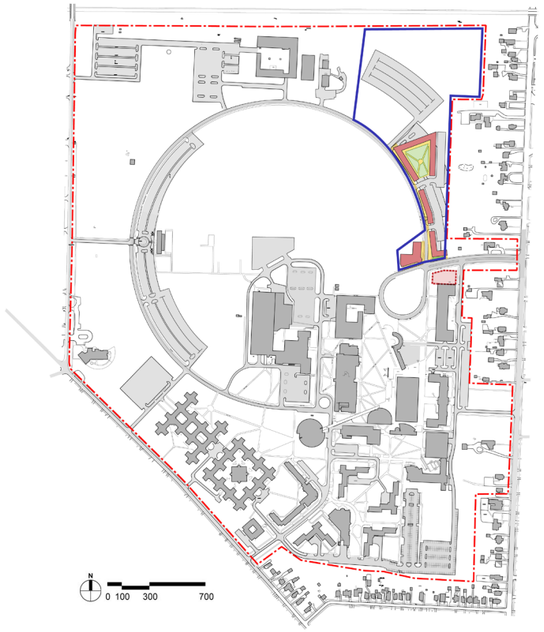

**Phase I -** Currently in Design


**Phase II -** Potential future additions to the Visual Arts wing and building entry.

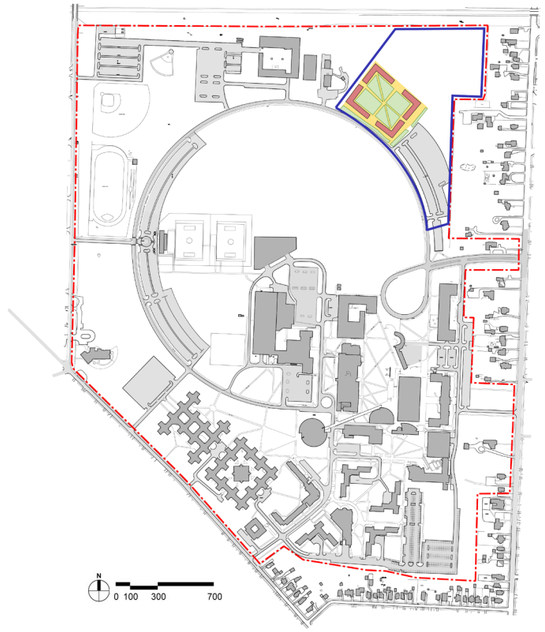


Precedent examples of townhome designs suggest that a contemporary architectural language can achieve the domestic scale and character that is desirable in a student housing while still reflecting the expression of the modernist architecture of the campus.

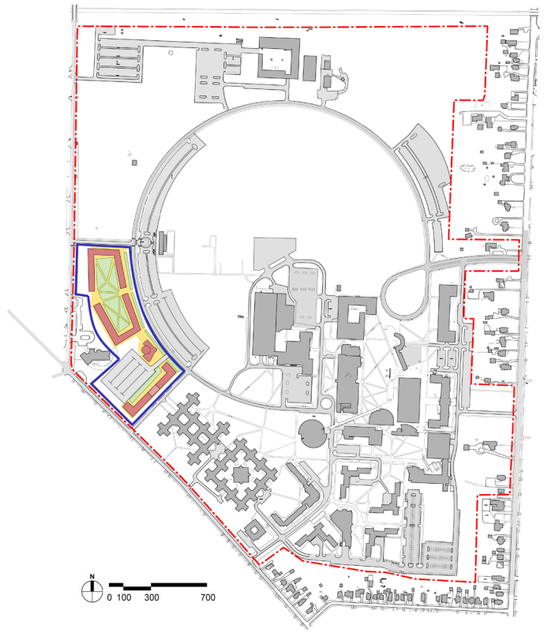
OPTION A



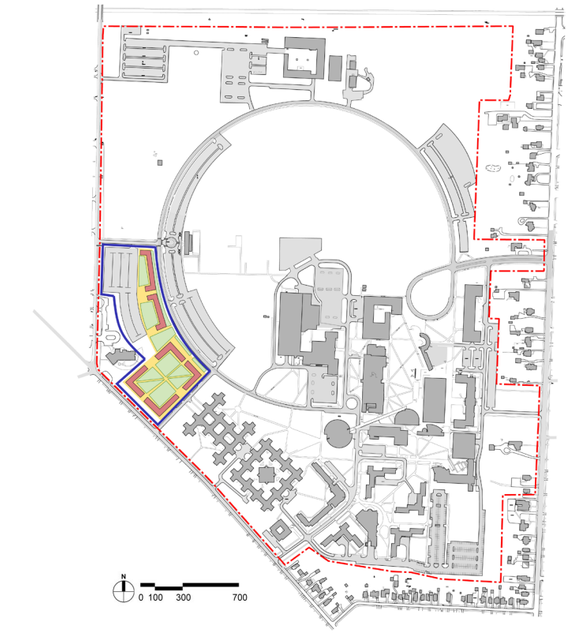

OPTION B




OPTION C1




OPTION C2




The Master Plan explores a variety of options for siting and configuring the proposed townhome development including two options to the north of Symphony Circle, outside the Ring Road; and two alternatives on the southeast quadrant of the campus adjacent to Igoe and Hendrix Halls across Park Drive.

## Townhomes

The campus plans to add 200 new beds of townhome-style residence halls. A site study is currently underway to establish a location for these townhomes, which are expected to provide apartment-style living options to upperclassmen who might normally reside off-campus. As such, they are intended to be clustered closely together, with a community building for resident use. The construction of the air-conditioned townhomes will also enable SUNY Fredonia to offer short-term accommodations during the summer months for camps, conferences, and symposia.

Because the townhomes will be densely developed, they have the effect of constructing a large new complex of buildings on the SUNY Fredonia campus. In consideration of the impact that the townhomes will have, they have been studied by the Facilities Master Plan for their ability to support important principles of campus planning for the campus. Options for siting the townhomes are presented on these pages, each with benefits to the overall goals of the Facilities Master Plan. Each of the sites presented have been selected in order to preserve the density of the campus core and bring additional pedestrian traffic to the pedestrian zone. An effort has been made to find locations that are as close to compatible uses on campus as possible, even when alterations to existing parking and/or infrastructure is necessary to accommodate them.

## Admissions Welcome Center

The Office of Admissions is currently located in the Fenner House, a former residence on Central Avenue, next to the President's Residence. The Fenner House is unable to accommodate large groups and meetings, and has little room for gathering and showcasing marketing materials. If larger tours for prospective students are to be given, they must be directed elsewhere on campus, which limits the Office's ability to control the visitor's experience and first impressions of SUNY Fredonia. In response, an Admissions Welcome Center has been proposed on a site adjacent to the Fenner House, replacing a condemned building owned by the College. The building will likely be 5,000-6,000 square feet, with gathering spaces and a SUNY Fredonia museum on the ground level, offices above, and storage below.

The Welcome Center will provide a more visible and attractive way to enter the campus for the first time, with the Office of Admissions able to orient visitors and guests from a single location. Attention to the surrounding landscape and approach to the main campus from the Welcome Center is important to the creation of a positive experience of SUNY Fredonia. The surrounding landscape must therefore recognize the importance of the connection between Central Avenue and the campus entry point at the new Science and Technology Center. Landscape improvements at this connection must be part of the scope of the Admissions Welcome Center in order to guarantee its success.

The existing Fenner House provides an attractive and welcoming environment for visitors and prospective students, but is limited in its ability to host large groups and functions.

A conceptual rendering of a New Admissions Welcome Center adjacent to the Fenner House with the Science and Technology Center beyond.

## Proposed New Academic Facility - OPTION 1

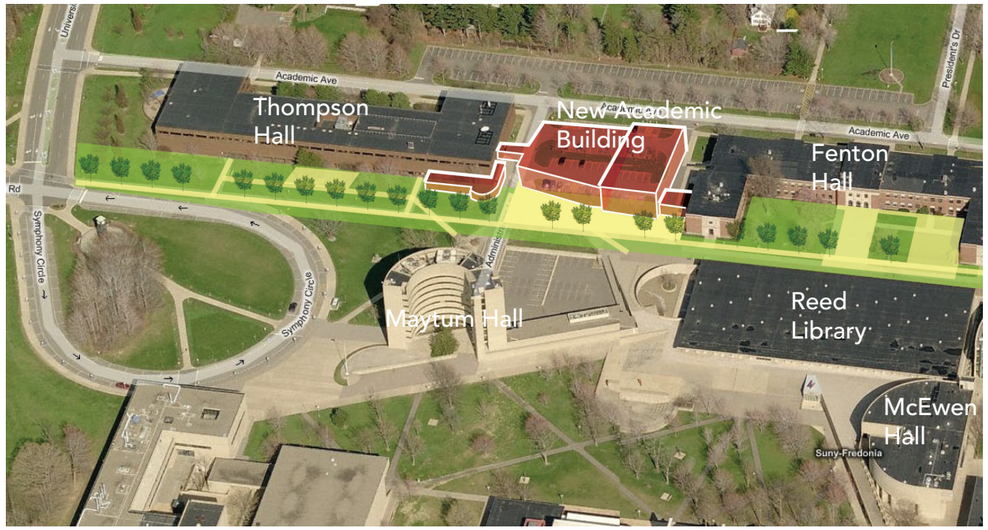
A conceptual rendering of a potential new academic facility sited between Thompson and Fenton Hall.  The Master Plan study includes exploring possible links to the adjacent buildings and the library as well as improved access between the Library and Maytum Hall.

## A New Academic Building

The findings of the first three phases of the Facilities Master Plan indicate a need for new academic space, both to satisfy a quantitative need and to relieve pressures on existing facilities in meeting the demands of contemporary instruction. Thompson Hall is an example of an existing building on campus that is over-programmed, with less than ideal spaces for faculty offices, instruction, and clinical study. A new academic building can alleviate space constraints of existing buildings while providing new, state-of-the-art instructional spaces that the College currently lacks. This building not only provides much-needed space types for academic programs, but also presents opportunities to create physical connections, showcase academic programs more publicly, and accommodate the needs of visiting groups. In addition, technology can be incorporated in such a way as to create a more global presence for SUNY Fredonia, with potential expansions in distance learning and collaborative opportunities with other institutions and the public sector.

The site in consideration for a New Academic Building is located between Fenton and Thompson Halls, at the heart of the academic core of SUNY Fredonia. Siting the building in this location guarantees a maximum of student traffic from the Main Quad and from the north-south pedestrian corridor to its west, as well as high visibility from Central Avenue, the main public approach to the campus. Though it partially displaces a convenient parking lot, this site is ideal in supporting the goals of the Facilities Master Plan for a dense, pedestrian-friendly environment. A building on this site would fit comfortably in a 25,000 square-foot footprint; it is recommended that the New Academic Building be three stories, for a total of 75,000 gsf.

Program for the building will include general purpose classrooms, small lecture halls, governance/case study rooms, informal study space, academic offices, and departmental reading rooms. Spaces for both academic and public use will be incorporated to create an interactive, 24-hour environment. Many of these programs would not necessarily add program space for the campus, but would replace underutilized or inappropriate space in existing buildings, Thompson Hall in particular. Perhaps most importantly, the building is a potential home for the School of Business with very high visibility, promoting growth of the college and its programs by giving it a more prominent location. The College of Education is another of the University's most reputable colleges, and would also benefit from increased visibility. This visibility could be provided either in the New Academic Building, or in an improved Thompson Hall as a result of its construction, but should be a priority in the FMP goal of showcasing key academic programs.




A conceptual diagram showing potential siting and massing of a new academic building. The site offers a unique opportunity to link the new facility with Thompson and Fenton; the two primary general purpose classroom and departmental buildings for the College of Arts Sciences.

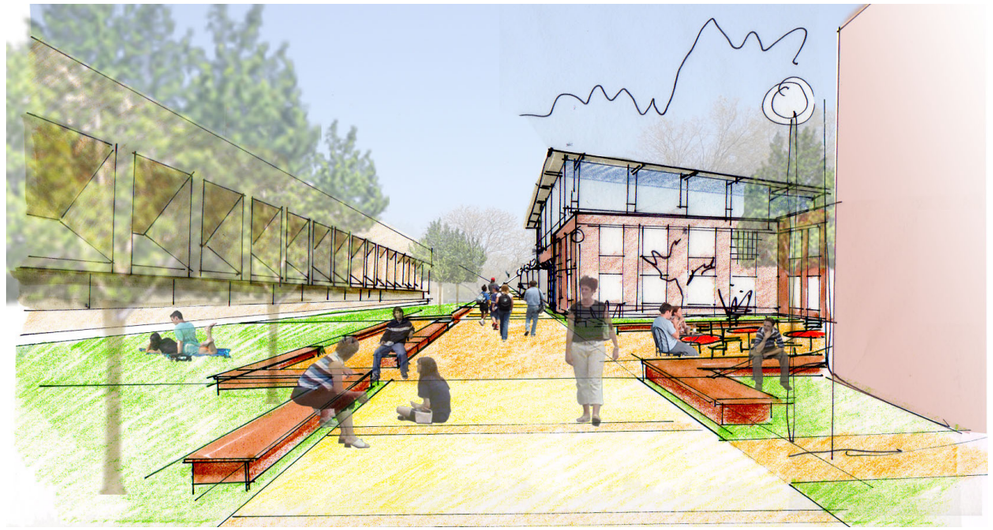

OPTION 1 A conceptual site plan including the potential to incorporate a new entrance addition to Thompson Hall as well as landscape improvements as part of the Library/Fenton corridor.

## Proposed New Academic Facility with Maytum Hall connector - OPTION 2

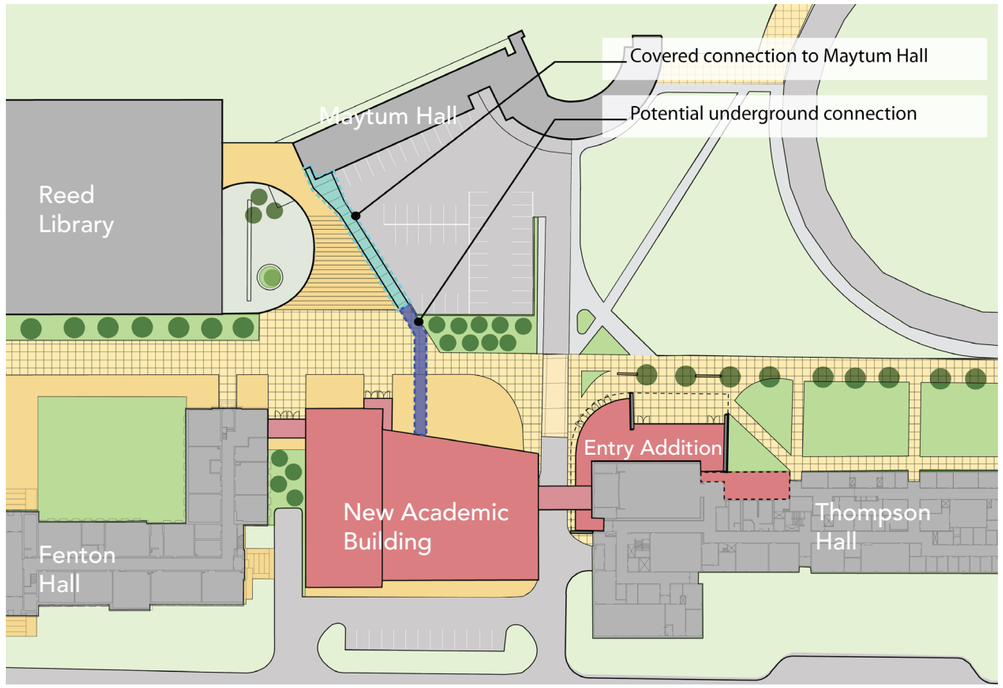
The building siting studies included the potential for a covered canopy or enclosed corridor connecting the Library/Maytum tunnel link to the new academic building. The option to continue this connection through a below-grade tunnel was also explored with the goal of providing a direct, internal access from Reed Library to the New Building and in turn Thompson and Fenton Halls. This connection would be a key link in the realizing the goal of creating a continuous, internal path of circulation between all core campus buildings.

The New Academic Building creates interior connections between buildings, of particular importance in harsh winter climates. Without disrupting circulation in the vicinity of Thompson Hall's loading dock, a bridge connection can be made from the new building to the main circulation stair in Thompson Hall. Additionally, a more substantial connection is possible to Fenton Hall to the south, which could potentially serve as a shared public entrance with access to a café or lounge space. Depending on the configuration of the first level, a glazed connection could run parallel to the outdoor north-south corridor with seating areas along it, effectively extending the pedestrian environment from outside to inside. In the future, a potential connection between Fenton and Houghton Halls would complete the interior connectivity of the majority of the academic buildings at SUNY Fredonia, from the Science and Technology Center at the south to Thompson Hall at the north.

Another consideration for connections between the buildings is a tunnel connecting the lower level of the Library to either Fenton Hall or the New Academic Building. Although this solution is costly and presents technical challenges, creating this important link would provide an essential connection between the buildings on the east side of the Campus with the buildings on the west through Reed, McEwen and a proposed building on the Jewett site connecting to Mason Hall.

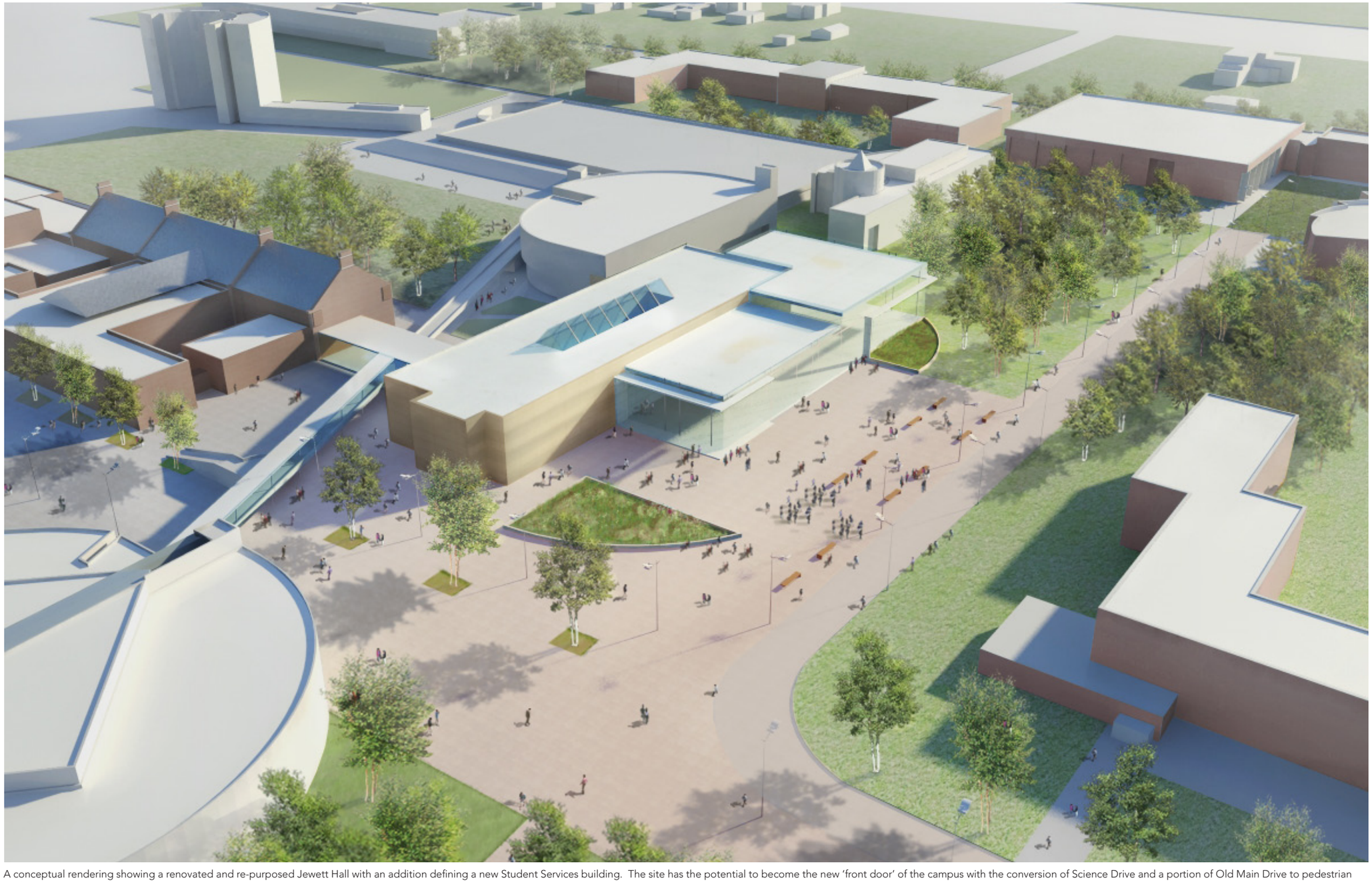


A conceptual sketch of the landscape corridor between the Reed Library and Fenton Hall depicting the façade of the new academic building visible beyond the north wing of Fenton Hall.




OPTION 2 A diagram of a possible enclosed corridor extension of the Maytum/Library tunnel and the opportunity to continue a below grade access to the new facility. The connection to Thompson Hall is proposed as an upper level bridge to enable at-grade vehicular access to the Maytum Hall loading dock and parking lot.

## Proposed Jewett Hall Renovation with addition - OPTION 2



A conceptual rendering showing a renovated and re-purposed Jewett Hall with an addition defining a new Student Services building. The site has the potential to become the new 'front door' of the campus with the conversion of Science Drive and a portion of Old Main Drive to pedestrian environments.

## Jewett Hall: Renovation/Addition/Replacement

Jewett Hall sits at an important location within the campus core, currently occupied by programs in the sciences, to be relocated to the new Science and Technology Building upon its completion in 2013. At that time, the building is slated for use as surge space while Houghton Hall undergoes renovations, requiring few upgrades to the existing building in order to accommodate surged programs. Following this time period, the FMP makes recommendations for the future of Jewett Hall that have dramatic impacts on the immediate context and the entire campus, both programmatically and experientially.

The site occupied by Jewett Hall is an important crossroads of the SUNY Fredonia campus. It is in two overlapping areas of activity: a zone of student services and quasi-academic functions created by the Williams Center, Reed Library, and University Commons, and bordering what will become the Science Quad to its east, sharing the honey locust grove with the new Sciences Complex of Houghton Hall and the Science and Technology Center. This strategic location indicates the importance of the site on which Jewett Hall sits, and calls into question the best use of the site. The following options describe development scenarios on the site which range from a modest renovation of the existing building to a dramatic transformation of the site and its surroundings.

**Option 1: Jewett Hall Renovation**

The most modest approach is to fully renovate the existing Jewett Hall building for use as instructional space for those programs with a demonstrated need, for student services functions, or a combination of the two.  As recorded in Phase II: Assessment of Conditions, the building's interior is generally in good shape, but is limited in its capacity to function as a student services facility because of low ceiling heights and its small footprint. Use as laboratories would also prove difficult without significant alterations to the building's interior, because of the need for more flexible, larger labs for contemporary science instruction. Less significant renovations would be necessary if the building were planned for general classroom use, but its location and relationship to the Science Quad and to student services functions make it a better candidate for these programs.

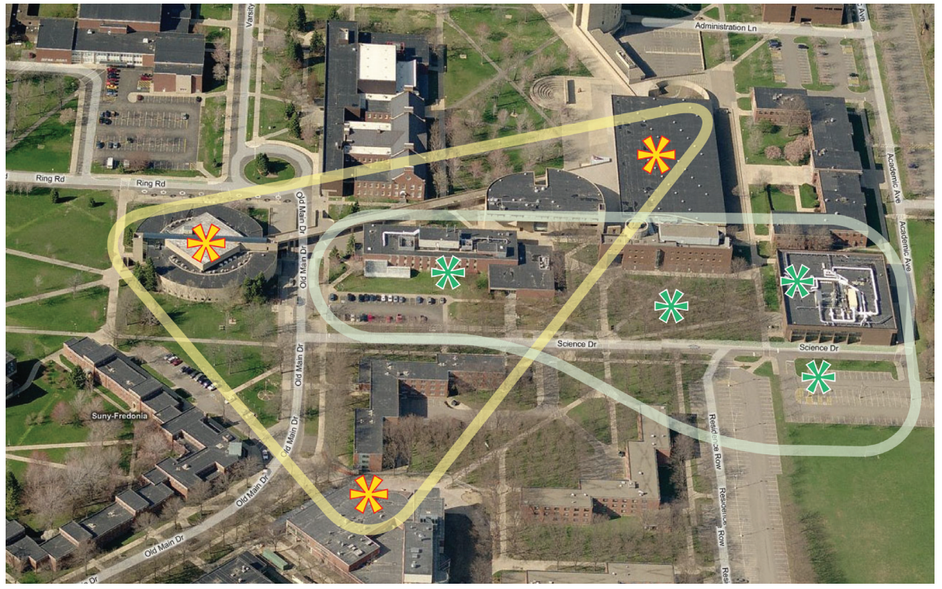
The scope of renovations to Jewett Hall in this option would satisfy needs outlined in Phase II: Assessment of Conditions, and any needs that would arise following a programming study. Asbestos abatement is required in interior spaces above grade, where contaminated tile is found. Additionally, the MEP systems require full renovation. Jewett Hall will serve a valuable purpose as surge space for planned and future renovations. However, full renovation of the building is needed for it to remain useful to the campus-significant expense of time and resources for a facility whose usefulness and suitability for current instructional needs is questionable.

A renovation of Jewett Hall should also address exterior facade improvements and demolition of the green house. Given the prominence of this site, it is a recommendation of the Facilities Master Plan to, at a minimum, improve the appearance of the building and the initial impression it presents to Campus visitors.

**Option 2: Renovation + Addition**

Building on option 1, and understanding the limits of the current facilities at Jewett Hall, this option fully renovates part of Jewett Hall, while replacing a portion of it with a new addition. In this way, the building can be recycled for campus use, while maximizing its potential with new space. An addition would not only provide space for the building that would be specifically programmed and designed for its intended use, but could also create an improved appearance and entrance at this prominent location on campus. Spaces in the existing building could be renovated to remain relatively close to their current configuration, but new space could be larger, with higher ceilings and more flexibly arranged. Designing a renovation and addition is more suitable for use either for student services or instructional purposes.

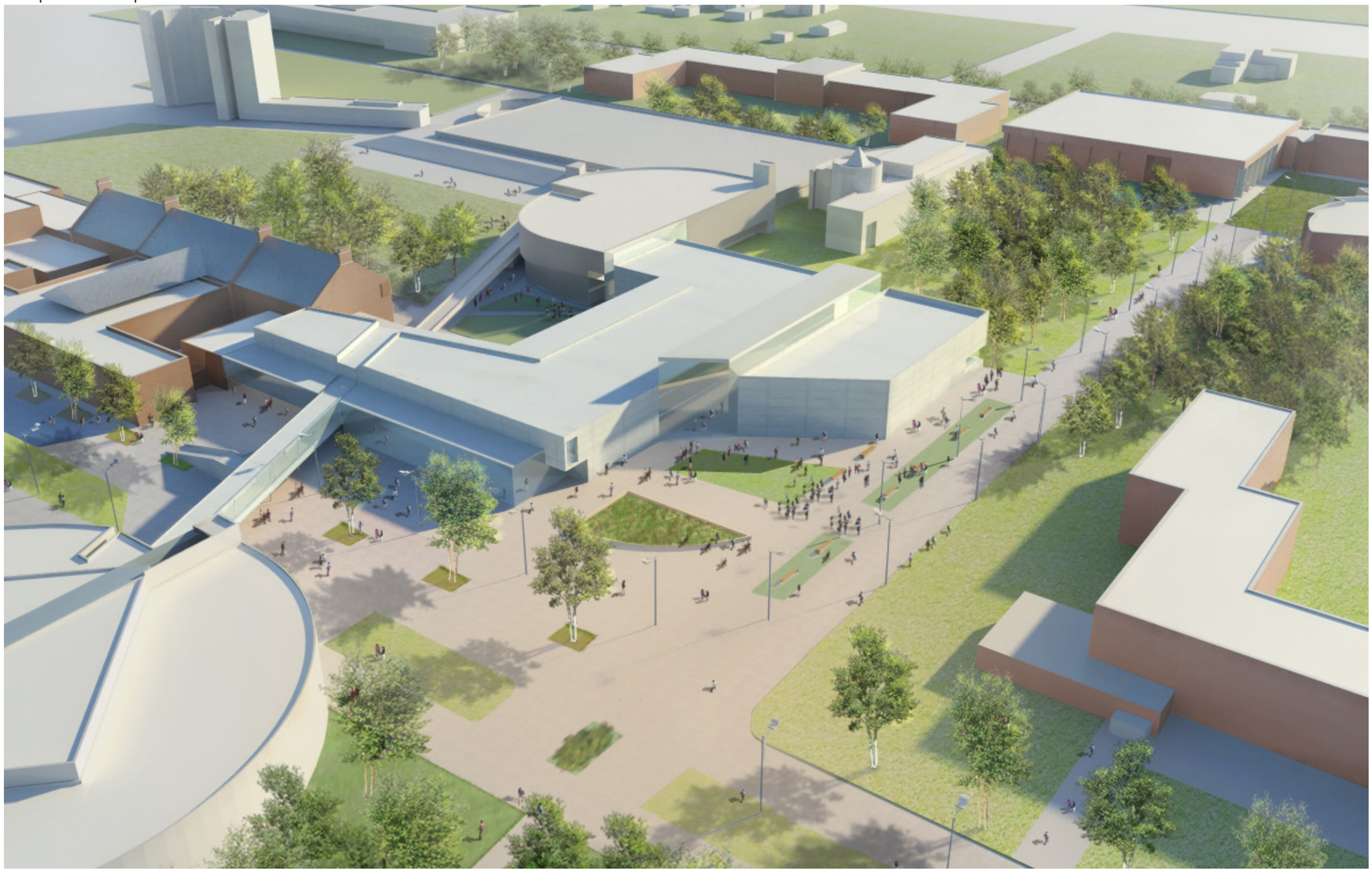
The proposed location for an addition is at the southeast corner of Jewett Hall. This location suggests a partial demolition at the existing lecture hall and perhaps farther to the back of the building. The area demolished would also include the existing main entrance, to be replaced by a more attractive, current design with more visual interest. The location of the addition allows the existing parking lot at Jewett Hall to remain, and concentrates new space along the border of the Science Quad. However, the addition would be also visible from the Old Main Drive approach. In the future, the parking lot and the remainder of Science Drive could be eliminated and replaced with a large plaza at the addition's entrance.




The importance of the Jewett Site is illustrated by its presence in the center of the 3 principal student service facilities:  The Williams Center, University Commons and Reed Library, as well as serving as an important edge to the Science Quad.

The existing façade of Jewett Hall with its surface parking lot in the foreground.  The building makes a less than memorable first impression to the main campus and has neither the distinct expression of the Pei-Cobb architecture nor the historical character of older buildings such as Mason Hall and Fenton Hall.

Proposed Replacement of Jewett Hall - OPTION 3



A conceptual rendering of a redeveloped Jewett Hall site as a new student services facility. The improvement presents the potential to reconstruct the spine to the Williams Center as an enclosed connector as well as the opportunity to link the facility directly to McEwen and Mason Hall.

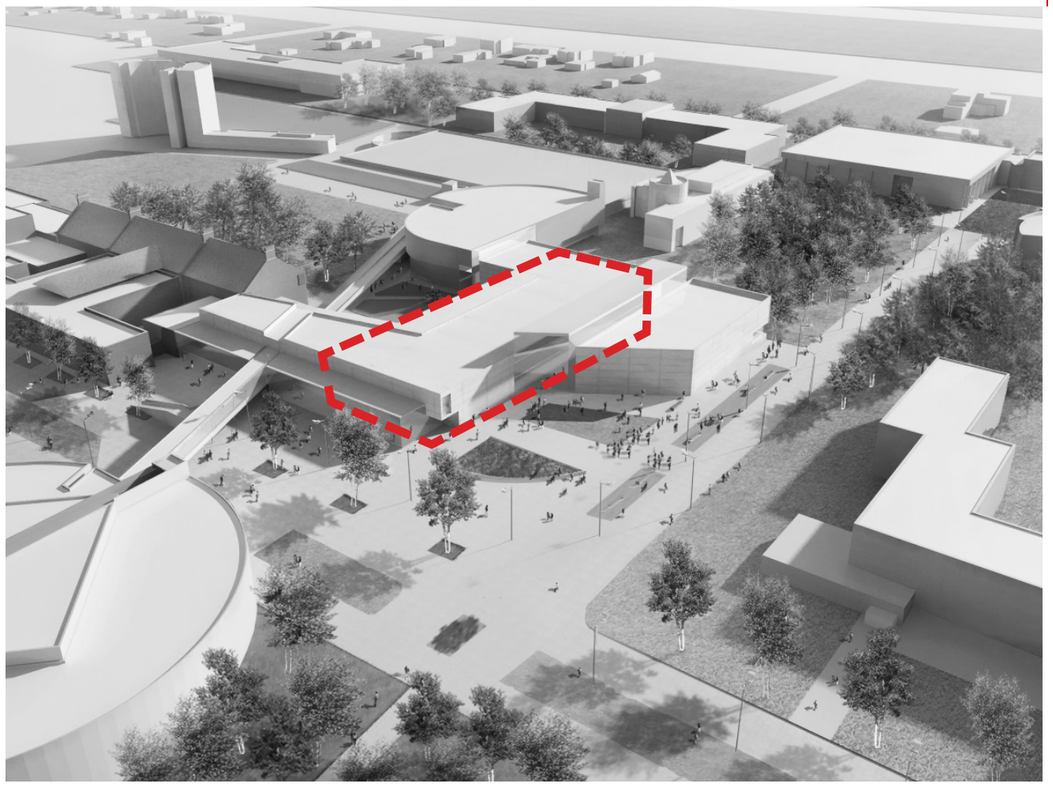
**Option 3: Replacement**

Recognizing the significance of the site, this option proposes full demolition of the existing building, to be replaced by a larger, purpose built facility. This facility would complement the Williams Center as a very active, public building with improved adjacent plaza spaces, providing student services functions that the Williams Center is currently unable to accommodate. Such programs include large meeting and governance space for both academic and extracurricular programs, technologically-equipped screening rooms and/or theatre spaces, and office spaces that are more publicly accessible. The new building could also provide additional informal gathering space that is now at a minimum on campus. Seen from many approaches to the campus, including from the Old Main Drive approach and the improved connection from the Admissions Welcome Center and Central Avenue, the new building would dramatically change the image of SUNY Fredonia and put the heart of the campus firmly on the map. In short, the site of Jewett Hall would be transformed into a dynamic, 24-hour space, with high visibility and improved student services offerings for the entire campus to enjoy.

Careful attention to the massing of a new building at the site of Jewett Hall presents opportunities for improvements to the pedestrian realm and connectivity between buildings and exterior spaces. SUNY Fredonia has already identified a need to rethink the Spine and its relationship to nearby buildings, especially near the Mason/Jewett/Williams Center connection. The new building incorporates this connection, along with a solution for the partial enclosure and replacement of the Spine that improves its appearance and usefulness. The building has the potential to provide interior links between the Williams Center, Mason Hall, and McEwen Hall, completing the "coatless" connectivity that is an important goal of the future development of the campus. With a more substantial built connection to Mason Hall on the first level, the new building even has the potential to act as surge space during a renovation of Mason Hall. If carefully planned with attention to acoustics and humidity concerns, the new building could provide temporary performance, rehearsal, and practice spaces to the School of Music while Mason Hall facilities are offline. There are also opportunities for the new building to provide permanent spaces for Music to accommodate projected growth needs for the department.

The facility is proposed to occupy approximately 100,000 gsf over two stories, with several double-height atrium spaces and some high ceilinged lecture and/or theatre venues. The program of the building will require further study, but it is suggested that it be considered not exclusively for student services uses, but that it also contain some scheduled space for general use instruction. Dedicated space for the sciences could also be provided, but should be located at the eastern side of the plan to address the Science Quad. This instructional space would serve as a replacement for the existing Jewett Hall Lecture room 101 which is used extensively by the sciences. Site studies show that a potential 4,000 gsf of office space is possible. When programming this facility, special attention to the location of public spaces such as lounges, informal study areas, cafes, and atrium spaces is of utmost importance to maximizing visibility of the building and the activity within it.

A new building on this prominent site has the potential to facilitate many of the development principles that have been outlined earlier in this chapter. Though demolition of an existing building requires more planning than building on open land, the recognition of the strategic location of the site makes it a strong candidate for a substantial amount of new construction. Building within the campus core, at its heart, makes strides towards creating even more density of activity and built program where pedestrian activity is most prevalent.



A massing model of a potential new facility with an outline of the footprint of the existing Jewett Hall.

A concept sketch showing a new entrance addition to Thompson Hall. By adding to the corner, the natural pedestrian approach to the building is formalized creating an opportunity to transform the character of the facility and its relationship to the main campus.

The existing approach to Thompson Hall from the main quad. The building presents an austere, blank façade with most foot traffic entering through a secondary entrance adjacent to the loading dock.

A recent conversion of an under-utilized student lounge as a FSA operated venue. Modest interior improvements and the introduction of vending were a response to the lack of common social space for a facility that houses the College's largest population of students and faculty. An entry addition presents an opportunity to further contribute to this need and expand the potential of the café functions.

## Thompson Hall Improvements

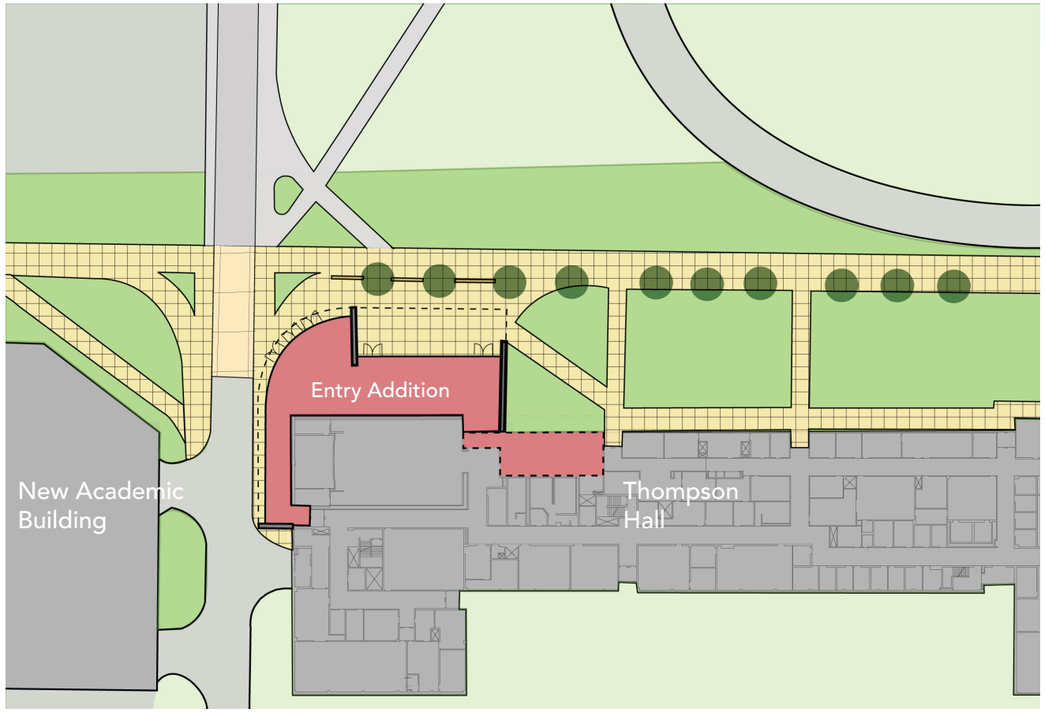
Thompson Hall houses the majority of academic programs and instruction for SUNY Fredonia, and has been successfully accommodating more and more students and programs with few alterations to the existing spaces. Over time, the building has become crowded as instructional space needs have eliminated offices on the building's perimeter, relocating them to former storage spaces at the windowless core of the floor plan. Departmental reading rooms and meeting spaces have all but been eliminated, save a few exceptions, and student lounge and gathering space has been slowly taken up by conference rooms, offices, and classrooms. Thompson Hall is the home of several of SUNY Fredonia's key programs, among them the entire College of Education and School of Business. These important programs and others are indistinguishable from each other and have very low visibility in the building's dark and confusing corridors. The many issues related to the quality of space at Thompson Hall warrants a study of its interior, and a strategy for alleviating some of the pressures on space by building new space elsewhere. Because of the intense usage of the building, Thompson Hall improvements will have to be planned carefully as phased renovations, taking advantage of backfill opportunities for vacated space.

One such backfill opportunity exists with the construction of the new day care facility elsewhere on campus. This small area at the first floor of north wing of Thompson Hall was fully vacated and made available in 2010. A program study for the space has not been completed, although logical candidates include the Communications Disorders and Sciences and the College of Education, both nearby and both in need of additional space. Communications Disorders and Sciences has already created a proposal for use of the space for clinical purposes, with additional observation facilities that are separated from other building uses. The College of Education is in need of space for clinical purposes as well, though if it were to occupy all or part of the space more detailed study of priorities for additional space is required. In either case, opportunities exist for an improved entrance, either entirely separate from other Thompson Hall entrances or in concert with them, depending on function. Such an entrance could provide greater visibility to the functions within, which are often used by visitors to the campus.

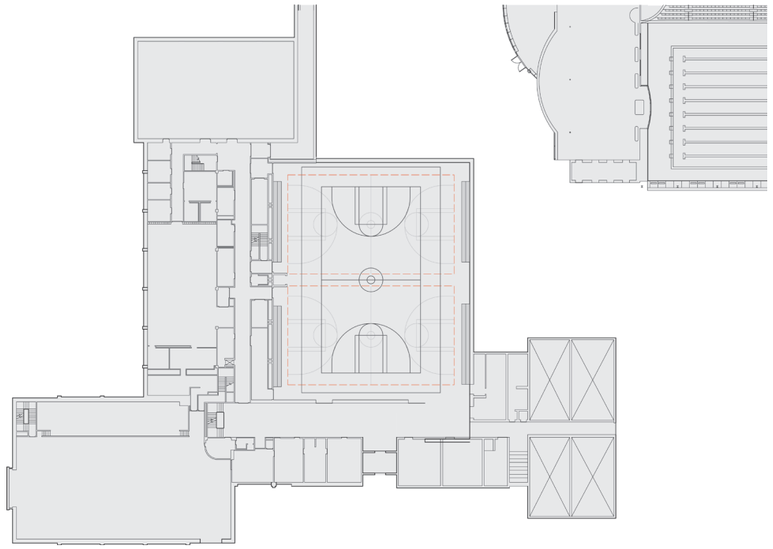
In the near term, entrance improvements to Thompson Hall are small interventions that can dramatically transform the perception of the building. Currently, most students access the building from the southern entrance, directly adjacent to the loading area. This uninviting entrance is indistinguishable from other entrances, is too small with only a single door, and has very little lobby space beyond it for orientation to the confusing floor plan of the building. It is also accessed by several steps up to the first level, requiring handicapped students to enter elsewhere. Because the pedestrian approach to Thompson Hall is well-established, a modest addition at this corner (approximately 5,300 sf) as recommended by the concept alternatives can solve a number of the building's issues with entry and identity without affecting interior space, allowing the building to continue to operate while improvements are made.

The proposed addition keeps the loading areas and vehicular access to Maytum Hall's parking lot intact, while creating a lobby for informal gathering, study, and breakout space from the lecture hall at this level. The lobby extends along the front face of the building, stretching north to encompass an additional entrance to Thompson Hall. In this way, the lobby directs foot traffic into the existing building from multiple points, eliminating bottlenecks at tight corners and providing relief space during busy times of day. By extending the addition northward, it also takes advantage of Thompson W103, a formerly under-utilized space which was recently converted to an FSA operated facility with vending and some prepared food. With modest renovations, this space could become a café supporting the new lobby, a program present in the majority of other buildings on campus. An addition to Thompson Hall at its southwest corner will be a welcome change to the approach and interior circulation of this major academic building. It will also activate the northern terminus of the well-used north-south corridor extending from Symphony Circle to the new Sciences Complex.

Given the population of Thompson Hall, and the lack of common, social spaces in the building, a new entry addition could also combine an expanded Cafe operation in W103, similar in scale to other FSA facilities within Academic buildings.



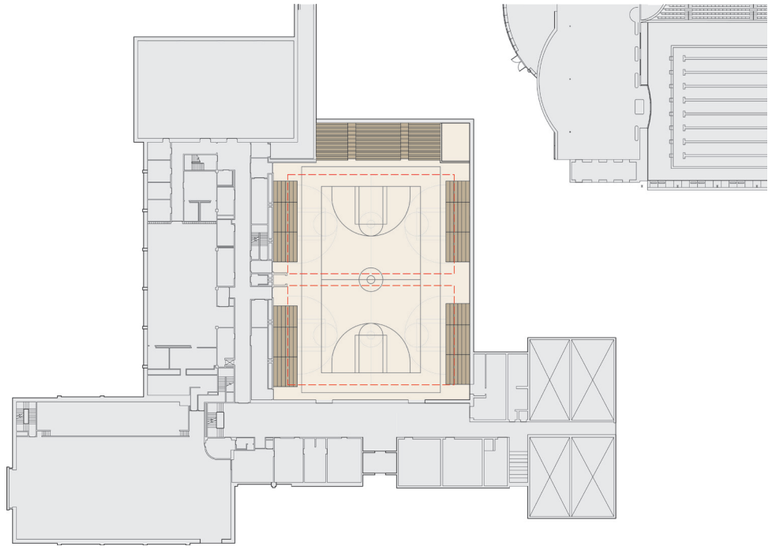

A site plan of the Thompson Hall entry addition maintaining vehicular access to the Maytum Hall loading dock and parking lot. A modest intervention has the potential to improve accessibility to the building and the adjacent lecture hall, and provide much needed common, student social space for the building.



## EXISTING PLAN

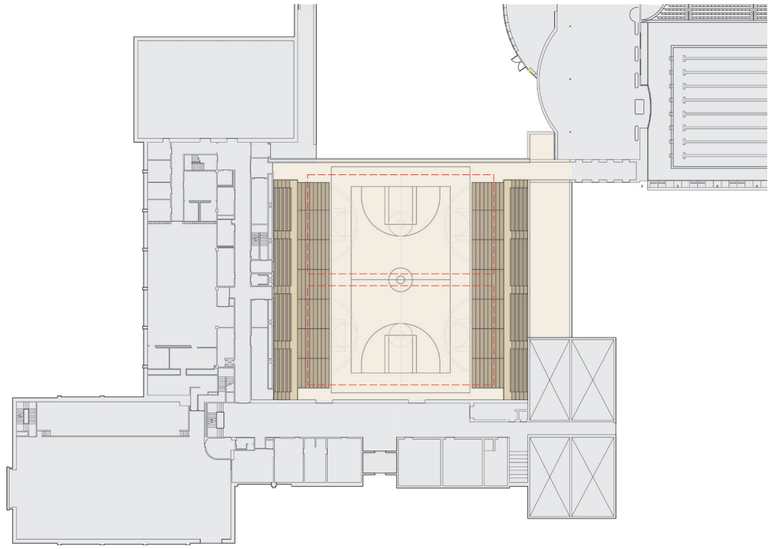
The existing plan of the Dods gym and its 750 seat bleacher capacity.

The existing Dods gym does not have sufficient capacity for basketball and volleyball competition requiring games to be played on the rubber floor of the Steele Field House.



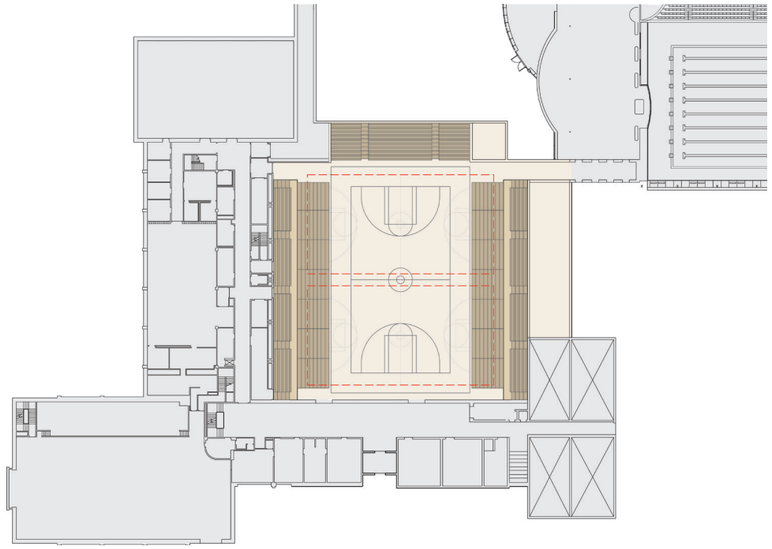
## OPTION 1

Option 1 explores the potential for a simple, expanded bleacher addition through the west wall of the gym providing an additional 350 seats, but less than ideal sight lines.



## OPTION 2

Option 2 proposes to demolish and reconstruct the gym super structure and build a larger long-span facility a 1,600 seat capacity as well as opportunities for new team rooms and support space. The expanded footprint of Option 2 also enables a connection to the Natatorium lobby and function spaces creating greater opportunities for Dods Gym events, improved visibility and better access.



## OPTION 3

Option 3 proposes to demolish and reconstruct the gym super structure and build a larger long-span facility with a 2,100 seat capacity with additional bleachers at the end wall of the court. This expanded footprint also creates opportunities for new team rooms and support space and enables a connection to the Natatorium lobby and function spaces. Both Option 2 and 3 require utilizing a small amount of existing core space adjacent to the racquetball courts.

## Dods Hall Renovations: Fitness Center and Basketball Venue

Dods Hall has been the hub of athletics and recreation since its construction in 1963. Over time it has received several additions and renovations that have compromised its efficiency and many of its facilities are outdated, and fail to meet requirements of Division III athletics. Two specific issues that have been identified by SUNY Fredonia and the Facilities Master Plan for improvement by 2023 are the addition of an accessible fitness center and renovations to provide an acceptable basketball venue for at least 1,000 seats.

The Dods Hall Fitness Center improvement has been a priority of the student body for some time, complete with a conceptual design for the renovation of the now-filled old pool area of the building. The existing fitness center at the building's lower level is too small to meet the needs of the student population, and is jointly scheduled with athletics programs, limiting its availability. A new fitness center in the old pool is an optimal location, at the main level of Dods Hall adjacent to its main entrance. This will provide a highly visible and accessible location for the new facility. The existing fitness center will be used exclusively by student athletes and will help overcome the scheduling conflicts that exist in the current undersized facility. The proposal to create openings in the façade creates a new point of interest on Varsity Drive that would be visible during day and nighttime hours, activating this north-south corridor.

Additionally, Dods Hall's gymnasium has been identified for renovation in order to create a Division III basketball facility to seat a larger number of spectators than its current capacity of 750. Changes to the configuration of the bleachers for adequate walk-off space and room for practice courts are necessary. An expansion of the Gym seating capacity would create a much needed Basketball and Volleyball facility with appropriate wood flooring. Because of seating limitations in the existing Gym, both sports currently use the Steele Field House for competition. This facility has a rubber flooring surface which is not ideal for Basketball. The need for the multi-purpose rubber flooring to accommodate track and field makes it infeasible to add a wood floor for Basketball in the Field House, making an expanded Dods Gym an ideal solution. Three options for the reconfiguration of the Dods Hall gymnasium are proposed:

**Option 1: Modest Extension, 1,100 seats**

The first option expands one side of the Dods Hall gymnasium to accommodate additional retractable bleachers for events but retains the super-structure of the building. Similar to the way that the existing gym is used, retractable bleachers would be used at each side of the main court, though the proposed scheme suggests a replacement of the existing bleachers to allow adequate walk-off space around the main court. The expanded bleachers in this scenario have poor sight lines in several locations.

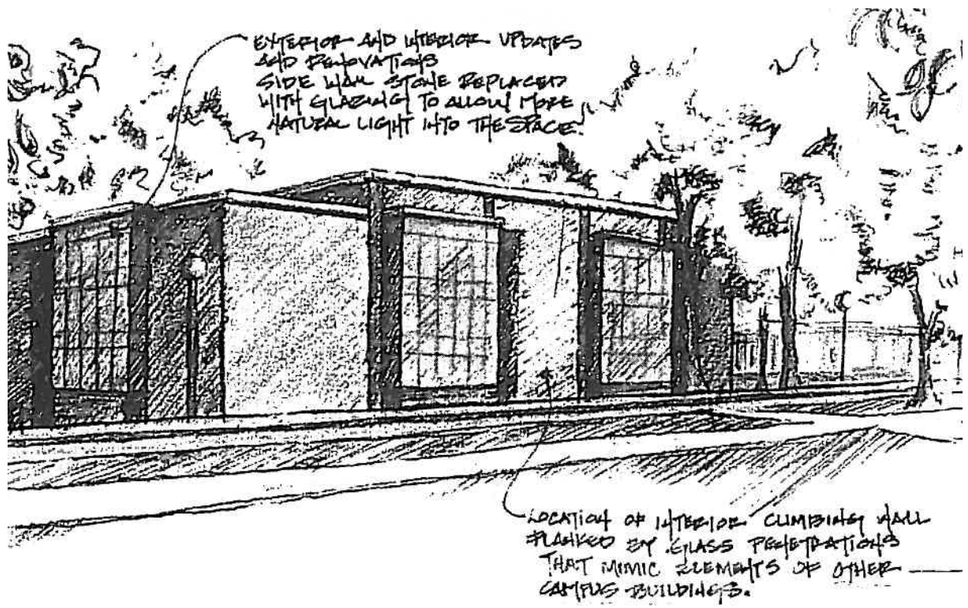
**Option 2: Side Expansion, 1,625 seats**

This option involves the expansion of the existing gym at the sides to accommodate additional bleachers at a second level. This option is more substantial in scope, as it involves shifting the center of the main court to the north, and removing a few spaces in the existing building to accommodate the enlarged gym footprint. A connection to the Natatorium is made at one corner of the gym, and space is provided behind the new bleachers for team rooms and/or storage for the new facility. This alternative implies a complete demolition of the existing Dods Hall gym and replacement with new exterior walls.

**Option 3: Large Expansion, 2,125 seats**

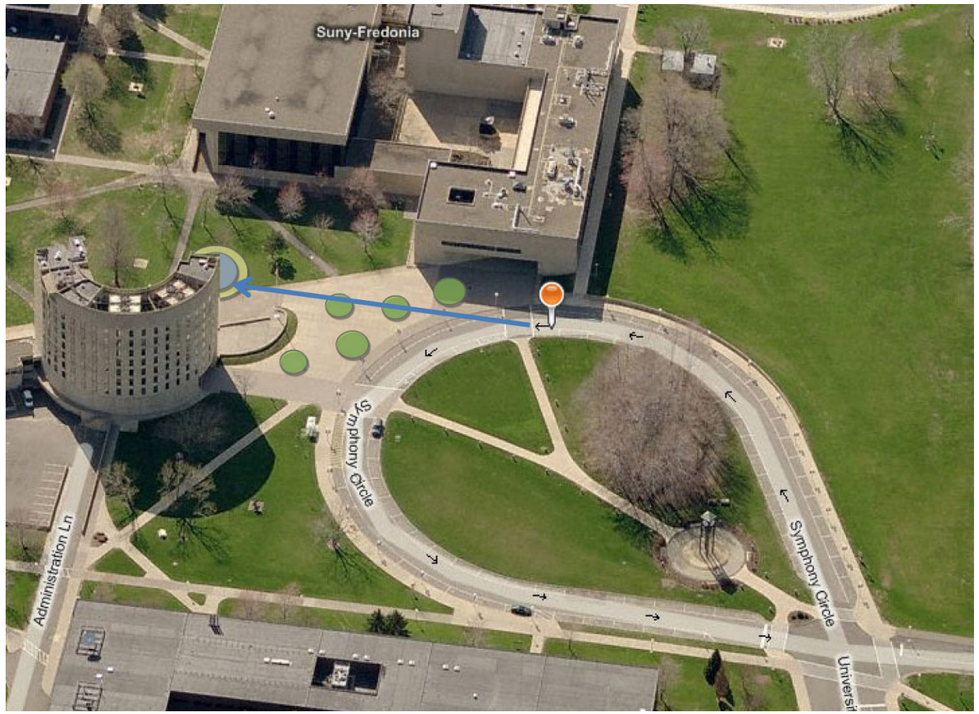
This option is the most ambitious, also requiring complete demolition of the existing gym. Its floor plan combines the first two options' bleacher configurations, adding a maximum number of seats to the facility by providing retractable bleachers on three sides of the main court, with the side bleachers over two levels. The connection to The Natatorium and additional space for team rooms is provided, as is potential access points from the upper story of Dods Hall.

The existing Dods Hall entrance with the volume of the gym beyond. A new gymnasium structure also presents an opportunity to improve the appearance of the facility's main entrance.




The proposed repurposing of the old pool to a student fitness center also presents an opportunity to introduce windows and other façade improvements that will enhance the building's presence on Varsity Drive.

## Symphony Circle Improvements




ISSUES

- The current plaza lacks life and is characterized by expansive impervious pavement
- A redeveloped Plaza presents an opportunity for a stronger Campus arrival and better visual connections to the Main Quad.
- A fountain is a potential opportunity to create a focal point for the plaza.

RECOMMENDATIONS

- Reduce the extent of the hardscope plaza by introducing green elements as well as seating and potentially additional sculptural elements, and/or a fountain as an entrance focal point.

## Symphony Circle Plaza

The Symphony Circle Plaza extends between the Rockefeller Arts Center and Maytum Administration Building, at the north end of the Main Quadrangle. The wide concrete surface complements the sculptural massing of I.M. Pei's iconic buildings, however is an uninviting space and lacks human scale. A recently added colorful sculpture is a welcome, but insufficient, element of visual attraction. The plaza is uncomfortable: exposed to winds that funnel between the buildings, with no shade on sunny days.

However, the plaza is an important point of arrival for campus visitors, particularly as a forecourt to the Rockefeller Arts Center. Modest interventions could create excellent opportunities to improve the plaza as well as provide a more refined transition from the landscape on the Main Quad.

Greening the plaza will go a long way towards improving the micro-climate and environmental comfort. Adding places to sit down and additional sculptures will animate the space and attract greater usage. The design of the additional green elements should not ignore the reality of the climate, with the need for frequent snow removal. Lower-maintenance types of landscaping are preferred, such as native shrubs and grasses that minimize the need for irrigation.

A special landscape feature integrated with the plaza could be a larger-scale fountain, which would be a focal point of the plaza and the Quad as well. The fountain design should be attractive year-round, even when the water feature is turned off; avoiding water over-spray onto paving should be another consideration. An attractive sitting area near the fountain could become a popular gathering spot for the students within the R.A.C, visitors to performing arts events and occupants of Maytum administration building.

One option for greening Symphony Circle Plaza could feature circular planted sitting areas, for a dynamic design that allows free circulation.

Another option for greening Symphony Circle Plaza could feature larger lawn panels, to reduce the extent of the paved plaza. The fountain would be the focal point and an attractive transition between the plaza and the Quad.

## Main Campus Quad Improvements


An aerial view of the Main Quad and the Symphony Circle Plaza. The verdant landscape of the quad is contrasted by the expansive impervious surfaces of the plaza and the inhospitable concrete plinth along the base of Maytum Hall and Reed Library.

## Main Quad

Unlike the Science Quad with its extraordinary honey locust groves, which so strongly defines the character of SUNY Fredonia, the Main Quad is a more typical campus green with average informal tree planting, and crisscrossing paths that follow desire lines from building to building. The dominant visual elements are the grand stepped plinth of Reed Library, and the oversized, underutilized plaza at the bottom of the concrete steps. The Quad is essentially flat, but there are several handicapped accessibility problems: the main entrance to Reed is several steps below the Quad grade, the Maytum plateau is several steps above, and the strong desire line to the northeast, towards Thompson, is interrupted by the story-high Reed stepped plinth.

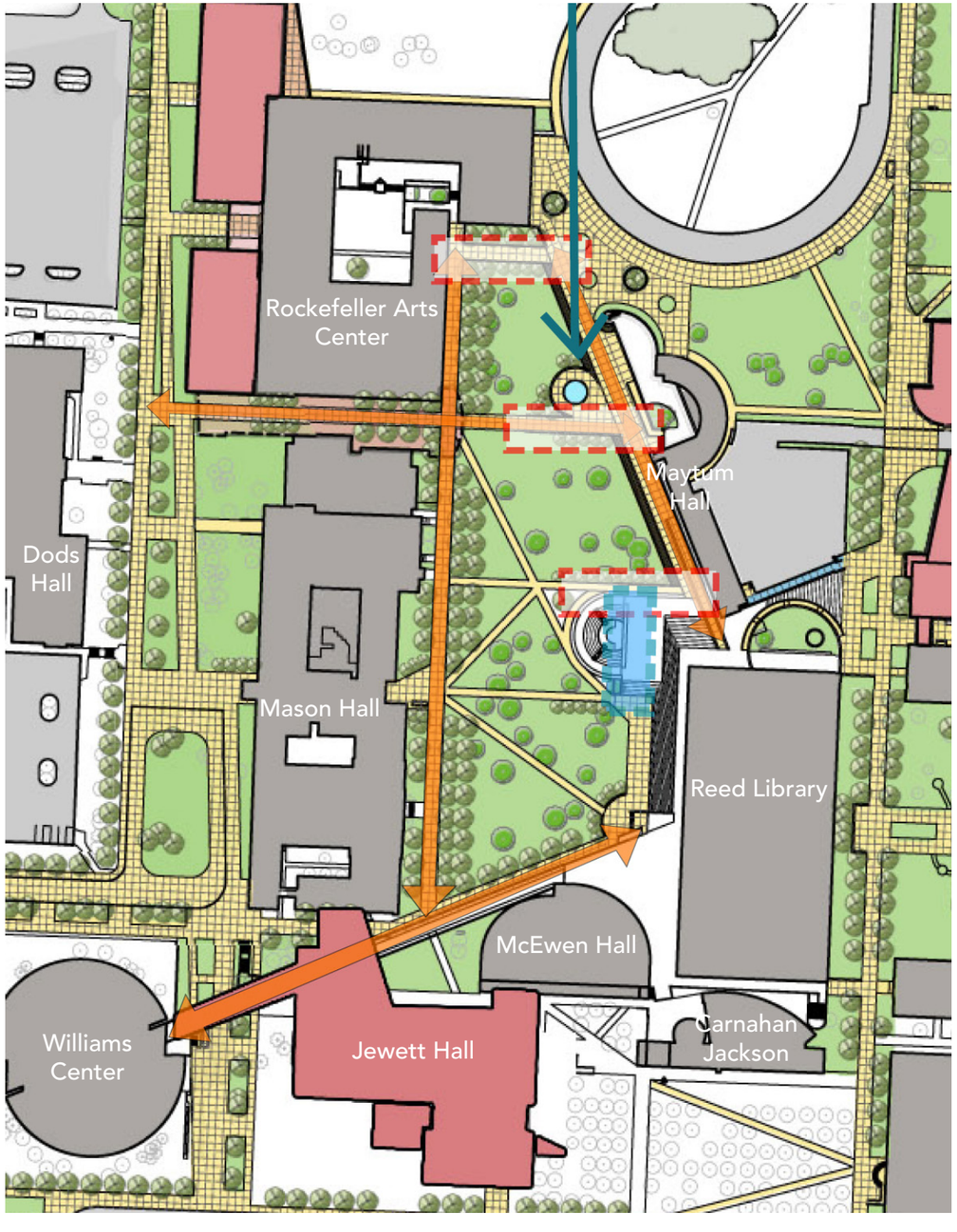
ISSUES

- Existing circulation lacks hierarchy
- Maytum plateau and Symphony Circle plaza are not ADA accessible
- Paving at bottom of Reed Steps is oversized and rarely used

RECOMMENDATIONS

- Create a new circulation scheme highlighting the primary connections
- Provide accessibility to Maytum terrace
- Utilize porous pavements, reduce extents of pavement
- Create sitting nodes, and distinctive areas to promote gathering and enhance the use of the Quad

## OPTION 1 - Quad Improvements




RECOMMENDATIONS

- Create a new circulation scheme highlighting the primary connections with pavement and new tree planting
- Maintain the Maytum terrace steps; provide accessibility by creating sloped walks
- Cut down wall at Amphitheater to open up
- Fountain  in front of Maytum

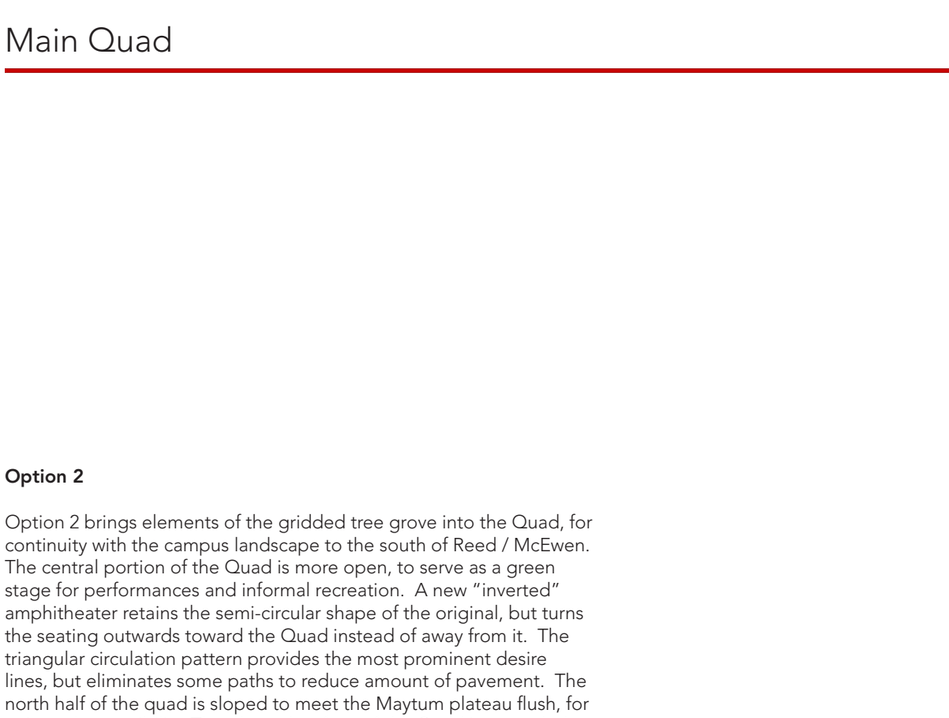
**Option 1**

This option creates a promenade along the west edge of the Quad, with orthogonal and diagonal secondary pathways.  From the formal west edge the landscape gradually becomes more informal to the east.  The Amphitheatre's surrounding walls are reduced, to open it up towards the Quad and the stepped plinth.  The paths in the north half of the Quad slope up to meet the Maytum plateau, but the existing Quad grade and the plateau steps remain; the raised paths create distinct outdoor rooms. The paved apron at the base of the Library steps is reduced in size and the Quad Landscape is extended toward the Library steps.

OPTION 1

**Option 2**

Option 2 brings elements of the gridded tree grove into the Quad, for continuity with the campus landscape to the south of Reed / McEwen. The central portion of the Quad is more open, to serve as a green stage for performances and informal recreation. A new "inverted" amphitheater retains the semi-circular shape of the original, but turns the seating outwards toward the Quad instead of away from it. The triangular circulation pattern provides the most prominent desire lines, but eliminates some paths to reduce amount of pavement. The north half of the quad is sloped to meet the Maytum plateau flush, for universal accessibility. The planted surface of the Quad is extended toward the base of the library steps to reduce the amount of impervious surface.

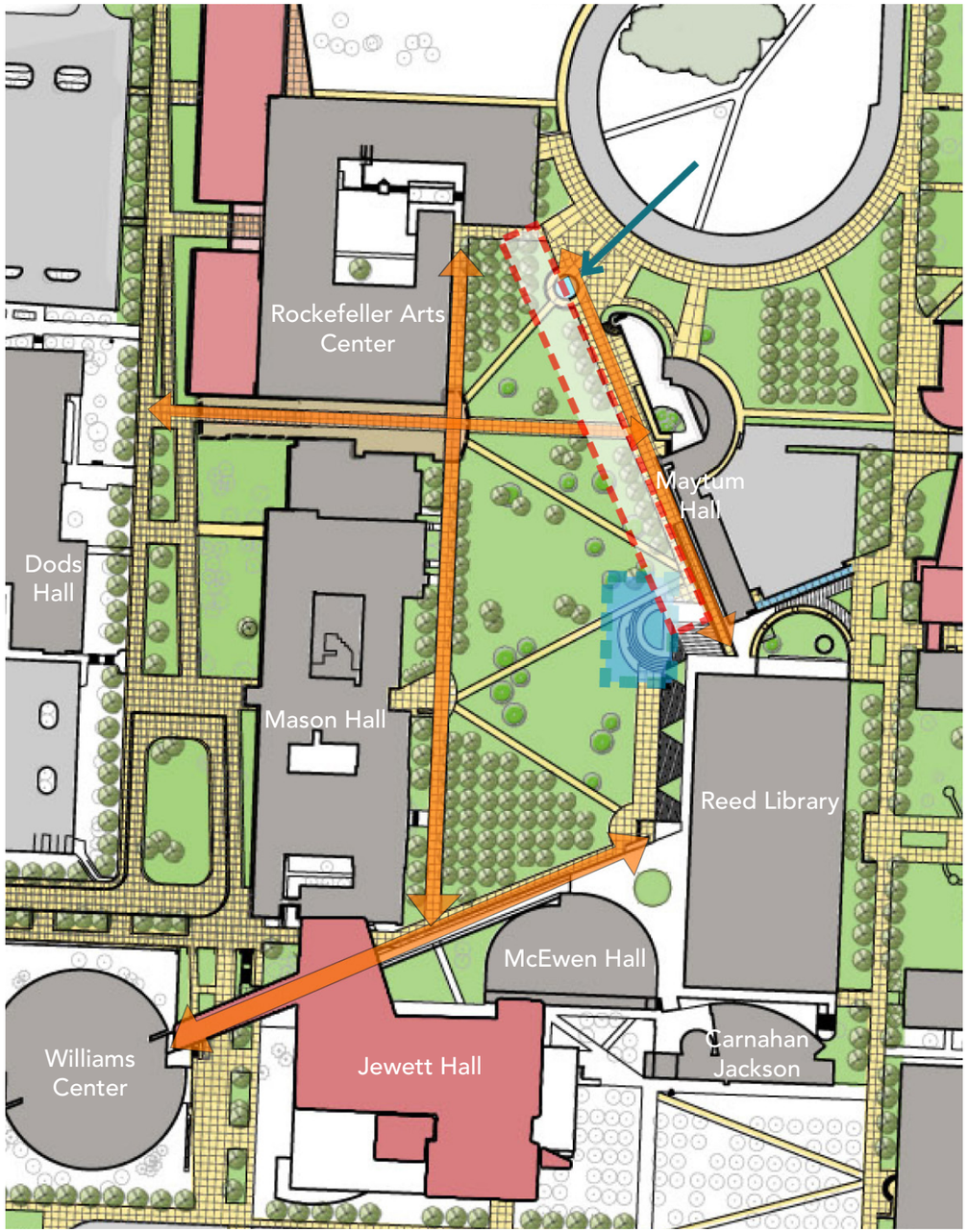


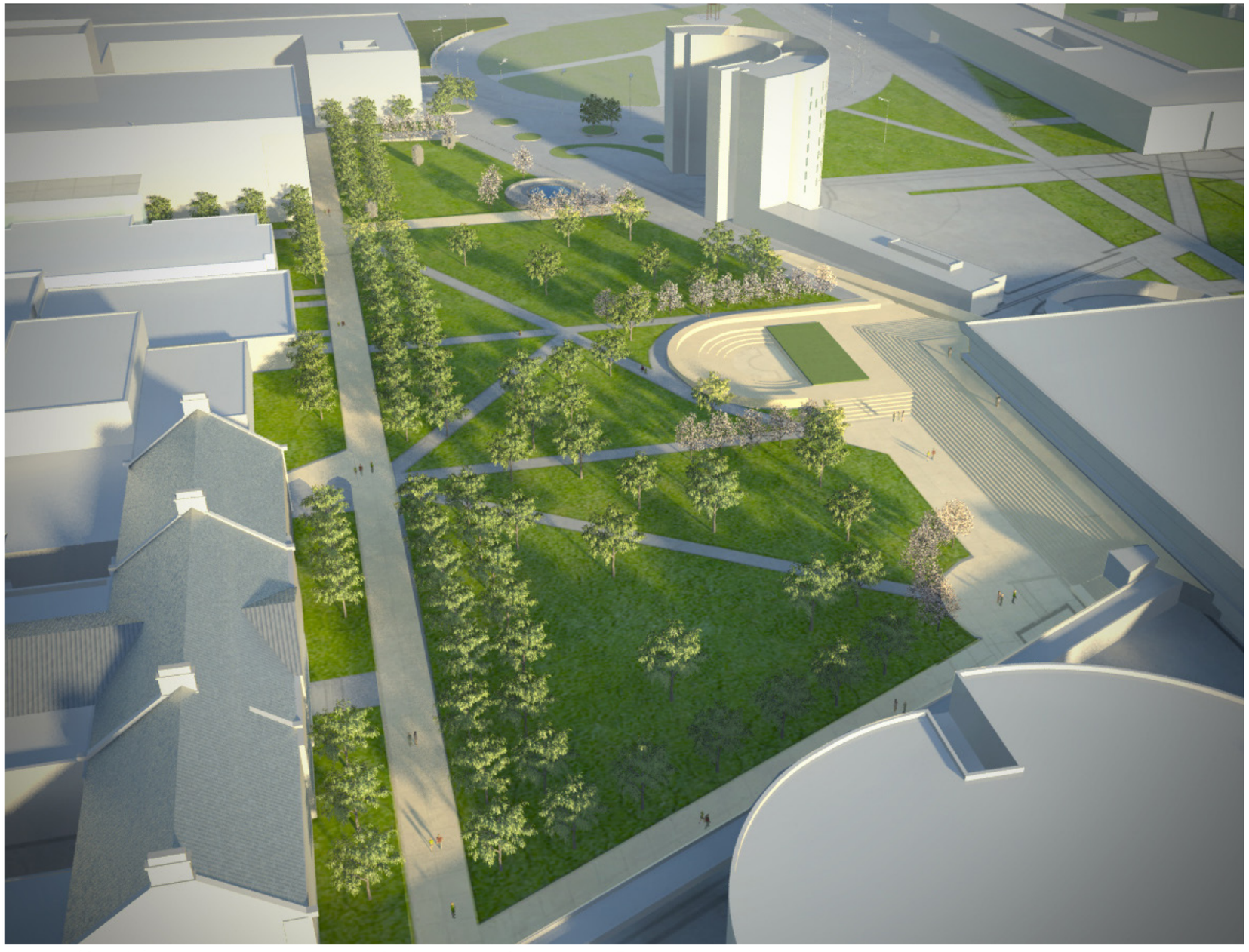
OPTION 2

RECOMMENDATIONS

- Create a new circulation scheme highlighting the primary connections with pavement and new tree planting
- Grade soil to meet Maytum terrace flush; paths at 5% slope max.
- New "Inverted Amphitheater" – facing the quad
- Fountain at Symphony Circle plaza
- Trees planted on a grid for continuity with rest of campus core

OPTION 2 - Quad Improvements





A rendering of Option 1 of proposed quad improvements, showing the Reed Library steps, the Spine, and access to Thompson Hall at the right

## Reed Steps, The Spine, Thompson Link

ISSUES

- A strong existing diagonal desire line – formalized by the elevated Spine, on the ground, and elevated
- Upper deck at Reed not ADA accessible from ground level
- The well-used tunnel link to Thompson Hall has hard to find entrances
- Outdoor amphitheater turns its back to Quad

The "Spine" is an iconic element of the Pei-Cobb Facilities Master Plan and continues to define a strong pedestrian desire line both on the ground plane and as an elevated connector to Williams, McEwen and the upper Library Plaza. Yet the physical conditions of the spine and the crossing of the upper Library entrance are significant challenges to the relevance of the structure today.

The Spine and the stepped plinth of Reed Library were major elements of the I.M. Pei Master Plan, and continue to be important elements of spatial organization on campus, although perhaps not entirely as envisioned by its creators. The elevated spine serves as a covered walkway directing foot traffic in the campus core. Its upper deck however is closed in winter; and it has lost some of its intent with the relocation of Reed's main entry to the lower level. Still the plaza at the terminus of the elevated Spine serves as one of main entrances for McEwen Hall.

The Spine exemplifies a strong diagonal circulation desire line that cuts across the campus core, from the southwest student residences, via the Williams Student Center, to the Reed Library, and beyond to Thompson Hall. The library edifice with its massive steps interrupts this diagonal, as the pedestrian must climb up one story to the library's upper plaza, then down towards Thompson Hall. This circulation segment is not ADA accessible. Adding the long, windy, snowy winters, the library steps are a daunting obstacle to site circulation.

.

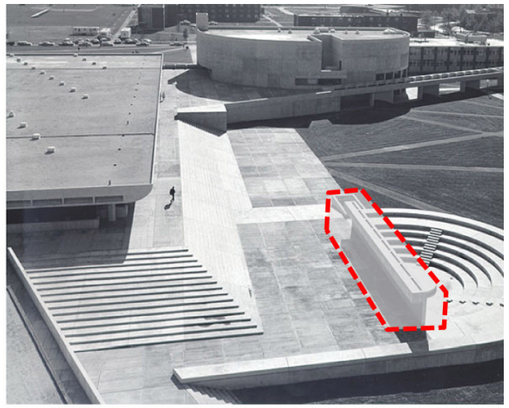
Many pedestrians choose an alternative route, a labyrinth-like tunnel underneath the library steps that enters on the lower level of the library and exits on a loading dock next to Maytum. To those that are new to campus, the existence of this tunnel may not be obvious, as its entrances are inconspicuous. Especially unattractive is the entrance tucked in a corner next to the loading dock.

Providing site ADA accessibility is an objective with high importance in improving the pedestrian environment. It appears possible to integrate ADA-compliant access to the upper plaza of Reed without compromising the integrity of I. M. Pei architectural composition. For instance, the long windowless wall and terrace between Maytum and Reed could comfortably accommodate a sloping path from the terrace up to the Reed upper plaza. Once there, an ADA ramp could hug the outside edge of the curved wall, which surrounds the sunken garden next to Reed, down to the at-grade level behind the Library. A 5-foot wide ramp would allow retaining the remaining width of the stairs which are part of the architectural concept. A more detailed study is required to determine the feasibility of these options.

The tunnel access under the library stairs deserves to be better presented, as it enriches the circulation possibilities, provides a comfortable connection during inclement weather, and is ADA accessible. Its entrances should be marked with clear, prominent signage. The entry next to the Maytum Hall's loading dock presents the greater aesthetic challenge. As explored in the New Academic Building studies, a covered glass canopy or enclosed, conditioned corridor would improve this condition aesthetically, as well as provide for a much more desirable pedestrian experience between the Library, Thompson Hall and Fenton Hall. The redevelopment of the Jewett site explores the potential to reconstruct and enclose a portion of the Spine between the Williams Center and the new building. The opportunity to physically connect to the south side of McEwen would establish a continuous, enclosed and accessible link between Williams and the Library.

Another aspect of the Reed steps and plaza is the user experience and comfort. These grand paved spaces compliment the architecture, but the scale feels overwhelming. Green elements have the potential to soften the hardscape. The upper plaza, a rooftop finished with concrete pavers on pedestals, could integrate a rooftop garden as an attractive open space feature. Its design should consider compatibility with the existing architecture. The Reed Stairs could also be "greened", to reduce the extents of paving and define more comfortably-scaled spaces, with the added benefit of reducing the areas that need to be shoveled in winter.

A simple intervention that could improve the visual experience of the amphitheater, is cutting down the high wall that separates it from the Reed steps.



RECOMMENDATIONS

- "Green" the terrace between Reed and McEwen Halls (extensive green roof type)
- Explore "greening" the Reed steps
- Make Amphiteater more visually accessible by removing its stage wall

RECOMENDATIONS

- An accessible ramp from the top of the Maytum Hall steps to the top of the library steps;
- A curving accessible ramp from the top of the library steps down to grade to improve access across the quad to Thompson and Fenton Halls;
- The potential to improve the visibility and quality of the connection between the Maytum/Library tunnel with either a canopy structure, lighting or ornamental railings that mark the commonly used path.
- Beyond a canopy structure, there is also an opportunity to enclose and condition the space as well as extend it to a below-grade connection to a new academic facility on the site between Thompson and Fenton Halls.

## North-South Corridor: Thompson Hall to Science Quad

One of the existing important campus corridors is the path that extends from Science Quad to Symphony Circle, running north-south between the back side of Reed Library, Fenton Hall and Thompson Hall. The main entrances to Houghton, Fenton, and Thompson Hall, as well as secondary entrances to Maytum are accessed from this corridor. Reed Library overlooks the path, but has no direct entrances from it. The diagonal desire line from the Spine, across (or under) the library steps, towards Thompson, intersects the corridor near its mid-length.

At each end of the corridor presently there are parking lots, however, with the upcoming construction of the new Science and Technology Center, the corridor will gain a strong terminus on the Science Quad. Another proposed building along this corridor is an academic building between Thompson and Fenton Hall. The new building will densify the eastern edge of the campus core, raising the prominence of this corridor in the campus fabric.

This existing corridor needs relatively modest site interventions to enhance its environment and underscore its importance. These include making the paved path wider so that it stands out in the spatial hierarchy; line the path with shade trees, new light fixtures, benches and seat walls at key areas along its length to create nodes for rest or gathering. Of special consideration is the present gravel bed that extends between Reed Library and the paved path; simply replacing the gravel with vegetation would be an immense improvement, and placing sculptures to create a sense of a sculpture garden would further elevate the appeal of this corridor as well as provide an elegant visual backdrop when viewed from inside the library.

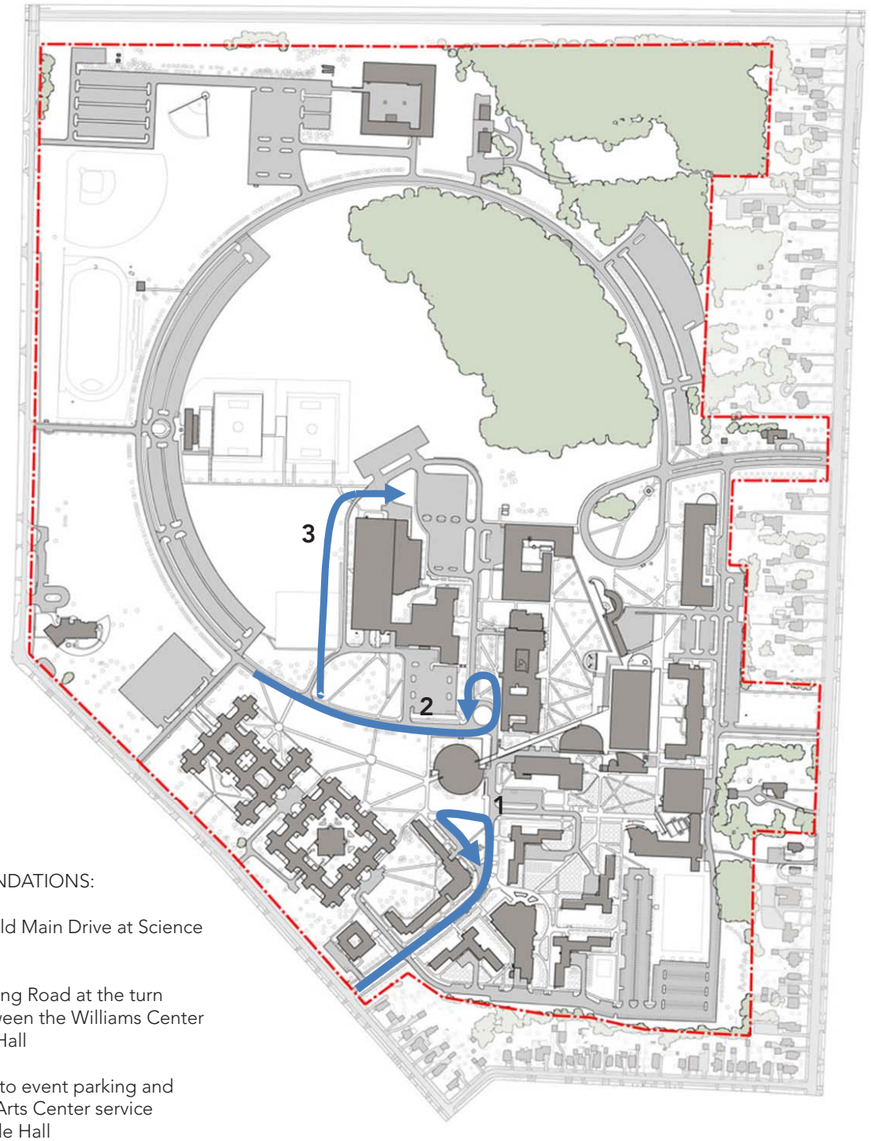
ISSUES

- Already a strong linear connection and well-traveled corridor
- Gravel bed next to Reed Library is a visual detractor and completely unused space in a prominent location
- Lacks pedestrian amenities
- Currently has no defined terminal destinations

RECOMENDATIONS

- Enhance connection with wider pavement and a tree allée
- Explore the potential to create a Landscape sculpture garden along Reed facade
- Benches, seat walls, new lighting, sculpture, and landscape for visual interest
- New Science and Technology Center as the terminus; proposed academic building and a new Thompson entry addition will create a strong visual terminus at the opposite end.


Before and After: new paving, tree planting, site lighting, and pedestrian amenities would greatly improve the pedestrian experience of the already strong N-S corridor from the Science Quad to Symphony Circle.

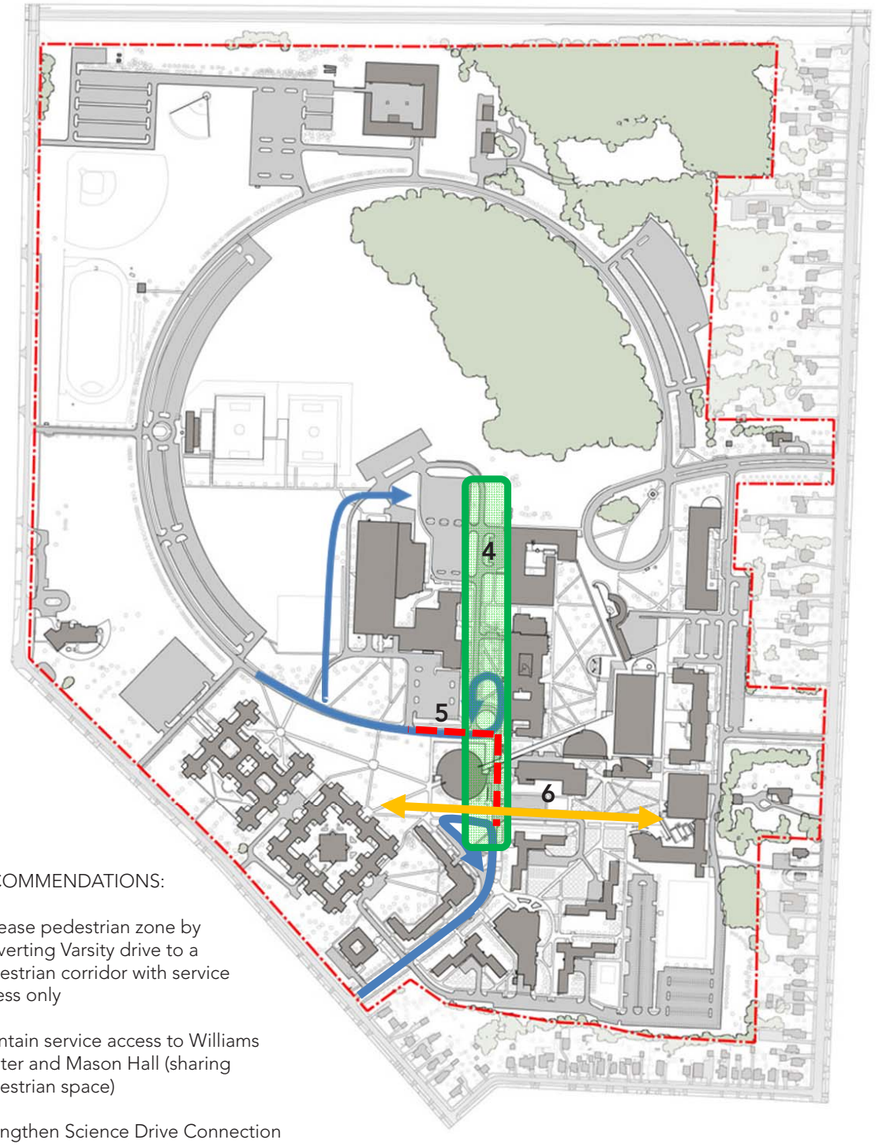



RECOMMENDATIONS:

**1** Terminate Old Main Drive at Science Drive

**2** Terminate Ring Road at the turn around between the Williams Center and Mason Hall

**3** New access to event parking and Rockefeller Arts Center service behind Steele Hall

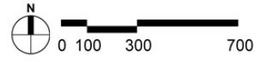



RECOMMENDATIONS:

**4** Increase pedestrian zone by converting Varsity drive to a pedestrian corridor with service access only

**5** Maintain service access to Williams Center and Mason Hall (sharing pedestrian space)

**6** Strengthen Science Drive Connection as a pedestrian path with service access only



## North-South Corridor: Old Main Drive / Varsity Drive

The area that holds the greatest potential for transformation of the campus core is the north-south corridor that extends from the University Commons to the south, to the Rockefeller Arts Center to the north. The corridor is defined by the northern segment of Old Main Drive and Varsity Drive. Alumni Hall, Jewett Hall, Williams Student Center, Mason, Dods, and Steele Hall face this corridor. The road infrastructure in this corridor provides vehicular access to the parking lot in front of Steele as well as main service access for Williams and the RAC. The circular intersection between Old Main Drive, Ring Road and Varsity Drive is also the drop-off for Mason Hall and a stop for the campus shuttle.

The greatest conflict between vehicular and pedestrian traffic within the campus core occurs at the ground-level intersection of this corridor and the Spine. The massive concrete supports of the spine impair the visibility at the pedestrian crossing. The loading dock of the Williams Center, located adjacent to this crossing, further increases the traffic conflict by adding service vehicles into the mix.

A review of the campus circulation in this area reveals that the existing vehicular access north of Williams Center is primarily a convenience rather than necessity. If the main objective of Varsity Drive is to access the parking lot at Steele Hall, or the RAC service area, an alternate access exists from Ring Road behind Steele Hall. The removal of Varsity Drive would be an opportunity for creating a pedestrian environment, for a more unified pedestrian core with unimpeded connections between the residential, academic, and recreational facilities. This intervention would also diminish the vehicular traffic on Old Main Drive as the college's busiest road, diverting some of its traffic to Park Drive.

The closing of Varsity Drive to traffic involves three coordinated interventions.

1. **Terminate Old Main Drive at Science Drive.** This would maintain vehicular access to the University Police which is located in Gregory Hall. A turnaround at the end is necessary to revert the traffic back towards Temple Street, particularly important for short-term visitors to University Commons.

2. **Terminate Ring Road at the Mason / William traffic Circle**. This will require modest improvements to the existing infrastructure, such as a potential elongation of the circle for a narrower drop-off alignment, new signage and striping.

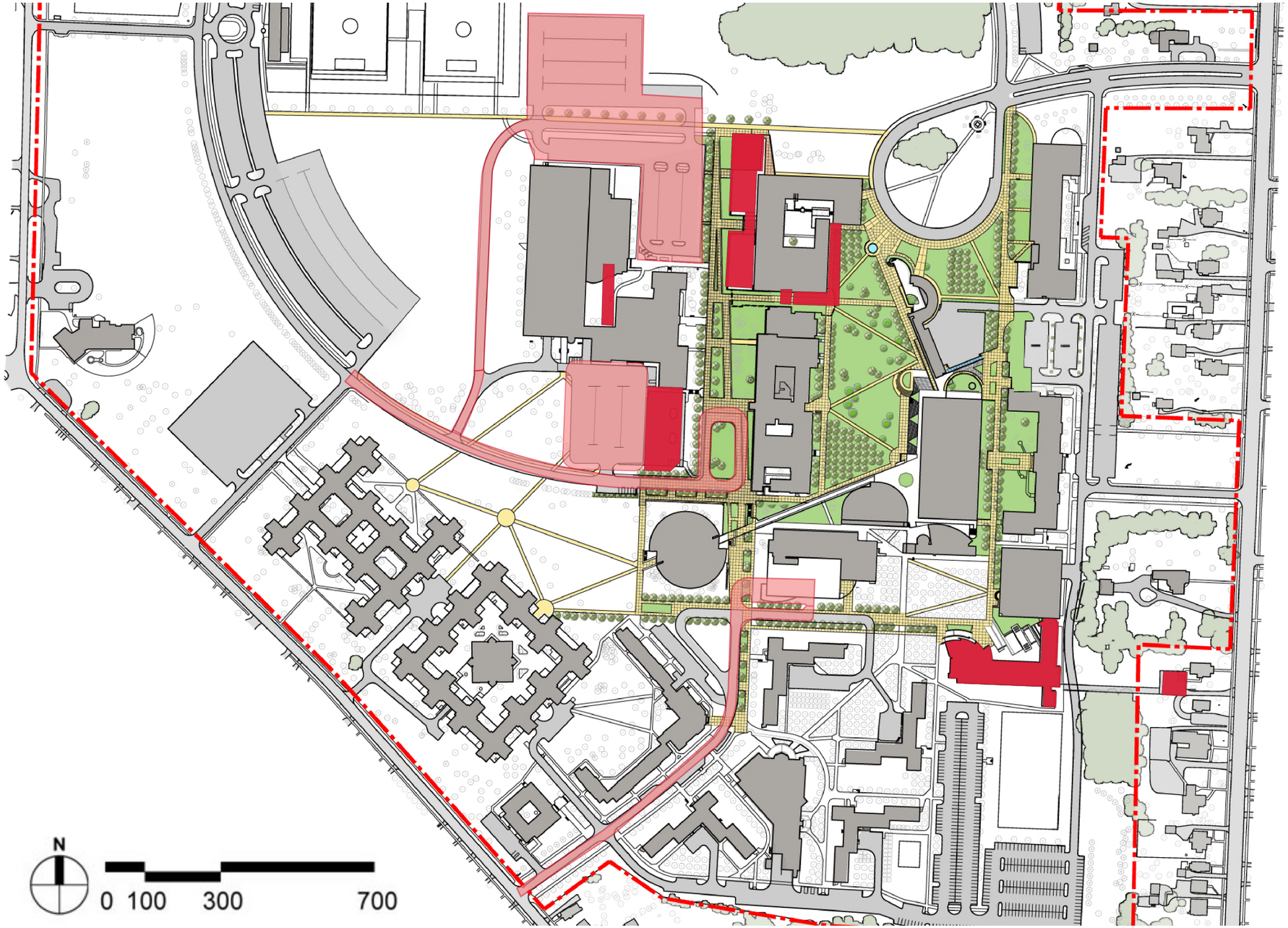
3. **New access to Steele Hall parking and RAC service, west of Steele Hall.** There is already a service road segment in this location, but it is uncomfortably close to the building structure; so a new road connection is recommended, further away from Steele.

4. **Increase the pedestrian zone.** Once automobile traffic is diverted from Varsity Road, there is an opportunity to make this space into a new pedestrian zone. The new promenade is a good candidate for introducing low-impact development practices, such as rain gardens and permeable paving, to reduce the runoff and increase infiltration of the storm water.

5. **Maintain service access to the Williams Center and Mason Hall (sharing pedestrian space).** While the everyday vehicular access will be removed, the new design should allow limited service access of the buildings, and emergency access. The width of paved paths and the configuration of green areas should be designed with the dimensions and turning radii of service and emergency vehicles in mind. Handicapped parking is also necessary within 200-feet of the Williams Center entrance, and it could be provided along the Ring Road.

6. **Strengthen Science Drive Connection**. The ultimate goal is to convert Science Drive into a pedestrian zone. That would require relocating existing campus services, which currently need vehicular and handicap parking access, from Alumni and Nixon Hall. In the interim, Science Drive may continue as a driveway with a very strong pedestrian presence. There are three alternatives in the development of the Science Drive / Old Main Road intersection, which correspond to the three Facilities Master Plan alternatives.

## ALTERNATIVE A




Alternative A: Jewett Hall is renovated, with a new building proposed in the Dods Hall lot. Old Main Drive terminus is in the Jewett Hall parking lot; Science Drive continues to serve Alumni Hall and Nixon parking lots.

### Alternative A

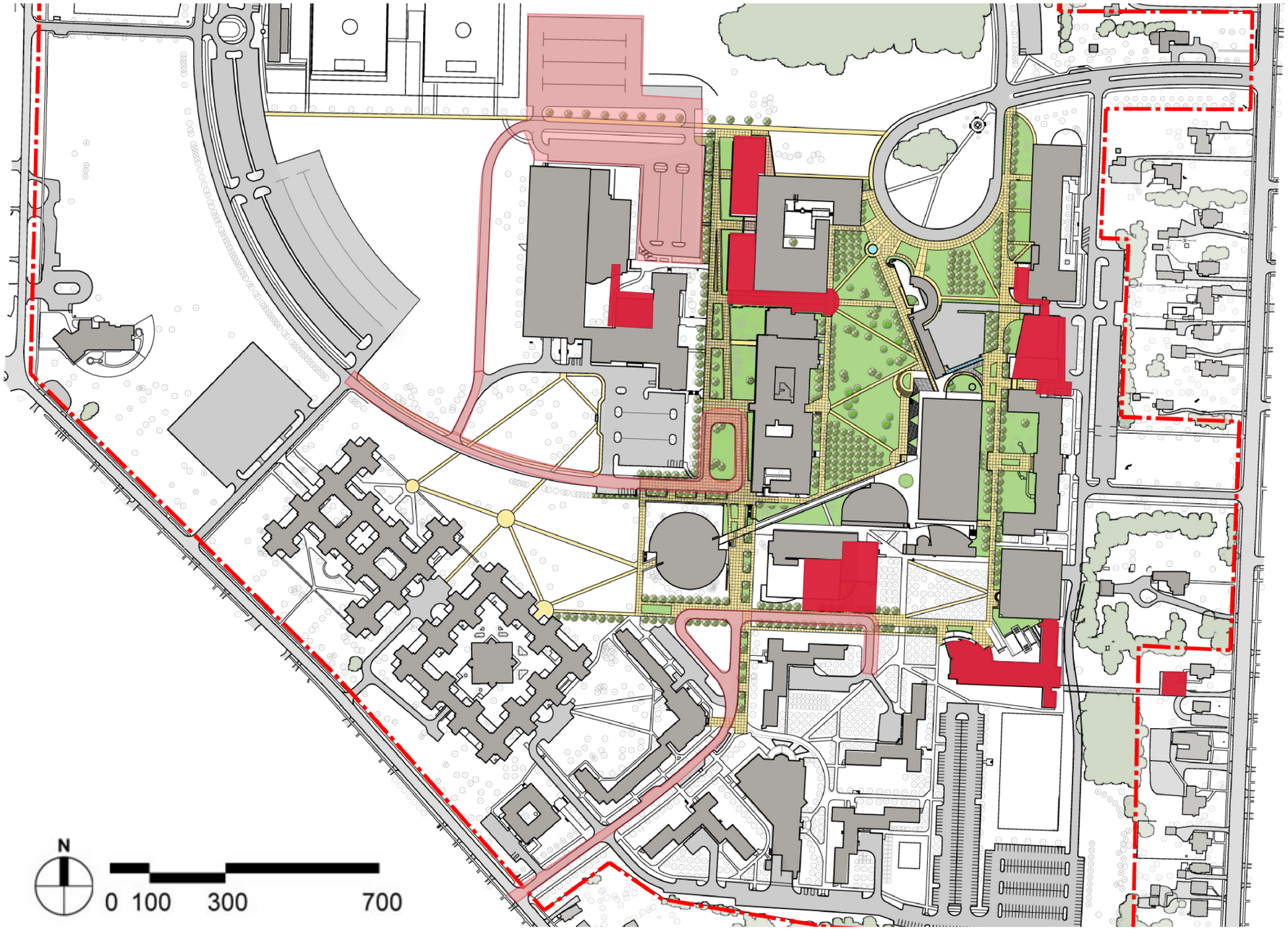
Alternative A proposed a new student service building on the Dods Hall parking lot in conjunction with a renovated Jewett Hall. Old Main Drive terminates at the parking lot of the renovated Jewett Hall; the traffic turns around on the Jewett parking lot. Science Drive remains active as a vehicular access road for campus services located in Alumni Hall and Nixon Hall, which require handicap parking and access. The Science Drive segment from Jewett Hall to the new science building is converted into a pedestrian zone, creating a more unified Science Quad.

## Alternative B

Alternative B proposes an addition to Jewett Hall as part of its conversion to a student services facility. In this scenario, with the elimination of the Jewett lot, a formal dropoff-turnaround is created in front of Williams Center. The turnaround road is independent from the Gregory Hall parking lot, which continues to be used by the campus police. Science drive continues to serve Alumni and Nixon Halls, and the road curbing is kept, but otherwise the signage and material treatment indicates that the automobiles are guests in a pedestrian zone, or signage suggests authorized vehicles only. The pedestrian paving pattern crosses the road at the entrance into Science Drive and at other crosswalk areas, serving as a visual traffic calming device.

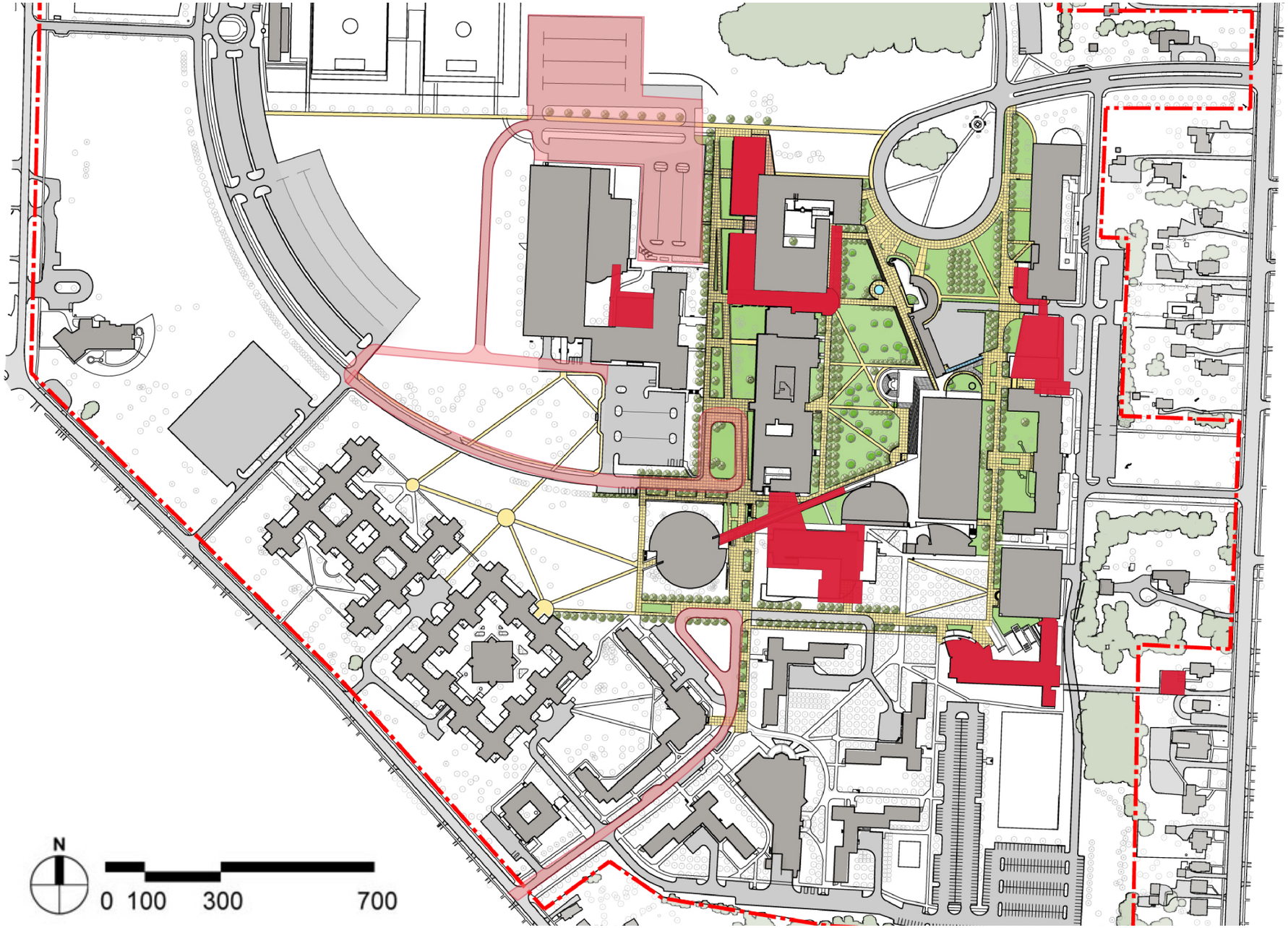
There are several advantages of this scheme over Alternative A, including an uninterrupted pedestrian walkway from the Science Quad to the Erie Dining Hall; a logical counter-clockwise circulation at the turnaround; and the convenience of a drop-off plaza near the Williams Center entrance.

ALTERNATIVE B




Alternative B: A new addition at renovated Jewett Hall. Old Main Drive terminus is a dropoff / turnaround in front of Williams Center; Science drive continues to serve Alumni and Nixon Hall parking lots.

## ALTERNATIVE C




Alternative C: A building on the New Jewett Hall site provides an upper-level link to Mason Hall. Old Main Drive dropoff / turnaround in front of Williams Center; Science Drive is converted to pedestrian zone with limited service access.

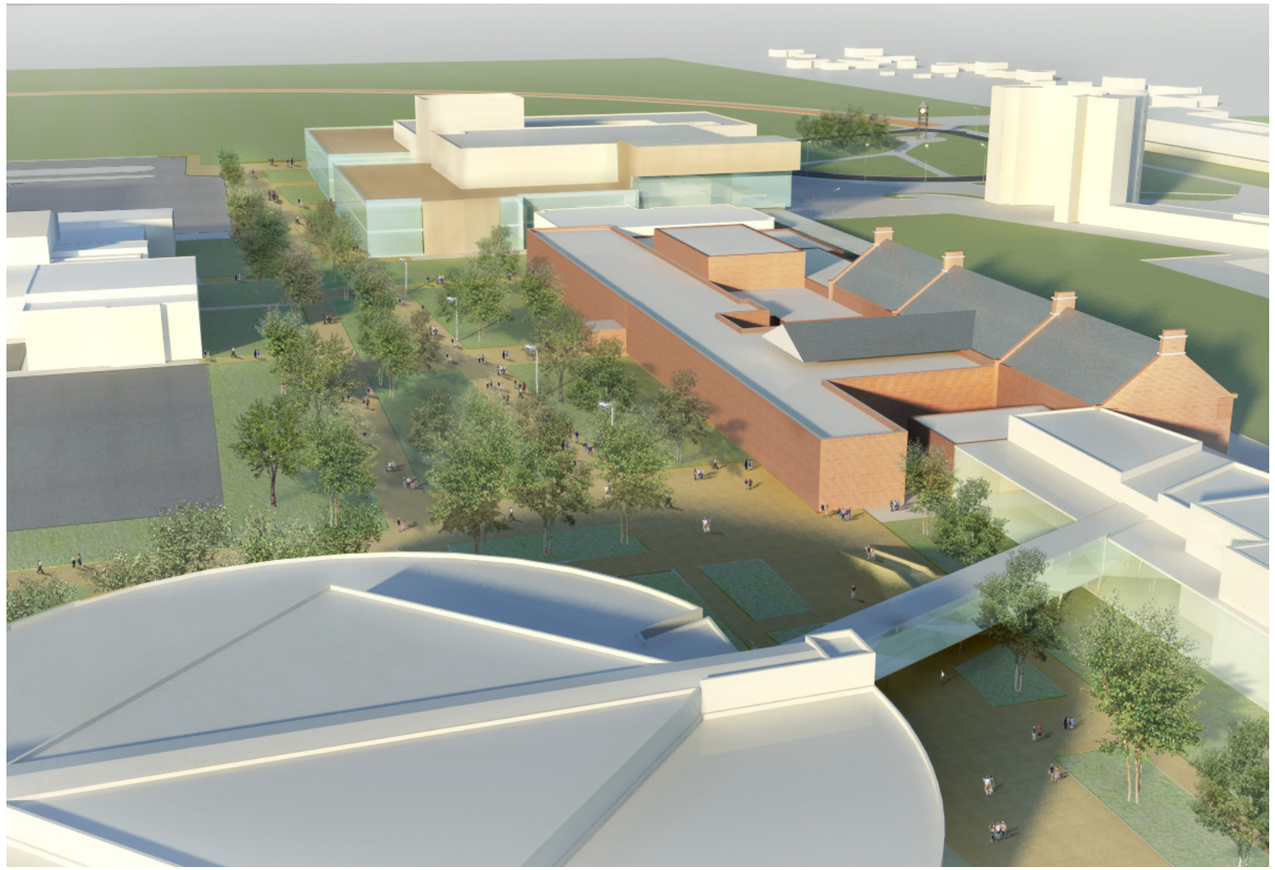
### Alternative C

Alternative C proposes a new building on the Jewett Hall site framing the Science Quad and the Varsity Drive corridor gateway. The space between the Williams Center and the new building becomes a new plaza, which extends under the Spine to Mason Hall. Science drive is fully converted to a pedestrian zone, as the campus services are relocated out of Alumni and Nixon Halls; the south half of Science Quad is reclaimed as a true campus landscape uninterrupted by driveways and parking lots. With these interventions, this area becomes the new heart of the campus where many pedestrian circulation corridors intersect; densify the core campus, enlarge the pedestrian core, enhance current strengths, and highlight new improvements. These interventions will achieve the overall master planning goals to densify the core.


Existing birds-eye view of the intersection of Old Main Drive and Science Drive.

The new pedestrian zone between Williams Center (foreground left), and the new Jewett Hall. Science Drive remains as a service access to existing campus services in Alumni and Nixon Hall, until they are relocated.

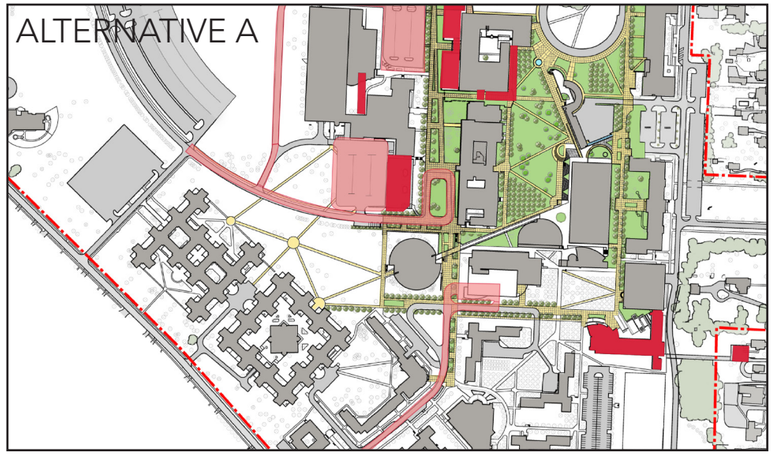
The new pedestrian zone replaces Varsity Drive. Williams Center is in foreground; RAC addition in back.
The corridor will remain accessible to service and emergency vehicle traffic.

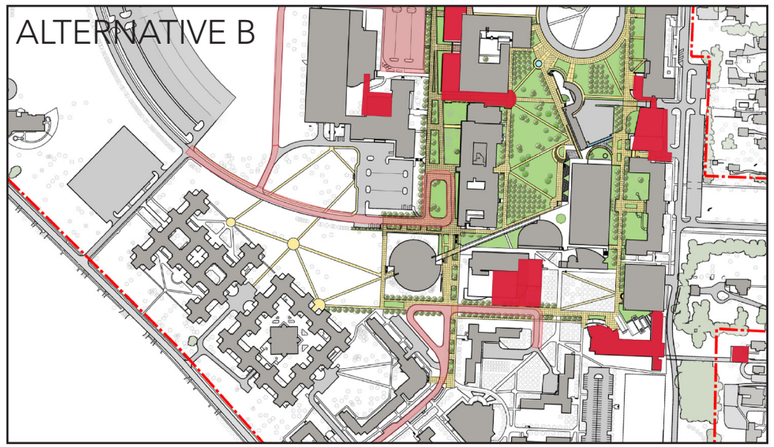


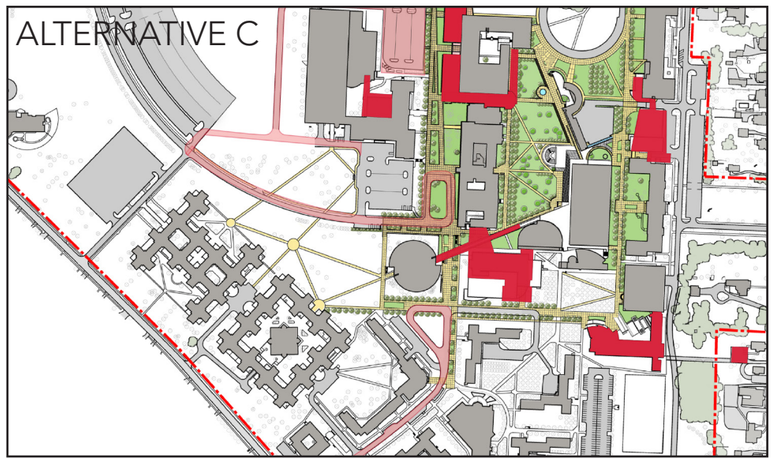
A concept rendering of a transformed Varsity Drive quadrangle with a Rockefeller Arts Addition at its northern terminus, a reconstructed spine and new student center at the southern end.

By limiting a portion of Old Main Drive to service vehicles only, the existing turn around can be redesigned as a more pedestrian friendly drop-off for Mason Hall and the Williams Center as well as continuing to serve as an important shuttle stop and terminus for ring road traffic.

The existing pedestrian corridor behind the Reed Library. The barren gravel bed has the potential to become a sculpture garden or other landscape intervention.



# Campus Corridors

## Selective Roadway Removals: Old Main Drive and Ring Road

In the interest of expanding the pedestrian zone and simplifying circulation within the campus core, the concept alternatives propose a series of options for the elimination of portions of Old Main Drive. While access to buildings within this zone must be maintained for loading, service, and emergency vehicles, restricting public access to these roads allows them to be treated as sidewalks and plazas, transforming them from utilitarian, car-focused areas to pedestrian friendly streetscapes. Development guidelines outlined earlier in this chapter prioritize the conversion of more of the campus core to a pedestrian zone, which can be accomplished without compromising access to buildings by essential services. A phased approach to implementation will allow the adjustment to be made seamlessly, and potentially in concert with other capital improvements, such as a new building on the site of Jewett Hall. Three options for the reconfiguration of roadways at the now-complicated intersection of Old Main Drive, Varsity Drive, and Ring Road are suggested:

**Option 1: Turnaround in Jewett Parking Lot**

This option presents minimal interventions in order to eliminate the traffic circle and the dangerous intersection of Williams Center entrance with Old Main Drive. In this scheme, Old Main Drive terminates at the Jewett Hall parking lot, where it is possible to make a full turn. Science Drive remains intact to provide public access to Alumni and Nixon Hall parking lots, but is removed from this access point eastward and replaced with pedestrian paths to the new Science and Technology Center.

**Option 2: New Turnaround at Gregory Hall**

Removal of the Jewett Hall parking lot in this option requires the creation of a turnaround to accommodate traffic arriving from the Old Main Drive approach. This turnaround is designed to follow the angle of the Gregory Hall parking lot (though not to circulate through it) and return vehicles to Old Main Drive. The design of this turnaround must avoid the planned plaza space to be constructed to the south of the Williams Center.

**Option 3: Eliminate Science Drive**

This scheme removes the maximum amount of paved area to be replaced with service-only pedestrian streetscape. In this option, the entirety of Science Drive is removed. This roadway change is dependent on several other developments before Science Drive can be completely removed. First, public access to Alumni and Nixon Halls must either no longer be necessary, be provided elsewhere, or be changed to service-only. This can be accomplished by removing non-residential programs from these residence halls, returning them to use by students. Secondly, a new building at the site of Jewett Hall can facilitate substantial improvements to the pedestrian realm immediately adjacent to its main entrance. The College is unlikely to design and plan the extensive plaza and paving enhancements that are suggested by this option on it's own; but full implementation of this option is feasible when combined with a major capital improvement such as a new building.

## North-South Corridor: Varsity Drive

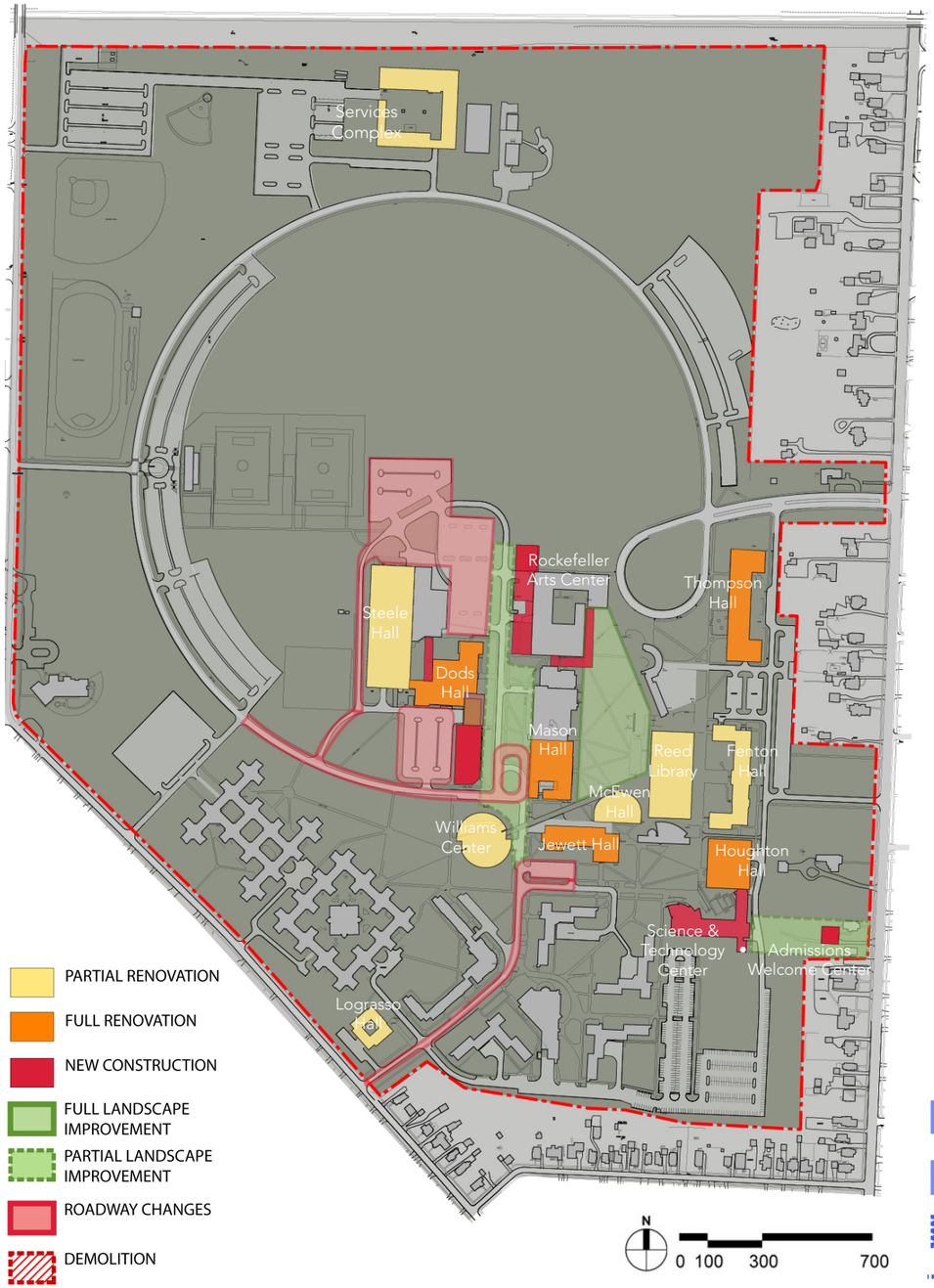
The roadway changes suggested by the removal of the traffic circle and Ring Road to the north of the Williams Center suggest a change to Varsity Drive to further enhance the pedestrian environment. Removal of the traffic circle renders Varsity Drive inaccessible and unnecessary, though access to Mason, Dods, and Steele Halls and the Rockefeller Arts Center must still be maintained. With a similar treatment of eliminated roadways like Science Drive, the FMP recommends restricting this roadway to service and emergency vehicles only, creating a pedestrian-focused corridor. As the Dods Hall Fitness Center and the Rockefeller Arts Center Addition come on-line, these uses will activate this new pedestrian zone.

## North-South Corridor: Symphony Circle to Science Quad

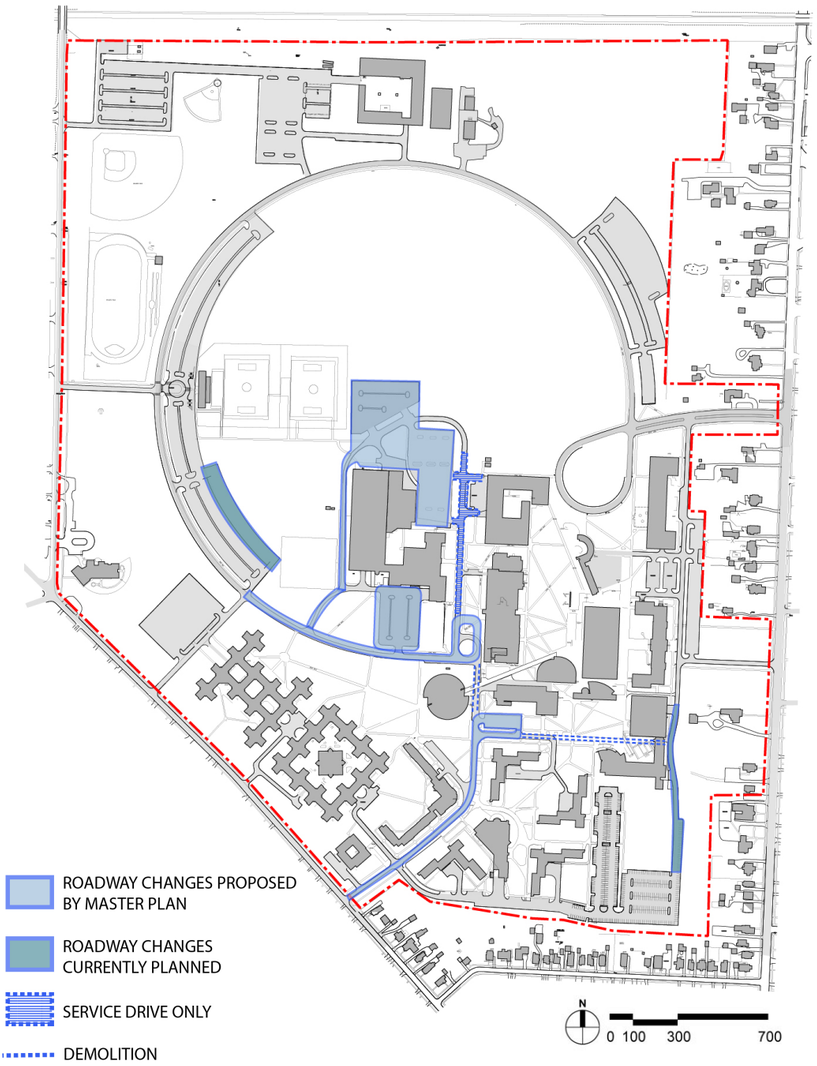
This existing axis is a strong pedestrian corridor, linking a majority of academic buildings and providing access to the Main Quad at its ends. It is heavily used by students currently, and would benefit from further enhancements for consistency of landscape and streetscape along its length. As new buildings and additions such as the new Academic Building and the Thompson Hall addition become a reality, they will activate this corridor and necessitate improvements to it at their main entrances. While new capital improvement will call attention to this corridor and perhaps be designed to improve portions of it, designs for the entire length of the axis will provide a consistency of material and aesthetic that will benefit the pedestrian environment. Latent possiblities for its improvement already exist, most notably at the location of the main entrance to Fenton Hall between it and Reed Library. The gravel zone immediately adjacent to Reed Library is unused and unattractive. A redesign of the space between Reed Library and Fenton Hall creates a large, active landscape plaza where many students already gather in warm months. The café space in Fenton Hall exits directly onto this space as well, where tables and benches are provided to further activate the space and encourage students to linger. While this north-south corridor is already a strong pedestrian axis, it will become even more prominent after a redesign providing consistent tree lines, paving and landscape elements, and lighting.

A concept for a transformed corridor extending from the new Science and Technology building to Thompson Hall.

## ALTERNATIVE A - Facilities Master Plan




## ALTERNATIVE A - Campus Circulation & Parking




## Concept Alternatives: Alternative A

This scenario involves the least amount of new construction of the three concept alternatives, proposing to re-purpose Jewett Hall for Student Services. This Alternative also shifts the focus of a New Academic building to the west side of the campus in the Dods Hall parking lot. Renovation improvements are limited to the most pressing needs for the campus, including the creation of surge space and backfilling of space that is slated to be vacated. Landscape improvements are also kept to a minimum, related mostly to the implementation of capital improvements in their vicinity. Perhaps the most ambitious of the improvement in this alternative is the reconfiguration of Varsity Drive and the Mason Hall drop-off circle, to be replaced by new vehicular circulation and landscape elements. Alternative A is focused on maintaining existing buildings for long-term use, while making enhancements to the campus only where most practical.

**Demolition**

There is no building demolition planned for this alternative, though demolition of existing roadways is proposed (see Alternative A: Circulation & Parking)

**Renovation**

Extensive renovations are proposed for Houghton and Jewett Halls, as has been planned following the construction of the Science and Technology Center. Other buildings will receive partial renovation based on their most urgent needs. LoGrasso Hall's planned exterior renovations will occur with minimal intervention to the interior. The Services Complex has already planned changes to the configuration of program within it; these renovations are practical and will benefit the efficiency of services on campus. The Thompson Hall day care space will be backfilled with existing program in Thompson Hall, creating renovated space for the department of Communication Disorders and Sciences. More ambitious renovations to Thompson Hall are proposed in two additional phases. Fenton Hall renovations will be extensive but mostly related to systems and building envelope; these involve installation of air conditioning and adjustment of existing systems to accommodate it, full sprinkler system, and window and roof replacement. Finally, Williams Center renovations are currently planned and funded, and will continue according to proposed plans. These renovations will close the Williams Center for the 2011-2012 academic year, but will result in upgrades to building systems, new glazing, improvements to interior spaces, and a new, safer configuration of the building's loading area. Renovations to the Dods Hall including an expansion to the Gym for added seating are also proposed.

**New Construction**

New construction in Alternative A includes a new building for students services on the site directly south of the Dods Hall. Additionally, the Alternative includes the Rockefeller Arts Center addition currently underway plus a small corridor connector from the RAC to Mason Hall. Finally, a planned fitness center will be constructed in the old pool area of Dods Hall.

## Alternative A: Circulation & Parking

Several selective demolitions are planned in this alternative. These roadways include part of Science Drive, from the Science and Technology Center to the Nixon and Alumni Hall access drive, and the entirety of Varsity Drive from the Rockefeller Arts Center to the Williams Center. With these removals, Old Main Drive terminates to the south of the Williams Center, with a turnaround in the Jewett Hall parking lot. Varsity Drive is restricted to emergency and service vehicles only, and is redesigned with materials that suggest a pedestrian environment. The Mason Hall drop-off circle is slightly altered to change its character from a traffic circle to a true vehicular drop-off for events. This new drop-off allows vehicles to return to Ring Road when entering from the west, in the absence of the Varsity Drive roadway. Rockefeller Arts Center patron parking remains to the north of the athletics complex, though access to the service doors at the west side of the RAC is restricted to authorized vehicles. Handicap and temporary parking for the Williams Center is provided directly to its north.

## Alternative A Phase I: 2013 - 2018

**New construction:**

- Science and Technology Center

**Renovation:**

- Dods Hall Fitness Center
- Houghton Hall – full renovation
  - Window replacement
  - HVAC replacement
  - Asbestos abatement
  - Accessibility improvements
  - Jewett Hall to act as surge space
- Williams Center
  - Proceed with planned renovations to interior, window replacement
- Thompson Hall Backfill
  - Renovate former Day Care for use by Communication Disorders and Sciences
- Services Complex
  - Reconfigure existing program, backfilling former central plant space and HVAC.
- LoGrasso Hall
  - Exterior Renovations, HVAC upgrades
- Reed Library
  - Renovations to public spaces, Offices HVAC upgrades

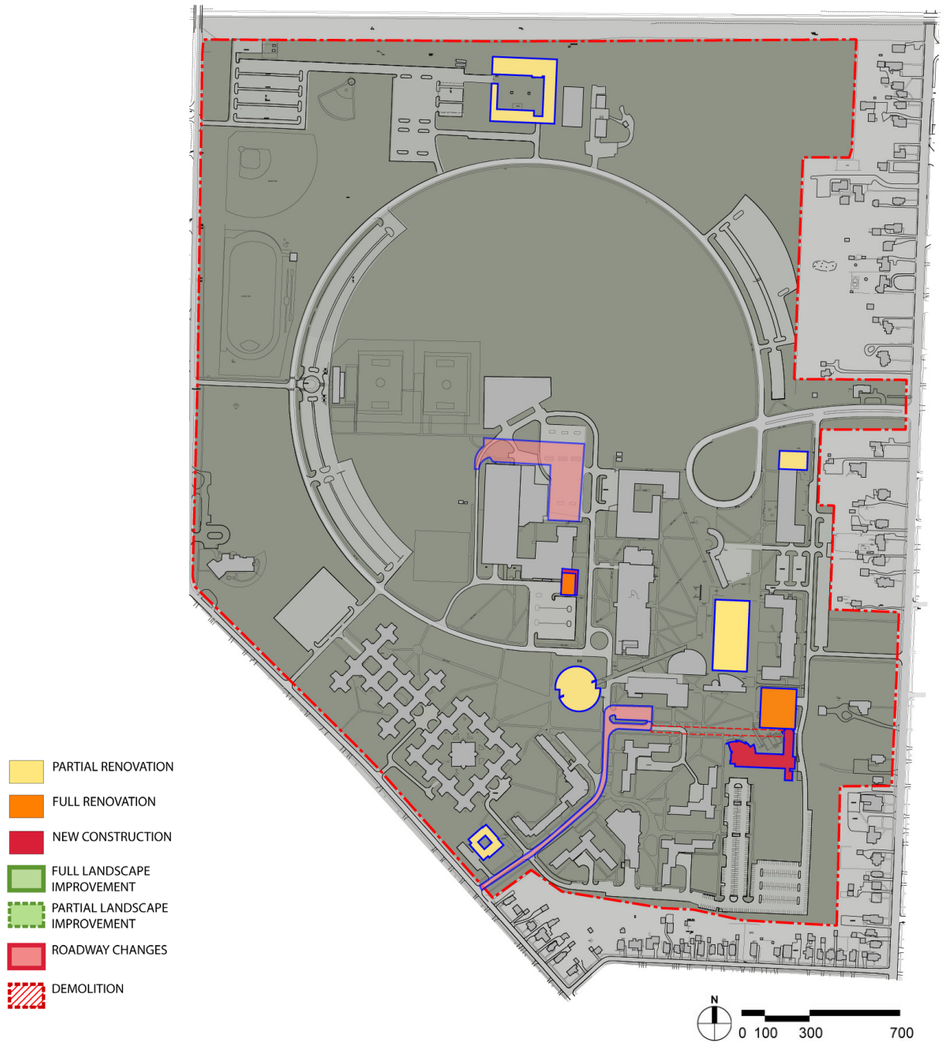
**Circulation/Parking:**

- Terminate Science Drive to Nixon and Alumni Hall access

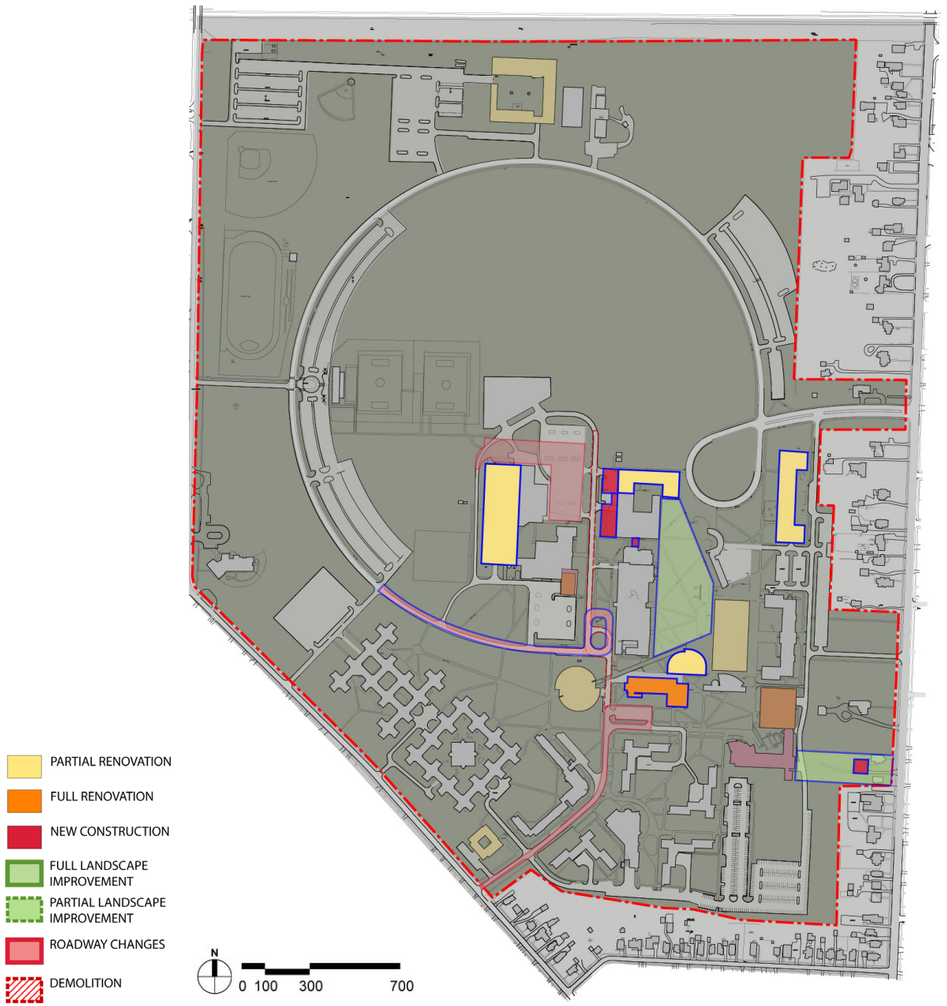
**Landscape:**

- Old Main Drive phase I, pedestrian improvements north of Jewett Lot.

## ALTERNATIVE A - Phase I - 2013 / 2018



## ALTERNATIVE A - Phase II - 2018 / 2023




### Alternative A Phase II: 2018 - 2023

**New construction:**

- Rockefeller Arts Center Addition
- Admissions Welcome Center

**Renovation:**

- Jewett Hall – full renovation
  - Some interior partition changes to accommodate students service uses classrooms
  - Full systems upgrades
  - Door and window replacement
  - Asbestos abatement
- Steele Hall renovation
- Thompson Hall - Phase II partial renovation
- Rockefeller Arts renovations
- McEwen Hall renovations
  - Re-purposing Lecture Hall for Music.

**Landscape:**

- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements

**Circulation/Parking:**

- Eliminate Old Main Drive north of Jewett parking lot access
- Eliminate Varsity Drive from Rockefeller Arts Center to Mason Hall drop-off circle
- Provide revised turnaround at Mason Hall drop-off

## Alternative A Phase III: Beyond 2023

**New construction:**

- New Academic Building: general purpose classrooms, School of Business
- Rockefeller Arts - Phase II addition

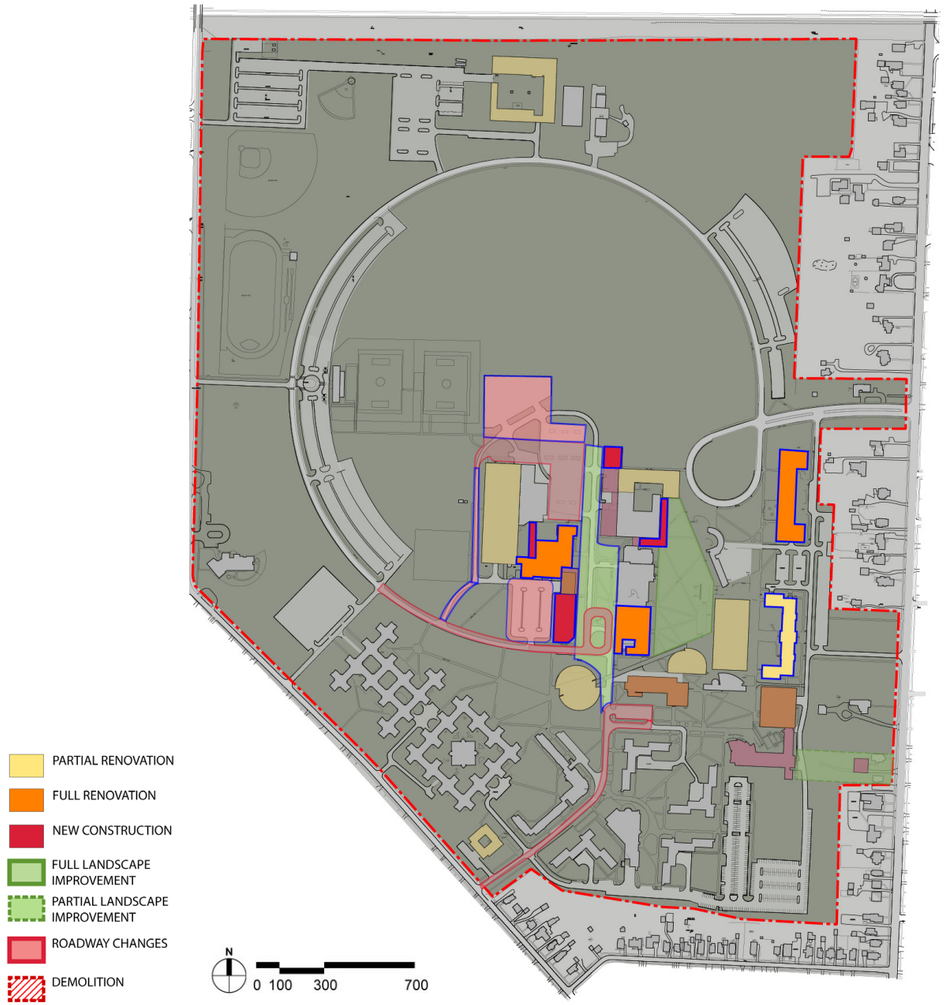
**Renovation:**

- Thompson Hall - Phase III full renovation
- Old Mason Hall
  - Air Conditioning
  - Full HVAC/plumbing replacement
  - Humidity Control
  - Acoustical improvements
  - Sprinklers
  - Electrical
  - Create “smart” classrooms
  - Repurpose Diers Recital Hall for rehearsal space
- New Mason Hall
  - Acoustics, humidity improvements
  - Reconfiguration of some classrooms and/or practice rooms for optimal efficiency
- Dods Hall Fitness Center renovation and Gym expansion
- Fenton Hall – partial renovation
  - Air conditioning
  - Radiators, piping and distribution
  - Sprinklers
  - Window and roof replacement

**Landscape:**

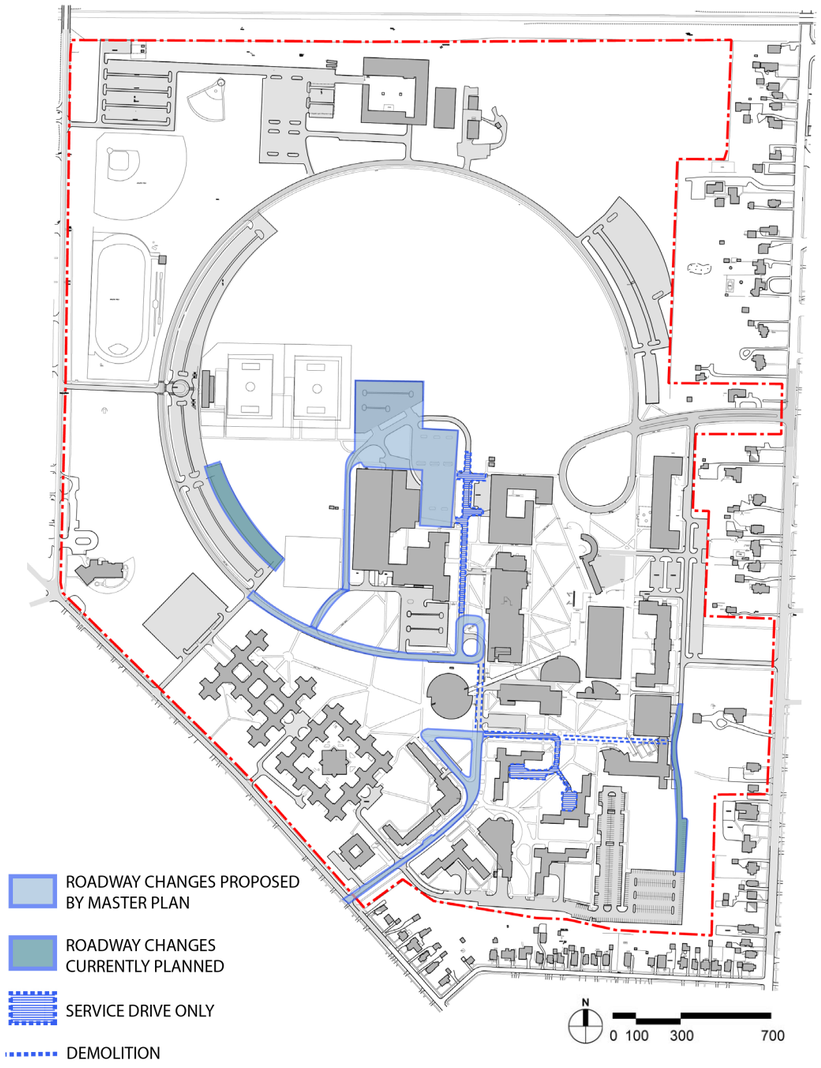
- Varsity Drive replacement with north-south pedestrian corridor

## ALTERNATIVE A - Phase III - 2023 / Beyond



## ALTERNATIVE B - Facilities Master Plan


## ALTERNATIVE B - Campus Circulation & Parking




## Concept Alternatives: Alternative B

This alternative proposes an addition and renovation to Jewett Hall as a student services facility. As in Alternative A, planned projects are assumed to proceed as designed. Changes to the campus landscape and circulation is more substantial than the previous alternative, with increased scope to the Main Quad improvements and more extensive interventions for the replacement of Varsity Drive.

**Demolition**

Very little demolition of built space is recommended in this alternative with the exception of portions of Jewett Hall, which will be demolished to make way for an addition. Roadway demolition will also occur to make way for new pedestrian-friendly corridors described below.

**Renovation**

Renovations of additional buildings occur in this phase, helping to create better social and academic spaces within existing buildings. In addition to the renovations to the Williams Center and Dods, Houghton and Thompson Halls as described in Alternative A, the Dods Hall gymnasium and Mason Hall will be renovated according to needs expressed in Phases I and II of the Facilities Master Plan. Dods Hall renovations to the gymnasium will entail an expansion for the accommodation of additional bleachers, but not full replacement of the existing gym. Full renovation will occur at Old Mason, where air conditioning and humidity controls, HVAC and plumbing replacment, sprinklers, electrical upgrades, acoustical improvements, technology improvements, and a repurposing of Diers Recital Hall for rehearsal space is needed.

**New Construction**

A few larger capital improvements have been added to the scope of this alternative; generally they do not maximize square footage growth, but are somewhat conservative as to campus needs for new construction. The Rockefeller Arts Center addition takes on a larger footprint than the previous alternative, creating a more dramatic presence on the Main Quad by increasing the scale of the Mason Hall connector. Jewett Hall remains an important concern, with full renovation and an addition planned for its site. In addition to Thompson Hall backfill improvement, a new entrance lobby will be constructed at the building's southwest corner, with improvements to existing interior spaces directly adjacent to it. Townhome residences for upperclassmen will be built at the western border of the campus, north of the new Community and Child Care Center. Finally, a large new academic building will be constructed between Thompson and Fenton Halls.

## Alternative B:
## Circulation & Parking

More extensive alterations to campus circulation and parking systems are recommended in this alternative. Demolition of the existing Varsity Drive from Rockefeller Arts Center to south of the Williams Center remains a priority, to be replaced with pedestrian-scale streetscape elements that expand the pedestrian zone while maintaining critical access to campus buildings by authorized vehicles. The turnaround proposed at Mason Hall is a redesign of the existing traffic circle more in character with a small civic drop-off for performances. Enhancements to the Ring Road approach to this drop-off from the west are recommended to extend to the Park Drive entrance point, transforming the vehicular and pedestrian experience from this western entrance. As in the previous alternative, Science Drive is terminated at the Alumni and Nixon Hall access point, replaced with a landscaped corridor at the new Science and Technology Center. The Jewett Hall parking lot is eliminated , making way for an entrance plaza to the Jewett Hall addition, though Science Drive remains. A more substantial turnaround at Gregory Hall is created to allow traffic entering from the south to return to Old Main Drive and exit the campus.

## Alternative B Phase I:
## 2013 - 2018

**New construction:**

- Science and Technology Center
- Rockefeller Arts Center Addition
- Thompson Hall Entrance Addition
- Townhomes

**Renovation:**

- Dods Hall Fitness Center
- Houghton Hall – full renovation
  - Window replacement
  - HVAC replacement
  - Asbestos abatement
  - Accessibility improvements
  - Jewett Hall to act as surge space
- Partial renovation of interiors for use as surge space for Mason Hall in later phase
- Jewett Hall
- Thompson Hall - Phase I
  - Renovate former Day Care for shared use by Communication Disorders and Sciences and College of Education
  - Partial renovations to interior space affected by entrance addition and HVAC
- LoGrasso Hall
  - Exterior renovations, HVAC upgrades
- Services Complex
  - Reconfigure existing program, backfilling former central plant space
- Williams Center
  - Proceed with planned renovations to interior, window replacement
- Reed Library
  - Renovations to public spaces, offices, HVAC upgrades

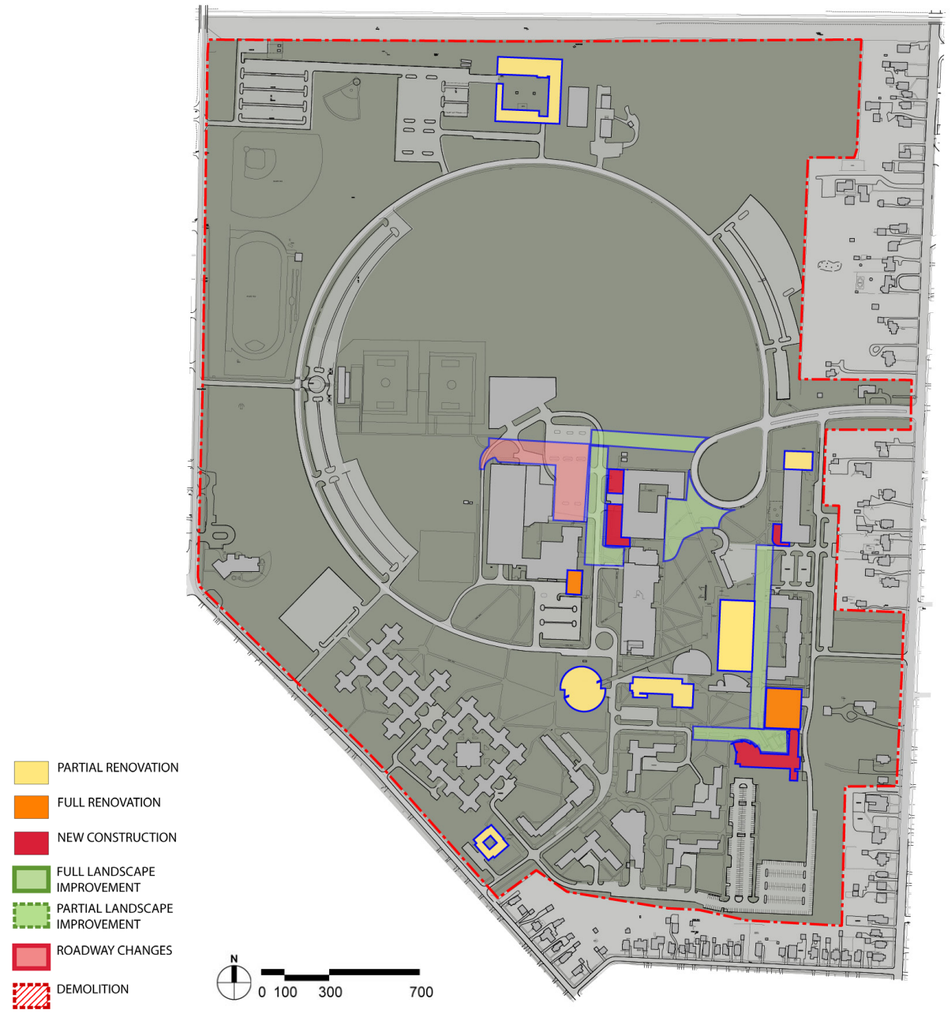
**Landscape:**

- Improvements to pedestrian areas associated with Rockefeller Arts Center Addition: portions of Varsity Drive corridor and plazas/ pedestrian approach from Symphony Circle to quad entrance
- Science Drive replacement landscape, integrated with Science and Technology Center courtyard
- Fenton Hall / Library Landscape

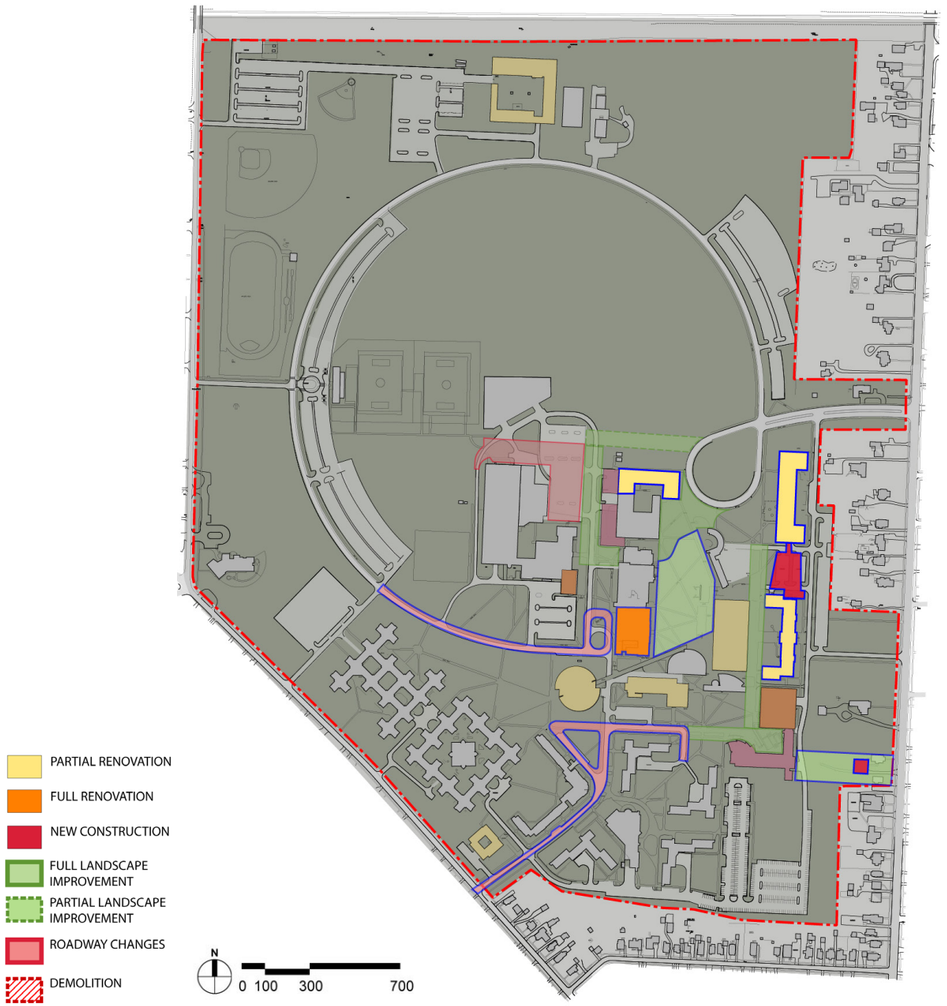
**Circulation/Parking:**

- Demolish Varsity Drive in front of new Rockefeller Arts Center Addition and replace with drive-able surface; authorized vehicles only, closed to public traffic
- Terminate Science Drive to Nixon and Alumni Hall access
- Partially reconfigure parking lot to the north of Steele Hall to allow east-west pedestrian connection from Symphony Circle to football arena and Ring Road

## ALTERNATIVE B - Phase I - 2013 / 2018



## ALTERNATIVE B - Phase II - 2018 / 2023




### Alternative B Phase II: 2018 - 2023

**New construction:**

- New Academic Building: general purpose classrooms, School of Business
- Admissions Welcome Center

**Renovation:**

- Old Mason Hall
  - Air Conditioning
  - Full HVAC/plumbing replacement
  - Humidity Control
  - Acoustical improvements
  - Sprinklers
  - Electrical
  - Create “smart” classrooms
  - Repurpose Diers Recital Hall for rehearsal space
- New Mason Hall
  - Acoustics, humidity improvements
  - Reconfiguration of some classrooms and/or practice rooms for optimal efficiency
- Fenton Hall partial renovation
  - Air conditioning
  - Radiators, piping and distribution
  - Sprinklers
  - Window and roof replacement
- Thompson Hall - Phase II
- Rockefeller Arts renovation

**Landscape:**

- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements south of plazas associated with Rockefeller Arts Center

**Circulation/Parking:**

- Demolish remainder of Varsity Drive to be replaced with drive-able pedestrian paving for authorized vehicles only
- Demolish Old Main Drive from Science Drive to north of Williams Center; replace with drive-able pedestrian paving for authorized vehicles only
- Create new turnaround at former Mason Hall traffic circle and extend improvements to pedestrian and vehicular circulation westward to Park Drive campus entrance
- Demolish Jewett Hall parking lot; replace with Science Drive access
- Create new turnaround at Gregory Hall

## Alternative B Phase III: Beyond 2023

**New construction:**

- Jewett Hall Addition, student services
- Dods Hall Fitness Center
- Rockefeller Arts - Phase II Addition

**Renovation:**

- Old Mason Hall
  - Air Conditioning
  - Full HVAC/plumbing replacement
  - Humidity Control
  - Acoustical improvements
  - Sprinklers
  - Electrical
  - Create “smart” classrooms
  - Repurpose Diers Recital Hall for rehearsal space
- Fenton Hall – partial renovation
  - Air conditioning
  - Radiators, piping and distribution
  - Sprinklers
  - Window and roof replacement
- Jewett Hall – full renovation
  - Some interior partition changes to accommodate general use classrooms
  - Full systems upgrades
  - Door and window replacement
  - Asbestos abatement
- Dods Hall
  - Expansion of one wall of existing gymnasium for additional bleachers
  - Replacement of existing bleachers for increased capacity, appropriate walk-off space for Division III requirements
- Thompson Hall - Phase III
- Steele Hall renovation

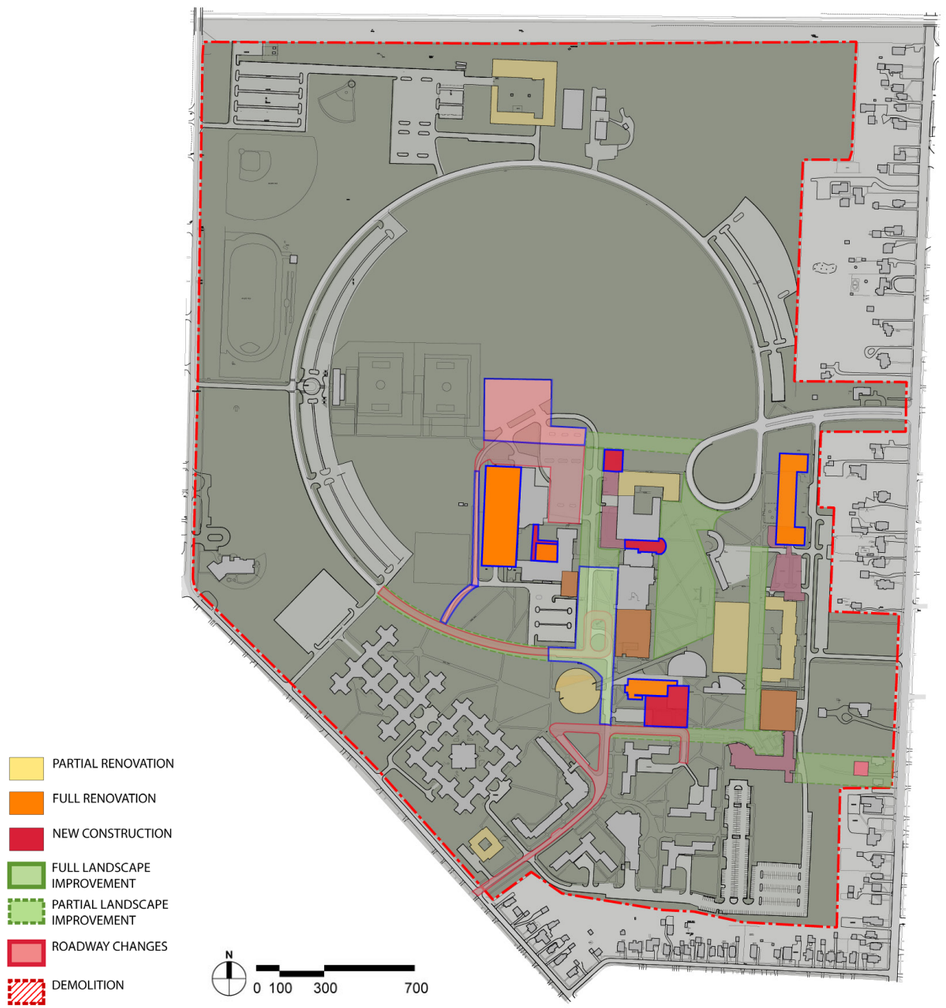
**Landscape:**

- Remainder of improvements to Varsity Drive replacement as pedestrian corridor
- Symphony Circle Landscape / Plaza
- Library Steps / Amphitheater Improvements

**Circulation/Parking:**

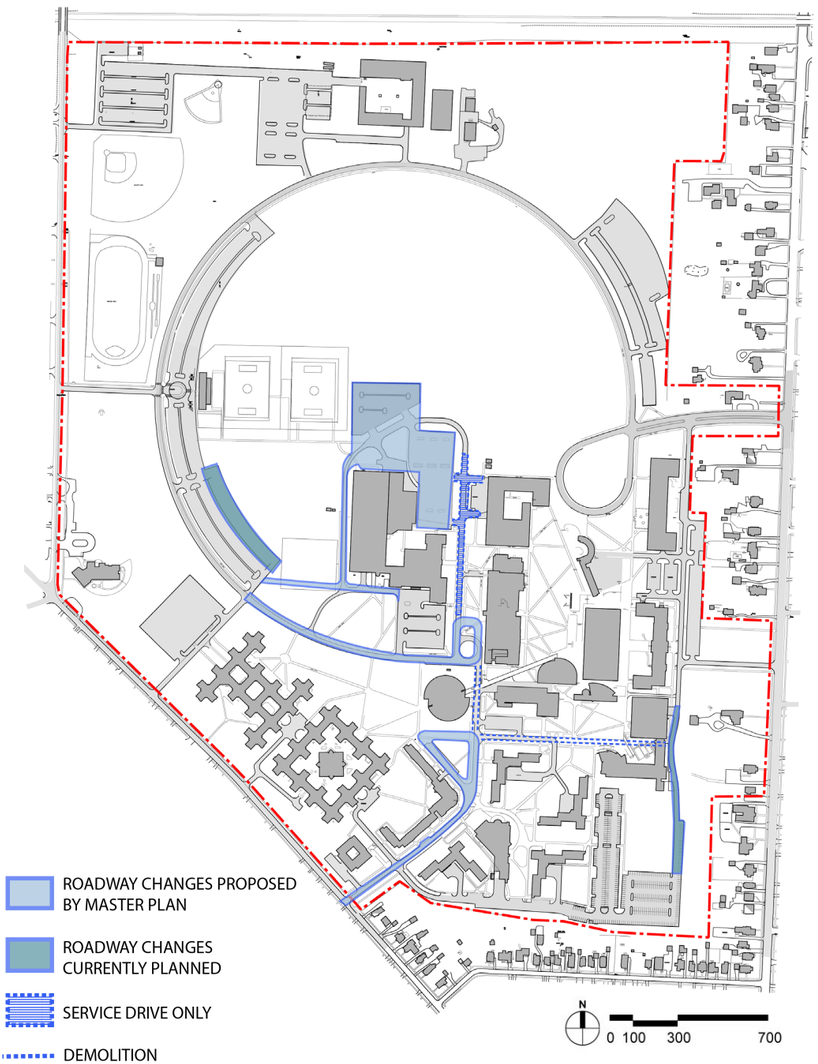
- Reconfigure parking lot to the north of Steele Hall to align with previous parking improvements in this area, allowing for east-west pedestrian connection from Symphony Circle
- Increase capacity and improve appearance of drive at west of athletics complex to become new entrance drive for Rockefeller Arts Center and Mason Hall patrons

## ALTERNATIVE B - Phase III - 2023 / Beyond



## ALTERNATIVE C - Facilities Master Plan


## ALTERNATIVE C - Campus Circulation & Parking




## Concept Alternatives: Alternative C

The most ambitious of the three alternatives, Alternative C proposes a new student services facility on the Jewett site and large-scale transformations of the campus environment by 2023. Several major capital improvements are implemented, to best accommodate the projected space deficiencies and suitability, along with extensive improvements to the campus landscape in support of the FMP development guidelines outlined earlier in this chapter. Where options for capital improvements were presented, this alternative selects the most ambitious option.

**Demolition**

The complete demolition of Jewett Hall is required to create a site for a new student services building and academic space for music. In addition, several campus roadways and parking areas are demolished to become an expanded pedestrian zone (see Alternative C: Parking & Circulation).

**Renovation**

This alternative represents the most extensive renovation to existing buildings. Aside from renovations described in earlier alternatives to the Williams Center, Old Mason, Fenton, Houghton, LoGrasso, and Dods Halls, more of the Mason Hall complex is to be partially renovated, along with the first levels of Gregory, Nixon, and Alumni residence halls. These residence halls currently house non-residential programs, as do many of the residence halls on campus. These buildings in particular are good candidates for the relocation of such programs, as their presence affects the campus context, requiring additional service and parking to be provided. Gregory Hall in particular houses a number of uses that could be relocated to the Services Complex, though Campus Police and the Faculty Student Association would need to remain. Finally, a full renovation of Thompson Hall is recommended for interior spaces. Thompson Hall's windowless offices and dark, confusing corridors will be reconfigured to create increased visibility of departments, additional study and gathering spaces for students and faculty, and technologically-equipped teaching spaces.

**New Construction**

This alternative proposes the most square footage of new construction, while remaining in line with campus program projections. Perhaps the most significant improvements that builds upon the more conservative previous alternatives is a new student services building at the current site of Jewett Hall. This improvement has the capacity to transform the heart of the campus core, while providing much-needed space for student services and social space.

## Alternative C:
## Circulation & Parking

Alternative C proposes the most significant changes to campus circulation. Varsity Drive and the Mason Hall drop-off circle are entirely eliminated, and Ring Road is eliminated from Varsity Drive to Park Drive. A new road from the Park Drive entrance road to the Dods Hall parking lot is created, along with a wider entrance drive along Steele Hall, leading to a reconfigured parking lot for athletics facilities and the Rockefeller Arts Center. The removed portions of Varsity Drive and Ring Road are turned over to the pedestrian environment, with streetscape elements and paving signifying the shift. These former roadways are not completely closed, but restricted to emergency and service vehicles only. During events and on certain days of high traffic, the roads could be opened to the public to alleviate congestion and provide more convenience on a temporary basis.

With the construction of a new building in place of Jewett Hall, Science Drive and the existing Jewett Hall parking lot are eliminated, providing a clear pedestrian path from the Williams Center to the new Science and Technology Building. Old Main Drive is terminated at a new triangular turnaround south of the Williams Center, restricting access to Williams Center loading to authorized vehicles. This alternative is able to remove Science Drive in its entirety because of the relocation of non-residential programs from Nixon and Alumni Halls, eliminating their need for vehicular access.

## Alternative C Phase I:
## 2013 - 2018

**New construction:**

- Science and Technology Center
- Rockefeller Arts Center Addition
- Thompson Hall Entrance Addition
- New Academic Building: general classrooms, School of Business

**Renovation:**

- Houghton Hall – full renovation
  - Window replacement
  - HVAC replacement
  - Asbestos abatement
  - Accessibility improvements
  - Jewett Hall to act as surge space
- Jewett Hall
  - Partial renovation of interiors for use as surge space for Mason Hall in later phase
- Thompson Hall - Phase I
  - Renovate former Day Care for shared use by Communication Disorders and Sciences and College of Education
  - Partial renovations to interior space affected by entrance addition
- LoGrasso Hall exterior and HVAC renovations
- Services Complex
  - Reconfigure existing program, backfilling former central plant space
- Reed Library renovations to public spaces, offices, HVAC upgrades

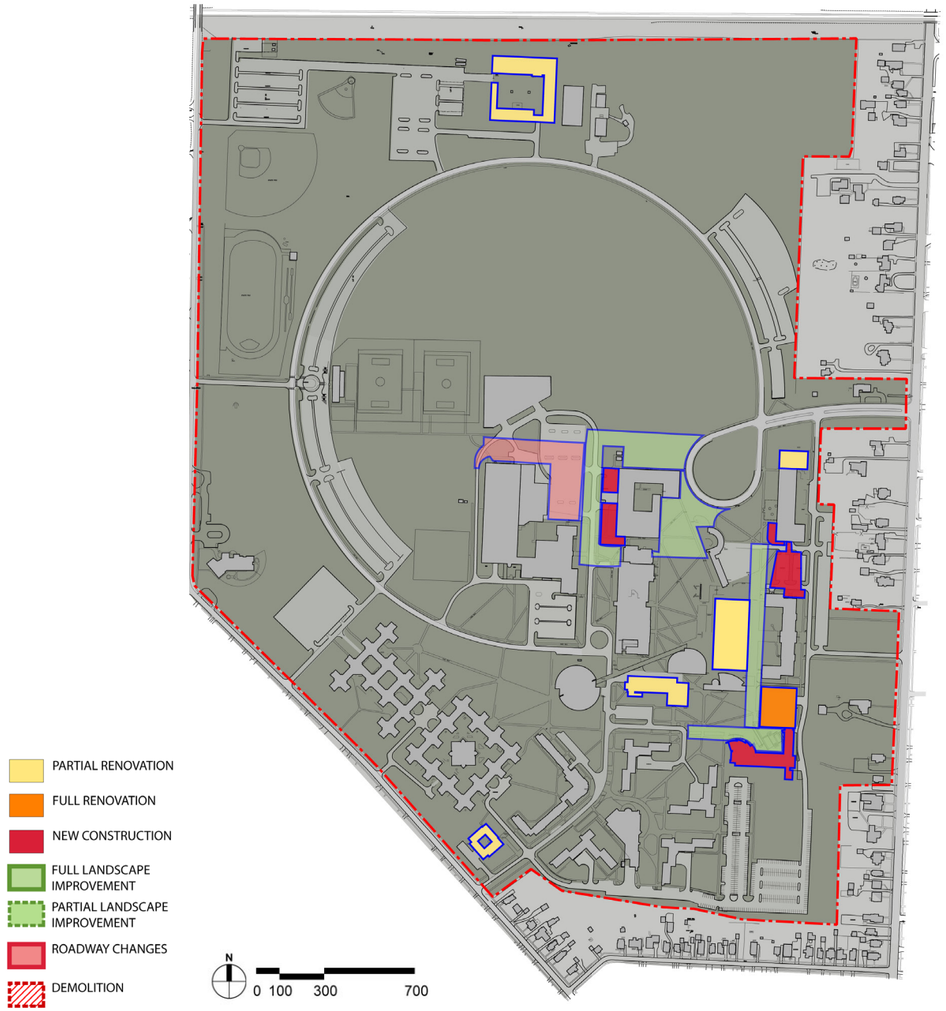
**Landscape:**

- Improvements to pedestrian areas associated with Rockefeller Arts Center Addition: portions of Varsity Drive corridor and plazas/ pedestrian approach from Symphony Circle to quad entrance
- Science Drive replacement landscape, integrated with Science and Technology Center courtyard
- Fenton Library Landscape Corridor

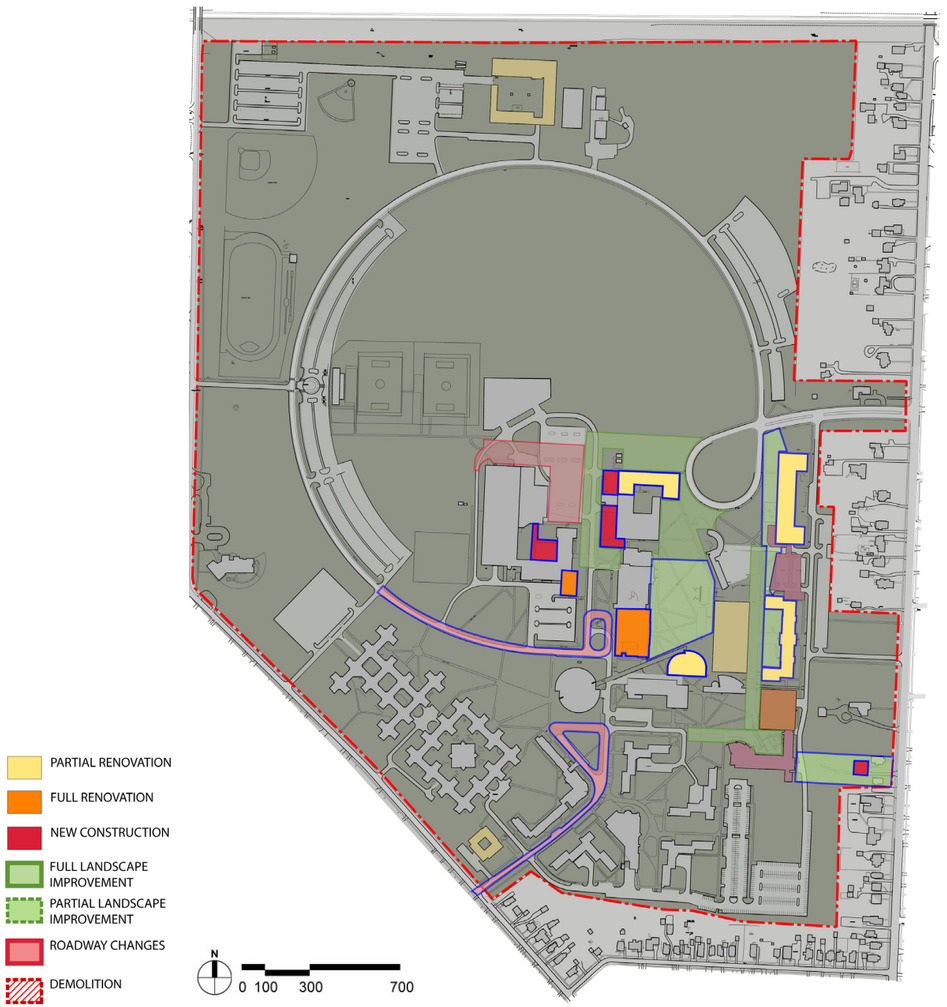
**Circulation/Parking:**

- Demolish Science Drive from Alumni and Nixon Hall access drive eastward
- Partially reconfigure parking lot to the north of Steele Hall to allow east-west pedestrian connection from Symphony Circle to football arena and Ring Road.

## ALTERNATIVE C - Phase I - 2013 / 2018



## ALTERNATIVE C - Phase II - 2018 / 2023




### Alternative C Phase II: 2018 - 2023

**New construction:**

- Admissions Welcome Center
- Dods Hall Fitness Center

**Renovation:**

- Dods Hall
  - Expansion of one wall of existing gymnasium for additional bleachers
  - Replacement of existing bleachers for increased capacity, appropriate walk-off space for Division III requirements
- Old Mason Hall
  - Air Conditioning
  - Full HVAC/plumbing replacement
  - Humidity Control
  - Acoustical improvements
  - Sprinklers
  - Electrical
  - Create “smart” classrooms
  - Repurpose Diers Recital Hall for rehearsal space
- New Mason Hall
  - Acoustics, humidity improvements
  - Reconfiguration of some classrooms and/or practice rooms for optimal efficiency
- Fenton Hall – partial renovation
  - Air conditioning
  - Radiators, piping and distribution
  - Sprinklers
  - Window and roof replacement
- Thompson Hall - Phase II renovation
- McEwen Hall renovations
- Rockefeller Arts renovations

**Landscape:**

- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements south of plazas associated with Rockefeller Arts Center
- Consistent improved landscape at north-south axis from Symphony Circle to the Science Quad

**Circulation/Parking:**

- Demolish Jewett Hall parking lot; replace with Science Drive access
- Create new turnaround at Gregory Hall
- Demolish Old Main Drive from new turnaround to Mason Hall Drop-Off; maintain service access

## Alternative C Phase III: Beyond 2023

**New construction:**

- Student Services Building (Jewett Hall Replacement) - additional Academic space for Music
- Services Complex Addition
- Rockefeller Arts - Phase II Addition: Visual Arts, Concert Hall entry

**Renovation:**

- Gregory, Nixon, and Alumni Residence Halls
  - Remove non-residential functions from Alumni and Nixon Halls
  - Remove some non-residential functions from Gregory Hall and relocated to Services Complex. Remaining space reallocated to residential functions.
- Steele Field House renovations
- Thompson Hall - Phase III renovation

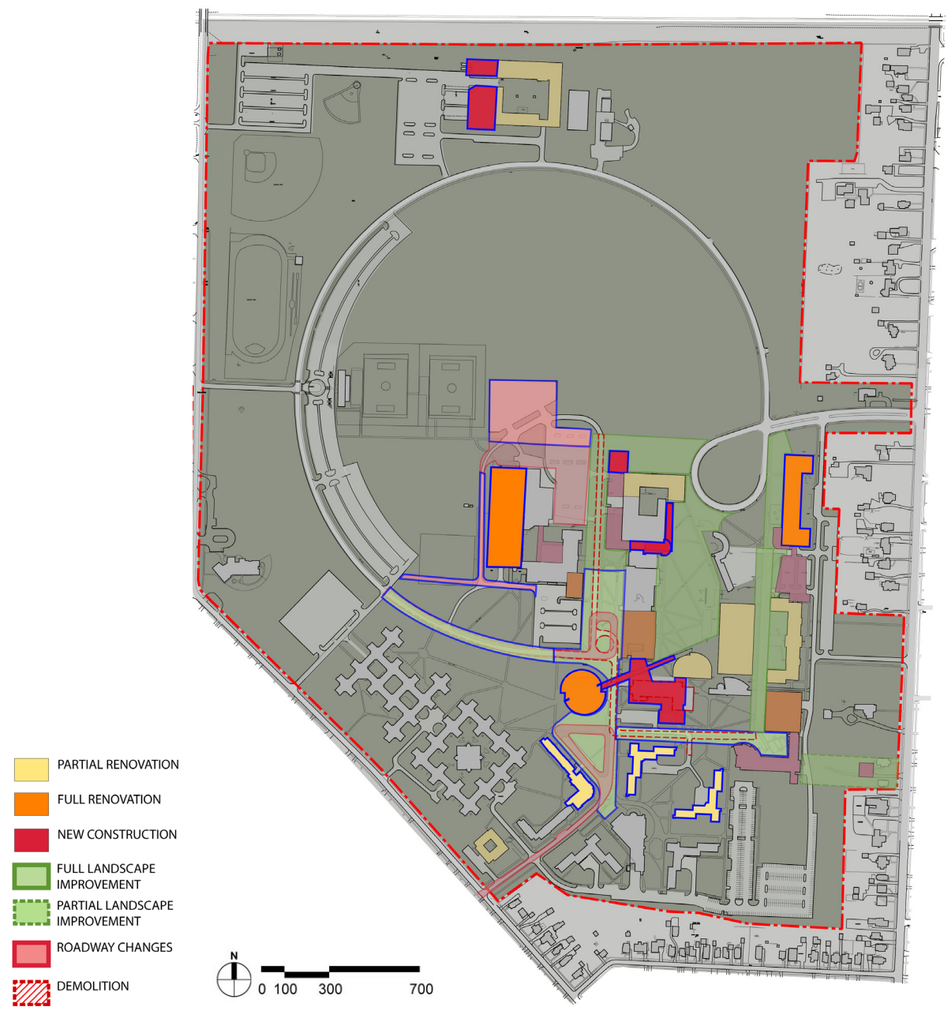
**Landscape:**

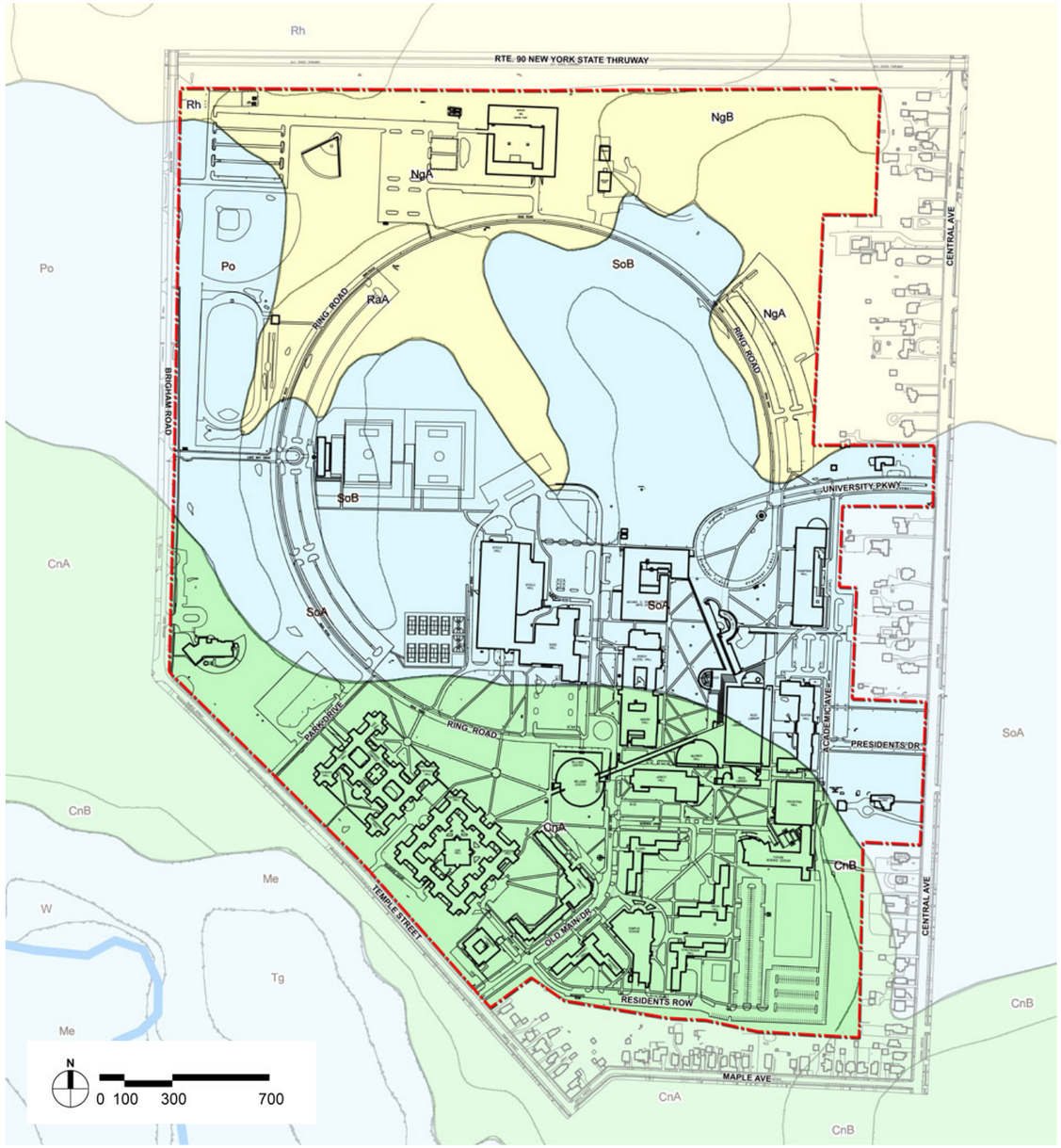
- Create pedestrian environment at north-south axis in place of Varsity Drive roadway and removed portion of Ring Road north of Williams Center; continuous landscape treatment in all new areas of removed roadway
- Landscape improvements to entirety of Science Drive as pedestrian axis

**Circulation/Parking:**

- Demolish Varsity Drive, Mason Hall drop-off circle, and Ring Road from Williams Center to Park Drive
- New connection from Park Drive parking lots to Dods Hall parking lot
- Widened entrance drive for Rockefeller Arts Center, to west of Steele Hall
- Reconfigure parking lot to the north of Steele Hall to align with previous parking improvements in this area, allowing for east-west pedestrian connection from Symphony Circle
- Increase capacity and improve appearance of drive at west of athletics complex to become new entrance drive for Rockefeller Arts Center and Mason Hall patrons

## ALTERNATIVE C - Phase III - 2023 / Beyond






## SOILS MAP

Hydrologic Groups:

- A - High Infiltration Rate
- B - Moderate Infiltration Rate
- C - Slow Infiltration Rate
- D - Slow Infiltration Rate with Moderate Infiltration at Drained Areas

Underlying soils in the campus core have high or moderate infiltration rates, making possible the use of porous pavements and various stormwater infiltration stormwater management practices.

# Site and Sustainability

## Greening the Campus

Recomendations:

- Select locations for development that favor already developed and impervious areas
- Utilize porous pavements to increase subsurface infiltration
- Utilize bioretention / rain gardens for their stormwater management and aesthetic value
- Consider subsurface storage for irrigation or infiltration
- Utilize green roofs

## Stormwater Management Approaches

New campus improvements, buildings, parking, and paved circulation paths are necessary to support the growth and the future of the College . However the increased impervious area associated with new development will cause an increased volume of storm water runoff, which must be managed to slow down its discharge and remove its pollutants. The SUNY Fredonia existing storm water management system has already reached its capacity to manage the runoff from any future developments. Moving forward, each new improvement needs to address storm water challenges, in order to meet the state requirements for removing pollutants from storm water and slowing down its discharge into rivers and streams.

One of the standard stomwater management practices (SMPs) is to create a retention basin to collect and filter runoff; the size of the basin is calculated based on the impervious area of new development. The retention ponds usually take a considerable amount of space. The SUNY Fredonia campus core does not have a lot of suitable open space for retention ponds; and placing them outside of the core will require long and constly storm sewage pipes from the new project area to the treatment SMP.

Fortunately there are other strategies that the College can pursue as alternatives to retention ponds. Reducing the stormwater runoff quantity by reducing amount of impervious area, and using alternative SMPs , either underground or with a smaller surface footprint are the principal techniques for stormwater management, and some of the recommended measures are discussed next.

## Select locations for development that favor already developed and impervious areas

When working within the context of a pre-existing campus environment, the advantage is that new development improvements can be proposed on previously disturbed, impervious land – for example on the location of outdated facilities or existing paved parking lots. The disadvantage is that the existing infrastructure and the stricter regulations may require mitigation of development impacts within an environment that is already constrained for space.

Placing development on already developed and impervious areas is desirable; but often the need for replicating the lost parking or providing additional parking may only move the paved lot from one location to another, adding more impervious areas.

## Porous Pavements

The best approach in minimizing the storm-water impact of new development is to minimize the areas of impervious surface. In recent years, porous pavements such as porous asphalt and concrete, and permeable unit pavers, have been gaining popularity; research and the more widespread use have improved the material specifications. The higher cost of the porous pavements is often offset by the eliminated need for installing catch basins, piping, and constructing detention basins. The biggest advantage of porous pavements is that they attempt to simulate the pre-development conditions, so the storm water is infiltrated where it falls upon the ground. The water gets filtered through the soil and slowly recharges the ground water, rather than quickly discharging into streams and contributing to flooding and erosion hazards.

The SUNY Fredonia campus core is a good candidate for porous pavement, because its underlying soils have high or moderate infiltration rates. Geotechnical soil investigation is recommended when doing larger areas of porous pavement, such as porous asphalt parking lots.

Porous pavements, however, require a different maintenance regimen than regular pavements to maintain their effectiveness over time. For instance, use of sand is discouraged because it would clog the pavement pores; periodic vacuuming is recommended to keep the pores open. However field research at the University of New Hampshire Storm Water Center (http://www.unh.edu/erg/cstev/) has indicated that porous pavements continue to do their job over time even with lack of special maintenance.

## SubSurface Storage for Irrigation or Infiltration

Subsurface storage is another approach for storm water management that has little visible surface impact in the campus environment. Subsurface storage vaults could be placed under parking or landscaped areas. Collected rain water from roofs could be used for irrigation, or infiltrated back into the ground.

## Bioretention / Rain Gardens

Space-constrained environments may rely on smaller-scale bioretention areas, also known as rain gardens. These are depressed planting beds that are designed to retain storm water for a limited, relatively short period of time (+/- 36 hours), where the soil medium and the plants aid in filtering out sediments and other contaminants before water is either infiltrated or discharged back into the stormwater piping system. Specific planting medium, and plants that could withstand heavy rainfall, but also periods of drought, must be specified. The rain gardens can be quite attractive and there are various design approaches that would suit the campus environment.

Permeable unit pavers are an attractive porous pavement choice for plazas and pedestrian areas.

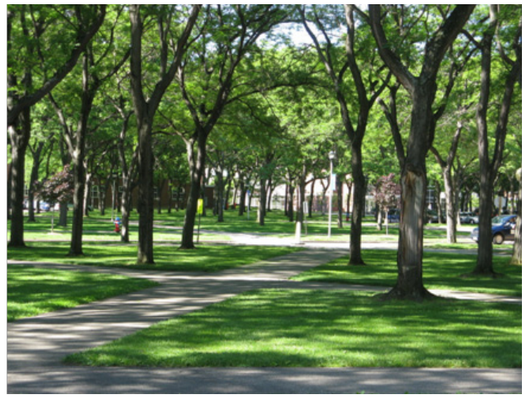
Infiltration galleys are among the SMPs for sub-surface infiltration.

Bioretention swale featuring irises, ornamental grasses, and wildflowers.

The existing bioretention pond, near Lakeway Drive, provides water quality volume sufficient to compensate for two remote campus improvements, where design of a conforming SMP was not practical.

Rain garden planter with ornamental planting.

The intended visual effect of a uniform row of trees has been lost due to replacement with small trees over time.



The preservation of tree uniformity in the Honey Locust Grove may require replacing whole sections at the same time, when current trees start declining.

Intensive green roofs (12" to 3'-4' deep plant beds, engineered or conventional soil mix) allow a wider range of ornamental planting for attractive, useable rooftop spaces. (Source: Stantec)

An example of replacement of an entire section of trees with new uniform-sized planting. (Source: Stantec)

## Landscape Maintenance

ISSUES

- The formal planting of honey-locusts on a grid has become the college "Signature Landscape"
- Replacement should attempt to strive for a similar look of uniformity of tree species and size
- All trees in the grove were planted at the same time, were of the same size, have similar growth conditions, and are likely to start declining at about the same time.

The College's consistent efforts to maintain the campus landscape are admirable, given its limited resources. One of the recent efforts has been to assess the condition of every tree in the campus core (the SUNY Fredonia Tree Inventory, October 2009); and propose a list of work orders by priority – whether it is to remove, prune, or inspect.

While the tree Inventory specifies the tree maintenance in the short term, the longer-term maintenance issues of the campus landscape have not been addressed. There are no specific guidelines for prevention of compaction in root zones, supplemental fertilizing of specimen trees, and replacement of trees. The lack of tree replacement guidelines have resulted with planting of very small caliper tree saplings in various locations, probably in the effort to plant as many as possible within the budget constraints. This is especially evident along Ring Road with its densely-spaced colonnade of armstrong maples, many of which have been replaced by saplings. The intended visual effect of a tall uniform hedgerow has been lost due to the inadequate replacements.

One of the landscape-related issues that SUNY Fredonia will have to face in the foreseeable future is the decline of the honey locust groves. These groves have become the campus iconic landscape, and the preservation of their character should be a campus priority.

While the honey locusts in the groves are generally in good condition, the issue is that all trees in the grove were planted at the same time, were of the same size, have similar growth conditions, and are likely to start declining at about the same time. Consistent care and protection would extend their longevity, however, when they do start declining, replacement should strive for a similar look of uniformity of tree species and size. A recommended treatment plan for the honey locust groves includes:

RECOMMENDATIONS

- Arborist should monitor condition of trees, and implement ongoing course of care (aeration of soil, fertilizing, pruning), to prevent decline as long as possible
- Edge protection, and removing of some of the footpaths will prevent compaction in the root zone.
- When decline of many trees is noted, entire sections of the grove should be replaced all at the same time, rather than replacement over time.
- Replacement tree material should be all of the same cultivar and size, preferably 3-1/2" to 4" caliper, minimum.

Replacing all at once has negative cost implications, but would allow proper preparation of the planting bed for optimal tree growth.

## Green Roofs

Green roofs are areas of vegetation placed upon the waterproofing membranes of existing or new roofs. One of the many benefits of green roofs is that they absorb a portion of the rain that falls upon the roofs, reducing the rate and quantity of roof runoff by 50%. The rain water is stored in the light-weight engineered soil medium, absorbed by the plant material, and eventually released as evapo-transpiration. Other environmental benefits of green roofs are that they keep the roofs cool and extend the life of the roof membrane; they insulate the roof structure to reduce thermal loss and improve thermal comfort within the building; they reduce the urban island thermal effect, and they provide habitat for birds and insects.

The green roofs also have considerable aesthetic potential. For example, the wide expanses of concrete pedestal pavers at the rooftop plaza between Reed Library and MacEwen Hall could be supplemented with areas of lush vegetation, for an attractive campus space.

Many of SUNY Fredonia's buildings feature flat roofs, which are suitable for green roof installation. New buildings, as well as existing buildings that will soon require replacement of the existing roofing membranes, should utilize the many benefits of green roofs.

## Precedents: Green Roofs

Extensive green roofs (6"-12" deep engineered soil mix, planted with sedums and ground covers) offer many environmental benefits, such as absorption of the storm water, insulation for the roof structure, and wildlife habitat. (Source: Stantec)

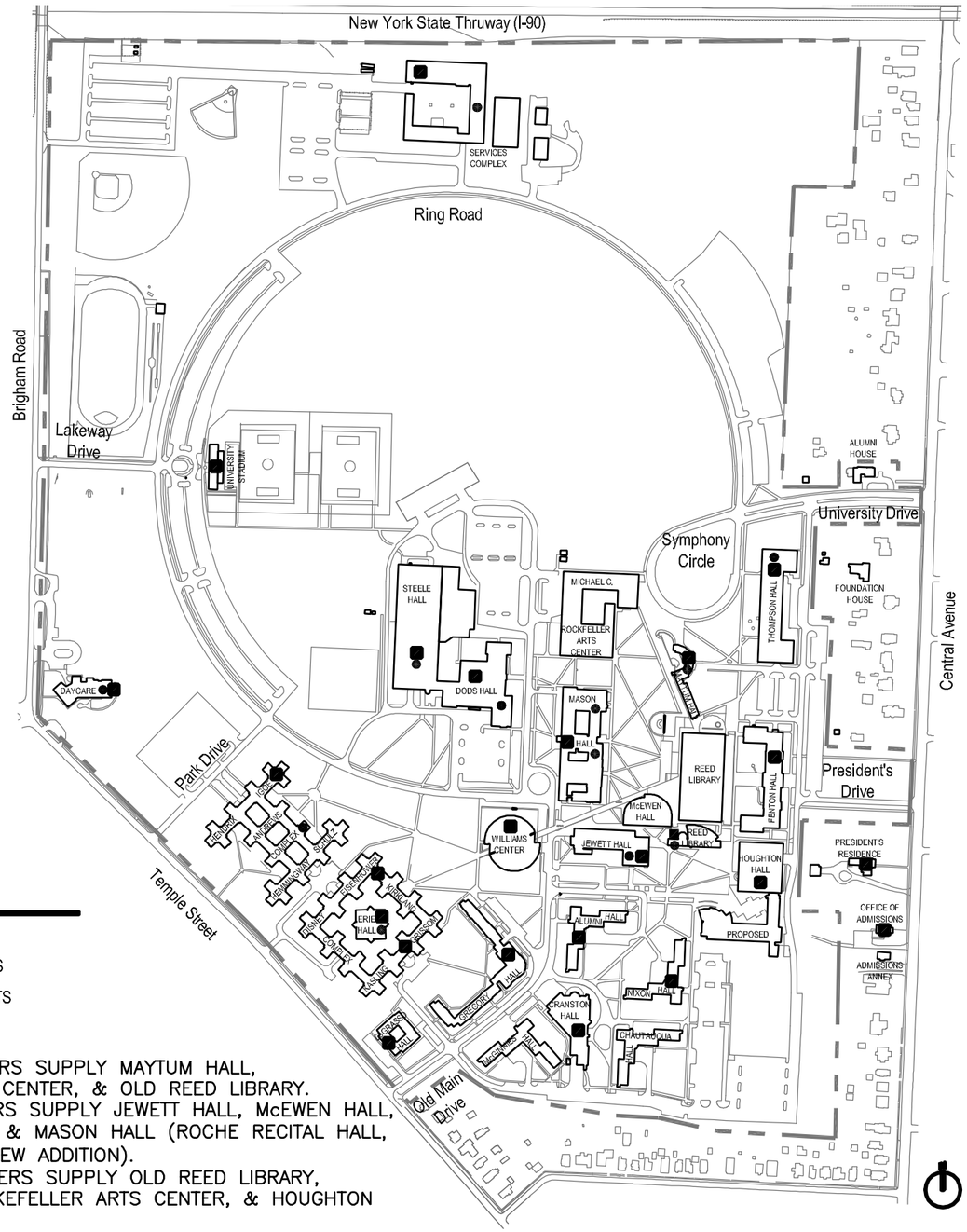
# Site Utilities

**Ongoing Improvements:**

- Rockefeller Hall (New Addition)
- Science Building
- Dods Hall (fitness center)
- Williams Center
- Welcome Center

## Site Issues

- Switchgear Upgrades and Distribution – The design of the upgrades will occur in two phases. Phase one will be to provide a new substation and dual feeders to the new primary switchgear in the basement of the former heating plant. The dual feeders will be extended from the primary switchgear in duct bank to manhole #6 near Rockefeller Arts Center. Phase two includes extending the feeders to all of the buildings and replacing the primary selective switches all of the buildings.
- Underground Utilities – The design of phase II water loops is progressing and the systems will then all be in good condition.
- IT – This requires no work
- Storm Sewer – It is recommended that any storm sewer renovations be handled on a case by case basis as has been done in the past. The system is taxed for the 10 year design storm however the alternative of routing a new outfall would be unfeasible as it would require excavation off site to the southwest of the campus through residential property. Storm water retention must be added to any new building, building addition, paring lot or impervious surface that is anticipated.



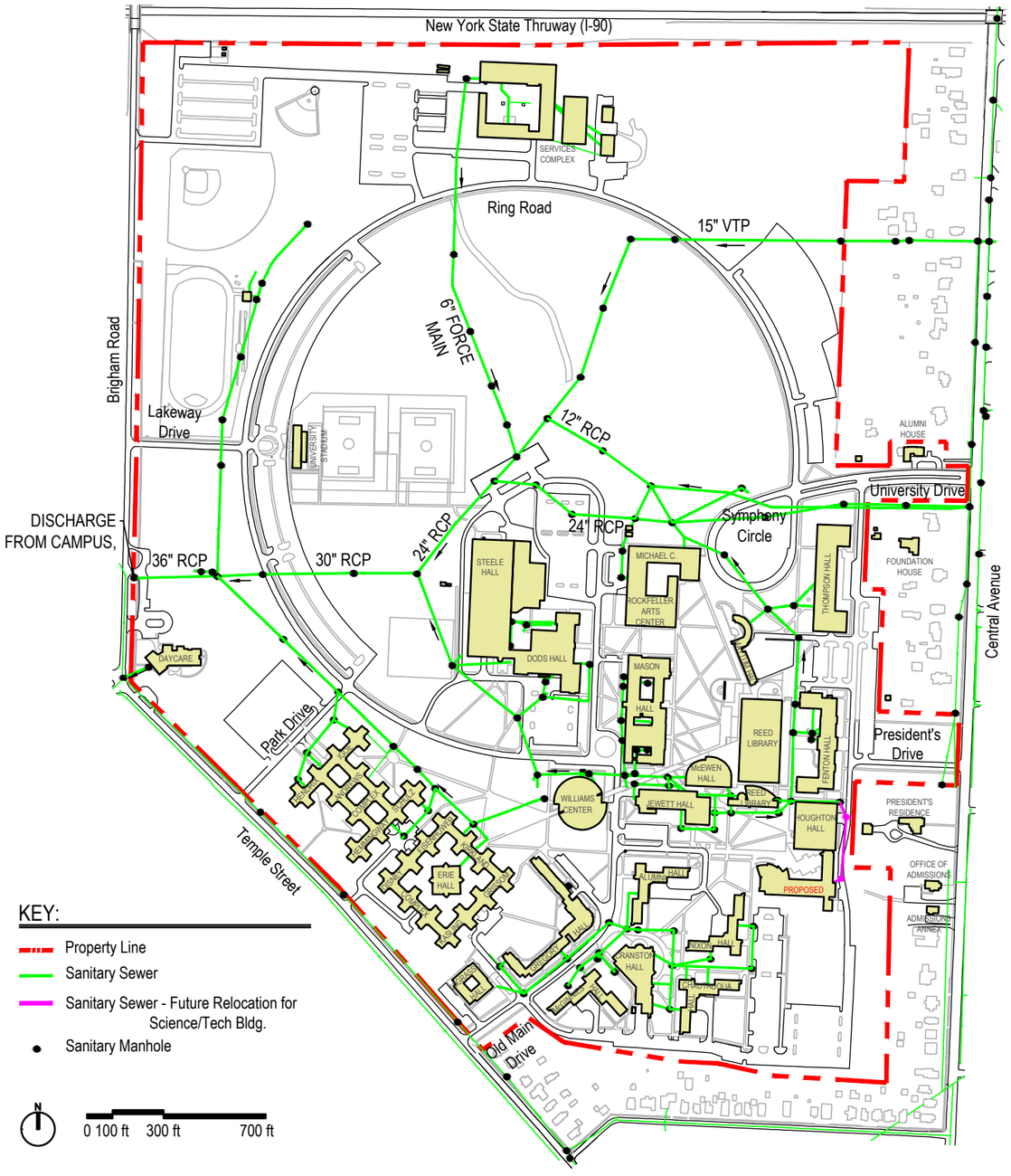

KEY:

- PROPERTY LINE
- EXISTING BOILER PLANTS
- EXISTING CHILLER PLANTS

GENERAL NOTES:

1. MAYTUM HALL BOILERS SUPPLY MAYTUM HALL, ROCKEFELLER ARTS CENTER, & OLD REED LIBRARY.
2. JEWETT HALL BOILERS SUPPLY JEWETT HALL, McEWEN HALL, OLD REED LIBRARY, & MASON HALL (ROCHE RECITAL HALL, MASON ANNEX, & NEW ADDITION).
3. MAYTUM HALL CHILLERS SUPPLY OLD REED LIBRARY, McEWEN HALL, ROCKEFELLER ARTS CENTER, & HOUGHTON HALL

The primary electrical service is in need of replacement due to age. A design project has been started to replaces the primary electrical service and distribution. The project is divided into two phases, phase 1 replace substation and first portion of primary conductors, phase 2 the remainder of primary cables.




## Physical Conditions: Infrastructure

### Sanitary

The sanitary system is a gravity sewer system with one section of force main as shown on the accompanying map. The sewer piping consists of +50% vitrified clay tile (VCT) and +35% reinforced concrete pipe (RCP), with the majority of the installation occurring between 1940 and 1960. Newer sanitary sewer lines account for roughly 15% of the system and are polyvinyl chloride pipe (PVC). Pipe diameter is reported to range between six-inch (6”) and thirty-six inch (36”).

The Village of Fredonia has two sanitary lines which enter the campus along Central Avenue and connect near the center of the Ring Road. The campus sewer system branches empty into these two lines and combined sanitary trunk. Currently the Village of Fredonia has an agreement with SUNY Fredonia to service sections of these sanitary lines. At the point of discharge from the campus the sanitary pipe is thirty-six inch (36”) diameter. A majority of the sanitary manholes are original brick made structures.

Nixon Hall is the only facility building to have a sanitary backflow preventer, this apparatus was installed after a backup event. In an effort to reduce grease build-up a grease trap has been installed at the University Commons.

Maintenance on the campus sewer system is performed as required. Tree root penetration at the older sections of pipe has been a common backup problem. Grease build-up from the College dining facilities found in Erie Hall, Williams Center and University Commons have created blockage issues. Some manholes and pipes in these prone areas are flushed as time permits.

### Phase IV Sanitary Recommendations:

- Perform a closed circuit video (CCTV) inspection of the sanitary sewer lines campus wide to determine conditions and potential problem areas. CCTV will also aid in the identification of correct structure netwo
- Perform regula d manholes.
- Phase replacen nanhole structures.

## Storm Distribution

The drainage system for SUNY Fredonia is a gravity type, separated storm sewer system, shown on the accompanying map. This system consists of manholes, catch basins and storm drain piping which has been expanded as necessary based on infrastructure construction. Campus records have indicated there is roughly 40,000 linear feet (lf) of piping, ranging in size from 6" to 66" diameter. Pipe materials consist of Polyvinyl Chloride (PVC), Corrugated Metal Pipe (CMP) and Reinforced Concrete Pipe (RCP). The manholes and catch basins are believed to include precast reinforced concrete, and brick and mortar structures. This could not be verified due to limited record drawing availability. Structures in the traffic path are prone to collapse and a campus inspection schedule should be established.

There are two storm sewer trunks from the campus on the west side which discharge into Canadaway Creek. Both trunks transfer stormwater collected by the Village of Fredonia's storm water system through the campus. Based on analysis of the storm system done under the Stormwater Master Plan (2008), the 42" diameter (Outfall #2) southwest discharge rate for a 10-year rainfall event is equivalent to the outlet pipe capacity under existing conditions. Localized backups and flooding may occur with collection of additional stormwater into this system as the campus expands.

The campus currently performs maintenance on sections of the storm sewer system when possible. Pipes are flushed, and structure sumps cleared of debris accumulation as time permits during the summer months. Structures are replaced by the facility staff on an as-needed basis when outside the scope of ongoing construction projects.

Surface drainage is generally able to handle the storm runoff; however facility staff has identified the following areas of concern:

- Old Main Drive - East of Gregory Hall, standing water in roadway.
- Between Reed Library and Houghton Hall, standing water in lawn.
- Ring Road – At various locations surface runoff does not permeate through the gravel shoulder, and areas with pavement distress have created pools of standing water at various locations on the campus.
- Both Nixon and Chautauqua Halls have experienced storm water backups at times since the construction of Lot 19 over the existing tennis courts.

## Phase IV Storm Recommendations:

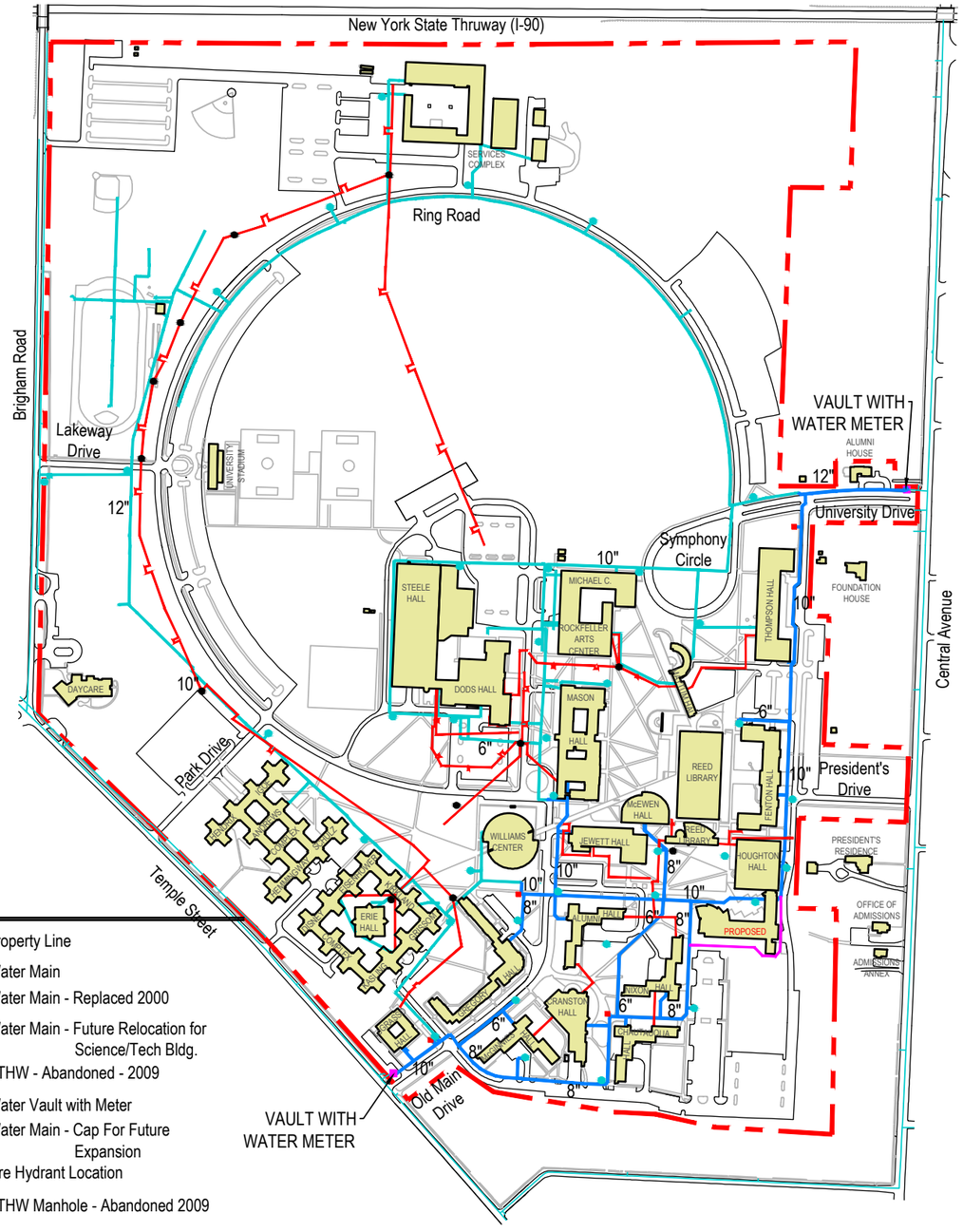
- Perform a closed circuit video (CCTV) inspection of the storm sewer lines campus wide to determine conditions and potential problem areas. CCTV will also aid in the identification of drains and structures for developing system mapping.
- Continue regular maintenance on storm lines, manholes and catch basins.
- Establish a campus inspection schedule of storm system.

## Stormwater Management Practice:

Any project with disturbance of more than one acre of land will require obtaining permit coverage under New York State Department of Environment Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharge from Construction Activity. The campus has the following Stormwater Management Practices: Bioretention System (located near Lakeway Drive) and Underground Infiltration System (the new Campus and Community Children's Center). For the proposed Science and Technology Building an underground detention plus cartridge filtration system is proposed.

Implementation of the required stormwater management practices on an individual project basis can consume land area and can be difficult to efficiently manage. An alternative would be to combine projects and treat the **total** required stormwater, as was done for the Cranston / Athletic Complex projects (using bioretention).

# Water Distribution Map




## Water

The configuration and size of campus water mains has been obtained from available mapping and as-built drawings from the 1999-2000 underground water distribution replacement. Based on this information the network consists of nearly all ductile iron pipes, ranging in size from 6" to 12" diameter. Water mains not replaced in the replacement project may date back to the 1950's. Found on the Water Distribution Map is the on-campus water distribution system, which differentiates between original, replaced and proposed water mains. Currently the campus is connected at (2) locations into the surrounding water system at the intersections of University/Central and Old Main/Temple. A vault is present at each location housing a water meter to monitor usage; only the Campus and Community Children's Center and Technology Incubator buildings have meters. Water distribution for the campus is a combined domestic and fire protection system; at some buildings separate fire protection service lines have been installed off the primary water main.

Fire hydrants are flushed and routinely flow tested verifying campus water pressure. Hydrant inspection report from 2009 flow testing has established an approximate pressure of 115 pounds per square inch (psi), throughout the campus.

As seen on the Water Distribution Map, the 2000 water replacement work was limited to the southeast quadrant of the campus. This project replaced the water mains between both water meter vaults along Academic Avenue and Science Drive. Laterals to existing buildings and fire hydrants found along the replacement alignment were replaced as encountered. Valves and pipe stubs have been installed at various locations to provide for future water line replacement project connections. Phase II of the replacement is in design and is slated to begin construction Spring of 2011. The scope of work for this project includes 8,000 linear feet of underground water line and 15 fire hydrants.

Relocation of an existing 10" diameter water main will be required for the construction of the proposed Science and Technology Building, south of Houghton Hall. The water line will be relocated around the east and south side of the building.

The campus has identified that water line problems or breaks have been relatively infrequent. Based on the BCAS assessment report this system has been rated 25% Poor, 25% Fair and 50% Good. Any water lines older than 50 years should be considered near the end of their useful design life and considered for replacement.

## Phase IV Water Recommendations:

- Installation of water meters at each building, allowing for detailed usage review.
- Replacement of original underground water mains not included in Phase II project (+3,000lf).
- Continue with regular maintenance on hydrants and valves, including flushing hydrants and opening and closing valves.

## High Temperature Hot Water

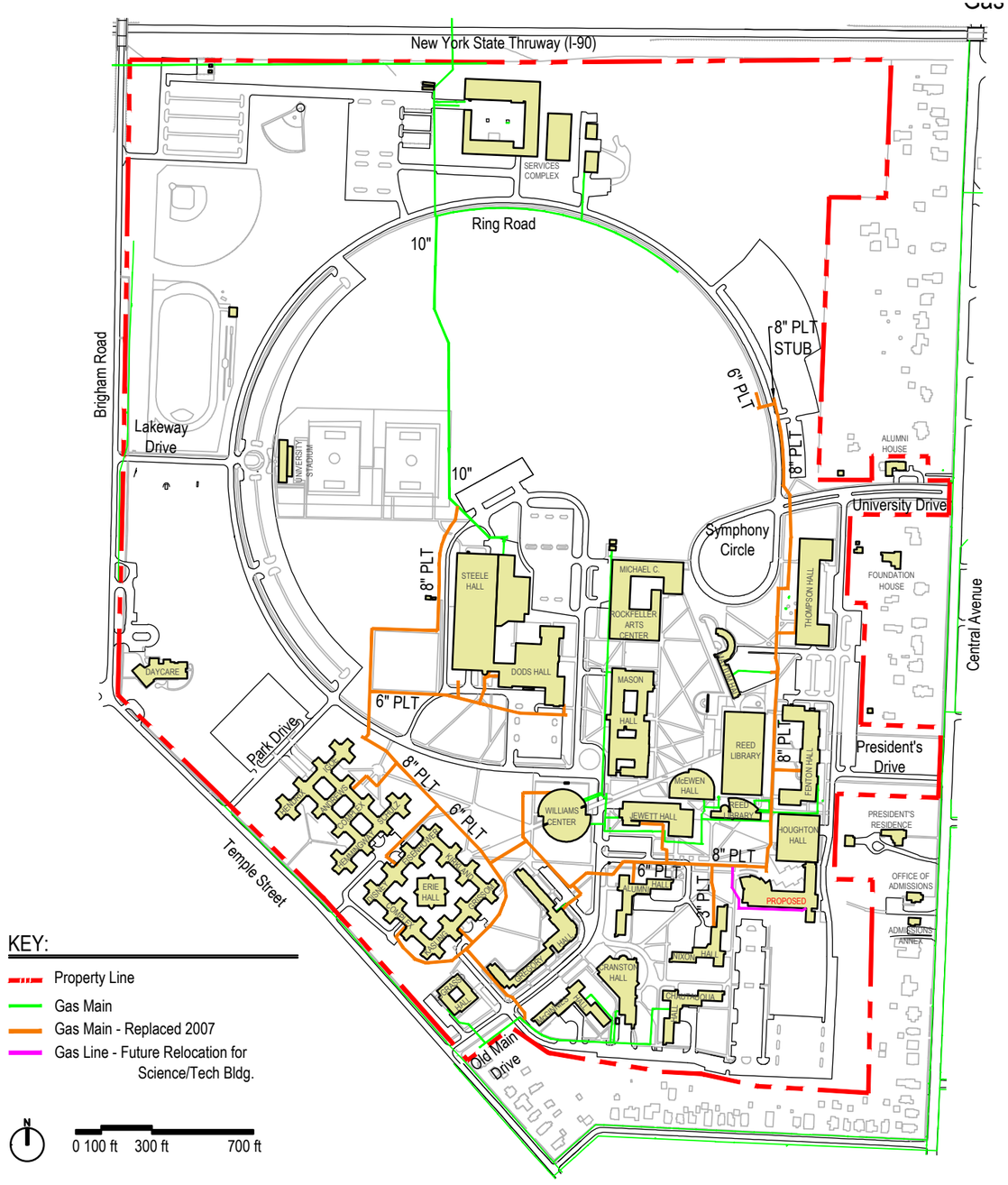
SUNY Fredonia has changed from a central boiler, high temperature hot water (HTHW) system to satellite heating systems. In May of 2009 the campus phased out the remaining HTHW system and abandoned the piping infrastructure in-place. The Facilities Planning Department has stated that HTHW manholes have been abandoned by removing the top riser section and access cover followed by filling manholes with backfill and/or concrete. This abandoned system should be suspected to have asbestos containing materials, thus requiring testing prior to demolition or removal. Incidental disturbance of asbestos containing materials shall follow corrective actions as detailed under New York State Department of Labor Code Rule 56.

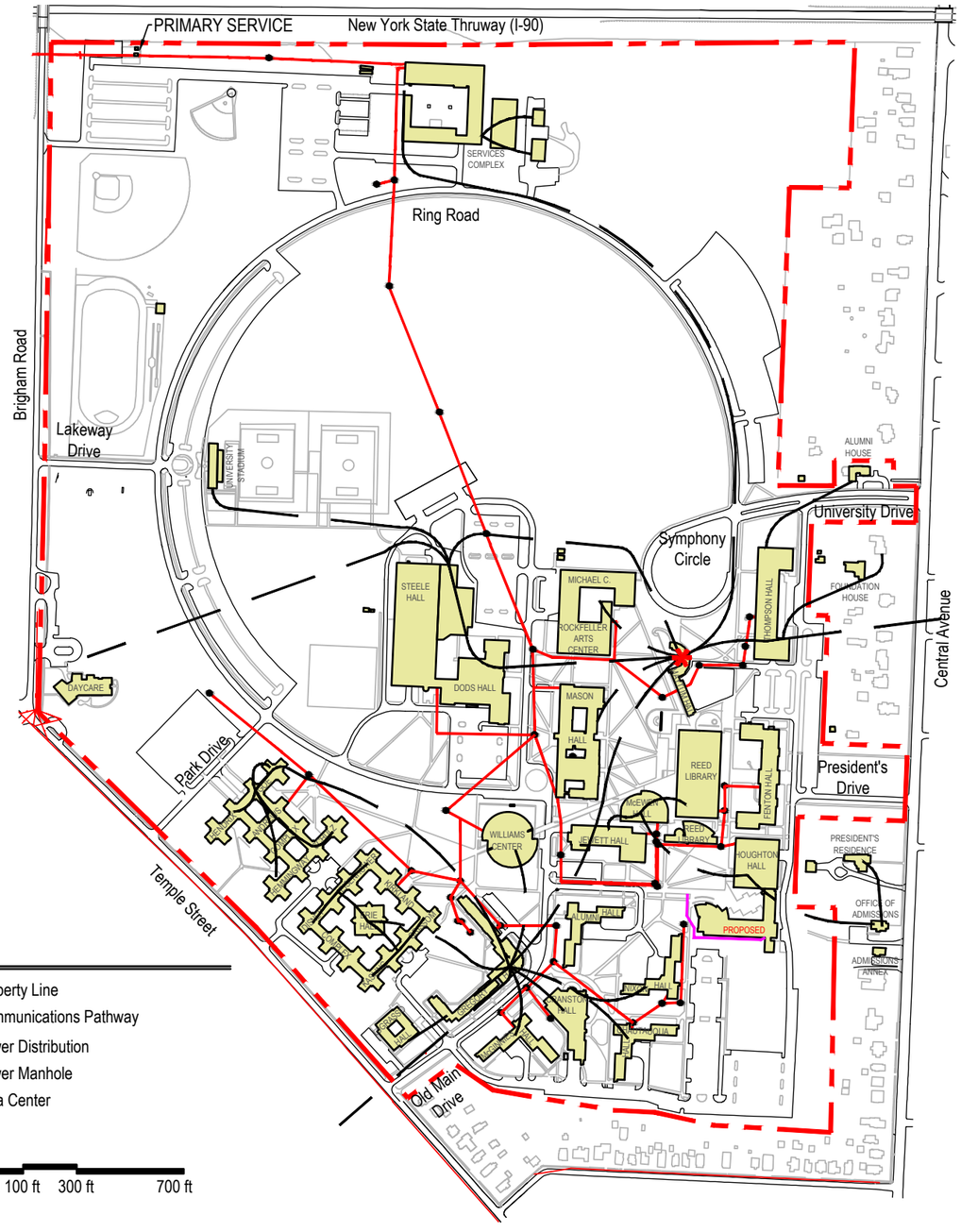
## Gas Distribution

In 2007 a campus wide gas upgrade project replaced the majority of existing gas piping with plastic pipe. Natural gas is piped over the campus as shown on the Gas Distribution Map, with differentiation between 2007 work and existing piping. The gas lines on the campus are owned and maintained by SUNY Fredonia. National Fuel provides gas to the campus from a gas main along the New York State Thruway, which ties in at the Services Complex. From the Services Complex a ten inch (10") line runs south through the Ring Road to Steele Hall. At this location the service is reduced to eight inch (8") pipe which branches as shown on the Gas Distribution Map to the facility buildings. Generally the gas lines within the campus consist of six (6") and eight inches (8") lines.

## Phase IV Gas Recommendations:

- Replacement of original gas lines not included in 2007 project.
- Update mapping of campus utilities, identifying active and abandoned lines/valves.






## Electrical Distribution

The electrical service to the SUNY Fredonia is fed from the utility, National Grid, to a single 10,000 KVA transformer with a 13.2KV secondary. From this service there are two primary feeds which serve all of the main buildings on the campus. Each building has a primary selective switch to a single transformer. Thompson Hall is the only building with two services to the building. The two primary feeds to each building allow for redundancy. If there is a problem with one of the feeders resulting in power outage, the switch can be operated to receive power from the second set of feeders.

The individual building service transformers range in size and have either a 480V or 208V secondary to serve the building loads. Currently the service to the campus and each building is of sufficient size to serve their required loads.

Currently there are no issues with the primary distribution. There is a study underway that is reviewing the current conditions of the primary conductors and manholes through out the campus.

## Alternative A

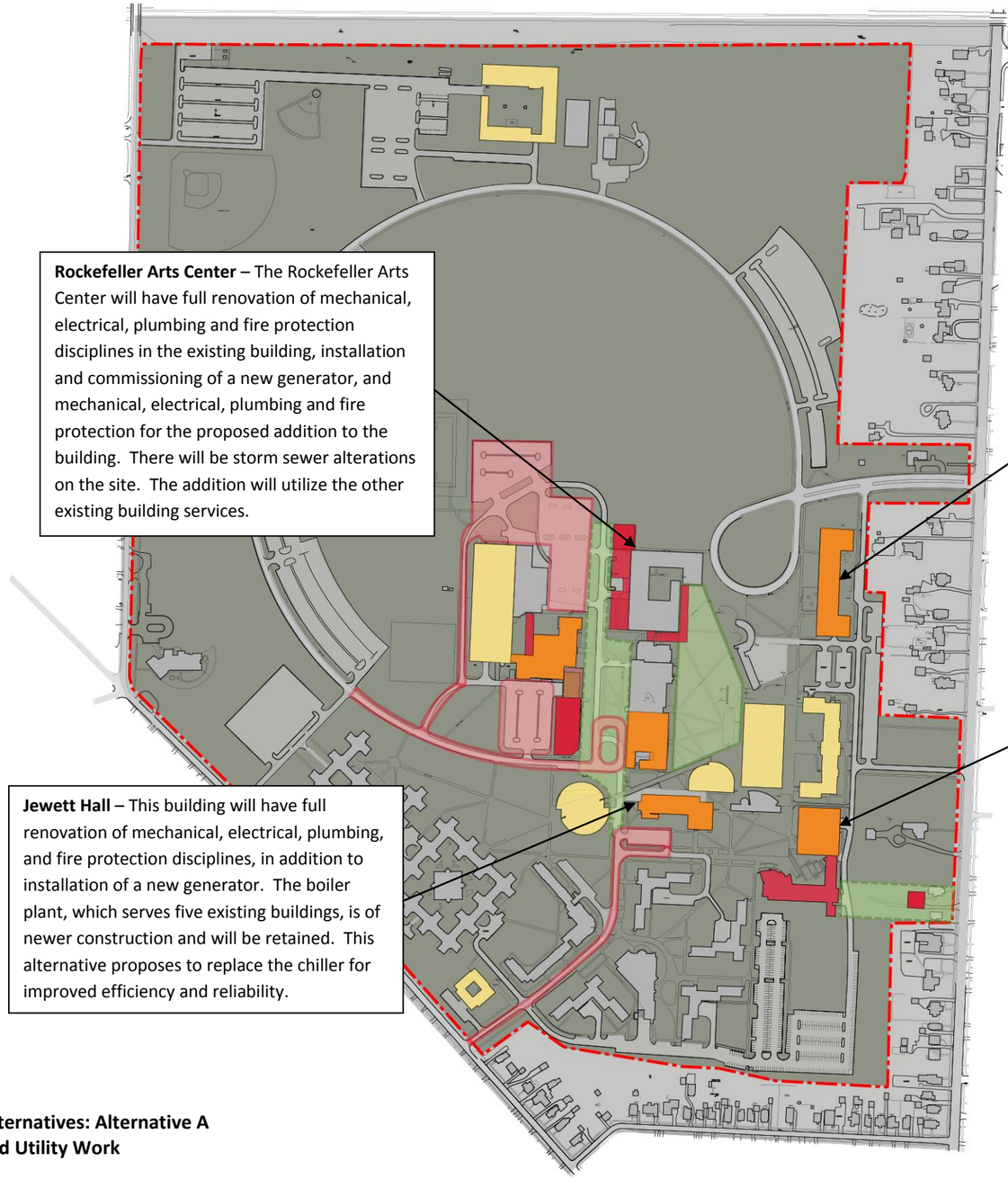
This alternative focuses on maintaining the existing buildings for long-term use and involves the least amount of new construction consisting of the following three concept alternatives.

**Renovation**

- **Houghton Hall -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to installation of a new generator.
- **Jewett Hall -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to installation of a new generator. The boiler plant, which serves five existing buildings, is of newer construction and will be retained. This alternative proposes to replace the chiller for improved efficiency and reliability.
- **Thompson Hall -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to the installation of a new generator.

**New Construction**

- **New Students Services Building** on Dods Hall lot **-** This will be a Student alone building. There is a potential to connect it to Dods Hall, however it would have its own HVAC system.
- **Rockefeller Arts Center -** The Rockefeller Arts Center will have full renovation of mechanical, electrical, plumbing and fire protection disciplines in the existing building, installation and commissioning of a new generator, and mechanical, electrical, plumbing and fire protection for the proposed addition to the building. There will be storm sewer alterations on the site. The addition will utilize the other existing building services.




**Concept Alternatives: Alternative A**
**MEP/FP and Utility Work**

# Utility Adjustments: Alternative B


**Rockefeller Arts Center** – The Rockefeller Arts Center will have full renovation of mechanical, electrical, plumbing and fire protection disciplines in the existing sections, installation and commissioning of a new generator, and mechanical, electrical, plumbing and fire protection for the proposed addition to the building. There will be storm sewer alterations on the site. The addition will utilize the other existing building services.

**Thompson Hall** – This building will have full renovation of mechanical, electrical, plumbing, and fire protection disciplines, in addition to installation of a new generator.

**New Academic Building** – This building will require new underground services including gas, storm, sanitary, domestic water, Information Technology and electrical. It will also require interior HVAC, plumbing, electrical, and IT systems.

**Houghton Hall** – This building will have full renovation of mechanical, electrical, plumbing, and fire protection disciplines, in addition to installation of a new generator.

**Dods Hall** – This building will have moderate scale renovation of the air handling units, additional chiller, alterations to the plumbing, electrical and fire protection systems.

**Old Mason** – This building will have full renovation of mechanical, electrical, plumbing, and fire protection disciplines, in addition to the installation of a new generator. The existing boiler and chillers are in good condition and will remain to serve the building.

**Jewett Hall** – The existing boiler plant provides heating for five buildings (refer to the boiler/chiller plant map). In lieu of the planned demolition work, the function of the boiler plant will be preserved.

**Concept Alternatives: Alternative B**
**MEP/FP and Utility Work**

## Alternative B

This alternative proposes more substantial changes in scope than Alternative A.

**Demolition**

- **Jewett Hall –** The existing boiler plant provides heating for five buildings (refer to the boiler plant map). In lieu of the planned demolition work, the function of the boiler plant will be preserved.

**Renovation**

- **Houghton Hall -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to installation of a new generator.
- **Thompson Hall -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to the installation of a new generator.
- **Dods Hall –** This building will have moderate scale renovation to the air handling units, additional chiller, alterations to the plumbing, electrical and fire protection systems.
- **Old Mason -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to the installation of a new generator. The existing boiler and chillers are in good condition and will remain to serve the building.

**New Construction**

- **Rockefeller Arts Center –** The Rockefeller Arts Center will have full renovation of mechanical, electrical, plumbing and fire protection disciplines in the existing sections, installation and commissioning of a new generator, and mechanical, electrical, plumbing and fire protection for the proposed addition to the building. There will be storm sewer alterations on the site. The addition will utilize the other existing building services.
- **New Academic Building -** This building will require new underground services including gas, storm, sanitary, domestic water, Information Technology and electrical. It will also require interior HVAC, plumbing, electrical and IT systems.

## Alternative C

This alternative proposes the larger scale transformations to the campus.

**Demolition**

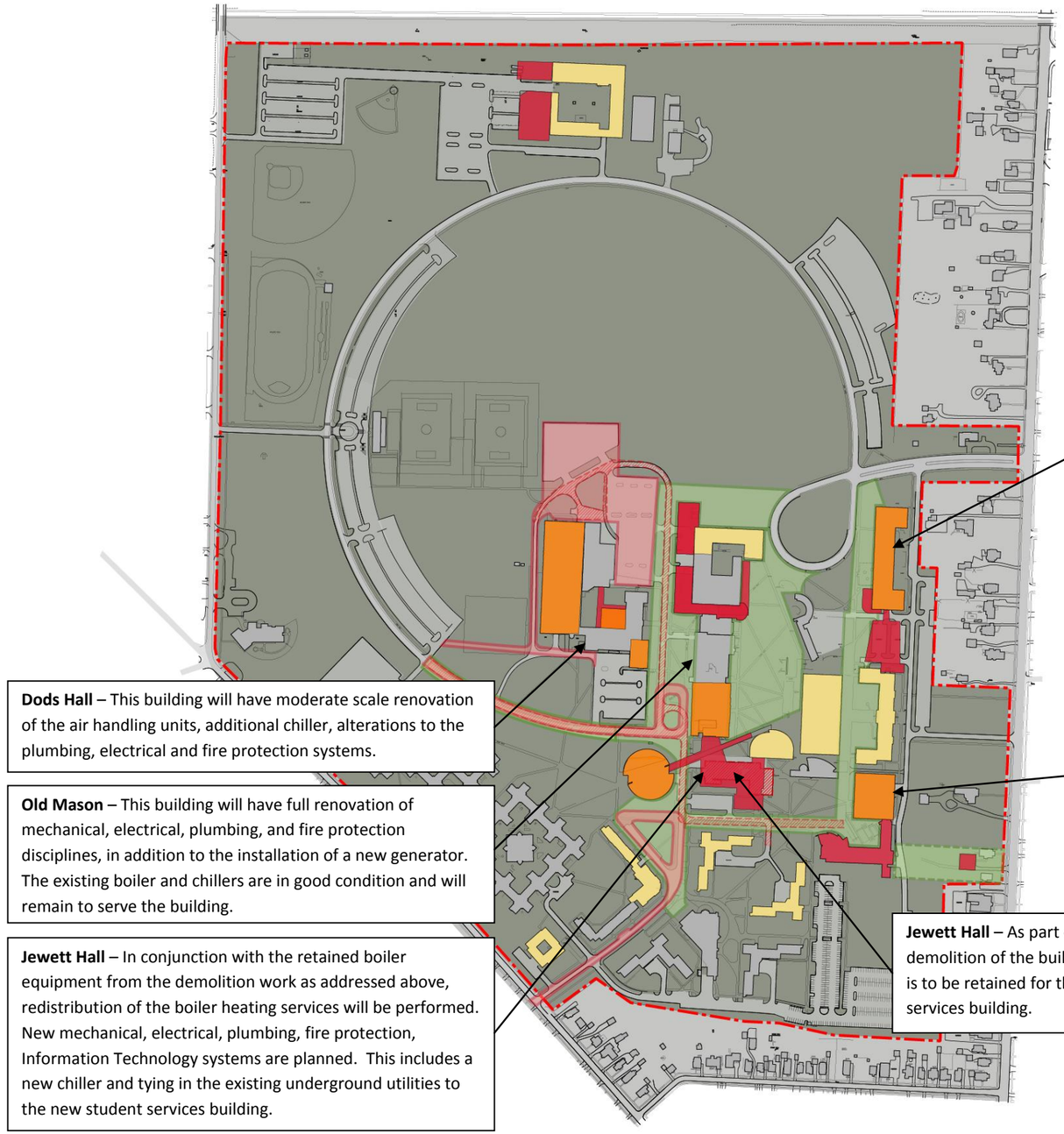
- **Jewett Hall –** As part of the complete demolition of the building, the boiler plant is to be retained for the new student services building.

**Renovation**

- **Houghton Hall -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to installation of a new generator.
- **Thompson Hall -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to the installation of a new generator.
- **Dods Hall –** This building will have moderate scale renovation to the air handling units, additional chiller, alterations to the plumbing, electrical and fire protection systems.
- **Old Mason -** This building will have full renovation of mechanical, electrical, plumbing and fire protection disciplines, in addition to the installation of a new generator. The existing boiler and chillers are in good condition and will remain to serve the building.

**New Construction**

- **Jewett Hall –** In conjunction with the retained boiler equipment from the demolition work as addressed above, redistribution of the boiler heating services will be performed. New mechanical, electrical, plumbing, fire protection, Information Technology systems are planned. This includes a new chiller and tying in the existing underground utilities to the new student services building.




**Concept Alternatives: Alternative C**
**MEP/FP and Utility Work**

## ALTERNATIVE A


### ALTERNATIVE A

**New construction:**

- Science and Technology Center
- Rockefeller Arts Center Addition
- Admissions Welcome Center
- New Academic Building: general purpose classrooms, School of Business
- Rockefeller Arts - Phase II addition

**Renovation:**

- Dods Hall Fitness Center
- Dods Hall Fitness Center renovation and Gym expansion
- Houghton Hall – full renovation
- Williams Center
- Thompson Hall Backfill
- Thompson Hall - Phase II partial renovation
- Thompson Hall - Phase III full renovation
- Fenton Hall – partial renovation
- Services Complex
- LoGrasso Hall
- Reed Library
- Jewett Hall – full renovation
- Steele Hall renovation
- Rockefeller Arts renovations
- McEwen Hall renovations
- Old Mason Hall
- New Mason Hall

**Landscape:**

- Old Main Drive phase I, pedestrian improvements north of Jewett Lot.
- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements
- Varsity Drive replacement with north-south pedestrian corridor

**Circulation/Parking:**

- Terminate Science Drive to Nixon and Alumni Hall access
- Eliminate Old Main Drive north of Jewett parking lot access
- Eliminate Varsity Drive from Rockefeller Arts Center to Mason Hall drop-off circle
- Provide revised turnaround at Mason Hall drop-off

## ALTERNATIVE B


### ALTERNATIVE B

**New construction:**

- Science and Technology Center
- Rockefeller Arts Center Addition
- Thompson Hall Entrance Addition
- New Academic Building: general purpose classrooms, School of Business
- Admissions Welcome Center
- Jewett Hall Addition, student services
- Dods Hall Fitness Center
- Rockefeller Arts - Phase II Addition

**Renovation:**

- Dods Hall Fitness Center
- Dods Hall
- Steele Hall renovation
- Houghton Hall – full renovation
- Jewett Hall
- Thompson Hall - Phase I
- LoGrasso Hall
- Services Complex
- Williams Center
- Reed Library
- Old Mason Hall
- New Mason Hall
- Thompson Hall - Phase II
- Thompson Hall - Phase III
- Rockefeller Arts renovation
- Fenton Hall – partial renovation
- Jewett Hall – full renovation

**Landscape:**

- Improvements to pedestrian areas associated with Rockefeller Arts Center Addition
- Science Drive replacement landscape
- Fenton / Library Landscape corridor
- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements
- Remainder of improvements to Varsity Drive
- Symphony Circle Landscape / Plaza
- Library Steps / Amphitheater Improvements

**Circulation/Parking:**

- Varsity Drive
- Terminate Science Drive to Nixon and Alumni Hall access
- Partially reconfigure parking lot to the north of Steele Hall
- Demolish remainder of Varsity Drive to be replaced with drive-able pedestrian paving for authorized vehicles only
- Demolish Old Main Drive from Science Drive to north of Williams Center
- Create new turnaround at former Mason Hall traffic
- Demolish Jewett Hall parking lot; replace with Science Drive access
- Create new turnaround at Gregory Hall
- Reconfigure parking lot to the north of Steele Hall
- Increase capacity and improve appearance of drive at west of athletics complex

## ALTERNATIVE C


### ALTERNATIVE C

**New construction:**

- Science and Technology Center
- Rockefeller Arts Center Addition
- Thompson Hall Entrance Addition
- New Academic Building: general classrooms, School of Business
- Admissions Welcome Center
- Dods Hall Fitness Center
- Student Services Building (Jewett Hall Replacement) - additional Academic space for Music
- Services Complex Addition
- Rockefeller Arts - Phase II Addition: Visual Arts, Concert Hall entry

**Renovation:**

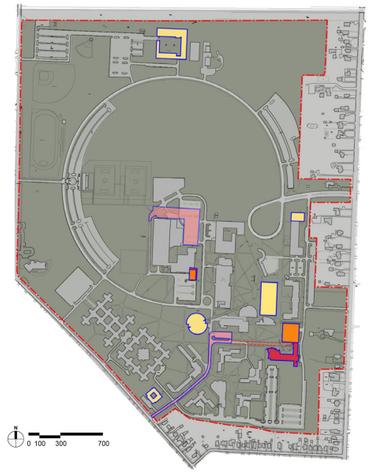
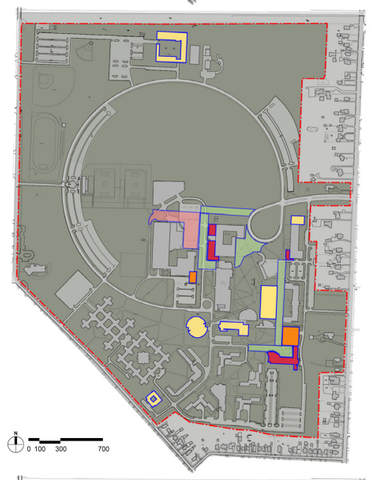
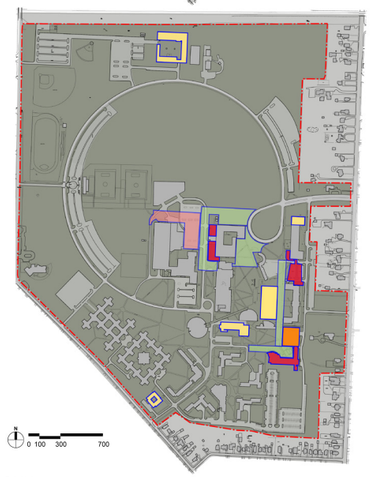
- Houghton Hall – full renovation
- Jewett Hall
- Thompson Hall - Phase I
- Thompson Hall - Phase II renovation
- Thompson Hall - Phase III renovation
- LoGrasso Hall exterior and HVAC renovations
- Services Complex
- Reed Library renovations to public spaces, offices, HVAC upgrades
- Dods Hall
- Old Mason Hall
- New Mason Hall
- Fenton Hall – partial renovation
- McEwen Hall renovations
- Rockefeller Arts renovations
- Gregory, Nixon, and Alumni Residence Halls
- Steele Field House renovations

**Landscape:**

- Improvements to pedestrian areas associated with Rockefeller Arts Center Addition
- Science Drive replacement landscape
- Fenton / Library Landscape Corridor
- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements
- Consistent improved landscape at north-south axis from Symphony Circle to the Science Quad
- Create pedestrian environment at north-south axis
- Landscape improvements to entirety of Science Drive as pedestrian axis

**Circulation/Parking:**

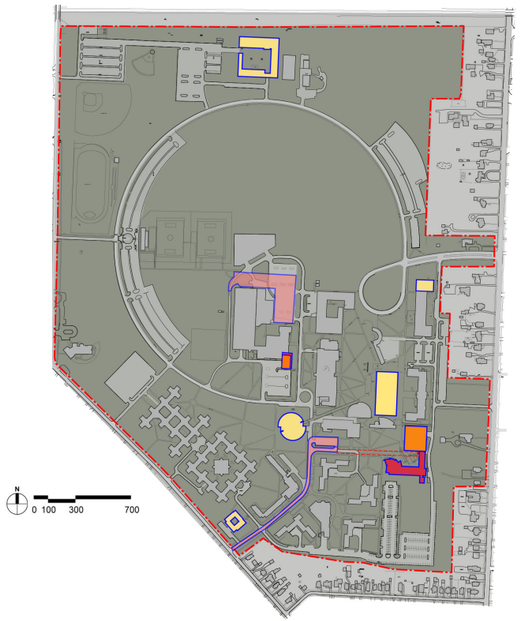
- Demolish Science Drive from Alumni and Nixon Hall access drive eastward
- Partially reconfigure parking lot to the north of Steele Hall
- Demolish Jewett Hall parking lot; replace with Science Drive access
- Create new turnaround at Gregory Hall
- Demolish Old Main Drive from new turnaround to Mason Hall Drop-Off; maintain service access
- Demolish Varsity Drive, Mason Hall drop-off circle, and Ring Road from Williams Center to Park Drive
- New connection from Park Drive parking lots to Dods Hall parking lot
- Widened entrance drive for Rockefeller Arts Center, to west of Steele Hall
- Reconfigure parking lot to the north of Steele Hall
- Increase capacity and improve appearance of drive at west of athletics complex

| | PHASE I - 2013 / 2018 | PHASE II - 2018 / 2023 | PHASE III - 2023 / Beyond |
|---|---|---|---|
| ALTERNATIVE A |  |  |  |
| ALTERNATIVE B |  |  |  |
| ALTERNATIVE C |  |  |  |

Alternative A

ALTERNATIVE A

PHASE I - 2013 / 2018




PHASE II - 2018 / 2023


PHASE III - 2023 / Beyond


## Alternative A Phase I: 2013 - 2018

**New construction:**

- Science and Technology Center

**Renovation:**

- Dods Hall Fitness Center
- Houghton Hall – full renovation
- Williams Center
- Thompson Hall Backfill
- Services Complex
- LoGrasso Hall
- Reed Library

**Circulation/Parking:**

- Terminate Science Drive to Nixon and Alumni Hall access

**Landscape:**

- Old Main Drive phase I, pedestrian improvements north of Jewett Lot.

## Alternative A Phase II: 2018 - 2023

**New construction:**

- Rockefeller Arts Center Addition
- Admissions Welcome Center

**Renovation:**

- Jewett Hall – full renovation
- Steele Hall renovation
- Thompson Hall - Phase II partial renovation
- Rockefeller Arts renovations
- McEwen Hall renovations

**Landscape:**

- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements

**Circulation/Parking:**

- Eliminate Old Main Drive north of Jewett parking lot access
- Eliminate Varsity Drive from Rockefeller Arts Center to Mason Hall drop-off circle
- Provide revised turnaround at Mason Hall drop-off

## Alternative A Phase III: Beyond 2023

**New construction:**

- New Academic Building: general purpose classrooms, School of Business
- Rockefeller Arts - Phase II addition

**Renovation:**

- Thompson Hall - Phase III full renovation
- Old Mason Hall
- New Mason Hall
- Dods Hall Fitness Center renovation and Gym expansion
- Fenton Hall – partial renovation

**Landscape:**

- Varsity Drive replacement with north-south pedestrian corridor

# Alternative A

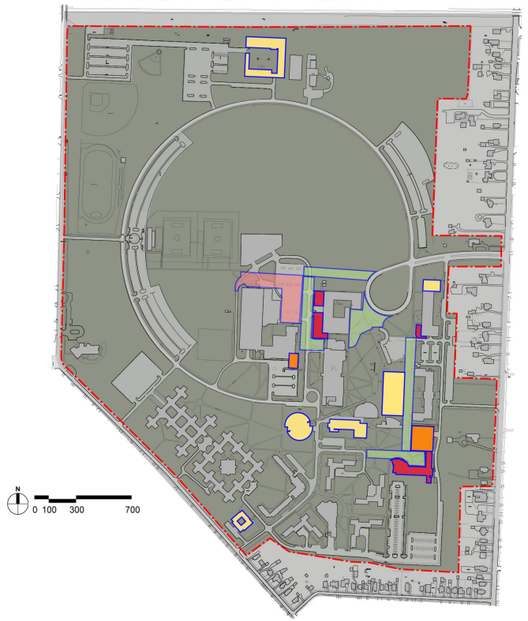
**Alternative A Plan Implementation - Projected Budgets**

| Construction Budget Costs | Area (GSF) | Unit Cost / GSF | Reno Costs | New or Addition Costs | Site Costs | Capital Budget Plan 2013-2018 | 2018-2023 | Beyond 2023 | Total |
|---|---|---|---|---|---|---|---|---|---|
| **Student Affairs / Athletics / Non-Academic Facilities** | | | | | | | | | |
| New Admissions Welcome Center | 6,000 | $314.07 | | $ 1,884,420 | | | $ 1,884,420 | | $ 1,884,420 |
| Jewett Hall - Option 1 - Renovation / Repurposing as Student Services Facility | 65,530 | $152.69 | $ 10,005,448 | | | | $ 10,005,448 | | $ 10,005,448 |
| LoGrasso Hall Mechanical Improvements | 24,445 | $142.25 | $ 3,477,179 | | | $ 3,477,179 | | | $ 3,477,179 |
| Service Complex Reconfiguration / Renovation | 14,000 | $142.25 | $ 1,991,430 | | | $ 1,991,430 | | | $ 1,991,430 |
| Dods Hall Renovation and Expanded Gymnasium and Team Rooms | 82,591 | $142.25 | | $ 11,748,157 | | $ 11,748,157 | | | $ 11,748,157 |
| Steele Field House Renovation | 91,734 | $126.59 | $ 11,612,148 | | | | $ 11,612,148 | | $ 11,612,148 |
| **Academic Facilities - Renovations** | | | | | | | | | |
| Thompson Hall - Phase 1 - Renovation: Daycare Backfill for Communication Disorders Clinical Space | 5,000 | $138.33 | $ 691,650 | | | 691,650 | | | |
| Thompson Hall - Phase 2 - Renovation: Misc. General Purpose Classroom Improvements | 21,000 | $138.33 | $ 2,904,930 | | | | $ 2,904,930 | | $ 2,904,930 |
| Thompson Hall - Phase 3 - Full Reno of Classrooms, Offices for College of Ed., History, Psychology, Sociology | 136,400 | $138.33 | $ 18,868,212 | | | | | $ 18,868,212 | $ 18,868,212 |
| Fenton Hall - Option A - Reno: Windows, HVAC Systems and Distribution | 72,759 | $121.37 | $ 8,830,396 | | | | | $ 8,830,396 | $ 8,830,396 |
| Houghton Hall Reno: Physics, Geoscience and Computer Science | 73,981 | $217.94 | $ 16,123,049 | | | $ 16,123,049 | | | $ 16,123,049 |
| Mason Hall Renovation: Music | 95,260 | $167.04 | $ 15,912,230 | | | | | $ 15,912,230 | $ 15,912,230 |
| Reed Library Renovation: Common Areas, Study Areas, Re-purposed offices | 80,861 | $144.86 | $ 11,713,120 | | | $ 11,713,120 | | | $ 11,713,120 |
| McEwen Hall Renovation: General Classrooms and Repurposing of Lecture Hall for Music | 50,894 | $142.25 | $ 7,239,417 | | | | $ 7,239,417 | | $ 7,239,417 |
| Rockefeller Arts Renovations: Visual Arts Wing and Theater Infrastructure | 50,000 | $133.11 | $ 6,655,500 | | | | $ 6,655,500 | | $ 6,655,500 |
| **Academic Facilities - New Construction** | | | | | | | | | |
| New Classroom Building: General Purpose Instructional Space, School of Business, College of Education Expansion | 75,000 | $296.24 | | $ 22,217,625 | | | | $ 22,217,625 | $ 22,217,625 |
| Thompson Hall - New Entry Addition: Accessibility and Common Area Improvements | 5,000 | $360.18 | | $ 1,800,900 | | | | $ 1,800,900 | $ 1,800,900 |
| Rockefeller Arts Phase II Addition: Entry, Accessibility, Concert Hall Support and public space improvements | 20,000 | $306.68 | | $ 6,133,500 | | | | $ 6,133,500 | $ 6,133,500 |
| **Campus Landscape and Infrastructure Improvements** | | | | | | | | | |
| Old Main / Science Drive Pedestrian Improvements Phase 1 | 17,000 | $21.58 | | | $ 366,901 | $ 366,901 | | | $ 366,901 |
| Old Main / Science Drive Pedestrian Improvements Phase 2 | 122,000 | $10.25 | | | $ 1,250,190 | | $ 1,250,190 | | $ 1,250,190 |
| Varsity Drive Pedestrian Improvements | 140,000 | $14.57 | | | $ 2,039,454 | | | $ 2,039,454 | $ 2,039,454 |
| Library/Fenton/Thompson Landscape Pedestrian Corridor | 75,000 | $11.31 | | | $ 848,381 | $ 848,381 | | | $ 848,381 |
| Main Quad Renovation | 143,000 | $8.34 | | | $ 1,193,292 | | $ 1,193,292 | | $ 1,193,292 |
| Library Steps / Amphitheater Improvements | 34,000 | $55.88 | | | $ 1,899,754 | | | $ 1,899,754 | $ 1,899,754 |
| Symphony Circle Plaza / Landscape Improvements | 56,000 | $11.26 | | | $ 630,772 | | | $ 630,772 | $ 630,772 |
| Underground Electrical Upgrades | 12,500 | $270.27 | | | $ 3,378,319 | $ 3,378,319 | | | $ 3,378,319 |
| Sub-Total Construction Budget Costs | | | $ 116,024,710 | $ 43,784,602 | $ 11,607,062 | $ 50,338,185 | $ 42,745,345 | $ 78,332,843 | $ 171,416,374 |
| **Other Project Budget Costs** | | | | | | | | | |
| Professional Fees, Equipment Costs, Contingencies Budgeted @ | 35% | | | | | $ 17,618,365 | $ 14,960,871 | $ 27,416,495 | $ 59,995,731 |
| Sub-Total Project Costs | | | | | | $ 67,956,550 | $ 57,706,216 | $ 105,749,338 | $ 231,412,104 |
| Escalation through Year 4 of Funding Cycle (Beginning 01/01/2011) @ Rate/Year | 3.75% | | | | | $ 17,838,594 | $ 25,967,797 | $ 67,415,203 | $ 111,221,595 |
| **Total Projected Budget Costs** | | | | | | **$ 85,795,144** | **$ 83,674,014** | **$ 173,164,541** | **$ 342,633,699** |

Alternative B

ALTERNATIVE B

PHASE I - 2013 / 2018




PHASE II - 2018 / 2023


PHASE III - 2023 / Beyond


## Alternative B Phase I: 2013 - 2018

**New construction:**

- Science and Technology Center
- Rockefeller Arts Center Addition
- Thompson Hall Entrance Addition

**Renovation:**

- Dods Hall Fitness Center
- Houghton Hall – full renovation
- Partial renovation of interiors for use as surge space for Mason Hall in later phase
- Jewett Hall
- Thompson Hall - Phase I
- LoGrasso Hall
- Services Complex
- Williams Center
- Reed Library

**Landscape:**

- Improvements to pedestrian areas associated with Rockefeller Arts Center Addition: portions of Varsity Drive corridor and plazas/pedestrian approach from Symphony Circle to quad entrance
- Science Drive replacement landscape, integrated with Science and Technology Center courtyard
- Fenton / Library Landscape

**Circulation/Parking:**

- Demolish Varsity Drive in front of new Rockefeller Arts Center Addition and replace with drive-able surface; authorized vehicles only, closed to public traffic
- Terminate Science Drive to Nixon and Alumni Hall access
- Partially reconfigure parking lot to the north of Steele Hall to allow east-west pedestrian connection from Symphony Circle to football arena and Ring Road

## Alternative B Phase II: 2018 - 2023

**New construction:**

- New Academic Building: general purpose classrooms, School of Business
- Admissions Welcome Center

**Renovation:**

- Old Mason Hall
- New Mason Hall
- Fenton Hall partial renovation
- Thompson Hall - Phase II
- Rockefeller Arts renovation

**Landscape:**

- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements south of plazas associated with Rockefeller Arts Center

**Circulation/Parking:**

- Demolish remainder of Varsity Drive to be replaced with drive-able pedestrian paving for authorized vehicles only
- Demolish Old Main Drive from Science Drive to north of Williams Center; replace with drive-able pedestrian paving for authorized vehicles only
- Create new turnaround at former Mason Hall traffic circle and extend improvements to pedestrian and vehicular circulation westward to Park Drive campus entrance
- Demolish Jewett Hall parking lot; replace with Science Drive access
- Create new turnaround at Gregory Hall

## Alternative B Phase III: Beyond 2023

**New construction:**

- Jewett Hall Addition, student services
- Dods Hall Fitness Center
- Rockefeller Arts - Phase II Addition

**Renovation:**

- Old Mason Hall
- Fenton Hall – partial renovation
- Jewett Hall – full renovation
- Dods Hall
- Thompson Hall - Phase III
- Steele Hall renovation

**Landscape:**

- Remainder of improvements to Varsity Drive replacement as pedestrian corridor
- Symphony Circle Landscape / Plaza
- Library Steps / Amphitheater Improvements

**Circulation/Parking:**

- Reconfigure parking lot to the north of Steele Hall to align with previous parking improvements in this area, allowing for east-west pedestrian connection from Symphony Circle
- Increase capacity and improve appearance of drive at west of athletics complex to become new entrance drive for Rockefeller Arts Center and Mason Hall patrons

# Alternative B

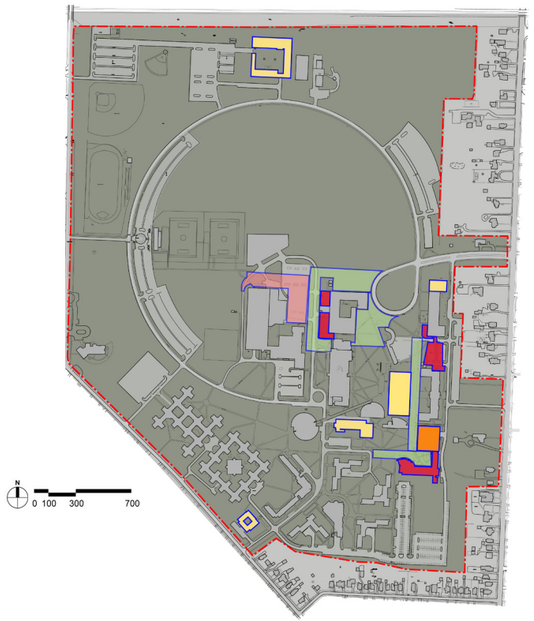
**Alternative B Plan Implementation - Projected Budgets**

| Construction Budget Costs | Area (GSF) | Unit Cost / GSF | Reno Costs | New or Addition Costs | Site Costs | Capital Budget Plan 2013-2018 | 2018-2023 | Beyond 2023 | Total |
|---|---|---|---|---|---|---|---|---|---|
| **Student Affairs / Athletics / Non-Academic Facilities** | | | | | | | | | |
| New Admissions Welcome Center | 6,000 | $314.07 | | $ 1,884,420 | | | $ 1,884,420 | | $ 1,884,420 |
| Jewett Hall - Option 2 - Renovation / Repurposing as Student Services Facility | 65,530 | $152.69 | $ 10,005,448 | | | | | $ 10,005,448 | $ 10,005,448 |
| Jewett Hall - Option 2 - Addition for Student Services, Music Dept. Expansion, Jewett Lecture Hall Replacement | 40,000 | $298.85 | $ 11,953,800 | | | | | $ 11,953,800 | |
| LoGrasso Hall Mechanical Improvements | 24,445 | $142.25 | $ 3,477,179 | | | $ 3,477,179 | | | $ 3,477,179 |
| Service Complex Reconfiguration / Renovation | 14,000 | $142.25 | $ 1,991,430 | | | $ 1,991,430 | | | $ 1,991,430 |
| Dods Hall Renovation and Expanded Gymnasium and Team Rooms | 82,591 | $142.25 | | $ 11,748,157 | | | | $ 11,748,157 | $ 11,748,157 |
| Steele Field House Renovation | 91,734 | $126.59 | $ 11,612,148 | | | | | $ 11,612,148 | $ 11,612,148 |
| **Academic Facilities - Renovations** | | | | | | | | | |
| Thompson Hall - Phase 1 - Renovation: Daycare Backfill for Communication Disorders Clinical Space | 5,000 | $138.33 | $ 691,650 | | | 691,650 | | | |
| Thompson Hall - Phase 2 - Renovation: Misc. General Purpose Classroom Improvements | 21,000 | $138.33 | $ 2,904,930 | | | | $ 2,904,930 | | $ 2,904,930 |
| Thompson Hall - Phase 3 - Full Reno of Classrooms, Offices for College of Ed., History, Psychology, Sociology | 136,400 | $138.33 | $ 18,868,212 | | | | | $ 18,868,212 | $ 18,868,212 |
| Fenton Hall - Option A - Reno: Windows, HVAC Systems and Distribution | 72,759 | $121.37 | $ 8,830,396 | | | | $ 8,830,396 | | $ 8,830,396 |
| Houghton Hall Reno: Physics, Geoscience and Computer Science | 73,981 | $217.94 | $ 16,123,049 | | | $ 16,123,049 | | | $ 16,123,049 |
| Mason Hall Renovation: Music | 95,260 | $167.04 | $ 15,912,230 | | | | $ 15,912,230 | | $ 15,912,230 |
| Reed Library Renovation: Common Areas, Study Areas, Re-purposed offices | 80,861 | $144.86 | $ 11,713,120 | | | $ 11,713,120 | | | $ 11,713,120 |
| McEwen Hall Renovation: General Classrooms and Repurposing of Lecture Hall for Music | 50,894 | $142.25 | $ 7,239,417 | | | | $ 7,239,417 | | $ 7,239,417 |
| Rockefeller Arts Renovations: Visual Arts Wing and Theater Infrastructure | 50,000 | $133.11 | $ 6,655,500 | | | | $ 6,655,500 | | $ 6,655,500 |
| **Academic Facilities - New Construction** | | | | | | | | | |
| New Classroom Building: General Purpose Instructional Space, School of Business, College of Education Expansion | 75,000 | $296.24 | | $ 22,217,625 | | | $ 22,217,625 | | $ 22,217,625 |
| Thompson Hall - New Entry Addition: Accessibility and Common Area Improvements | 5,000 | $360.18 | | $ 1,800,900 | | $ 1,800,900 | | | $ 1,800,900 |
| Rockefeller Arts Phase II Addition: Entry, Accessibility, Concert Hall Support and public space improvements | 20,000 | $306.68 | | $ 6,133,500 | | | | $ 6,133,500 | $ 6,133,500 |
| **Campus Landscape and Infrastructure Improvements** | | | | | | | | | |
| Old Main / Science Drive Pedestrian Improvements Phase 1 | 17,000 | $21.58 | | | $ 366,901 | $ 366,901 | | | $ 366,901 |
| Old Main / Science Drive Pedestrian Improvements Phase 2 | 122,000 | $10.25 | | | $ 1,250,190 | | $ 1,250,190 | | $ 1,250,190 |
| Varsity Drive Pedestrian Improvements | 140,000 | $14.57 | | | $ 2,039,454 | $ 2,039,454 | | | $ 2,039,454 |
| Library/Fenton/Thompson Landscape Pedestrian Corridor | 75,000 | $11.31 | | | $ 848,381 | $ 848,381 | | | $ 848,381 |
| Main Quad Renovation | 143,000 | $8.34 | | | $ 1,193,292 | | $ 1,193,292 | | $ 1,193,292 |
| Library Steps / Amphitheater Improvements | 34,000 | $55.88 | | | $ 1,899,754 | | | $ 1,899,754 | $ 1,899,754 |
| Symphony Circle Plaza / Landscape Improvements | 56,000 | $11.26 | | | $ 630,772 | | | $ 630,772 | $ 630,772 |
| Underground Electrical Upgrades | 12,500 | $270.27 | | | $ 3,378,319 | $ 3,378,319 | | | $ 3,378,319 |
| Sub-Total Construction Budget Costs | | | $ 127,978,510 | $ 43,784,602 | $ 11,607,062 | $ 42,430,382 | $ 68,088,000 | $ 72,851,791 | $ 183,370,174 |
| **Other Project Budget Costs** | | | | | | | | | |
| Professional Fees, Equipment Costs, Contingencies Budgeted @ 35% | | | | | | $ 14,850,634 | $ 23,830,800 | $ 25,498,127 | $ 64,179,561 |
| Sub-Total Project Costs | | | | | | $ 57,281,016 | $ 91,918,801 | $ 98,349,917 | $ 247,549,734 |
| Escalation through Year 4 of Funding Cycle (Beginning 01/01/2011) @ Rate/Year 3.75% | | | | | | $ 15,036,267 | $ 41,363,460 | $ 62,698,072 | $ 119,097,799 |
| **Total Projected Budget Costs** | | | | | | **$ 72,317,283** | **$ 133,282,261** | **$ 161,047,990** | **$ 366,647,534** |

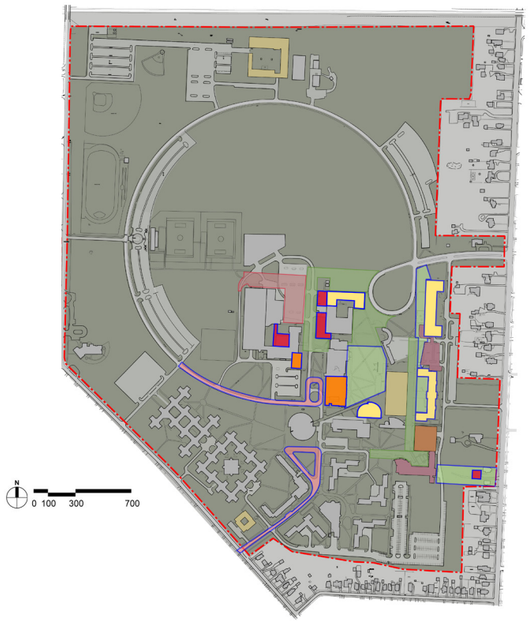
Alternative C

ALTERNATIVE C

PHASE I - 2013 / 2018




PHASE II - 2018 / 2023




PHASE III - 2023 / Beyond


## Alternative C Phase I: 2013 - 2018

**New construction:**

- Science and Technology Center
- Rockefeller Arts Center Addition
- Thompson Hall Entrance Addition
- New Academic Building: general classrooms, School of Business

**Renovation:**

- Houghton Hall – full renovation
- Jewett Hall
- Thompson Hall - Phase I
- LoGrasso Hall exterior and HVAC renovations
- Services Complex
- Reed Library renovations to public spaces, offices, HVAC upgrades

Landscape:

- Improvements to pedestrian areas associated with Rockefeller Arts Center Addition: portions of Varsity Drive corridor and plazas/pedestrian approach from Symphony Circle to quad entrance
- Science Drive replacement landscape, integrated with Science and Technology Center courtyard
- Fenton Library Landscape Corridor

**Circulation/Parking:**

- Demolish Science Drive from Alumni and Nixon Hall access drive eastward
- Partially reconfigure parking lot to the north of Steele Hall to allow east-west pedestrian connection from Symphony Circle to football arena and Ring Road.

## Alternative C Phase II: 2018 - 2023

**New construction:**

- Admissions Welcome Center
- Dods Hall Fitness Center

**Renovation:**

- Dods Hall
- Old Mason Hall
- New Mason Hall
- Fenton Hall – partial renovation
- Thompson Hall - Phase II renovation
- McEwen Hall renovations
- Rockefeller Arts renovations

**Landscape:**

- Improved connection from Admissions Welcome Center to Science and Technology Center
- Main Quad improvements south of plazas associated with Rockefeller Arts Center
- Consistent improved landscape at north-south axis from Symphony Circle to the Science Quad

**Circulation/Parking:**

- Demolish Jewett Hall parking lot; replace with Science Drive access
- Create new turnaround at Gregory Hall
- Demolish Old Main Drive from new turnaround to Mason Hall Drop-Off; maintain service access

## Alternative C Phase III: Beyond 2023

**New construction:**

- Student Services Building (Jewett Hall Replacement) - additional Academic space for Music
- Services Complex Addition
- Rockefeller Arts - Phase II Addition: Visual Arts, Concert Hall entry

**Renovation:**

- Gregory, Nixon, and Alumni Residence Halls
- Steele Field House renovations
- Thompson Hall - Phase III renovation

**Landscape:**

- Create pedestrian environment at north-south axis in place of Varsity Drive roadway and removed portion of Ring Road north of Williams Center; continuous landscape treatment in all new areas of removed roadway
- Landscape improvements to entirety of Science Drive as pedestrian axis

**Circulation/Parking:**

- Demolish Varsity Drive, Mason Hall drop-off circle, and Ring Road from Williams Center to Park Drive
- New connection from Park Drive parking lots to Dods Hall parking lot
- Widened entrance drive for Rockefeller Arts Center, to west of Steele Hall
- Reconfigure parking lot to the north of Steele Hall to align with previous parking improvements in this area, allowing for east-west pedestrian connection from Symphony Circle
- Increase capacity and improve appearance of drive at west of athletics complex to become new entrance drive for Rockefeller Arts Center and Mason Hall patrons

# Alternative C

**Alternative C Plan Implementation - Projected Budgets**

| Construction Budget Costs | Area (GSF) | Unit Cost / GSF | Reno Costs | New or Addition Costs | Site Costs | Capital Budget Plan 2013-2018 | 2018-2023 | Beyond 2023 | Total |
|---|---|---|---|---|---|---|---|---|---|
| **Student Affairs / Athletics / Non-Academic Facilities** | | | | | | | | | |
| New Admissions Welcome Center | 6,000 | $314.07 | | $ 1,884,420 | | | $ 1,884,420 | | $ 1,884,420 |
| Jewett Hall - Option 3 - Demolition of Existing Building | 65,530 | $18.27 | $ 1,197,233 | | | | | $ 1,197,233 | $ 1,197,233 |
| Jewett Hall - Option 3 - New Building for Student Services, Music Dept. Expansion, Jewett Lecture Hall Replacement | 100,000 | $319.73 | $ 31,972,500 | | | | | $ 31,972,500 | |
| LoGrasso Hall Mechanical Improvements | 24,445 | $142.25 | $ 3,477,179 | | | $ 3,477,179 | | | $ 3,477,179 |
| Service Complex Reconfiguration / Renovation | 14,000 | $142.25 | $ 1,991,430 | | | $ 1,991,430 | | | $ 1,991,430 |
| Service Complex Addition | 20,000 | | | | | | | | |
| Dods Hall Renovation and Expanded Gymnasium | 82,591 | $142.25 | | $ 11,748,157 | | | $ 11,748,157 | | $ 11,748,157 |
| Steele Field House Renovation | 91,734 | $126.59 | $ 11,612,148 | | | | | $ 11,612,148 | $ 11,612,148 |
| **Academic Facilities - Renovations** | | | | | | | | | |
| Thompson Hall - Phase 1 - Renovation: Daycare Backfill for Communication Disorders Clinical Space | 5,000 | $138.33 | $ 691,650 | | | 691,650 | | | |
| Thompson Hall - Phase 2 - Renovation: Misc. General Purpose Classroom Improvements | 21,000 | $138.33 | $ 2,904,930 | | | | $ 2,904,930 | | $ 2,904,930 |
| Thompson Hall - Phase 3 - Full Reno of Classrooms, Offices for College of Ed., History, Psychology, Sociology | 136,400 | $138.33 | $ 18,868,212 | | | | | $ 18,868,212 | $ 18,868,212 |
| Fenton Hall - Option A - Reno: Windows, HVAC Systems and Distribution | 72,759 | $121.37 | $ 8,830,396 | | | | $ 8,830,396 | | $ 8,830,396 |
| Houghton Hall Reno: Physics, Geoscience and Computer Science | 73,981 | $217.94 | $ 16,123,049 | | | $ 16,123,049 | | | $ 16,123,049 |
| Mason Hall Renovation: Music | 95,260 | $167.04 | $ 15,912,230 | | | | $ 15,912,230 | | $ 15,912,230 |
| Reed Library Renovation: Common Areas, Study Areas, Re-purposed offices | 80,861 | $144.86 | $ 11,713,120 | | | $ 11,713,120 | | | $ 11,713,120 |
| McEwen Hall Renovation: General Classrooms and Repurposing of Lecture Hall for Music | 50,894 | $142.25 | $ 7,239,417 | | | | $ 7,239,417 | | $ 7,239,417 |
| Rockefeller Arts Renovations: Visual Arts Wing and Theater Infrastructure | 50,000 | $133.11 | $ 6,655,500 | | | | $ 6,655,500 | | $ 6,655,500 |
| **Academic Facilities - New Construction** | | | | | | | | | |
| New Classroom Building: General Purpose Instructional Space, School of Business, College of Education Expansion | 75,000 | $296.24 | | $ 22,217,625 | | $ 22,217,625 | | | $ 22,217,625 |
| Thompson Hall - New Entry Addition: Accessibility and Common Area Improvements | 5,000 | $360.18 | | $ 1,800,900 | | $ 1,800,900 | | | $ 1,800,900 |
| Rockefeller Arts Phase II Addition: Entry, Accessibility, Concert Hall Support and public space improvements | 20,000 | $306.68 | | $ 6,133,500 | | | | $ 6,133,500 | $ 6,133,500 |
| **Campus Landscape and Infrastructure Improvements** | | | | | | | | | |
| Old Main / Science Drive Pedestrian Improvements Phase 1 | 17,000 | $21.58 | | | $ 366,901 | | | | $ - |
| Old Main / Science Drive Pedestrian Improvements Phase 2 | 122,000 | $10.25 | | | $ 1,250,190 | | $ 1,250,190 | | $ 1,250,190 |
| Varsity Drive Pedestrian Improvements | 140,000 | $14.57 | | | $ 2,039,454 | $ 2,039,454 | | | $ 2,039,454 |
| Library/Fenton/Thompson Landscape Pedestrian Corridor | 75,000 | $11.31 | | | $ 848,381 | $ 848,381 | | | $ 848,381 |
| Main Quad Renovation | 143,000 | $8.34 | | | $ 1,193,292 | | $ 1,193,292 | | $ 1,193,292 |
| Library Steps / Amphitheater Improvements | 34,000 | $55.88 | | | $ 1,899,754 | | | $ 1,899,754 | $ 1,899,754 |
| Symphony Circle Plaza / Landscape Improvements | 56,000 | $11.26 | | | $ 630,772 | | $ 630,772 | | $ 630,772 |
| Underground Electrical Upgrades | 12,500 | $270.27 | | | $ 3,378,319 | $ 3,378,319 | | | $ 3,378,319 |
| Sub-Total Construction Budget Costs | | | $ 139,188,995 | $ 43,784,602 | $ 11,607,062 | $ 64,281,107 | $ 58,249,304 | $ 71,683,347 | $ 194,213,758 |
| **Other Project Budget Costs** | | | | | | | | | |
| Professional Fees, Equipment Costs, Contingencies Budgeted @ 35% | | | | | | $ 22,498,387 | $ 20,387,256 | $ 25,089,172 | $ 67,974,815 |
| Sub-Total Project Costs | | | | | | $ 86,779,494 | $ 78,636,560 | $ 96,772,519 | $ 262,188,573 |
| Escalation through Year 4 of Funding Cycle (Beginning 01/01/2011) @ Rate/Year 3.75% | | | | | | $ 22,779,617 | $ 35,386,452 | $ 61,692,481 | $ 119,858,550 |
| **Total Projected Budget Costs** | | | | | | **$ 109,559,111** | **$ 114,023,013** | **$ 158,464,999** | **$ 382,047,123** |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**NEW ADMISSIONS WELCOME CENTER**

| | Project System | | NEW CONSTRUCTION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 2,000 | $ 8,000 | $ 4.00 | | | | |
| | Hazmat Abatement | 2,000 | $ 8,000 | $ 4.00 | | | | |
| | Sitework - Site Prep & Earthwork | 6,000 | $ 48,000 | $ 8.00 | | | | |
| | Sitework - Utilities | 6,000 | $ 30,000 | $ 5.00 | | | | |
| | Sitework - Pavements | 6,000 | $ 24,000 | $ 4.00 | | | | |
| | Sitework - Landscape & Misc. | 6,000 | $ 24,000 | $ 4.00 | | | | |
| | Foundations/Substructure | 6,000 | $ 90,000 | $ 15.00 | | | | |
| | Superstructure | 6,000 | $ 150,000 | $ 25.00 | | | | |
| | Roofing and Waterproofing | 6,000 | $ 120,000 | $ 20.00 | | | | |
| | Exterior Enclosure | 6,000 | $ 210,000 | $ 35.00 | | | | |
| | Interior Development - Partitions | 6,000 | $ 72,000 | $ 12.00 | | | | |
| | Interior Development - Finishes | 6,000 | $ 90,000 | $ 15.00 | | | | |
| | Interior Development - Specialties | 6,000 | $ 30,000 | $ 5.00 | | | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 6,000 | $ 30,000 | $ 5.00 | | | | |
| | Special Construction, Systems, Process, etc | | $ - | | | | | |
| | Fire Protection | 6,000 | $ 30,000 | $ 5.00 | | | | |
| | Plumbing | 6,000 | $ 60,000 | $ 10.00 | | | | |
| | HVAC | 6,000 | $ 240,000 | $ 40.00 | | | | |
| | Electrical - Power | 6,000 | $ 42,000 | $ 7.00 | | | | |
| | Electrical - Lighting | 6,000 | $ 48,000 | $ 8.00 | | | | |
| | Electrical - Systems | 6,000 | $ 60,000 | $ 10.00 | | | | |
| | Electrical - Telecom and Data | 6,000 | $ 30,000 | $ 5.00 | | | | |
| | Miscellaneous (Specify) | | $ - | | | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ 1,444,000** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ 108,300 | | | | | |
| | Design & Estimating Contingency | 10.00% | $ 144,400 | | | | | |
| | Construction Contingency | 7.00% | $ 101,080 | | | | | |
| | Contractor Overhead and Profit | 6.00% | $ 86,640 | | | | | |
| | **Construction Cost Unit** | | **$ 1,884,420** | **$ 314.07** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**JEWETT HALL RENO - OPTION 1**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 65,530 | | | $ 262,120 | $ 4.00 | | |
| | Hazmat Abatement | 65,530 | | | $ 524,240 | $ 8.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | 65,530 | | | $ 196,590 | $ 3.00 | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | 65,530 | | | $ 524,240 | $ 8.00 | | |
| | Interior Development - Partitions | 65,530 | | | $ 327,650 | $ 5.00 | | |
| | Interior Development - Finishes | 65,530 | | | $ 786,360 | $ 12.00 | | |
| | Interior Development - Specialties | 65,530 | | | $ 131,060 | $ 2.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 65,530 | | | $ 196,590 | $ 3.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 65,530 | | | $ 262,120 | $ 4.00 | | |
| | Plumbing | 65,530 | | | $ 524,240 | $ 8.00 | | |
| | HVAC | 65,530 | | | $ 2,293,550 | $ 35.00 | | |
| | Electrical - Power | 65,530 | | | $ 458,710 | $ 7.00 | | |
| | Electrical - Lighting | 65,530 | | | $ 524,240 | $ 8.00 | | |
| | Electrical - Systems | 65,530 | | | $ 393,180 | $ 6.00 | | |
| | Electrical - Telecom and Data | 65,530 | | | $ 262,120 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 7,667,010** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 575,026 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 766,701 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 536,691 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 460,021 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 10,005,448** | **$ 152.69** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**JEWETT HALL - OPTION 2 - NEW ADDITION**

| | Project System | | NEW CONSTRUCTION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 40,000 | $ 80,000 | $ 2.00 | | | | |
| | Hazmat Abatement | 40,000 | $ 80,000 | $ 2.00 | | | | |
| | Sitework - Site Prep & Earthwork | 40,000 | $ 280,000 | $ 7.00 | | | | |
| | Sitework - Utilities | 40,000 | $ 80,000 | $ 2.00 | | | | |
| | Sitework - Pavements | | $ - | | | | | |
| | Sitework - Landscape & Misc. | | $ - | | | | | |
| | Foundations/Substructure | 40,000 | $ 600,000 | $ 15.00 | | | | |
| | Superstructure | 40,000 | $ 1,000,000 | $ 25.00 | | | | |
| | Roofing and Waterproofing | 40,000 | $ 800,000 | $ 20.00 | | | | |
| | Exterior Enclosure | 40,000 | $ 1,400,000 | $ 35.00 | | | | |
| | Interior Development - Partitions | 40,000 | $ 480,000 | $ 12.00 | | | | |
| | Interior Development - Finishes | 40,000 | $ 600,000 | $ 15.00 | | | | |
| | Interior Development - Specialties | 40,000 | $ 200,000 | $ 5.00 | | | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 40,000 | $ 200,000 | $ 5.00 | | | | |
| | Special Construction, Systems, Process, etc | | $ - | | | | | |
| | Fire Protection | 40,000 | $ 200,000 | $ 5.00 | | | | |
| | Plumbing | 40,000 | $ 400,000 | $ 10.00 | | | | |
| | HVAC | 40,000 | $ 1,600,000 | $ 40.00 | | | | |
| | Electrical - Power | 40,000 | $ 280,000 | $ 7.00 | | | | |
| | Electrical - Lighting | 40,000 | $ 320,000 | $ 8.00 | | | | |
| | Electrical - Systems | 40,000 | $ 400,000 | $ 10.00 | | | | |
| | Electrical - Telecom and Data | 40,000 | $ 160,000 | $ 4.00 | | | | |
| | Miscellaneous (Specify) | | $ - | | | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ 9,160,000** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ 687,000 | | | | | |
| | Design & Estimating Contingency | 10.00% | $ 916,000 | | | | | |
| | Construction Contingency | 7.00% | $ 641,200 | | | | | |
| | Contractor Overhead and Profit | 6.00% | $ 549,600 | | | | | |
| | **Construction Cost Unit** | | **$ 11,953,800** | **$ 298.85** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**JEWETT HALL RENO - OPTION 2**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 65,530 | | | $ 262,120 | $ 4.00 | | |
| | Hazmat Abatement | 65,530 | | | $ 524,240 | $ 8.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | 65,530 | | | $ 196,590 | $ 3.00 | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | 65,530 | | | $ 524,240 | $ 8.00 | | |
| | Interior Development - Partitions | 65,530 | | | $ 327,650 | $ 5.00 | | |
| | Interior Development - Finishes | 65,530 | | | $ 786,360 | $ 12.00 | | |
| | Interior Development - Specialties | 65,530 | | | $ 131,060 | $ 2.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 65,530 | | | $ 196,590 | $ 3.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 65,530 | | | $ 262,120 | $ 4.00 | | |
| | Plumbing | 65,530 | | | $ 524,240 | $ 8.00 | | |
| | HVAC | 65,530 | | | $ 2,293,550 | $ 35.00 | | |
| | Electrical - Power | 65,530 | | | $ 458,710 | $ 7.00 | | |
| | Electrical - Lighting | 65,530 | | | $ 524,240 | $ 8.00 | | |
| | Electrical - Systems | 65,530 | | | $ 393,180 | $ 6.00 | | |
| | Electrical - Telecom and Data | 65,530 | | | $ 262,120 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 7,667,010** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 575,026 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 766,701 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 536,691 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 460,021 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 10,005,448** | **$ 152.69** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**JEWETT HALL - OPTION 3 - DEMOLISH EXISTING BUILDING**

| | Project System | | LOW INTENSITY RENOVATION Amount $ | LOW INTENSITY RENOVATION Rate $/GSF | MEDIUM INTENSITY RENOVATON Amount $ | MEDIUM INTENSITY RENOVATON Rate $/GSF | HIGH INTENSITY RENOVATION Amount $ | HIGH INTENSITY RENOVATION Rate $/GSF |
|---|---|---|---|---|---|---|---|---|
| | AREA GSF | SF | | | | | | |
| | Demolition | 65,530 | $ 262,120 | $ 4.00 | | | | |
| | Hazmat Abatement | | $ - | | | | | |
| | Sitework - Site Prep & Earthwork | 65,530 | $ 524,240 | $ 8.00 | | | | |
| | Sitework - Utilities | | $ - | | | | | |
| | Sitework - Pavements | | $ - | | | | | |
| | Sitework - Landscape & Misc. | 65,530 | $ 131,060 | $ 2.00 | | | | |
| | Foundations/Substructure | | $ - | | | | | |
| | Superstructure | | $ - | | | | | |
| | Roofing and Waterproofing | | $ - | | | | | |
| | Exterior Enclosure | | $ - | | | | | |
| | Interior Development - Partitions | | $ - | | | | | |
| | Interior Development - Finishes | | $ - | | | | | |
| | Interior Development - Specialties | | $ - | | | | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | | $ - | | | | | |
| | Special Construction, Systems, Process, etc | | $ - | | | | | |
| | Fire Protection | | $ - | | | | | |
| | Plumbing | | $ - | | | | | |
| | HVAC | | $ - | | | | | |
| | Electrical - Power | | $ - | | | | | |
| | Electrical - Lighting | | $ - | | | | | |
| | Electrical - Systems | | $ - | | | | | |
| | Electrical - Telecom and Data | | $ - | | | | | |
| | Miscellaneous (Specify) | | $ - | | | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ 917,420** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ 68,807 | | | | | |
| | Design & Estimating Contingency | 10.00% | $ 91,742 | | | | | |
| | Construction Contingency | 7.00% | $ 64,219 | | | | | |
| | Contractor Overhead and Profit | 6.00% | $ 55,045 | | | | | |
| | **Construction Cost Unit** | | **$ 1,197,233** | **$ 18.27** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**JEWETT HALL - OPTION 3 - NEW BUILDING**

| | Project System | | NEW CONSTRUCTION Amount $ | NEW CONSTRUCTION Rate $/GSF | MEDIUM INTENSITY RENOVATON Amount $ | MEDIUM INTENSITY RENOVATON Rate $/GSF | HIGH INTENSITY RENOVATION Amount $ | HIGH INTENSITY RENOVATION Rate $/GSF |
|---|---|---|---|---|---|---|---|---|
| | AREA GSF | SF | | | | | | |
| | Demolition | | $ - | | | | | |
| | Hazmat Abatement | | $ - | | | | | |
| | Sitework - Site Prep & Earthwork | 100,000 | $ 400,000 | $ 4.00 | | | | |
| | Sitework - Utilities | 100,000 | $ 300,000 | $ 3.00 | | | | |
| | Sitework - Pavements | 100,000 | $ 200,000 | $ 2.00 | | | | |
| | Sitework - Landscape & Misc. | 100,000 | $ 200,000 | $ 2.00 | | | | |
| | Foundations/Substructure | 100,000 | $ 1,500,000 | $ 15.00 | | | | |
| | Superstructure | 100,000 | $ 2,500,000 | $ 25.00 | | | | |
| | Roofing and Waterproofing | 100,000 | $ 2,000,000 | $ 20.00 | | | | |
| | Exterior Enclosure | 100,000 | $ 3,500,000 | $ 35.00 | | | | |
| | Interior Development - Partitions | 100,000 | $ 1,500,000 | $ 15.00 | | | | |
| | Interior Development - Finishes | 100,000 | $ 1,800,000 | $ 18.00 | | | | |
| | Interior Development - Specialties | 100,000 | $ 500,000 | $ 5.00 | | | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 100,000 | $ 1,500,000 | $ 15.00 | | | | |
| | Special Construction, Systems, Process, etc | | $ - | | | | | |
| | Fire Protection | 100,000 | $ 500,000 | $ 5.00 | | | | |
| | Plumbing | 100,000 | $ 1,200,000 | $ 12.00 | | | | |
| | HVAC | 100,000 | $ 4,000,000 | $ 40.00 | | | | |
| | Electrical - Power | 100,000 | $ 700,000 | $ 7.00 | | | | |
| | Electrical - Lighting | 100,000 | $ 800,000 | $ 8.00 | | | | |
| | Electrical - Systems | 100,000 | $ 1,000,000 | $ 10.00 | | | | |
| | Electrical - Telecom and Data | 100,000 | $ 400,000 | $ 4.00 | | | | |
| | Miscellaneous (Specify) | | $ - | | | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ 24,500,000** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ 1,837,500 | | | | | |
| | Design & Estimating Contingency | 10.00% | $ 2,450,000 | | | | | |
| | Construction Contingency | 7.00% | $ 1,715,000 | | | | | |
| | Contractor Overhead and Profit | 6.00% | $ 1,470,000 | | | | | |
| | **Construction Cost Unit** | | **$ 31,972,500** | **$ 319.73** | | | | |

**NOTE: INCLUDES FOOD SERVICE EQUIPMENT**

**Construction Cost Budgets - Renovation Type Unit Pricing**

**THOMPSON HALL - OPTION 1 - NEW ENTRY ADDITION**

| | Project System | | NEW CONSTRUCTION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 5,000 | $ 25,000 | $ 5.00 | | | | |
| | Hazmat Abatement | 5,000 | $ 10,000 | $ 2.00 | | | | |
| | Sitework - Site Prep & Earthwork | 5,000 | $ 25,000 | $ 5.00 | | | | |
| | Sitework - Utilities | | $ - | | | | | |
| | Sitework - Pavements | | $ - | | | | | |
| | Sitework - Landscape & Misc. | | $ - | | | | | |
| | Foundations/Substructure | 5,000 | $ 75,000 | $ 15.00 | | | | |
| | Superstructure | 5,000 | $ 150,000 | $ 30.00 | | | | |
| | Roofing and Waterproofing | 5,000 | $ 150,000 | $ 30.00 | | | | |
| | Exterior Enclosure | 5,000 | $ 300,000 | $ 60.00 | | | | |
| | Interior Development - Partitions | 5,000 | $ 75,000 | $ 15.00 | | | | |
| | Interior Development - Finishes | 5,000 | $ 100,000 | $ 20.00 | | | | |
| | Interior Development - Specialties | 5,000 | $ 25,000 | $ 5.00 | | | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 5,000 | $ 25,000 | $ 5.00 | | | | |
| | Special Construction, Systems, Process, etc | | $ - | | | | | |
| | Fire Protection | 5,000 | $ 25,000 | $ 5.00 | | | | |
| | Plumbing | 5,000 | $ 50,000 | $ 10.00 | | | | |
| | HVAC | 5,000 | $ 200,000 | $ 40.00 | | | | |
| | Electrical - Power | 5,000 | $ 35,000 | $ 7.00 | | | | |
| | Electrical - Lighting | 5,000 | $ 40,000 | $ 8.00 | | | | |
| | Electrical - Systems | 5,000 | $ 50,000 | $ 10.00 | | | | |
| | Electrical - Telecom and Data | 5,000 | $ 20,000 | $ 4.00 | | | | |
| | Miscellaneous (Specify) | | $ - | | | | | |
| | **Direct Construction Cost Unit** | | **$ 1,380,000** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ 103,500 | | | | | |
| | Design & Estimating Contingency | 10.00% | $ 138,000 | | | | | |
| | Construction Contingency | 7.00% | $ 96,600 | | | | | |
| | Contractor Overhead and Profit | 6.00% | $ 82,800 | | | | | |
| | **Construction Cost Unit** | | **$ 1,800,900** | **$ 360.18** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**THOMPSON HALL - PHASE 1 - RENOVATION**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 5,000 | | | $ 20,000 | $ 4.00 | | |
| | Hazmat Abatement | 5,000 | | | $ 30,000 | $ 6.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | 5,000 | | | $ 10,000 | $ 2.00 | | |
| | Superstructure | | | | $ - | | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | | | | $ - | | | |
| | Interior Development - Partitions | 5,000 | | | $ 25,000 | $ 5.00 | | |
| | Interior Development - Finishes | 5,000 | | | $ 60,000 | $ 12.00 | | |
| | Interior Development - Specialties | 5,000 | | | $ 10,000 | $ 2.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 5,000 | | | $ 15,000 | $ 3.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 5,000 | | | $ 20,000 | $ 4.00 | | |
| | Plumbing | 5,000 | | | $ 40,000 | $ 8.00 | | |
| | HVAC | 5,000 | | | $ 175,000 | $ 35.00 | | |
| | Electrical - Power | 5,000 | | | $ 35,000 | $ 7.00 | | |
| | Electrical - Lighting | 5,000 | | | $ 40,000 | $ 8.00 | | |
| | Electrical - Systems | 5,000 | | | $ 30,000 | $ 6.00 | | |
| | Electrical - Telecom and Data | 5,000 | | | $ 20,000 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 530,000** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 39,750 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 53,000 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 37,100 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 31,800 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 691,650** | **$ 138.33** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**THOMPSON HALL - OPTION 2 - RENOVATION**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 21,000 | | | $ 84,000 | $ 4.00 | | |
| | Hazmat Abatement | 21,000 | | | $ 168,000 | $ 8.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | 21,000 | | | $ 63,000 | $ 3.00 | | |
| | Superstructure | | | | $ - | | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | | | | $ - | | | |
| | Interior Development - Partitions | 21,000 | | | $ 105,000 | $ 5.00 | | |
| | Interior Development - Finishes | 21,000 | | | $ 252,000 | $ 12.00 | | |
| | Interior Development - Specialties | 21,000 | | | $ 42,000 | $ 2.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 21,000 | | | $ 63,000 | $ 3.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 21,000 | | | $ 84,000 | $ 4.00 | | |
| | Plumbing | 21,000 | | | $ 168,000 | $ 8.00 | | |
| | HVAC | 21,000 | | | $ 735,000 | $ 35.00 | | |
| | Electrical - Power | 21,000 | | | $ 147,000 | $ 7.00 | | |
| | Electrical - Lighting | 21,000 | | | $ 168,000 | $ 8.00 | | |
| | Electrical - Systems | 21,000 | | | $ 126,000 | $ 6.00 | | |
| | Electrical - Telecom and Data | 21,000 | | | $ 84,000 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 2,289,000** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 171,675 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 228,900 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 160,230 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 137,340 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 2,987,145** | **$ 142.25** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**THOMPSON HALL - OPTION 3 - RENOVATION**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 136,400 | | | $ 545,600 | $ 4.00 | | |
| | Hazmat Abatement | 136,400 | | | $ 818,400 | $ 6.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | 136,400 | | | $ 272,800 | $ 2.00 | | |
| | Superstructure | | | | $ - | | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | | | | $ - | | | |
| | Interior Development - Partitions | 136,400 | | | $ 682,000 | $ 5.00 | | |
| | Interior Development - Finishes | 136,400 | | | $ 1,636,800 | $ 12.00 | | |
| | Interior Development - Specialties | 136,400 | | | $ 272,800 | $ 2.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 136,400 | | | $ 409,200 | $ 3.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 136,400 | | | $ 545,600 | $ 4.00 | | |
| | Plumbing | 136,400 | | | $ 1,091,200 | $ 8.00 | | |
| | HVAC | 136,400 | | | $ 4,774,000 | $ 35.00 | | |
| | Electrical - Power | 136,400 | | | $ 954,800 | $ 7.00 | | |
| | Electrical - Lighting | 136,400 | | | $ 1,091,200 | $ 8.00 | | |
| | Electrical - Systems | 136,400 | | | $ 818,400 | $ 6.00 | | |
| | Electrical - Telecom and Data | 136,400 | | | $ 545,600 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 14,458,400** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 1,084,380 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 1,445,840 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 1,012,088 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 867,504 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 18,868,212** | **$ 138.33** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**NEW CLASSROOM BUILDING**

| | Project System | | NEW CONSTRUCTION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | | $ - | | | | | |
| | Hazmat Abatement | | $ - | | | | | |
| | Sitework - Site Prep & Earthwork | 75,000 | $ 300,000 | $ 4.00 | | | | |
| | Sitework - Utilities | 75,000 | $ 225,000 | $ 3.00 | | | | |
| | Sitework - Pavements | 75,000 | $ 150,000 | $ 2.00 | | | | |
| | Sitework - Landscape & Misc. | 75,000 | $ 150,000 | $ 2.00 | | | | |
| | Foundations/Substructure | 75,000 | $ 1,125,000 | $ 15.00 | | | | |
| | Superstructure | 75,000 | $ 1,875,000 | $ 25.00 | | | | |
| | Roofing and Waterproofing | 75,000 | $ 1,500,000 | $ 20.00 | | | | |
| | Exterior Enclosure | 75,000 | $ 2,625,000 | $ 35.00 | | | | |
| | Interior Development - Partitions | 75,000 | $ 900,000 | $ 12.00 | | | | |
| | Interior Development - Finishes | 75,000 | $ 1,125,000 | $ 15.00 | | | | |
| | Interior Development - Specialties | 75,000 | $ 375,000 | $ 5.00 | | | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 75,000 | $ 375,000 | $ 5.00 | | | | |
| | Special Construction, Systems, Process, etc | | $ - | | | | | |
| | Fire Protection | 75,000 | $ 375,000 | $ 5.00 | | | | |
| | Plumbing | 75,000 | $ 750,000 | $ 10.00 | | | | |
| | HVAC | 75,000 | $ 3,000,000 | $ 40.00 | | | | |
| | Electrical - Power | 75,000 | $ 525,000 | $ 7.00 | | | | |
| | Electrical - Lighting | 75,000 | $ 600,000 | $ 8.00 | | | | |
| | Electrical - Systems | 75,000 | $ 750,000 | $ 10.00 | | | | |
| | Electrical - Telecom and Data | 75,000 | $ 300,000 | $ 4.00 | | | | |
| | Miscellaneous (Specify) | | $ - | | | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ 17,025,000** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ 1,276,875 | | | | | |
| | Design & Estimating Contingency | 10.00% | $ 1,702,500 | | | | | |
| | Construction Contingency | 7.00% | $ 1,191,750 | | | | | |
| | Contractor Overhead and Profit | 6.00% | $ 1,021,500 | | | | | |
| | **Construction Cost Unit** | | **$ 22,217,625** | **$ 296.24** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**FENTON HALL RENO - OPTION A**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 72,759 | | | $ 145,518 | $ 2.00 | | |
| | Hazmat Abatement | 72,759 | | | $ 291,036 | $ 4.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | 72,759 | | | $ 72,759 | $ 1.00 | | |
| | Superstructure | | | | $ - | | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | | | | $ - | | | |
| | Interior Development - Partitions | 72,759 | | | $ 145,518 | $ 2.00 | | |
| | Interior Development - Finishes | 72,759 | | | $ 654,831 | $ 9.00 | | |
| | Interior Development - Specialties | 72,759 | | | $ 72,759 | $ 1.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 72,759 | | | $ 145,518 | $ 2.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 72,759 | | | $ 291,036 | $ 4.00 | | |
| | Plumbing | 72,759 | | | $ 582,072 | $ 8.00 | | |
| | HVAC | 72,759 | | | $ 2,546,565 | $ 35.00 | | |
| | Electrical - Power | 72,759 | | | $ 509,313 | $ 7.00 | | |
| | Electrical - Lighting | 72,759 | | | $ 582,072 | $ 8.00 | | |
| | Electrical - Systems | 72,759 | | | $ 436,554 | $ 6.00 | | |
| | Electrical - Telecom and Data | 72,759 | | | $ 291,036 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 6,766,587** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 507,494 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 676,659 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 473,661 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 405,995 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 8,830,396** | **$ 121.37** | | |

**NOTES: 100% NEW MEP SYSTEMS**
**25% GUT RENO ARCHITECTURAL SCOPE, 75% SPOT RENO TO ACCOMMODATE MEP**

**Construction Cost Budgets - Renovation Type Unit Pricing**

**FENTON HALL RENO - OPTION B**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 72,759 | | | | | $ 436,554 | $ 6.00 |
| | Hazmat Abatement | 72,759 | | | | | $ 727,590 | $ 10.00 |
| | Sitework - Site Prep & Earthwork | | | | | | $ - | |
| | Sitework - Utilities | | | | | | $ - | |
| | Sitework - Pavements | | | | | | $ - | |
| | Sitework - Landscape & Misc. | | | | | | $ - | |
| | Foundations/Substructure | 72,759 | | | | | $ 218,277 | $ 3.00 |
| | Superstructure | | | | | | $ - | |
| | Roofing and Waterproofing | | | | | | $ - | |
| | Exterior Enclosure | | | | | | $ - | |
| | Interior Development - Partitions | 72,759 | | | | | $ 727,590 | $ 10.00 |
| | Interior Development - Finishes | 72,759 | | | | | $ 873,108 | $ 12.00 |
| | Interior Development - Specialties | 72,759 | | | | | $ 291,036 | $ 4.00 |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 72,759 | | | | | $ 436,554 | $ 6.00 |
| | Special Construction, Systems, Process, etc | | | | | | $ - | |
| | Fire Protection | 72,759 | | | | | $ 291,036 | $ 4.00 |
| | Plumbing | 72,759 | | | | | $ 582,072 | $ 8.00 |
| | HVAC | 72,759 | | | | | $ 2,546,565 | $ 35.00 |
| | Electrical - Power | 72,759 | | | | | $ 509,313 | $ 7.00 |
| | Electrical - Lighting | 72,759 | | | | | $ 582,072 | $ 8.00 |
| | Electrical - Systems | 72,759 | | | | | $ 436,554 | $ 6.00 |
| | Electrical - Telecom and Data | 72,759 | | | | | $ 291,036 | $ 4.00 |
| | Miscellaneous (Specify) | | | | | | $ - | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ -** | | **$ 8,949,357** | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ - | | $ 671,202 | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ - | | $ 894,936 | |
| | Construction Contingency | 7.00% | $ - | | $ - | | $ 626,455 | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ - | | $ 536,961 | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ -** | **$ -** | **$ 11,678,911** | **$ 160.52** |

**NOTES: 100% NEW MEP SYSTEMS**
**100% GUT RENO ARCHITECTURAL SCOPE**

**Construction Cost Budgets - Renovation Type Unit Pricing**

**HOUGHTON HALL RENO**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 73,981 | | | | | $ 443,886 | $ 6.00 |
| | Hazmat Abatement | 73,981 | | | | | $ 887,772 | $ 12.00 |
| | Sitework - Site Prep & Earthwork | | | | | | $ - | |
| | Sitework - Utilities | | | | | | $ - | |
| | Sitework - Pavements | | | | | | $ - | |
| | Sitework - Landscape & Misc. | | | | | | $ - | |
| | Foundations/Substructure | 73,981 | | | | | $ 295,924 | $ 4.00 |
| | Superstructure | | | | | | $ - | |
| | Roofing and Waterproofing | | | | | | $ - | |
| | Exterior Enclosure | 73,981 | | | | | $ 443,886 | $ 6.00 |
| | Interior Development - Partitions | 73,981 | | | | | $ 739,810 | $ 10.00 |
| | Interior Development - Finishes | 73,981 | | | | | $ 1,109,715 | $ 15.00 |
| | Interior Development - Specialties | 73,981 | | | | | $ 369,905 | $ 5.00 |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 73,981 | | | | | $ 1,109,715 | $ 15.00 |
| | Special Construction, Systems, Process, etc | | | | | | $ - | |
| | Fire Protection | 73,981 | | | | | $ 369,905 | $ 5.00 |
| | Plumbing | 73,981 | | | | | $ 1,109,715 | $ 15.00 |
| | HVAC | 73,981 | | | | | $ 3,329,145 | $ 45.00 |
| | Electrical - Power | 73,981 | | | | | $ 665,829 | $ 9.00 |
| | Electrical - Lighting | 73,981 | | | | | $ 591,848 | $ 8.00 |
| | Electrical - Systems | 73,981 | | | | | $ 591,848 | $ 8.00 |
| | Electrical - Telecom and Data | 73,981 | | | | | $ 295,924 | $ 4.00 |
| | Miscellaneous (Specify) | | | | | | $ - | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ -** | | **$ 12,354,827** | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ - | | $ 926,612 | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ - | | $ 1,235,483 | |
| | Construction Contingency | 7.00% | $ - | | $ - | | $ 864,838 | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ - | | $ 741,290 | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ -** | **$ -** | **$ 16,123,049** | **$ 217.94** |

**NOTE: WILL BE CONVERTED FROM EXISTING FULL SCIENCE INSTRUCTION FACILITY INTO A "LIGHT" SCIENCE FACILITY.**

**Construction Cost Budgets - Renovation Type Unit Pricing**

**MASON HALL RENO**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 95,260 | | | $ 381,040 | $ 4.00 | | |
| | Hazmat Abatement | 95,260 | | | $ 571,560 | $ 6.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | | | | $ - | | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | 95,260 | | | $ 381,040 | $ 4.00 | | |
| | Interior Development - Partitions | 95,260 | | | $ 476,300 | $ 5.00 | | |
| | Interior Development - Finishes | 95,260 | | | $ 1,428,900 | $ 15.00 | | |
| | Interior Development - Specialties | 95,260 | | | $ 476,300 | $ 5.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 95,260 | | | $ 476,300 | $ 5.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 95,260 | | | $ 381,040 | $ 4.00 | | |
| | Plumbing | 95,260 | | | $ 762,080 | $ 8.00 | | |
| | HVAC | 95,260 | | | $ 3,810,400 | $ 40.00 | | |
| | Electrical - Power | 95,260 | | | $ 762,080 | $ 8.00 | | |
| | Electrical - Lighting | 95,260 | | | $ 1,143,120 | $ 12.00 | | |
| | Electrical - Systems | 95,260 | | | $ 762,080 | $ 8.00 | | |
| | Electrical - Telecom and Data | 95,260 | | | $ 381,040 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 12,193,280** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 914,496 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 1,219,328 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 853,530 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 731,597 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 15,912,230** | **$ 167.04** | | |

**NOTES: 1) MASON HALL COMPLEX CONSISTS OF OLD MASON (32,000 sf), NEW MASON (50,500 sf) AND MASON ANNEX (12,760 sf).**
**2) REPLACE WINDOWS AT OLD MASON ONLY.**

**Construction Cost Budgets - Renovation Type Unit Pricing**

**SERVICE COMPLEX RENOVATION / RECONFIGURATION**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 52,000 | | | $ 208,000 | $ 4.00 | | |
| | Hazmat Abatement | 52,000 | | | $ 208,000 | $ 4.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | 52,000 | | | $ 156,000 | $ 3.00 | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | 52,000 | | | $ 208,000 | $ 4.00 | | |
| | Interior Development - Partitions | 52,000 | | | $ 260,000 | $ 5.00 | | |
| | Interior Development - Finishes | 52,000 | | | $ 624,000 | $ 12.00 | | |
| | Interior Development - Specialties | 52,000 | | | $ 104,000 | $ 2.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 52,000 | | | $ 156,000 | $ 3.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 52,000 | | | $ 208,000 | $ 4.00 | | |
| | Plumbing | 52,000 | | | $ 416,000 | $ 8.00 | | |
| | HVAC | 52,000 | | | $ 1,820,000 | $ 35.00 | | |
| | Electrical - Power | 52,000 | | | $ 364,000 | $ 7.00 | | |
| | Electrical - Lighting | 52,000 | | | $ 416,000 | $ 8.00 | | |
| | Electrical - Systems | 52,000 | | | $ 312,000 | $ 6.00 | | |
| | Electrical - Telecom and Data | 52,000 | | | $ 208,000 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 5,668,000** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 425,100 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 566,800 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 396,760 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 340,080 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 7,396,740** | **$ 142.25** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**REED LIBRARY RENO**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 80,861 | | | $ 323,444 | $ 4.00 | | |
| | Hazmat Abatement | 80,861 | | | $ 566,027 | $ 7.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | | | | $ - | | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | | | | $ - | | | |
| | Interior Development - Partitions | 80,861 | | | $ 323,444 | $ 4.00 | | |
| | Interior Development - Finishes | 80,861 | | | $ 1,212,915 | $ 15.00 | | |
| | Interior Development - Specialties | 80,861 | | | $ 242,583 | $ 3.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 80,861 | | | $ 404,305 | $ 5.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 80,861 | | | $ 323,444 | $ 4.00 | | |
| | Plumbing | 80,861 | | | $ 485,166 | $ 6.00 | | |
| | HVAC | 80,861 | | | $ 2,830,135 | $ 35.00 | | |
| | Electrical - Power | 80,861 | | | $ 566,027 | $ 7.00 | | |
| | Electrical - Lighting | 80,861 | | | $ 808,610 | $ 10.00 | | |
| | Electrical - Systems | 80,861 | | | $ 404,305 | $ 5.00 | | |
| | Electrical - Telecom and Data | 80,861 | | | $ 485,166 | $ 6.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 8,975,571** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 673,168 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 897,557 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 628,290 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 538,534 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 11,713,120** | **$ 144.86** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

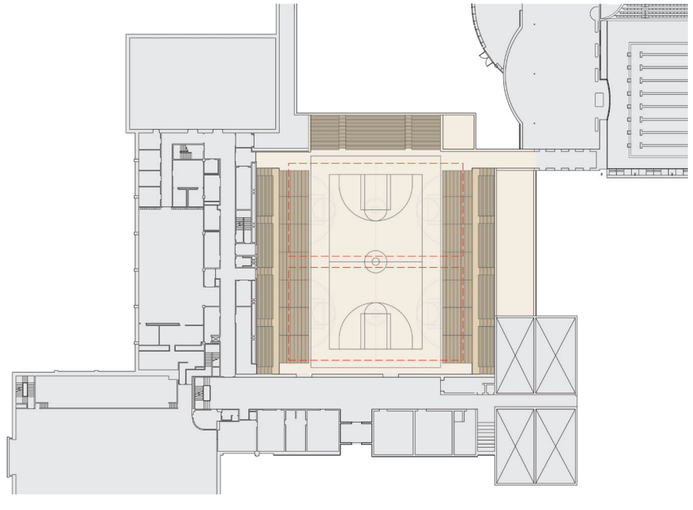
**McEWEN HALL RENO**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 50,894 | | | $ 203,576 | $ 4.00 | | |
| | Hazmat Abatement | 50,894 | | | $ 407,152 | $ 8.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | 50,894 | | | $ 152,682 | $ 3.00 | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | 50,894 | | | $ 254,470 | $ 5.00 | | |
| | Interior Development - Partitions | 50,894 | | | $ 610,728 | $ 12.00 | | |
| | Interior Development - Finishes | 50,894 | | | $ 101,788 | $ 2.00 | | |
| | Interior Development - Specialties | 50,894 | | | $ 152,682 | $ 3.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | | | | $ - | | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 50,894 | | | $ 203,576 | $ 4.00 | | |
| | Plumbing | 50,894 | | | $ 407,152 | $ 8.00 | | |
| | HVAC | 50,894 | | | $ 1,781,290 | $ 35.00 | | |
| | Electrical - Power | 50,894 | | | $ 356,258 | $ 7.00 | | |
| | Electrical - Lighting | 50,894 | | | $ 407,152 | $ 8.00 | | |
| | Electrical - Systems | 50,894 | | | $ 305,364 | $ 6.00 | | |
| | Electrical - Telecom and Data | 50,894 | | | $ 203,576 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 5,547,446** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 416,058 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 554,745 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 388,321 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 332,847 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 7,239,417** | **$ 142.25** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**LoGRASSO HALL**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 24,445 | | | $ 97,780 | $ 4.00 | | |
| | Hazmat Abatement | 24,445 | | | $ 195,560 | $ 8.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | 24,445 | | | $ 73,335 | $ 3.00 | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | 24,445 | | | $ 122,225 | $ 5.00 | | |
| | Interior Development - Partitions | 24,445 | | | $ 293,340 | $ 12.00 | | |
| | Interior Development - Finishes | 24,445 | | | $ 48,890 | $ 2.00 | | |
| | Interior Development - Specialties | 24,445 | | | $ 73,335 | $ 3.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | | | | $ - | | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 24,445 | | | $ 97,780 | $ 4.00 | | |
| | Plumbing | 24,445 | | | $ 195,560 | $ 8.00 | | |
| | HVAC | 24,445 | | | $ 855,575 | $ 35.00 | | |
| | Electrical - Power | 24,445 | | | $ 171,115 | $ 7.00 | | |
| | Electrical - Lighting | 24,445 | | | $ 195,560 | $ 8.00 | | |
| | Electrical - Systems | 24,445 | | | $ 146,670 | $ 6.00 | | |
| | Electrical - Telecom and Data | 24,445 | | | $ 97,780 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 2,664,505** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 199,838 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 266,451 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 186,515 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 159,870 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 3,477,179** | **$ 142.25** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**DODS HALL RENO**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | Demolition | 82,591 | | | $ 330,364 | $ 4.00 | | |
| | Hazmat Abatement | 82,591 | | | $ 495,546 | $ 6.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | 82,591 | | | $ 165,182 | $ 2.00 | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | 82,591 | | | $ 495,546 | $ 6.00 | | |
| | Interior Development - Partitions | 82,591 | | | $ 412,955 | $ 5.00 | | |
| | Interior Development - Finishes | 82,591 | | | $ 825,910 | $ 10.00 | | |
| | Interior Development - Specialties | 82,591 | | | $ 82,591 | $ 1.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 82,591 | | | $ 165,182 | $ 2.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 82,591 | | | $ 330,364 | $ 4.00 | | |
| | Plumbing | 82,591 | | | $ 825,910 | $ 10.00 | | |
| | HVAC | 82,591 | | | $ 2,890,685 | $ 35.00 | | |
| | Electrical - Power | 82,591 | | | $ 578,137 | $ 7.00 | | |
| | Electrical - Lighting | 82,591 | | | $ 660,728 | $ 8.00 | | |
| | Electrical - Systems | 82,591 | | | $ 495,546 | $ 6.00 | | |
| | Electrical - Telecom and Data | 82,591 | | | $ 247,773 | $ 3.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | **Direct Construction Cost Unit** | | $ - | | $ 9,002,419 | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 675,181 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 900,242 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 630,169 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 540,145 | | | |
| | **Construction Cost Unit** | | $ - | $ - | $ 11,748,157 | $ 142.25 | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**STEELE FIELD HOUSE RENO**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 91,734 | | | $ 366,936 | $ 4.00 | | |
| | Hazmat Abatement | 91,734 | | | $ 183,468 | $ 2.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | | | | $ - | | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | | | | $ - | | | |
| | Interior Development - Partitions | 91,734 | | | $ 458,670 | $ 5.00 | | |
| | Interior Development - Finishes | 91,734 | | | $ 917,340 | $ 10.00 | | |
| | Interior Development - Specialties | 91,734 | | | $ 91,734 | $ 1.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 91,734 | | | $ 183,468 | $ 2.00 | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 91,734 | | | $ 366,936 | $ 4.00 | | |
| | Plumbing | 91,734 | | | $ 917,340 | $ 10.00 | | |
| | HVAC | 91,734 | | | $ 3,210,690 | $ 35.00 | | |
| | Electrical - Power | 91,734 | | | $ 642,138 | $ 7.00 | | |
| | Electrical - Lighting | 91,734 | | | $ 733,872 | $ 8.00 | | |
| | Electrical - Systems | 91,734 | | | $ 550,404 | $ 6.00 | | |
| | Electrical - Telecom and Data | 91,734 | | | $ 275,202 | $ 3.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 8,898,198** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 667,365 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 889,820 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 622,874 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 533,892 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 11,612,148** | **$ 126.59** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

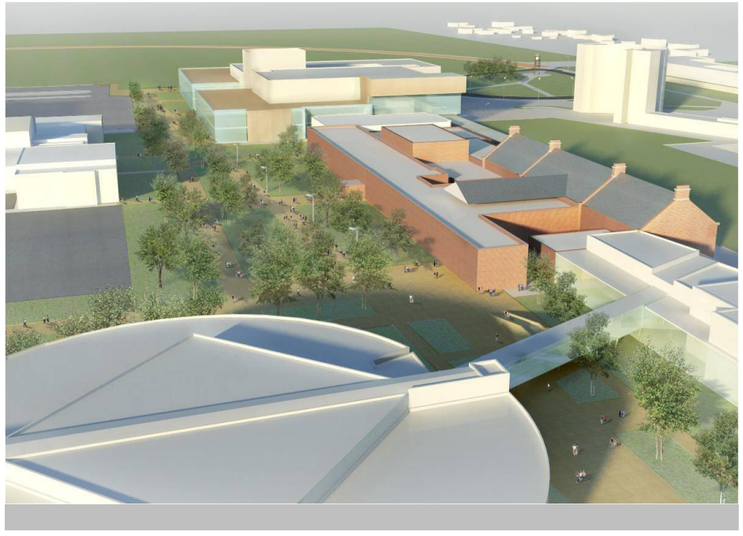
**ROCKEFELLER ARTS RENOVATIONS**

| | Project System | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 50,000 | | | $ 200,000 | $ 4.00 | | |
| | Hazmat Abatement | 50,000 | | | $ 200,000 | $ 4.00 | | |
| | Sitework - Site Prep & Earthwork | | | | $ - | | | |
| | Sitework - Utilities | | | | $ - | | | |
| | Sitework - Pavements | | | | $ - | | | |
| | Sitework - Landscape & Misc. | | | | $ - | | | |
| | Foundations/Substructure | | | | $ - | | | |
| | Superstructure | 50,000 | | | $ 150,000 | $ 3.00 | | |
| | Roofing and Waterproofing | | | | $ - | | | |
| | Exterior Enclosure | 50,000 | | | $ 150,000 | $ 3.00 | | |
| | Interior Development - Partitions | 50,000 | | | $ 600,000 | $ 12.00 | | |
| | Interior Development - Finishes | 50,000 | | | $ 100,000 | $ 2.00 | | |
| | Interior Development - Specialties | 50,000 | | | $ 250,000 | $ 5.00 | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | | | | $ - | | | |
| | Special Construction, Systems, Process, etc | | | | $ - | | | |
| | Fire Protection | 50,000 | | | $ 200,000 | $ 4.00 | | |
| | Plumbing | 50,000 | | | $ 400,000 | $ 8.00 | | |
| | HVAC | 50,000 | | | $ 1,250,000 | $ 25.00 | | |
| | Electrical - Power | 50,000 | | | $ 350,000 | $ 7.00 | | |
| | Electrical - Lighting | 50,000 | | | $ 750,000 | $ 15.00 | | |
| | Electrical - Systems | 50,000 | | | $ 300,000 | $ 6.00 | | |
| | Electrical - Telecom and Data | 50,000 | | | $ 200,000 | $ 4.00 | | |
| | Miscellaneous (Specify) | | | | $ - | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ -** | | **$ 5,100,000** | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ - | | $ 382,500 | | | |
| | Design & Estimating Contingency | 10.00% | $ - | | $ 510,000 | | | |
| | Construction Contingency | 7.00% | $ - | | $ 357,000 | | | |
| | Contractor Overhead and Profit | 6.00% | $ - | | $ 306,000 | | | |
| | **Construction Cost Unit** | | **$ -** | **$ -** | **$ 6,655,500** | **$ 133.11** | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**ROCKEFELLER ARTS PHASE II ADDITION**

| | Project System | | NEW CONSTRUCTION | | MEDIUM INTENSITY RENOVATON | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|
| | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | |
| | | | | | | | | |
| | Demolition | 20,000 | $ 40,000 | $ 2.00 | | | | |
| | Hazmat Abatement | 20,000 | $ 40,000 | $ 2.00 | | | | |
| | Sitework - Site Prep & Earthwork | 20,000 | $ 160,000 | $ 8.00 | | | | |
| | Sitework - Utilities | | $ - | | | | | |
| | Sitework - Pavements | | $ - | | | | | |
| | Sitework - Landscape & Misc. | | $ - | | | | | |
| | Foundations/Substructure | 20,000 | $ 300,000 | $ 15.00 | | | | |
| | Superstructure | 20,000 | $ 600,000 | $ 30.00 | | | | |
| | Roofing and Waterproofing | 20,000 | $ 400,000 | $ 20.00 | | | | |
| | Exterior Enclosure | 20,000 | $ 700,000 | $ 35.00 | | | | |
| | Interior Development - Partitions | 20,000 | $ 240,000 | $ 12.00 | | | | |
| | Interior Development - Finishes | 20,000 | $ 300,000 | $ 15.00 | | | | |
| | Interior Development - Specialties | 20,000 | $ 100,000 | $ 5.00 | | | | |
| | Interior Dev - Equip & Fixed Furnishings/Millwork | 20,000 | $ 100,000 | $ 5.00 | | | | |
| | Special Construction, Systems, Process, etc | | $ - | | | | | |
| | Fire Protection | 20,000 | $ 100,000 | $ 5.00 | | | | |
| | Plumbing | 20,000 | $ 200,000 | $ 10.00 | | | | |
| | HVAC | 20,000 | $ 800,000 | $ 40.00 | | | | |
| | Electrical - Power | 20,000 | $ 140,000 | $ 7.00 | | | | |
| | Electrical - Lighting | 20,000 | $ 200,000 | $ 10.00 | | | | |
| | Electrical - Systems | 20,000 | $ 200,000 | $ 10.00 | | | | |
| | Electrical - Telecom and Data | 20,000 | $ 80,000 | $ 4.00 | | | | |
| | Miscellaneous (Specify) | | $ - | | | | | |
| | | | | | | | | |
| | **Direct Construction Cost Unit** | | **$ 4,700,000** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | $ 352,500 | | | | | |
| | Design & Estimating Contingency | 10.00% | $ 470,000 | | | | | |
| | Construction Contingency | 7.00% | $ 329,000 | | | | | |
| | Contractor Overhead and Profit | 6.00% | $ 282,000 | | | | | |
| | **Construction Cost Unit** | | **$ 6,133,500** | **$ 306.68** | | | | |



**Construction Cost Budgets - Renovation Type Unit Pricing**

**OLD MAIN / SCIENCE DRIVE PEDESTRIAN IMPROVEMENTS PHASE 1**

| | Project System | | | LOW INTENSITY RENOVATION Amount $ | LOW INTENSITY RENOVATION Rate $/GSF | MEDIUM INTENSITY RENOVATION Amount $ | MEDIUM INTENSITY RENOVATION Rate $/GSF | HIGH INTENSITY RENOVATION Amount $ | HIGH INTENSITY RENOVATION Rate $/GSF |
|---|---|---|---|---|---|---|---|---|---|
| | AREA GSF | SF | | | | | | | |
| | Site Preparation, incl.paving removal, grading, etc. | 17,000 | sf | $ 34,000 | $ 2.00 | | | | |
| | Walkways - 6"cement concrete on 12" aggregate base | 9,000 | sf | $ 45,000 | $ 5.00 | | | | |
| | Special paving at plaza | 2,000 | sf | $ 28,000 | $ 14.00 | | | | |
| | Precast edging at plant beds | 600 | lf | $ 15,000 | $ 25.00 | | | | |
| | Site lighting (new pole lights, footings, conduits) | 3 | ea | $ 10,500 | $ 3,500.00 | | | | |
| | Tree planting (3" to 3-1/2" cal) | 3 | ea | $ 2,250 | $ 750.00 | | | | |
| | Loam and seed, irrigated | 6,000 | sf | $ 6,000 | $ 1.00 | | | | |
| | Other plantings | 400 | ea | $ 20,000 | $ 50.00 | | | | |
| | Storm drainage (1CB + 1MH + 100 lf piping) | 1 | ls | $ 11,000 | $ 11,000.00 | | | | |
| | Miscellaneous improvements, allowance | 1 | ls | $ 10,000 | $ 10,000.00 | | | | |
| | **Science Dr. closure (from Alumni Hall driveway to Science Center)** | | | | | | | | |
| | Site Preparation, incl.paving removal, grading, etc. | 11,000 | sf | $ 22,000 | $ 2.00 | | | | |
| | Walkways - 6"cement concrete on 12" aggregate base | 7,600 | sf | $ 38,000 | $ 5.00 | | | | |
| | Site lighting (new pole lights, footings, conduits) | 3 | ea | $ 10,500 | $ 3,500.00 | | | | |
| | Tree planting (3" to 3-1/2" cal) | 6 | ea | $ 4,500 | $ 750.00 | | | | |
| | Loam and seed, irrigated | 3,400 | sf | $ 3,400 | $ 1.00 | | | | |
| | Storm drainage (1CB + 1MH + 100 lf piping) | 1 | ls | $ 11,000 | $ 11,000.00 | | | | |
| | Miscellaneous improvements, allowance | 1 | ls | $ 10,000 | $ 10,000.00 | | | | |
| | **Direct Construction Cost Unit** | | | **$ 281,150** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | | $ 21,086 | | | | | |
| | Design & Estimating Contingency | 10.00% | | $ 28,115 | | | | | |
| | Construction Contingency | 7.00% | | $ 19,681 | | | | | |
| | Contractor Overhead and Profit | 6.00% | | $ 16,869 | | | | | |
| | **Construction Cost Unit** | | | **$ 366,901** | **$ 21.58** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**OLD MAIN / SCIENCE DRIVE PEDESTRIAN IMPROVEMENTS PHASE 2**

| | Project System | | | LOW INTENSITY RENOVATION Amount $ | LOW INTENSITY RENOVATION Rate $/GSF | MEDIUM INTENSITY RENOVATION Amount $ | MEDIUM INTENSITY RENOVATION Rate $/GSF | HIGH INTENSITY RENOVATION Amount $ | HIGH INTENSITY RENOVATION Rate $/GSF |
|---|---|---|---|---|---|---|---|---|---|
| | AREA GSF | SF | | | | | | | |
| | Site Preparation, incl.paving removal, grading, etc. | 122,000 | sf | $ 244,000 | $ 2.00 | | | | |
| | Walkways - 6"cement concrete on 12" aggregate base | 30,000 | sf | $ 150,000 | $ 5.00 | | | | |
| | Special paving at plazas | 6,000 | sf | $ 84,000 | $ 14.00 | | | | |
| | Precast edging at plant beds | 300 | lf | $ 7,500 | $ 25.00 | | | | |
| | Bituminous concrete roadway new | 17,000 | sf | $ 68,000 | $ 4.00 | | | | |
| | Bituminous concrete resurface | 14,000 | sf | $ 28,000 | $ 2.00 | | | | |
| | Granite curb | 1,200 | lf | $ 39,600 | $ 33.00 | | | | |
| | Site lighting (new pole lights, footings, conduits) | 20 | ea | $ 70,000 | $ 3,500.00 | | | | |
| | Tree planting (3" to 3-1/2" cal) | 50 | ea | $ 37,500 | $ 750.00 | | | | |
| | Loam and seed, irrigated | 55,000 | sf | $ 55,000 | $ 1.00 | | | | |
| | Other plantings | 1,000 | ea | $ 50,000 | $ 50.00 | | | | |
| | Retention bioswale | 2,000 | sf | $ 16,000 | $ 8.00 | | | | |
| | Storm drainage (4CB + 2MH + 200 lf piping @ 1 acre) | 2.8 | ac | $ 78,400 | $ 28,000.00 | | | | |
| | Miscellaneous improvements, allowance | 1 | ls | $ 30,000 | $ 30,000.00 | | | | |
| | **Direct Construction Cost Unit** | | | **$ 958,000** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | | $ 71,850 | | | | | |
| | Design & Estimating Contingency | 10.00% | | $ 95,800 | | | | | |
| | Construction Contingency | 7.00% | | $ 67,060 | | | | | |
| | Contractor Overhead and Profit | 6.00% | | $ 57,480 | | | | | |
| | **Construction Cost Unit** | | | **$ 1,250,190** | **$ 10.25** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**OLD MAIN / SCIENCE DRIVE PEDESTRIAN IMPROVEMENTS PHASE 2**

| | Project System | | | LOW INTENSITY RENOVATION | | MEDIUM INTENSITY RENOVATION | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | | |
| | Site Preparation, incl.paving removal, grading, etc. | 122,000 | sf | $ 244,000 | $ 2.00 | | | | |
| | Walkways - 6"cement concrete on 12" aggregate base | 30,000 | sf | $ 150,000 | $ 5.00 | | | | |
| | Special paving at plazas | 6,000 | sf | $ 84,000 | $ 14.00 | | | | |
| | Precast edging at plant beds | 300 | lf | $ 7,500 | $ 25.00 | | | | |
| | Bituminous concrete roadway new | 17,000 | sf | $ 68,000 | $ 4.00 | | | | |
| | Bituminous concrete resurface | 14,000 | sf | $ 28,000 | $ 2.00 | | | | |
| | Granite curb | 1,200 | lf | $ 39,600 | $ 33.00 | | | | |
| | Site lighting (new pole lights, footings, conduits) | 20 | ea | $ 70,000 | $ 3,500.00 | | | | |
| | Tree planting (3" to 3-1/2" cal) | 50 | ea | $ 37,500 | $ 750.00 | | | | |
| | Loam and seed, irrigated | 55,000 | sf | $ 55,000 | $ 1.00 | | | | |
| | Other plantings | 1,000 | ea | $ 50,000 | $ 50.00 | | | | |
| | Retention bioswale | 2,000 | sf | $ 16,000 | $ 8.00 | | | | |
| | Storm drainage (4CB + 2MH + 200 lf piping @ 1 acre) | 2.8 | ac | $ 78,400 | $ 28,000.00 | | | | |
| | Miscellaneous improvements, allowance | 1 | ls | $ 30,000 | $ 30,000.00 | | | | |
| | **Direct Construction Cost Unit** | | | **$ 958,000** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | | $ 71,850 | | | | | |
| | Design & Estimating Contingency | 10.00% | | $ 95,800 | | | | | |
| | Construction Contingency | 7.00% | | $ 67,060 | | | | | |
| | Contractor Overhead and Profit | 6.00% | | $ 57,480 | | | | | |
| | **Construction Cost Unit** | | | **$ 1,250,190** | **$ 10.25** | | | | |

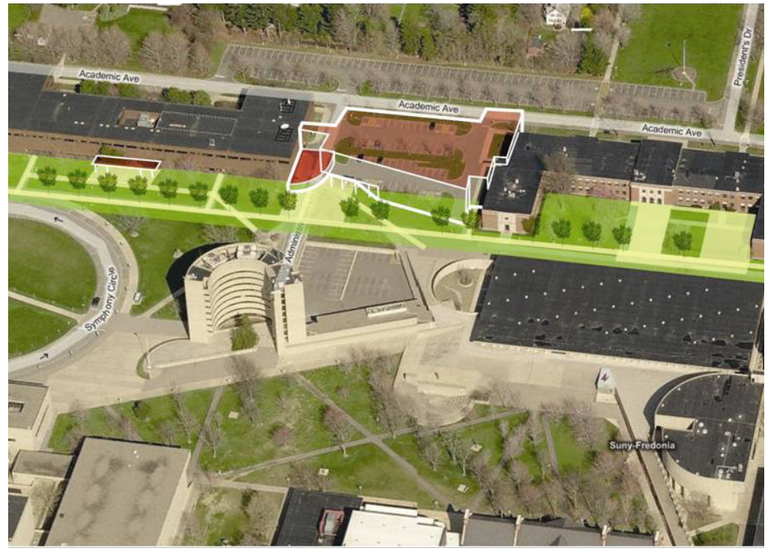
**Construction Cost Budgets - Renovation Type Unit Pricing**

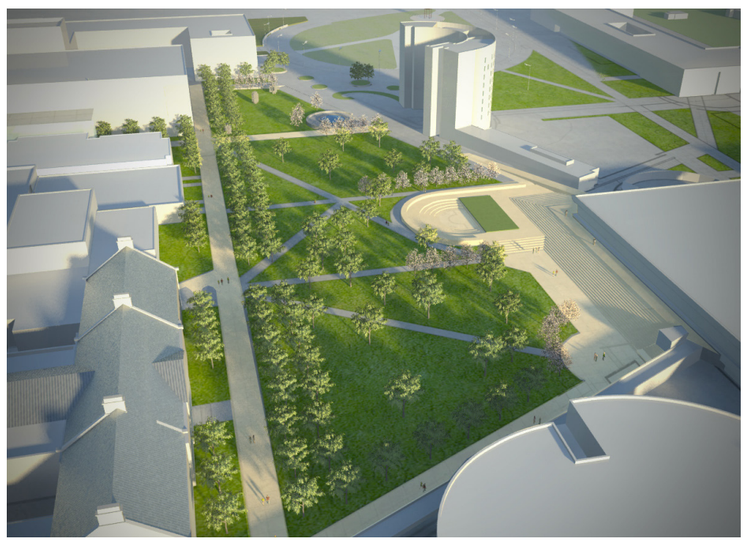
**LIBRARY / FENTON / THOMPSON LANDSCAPE CORRIDOR**

| | Project System | | | NEW CONSTRUCTION | | MEDIUM INTENSITY RENOVATION | | HIGH INTENSITY RENOVATION | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF | Amount $ | Rate $/GSF |
| | AREA GSF | SF | | | | | | | |
| | Site Preparation, incl.paving removal, grading, etc. | 75,000 | sf | $ 112,500 | $ 1.50 | | | | |
| | Walkways - 6"cement concrete on 12" aggregate base | 35,000 | sf | $ 175,000 | $ 5.00 | | | | |
| | Special paving at plazas | 5,000 | sf | $ 70,000 | $ 14.00 | | | | |
| | Site lighting (new pole lights, footings, conduits) | 20 | ea | $ 70,000 | $ 3,500.00 | | | | |
| | Tree planting (3" to 3-1/2" cal) | 60 | ea | $ 45,000 | $ 750.00 | | | | |
| | Loam and seed, irrigated | 35,000 | sf | $ 35,000 | $ 1.00 | | | | |
| | Other plantings | 1,000 | ea | $ 50,000 | $ 50.00 | | | | |
| | Concrete seat walls | 420 | lf | $ 25,200 | $ 60.00 | | | | |
| | Storm drainage (2CB + 2MH + 200 lf piping @ 1 acre) | 1.7 | ac | $ 37,400 | $ 22,000.00 | | | | |
| | Miscell. improvements, allowance | 1 | ls | $ 30,000 | $ 30,000.00 | | | | |
| | **Direct Construction Cost Unit** | | | **$ 650,100** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | | $ 48,758 | | | | | |
| | Design & Estimating Contingency | 10.00% | | $ 65,010 | | | | | |
| | Construction Contingency | 7.00% | | $ 45,507 | | | | | |
| | Contractor Overhead and Profit | 6.00% | | $ 39,006 | | | | | |
| | **Construction Cost Unit** | | | **$ 848,381** | **$ 11.31** | | | | |

Assumptions

1. No changes to underground utilities except as noted





**Construction Cost Budgets - Renovation Type Unit Pricing**

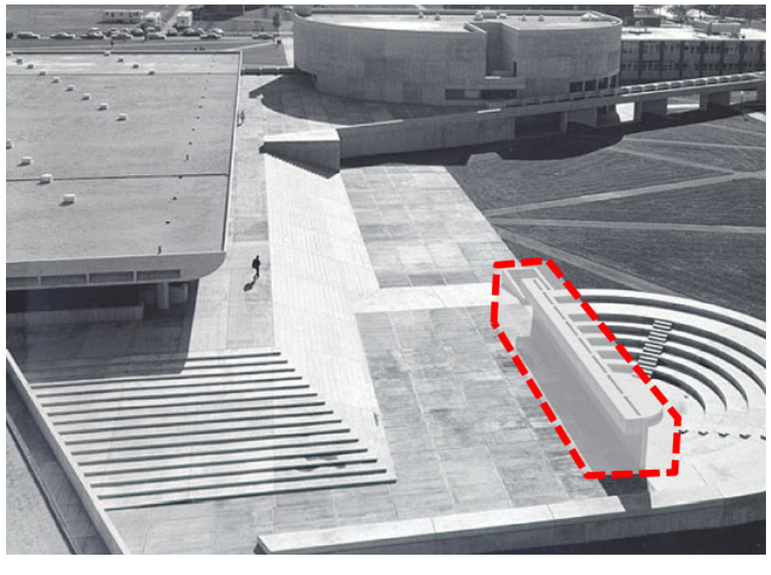
**MAIN QUADRANGLE LANDSCAPE RENOVATION**

| | Project System | | | LOW INTENSITY RENOVATION Amount $ | LOW INTENSITY RENOVATION Rate $/GSF | MEDIUM INTENSITY RENOVATION Amount $ | MEDIUM INTENSITY RENOVATION Rate $/GSF | HIGH INTENSITY RENOVATION Amount $ | HIGH INTENSITY RENOVATION Rate $/GSF |
|---|---|---|---|---|---|---|---|---|---|
| | AREA GSF | SF | | | | | | | |
| | Site Preparation, incl.paving removal, grading, etc. | 143,000 | sf | $ 214,500 | $ 1.50 | | | | |
| | Walkways - 6"cement concrete on 12" aggregate base | 21,000 | sf | $ 105,000 | $ 5.00 | | | | |
| | Porous pavers | 9,000 | sf | $ 126,000 | $ 14.00 | | | | |
| | Special paving at plaza | 4,000 | sf | $ 56,000 | $ 14.00 | | | | |
| | Site lighting (new pole lights, footings, conduits) | 25 | ea | $ 87,500 | $ 3,500.00 | | | | |
| | Tree planting (3" to 3-1/2" cal) | 80 | ea | $ 60,000 | $ 750.00 | | | | |
| | Loam and seed, irrigated | 109,000 | sf | $ 109,000 | $ 1.00 | | | | |
| | Other plantings, shrubs, groundcovers | 1,000 | ea | $ 50,000 | $ 50.00 | | | | |
| | Specimen trees | 4 | ea | $ 6,000 | $ 1,500.00 | | | | |
| | Storm drainage (2CB + 2MH + 200 lf piping @ 1 acre) | 3.2 | ac | $ 70,400 | $ 22,000.00 | | | | |
| | Miscellaneous improvements, allowance | 1 | ls | $ 30,000 | $ 30,000.00 | | | | |
| | **Direct Construction Cost Unit** | | | **$ 914,400** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | | $ 68,580 | | | | | |
| | Design & Estimating Contingency | 10.00% | | $ 91,440 | | | | | |
| | Construction Contingency | 7.00% | | $ 64,008 | | | | | |
| | Contractor Overhead and Profit | 6.00% | | $ 54,864 | | | | | |
| | **Construction Cost Unit** | | | **$ 1,193,292** | **$ 8.34** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**SYMPHONY CIRCLE PLAZA AND LANDSCAPE**

| | Project System | | | LOW INTENSITY RENOVATION Amount $ | LOW INTENSITY RENOVATION Rate $/GSF | MEDIUM INTENSITY RENOVATION Amount $ | MEDIUM INTENSITY RENOVATION Rate $/GSF | HIGH INTENSITY RENOVATION Amount $ | HIGH INTENSITY RENOVATION Rate $/GSF |
|---|---|---|---|---|---|---|---|---|---|
| | AREA GSF | SF | | | | | | | |
| | Site Preparation, incl.paving removal, grading, etc. | 56,000 | sf | $ 84,000 | $ 1.50 | | | | |
| | Walkways - 6"cement concrete on 12" aggregate base | 18,000 | sf | $ 90,000 | $ 5.00 | | | | |
| | Special paving at plaza | 8,000 | sf | $ 112,000 | $ 14.00 | | | | |
| | Site lighting (new pole lights, footings, conduits) | 10 | ea | $ 35,000 | $ 3,500.00 | | | | |
| | Tree planting (3" to 3-1/2" cal) | 25 | ea | $ 18,750 | $ 750.00 | | | | |
| | Loam and seed, irrigated | 30,000 | sf | $ 30,000 | $ 1.00 | | | | |
| | Other plantings | 500 | ea | $ 25,000 | $ 50.00 | | | | |
| | Fountain allowance, incl. water supply, pump etc. | 1 | ls | $ 50,000 | $ 50,000.00 | | | | |
| | Storm drainage (2CB + 2MH + 200 lf piping @ 1 acre) | 1.3 | ac | $ 28,600 | $ 22,000.00 | | | | |
| | Miscellaneous improvements, allowance | 1 | ls | $ 10,000 | $ 10,000.00 | | | | |
| | **Direct Construction Cost Unit** | | | **$ 483,350** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | | $ 36,251 | | | | | |
| | Design & Estimating Contingency | 10.00% | | $ 48,335 | | | | | |
| | Construction Contingency | 7.00% | | $ 33,835 | | | | | |
| | Contractor Overhead and Profit | 6.00% | | $ 29,001 | | | | | |
| | **Construction Cost Unit** | | | **$ 630,772** | **$ 11.26** | | | | |



**Construction Cost Budgets - Renovation Type Unit Pricing**

**LIBRARY STEPS / AMPHITHEATER LANDSCAPE IMPROVEMENTS**

| | Project System | | | LOW INTENSITY RENOVATION Amount $ | LOW INTENSITY RENOVATION Rate $/GSF | MEDIUM INTENSITY RENOVATION Amount $ | MEDIUM INTENSITY RENOVATION Rate $/GSF | HIGH INTENSITY RENOVATION Amount $ | HIGH INTENSITY RENOVATION Rate $/GSF |
|---|---|---|---|---|---|---|---|---|---|
| | AREA GSF | SF | | | | | | | |
| | Remove courtyard paving, waterproofing, insulation | 34,000 | sf | $ 85,000 | $ 2.50 | | | | |
| | Precast concrete pavers for roof deck, on pedestals | 18,000 | sf | $ 324,000 | $ 18.00 | | | | |
| | Precast stair tread replacements | 7,200 | sf | $ 108,000 | $ 15.00 | | | | |
| | Precast edging at plant beds | 200 | lf | $ 6,000 | $ 30.00 | | | | |
| | Precast planter seatwalls, 30" avg ht. | 350 | lf | $ 31,500 | $ 90.00 | | | | |
| | Waterproofing, drainage membrane, insulation | 34,000 | sf | $ 408,000 | $ 12.00 | | | | |
| | Engineered soil medium, allowance | 1 | lf | $ 10,000 | $ 10,000.00 | | | | |
| | Site lighting (step and ramp lights) | 20 | ea | $ 20,000 | $ 1,000.00 | | | | |
| | Green roof plantings | 2,000 | ea | $ 70,000 | $ 35.00 | | | | |
| | Irrigation | 6,000 | sf | $ 6,000 | $ 1.00 | | | | |
| | Retaining walls at ramps | 120 | cy | $ 102,000 | $ 850.00 | | | | |
| | Poured concrete ramps | 2,000 | sf | $ 16,000 | $ 8.00 | | | | |
| | Ramp and stair handrails | 800 | lf | $ 80,000 | $ 100.00 | | | | |
| | Retaining wall at tunnel walk | 50 | cy | $ 42,500 | $ 850.00 | | | | |
| | Cement concrete paving at tunnel walk | 1,200 | sf | $ 6,000 | $ 5.00 | | | | |
| | Concrete stairs to loading area at tunnel walk | 1 | ls | $ 12,000 | $ 12,000.00 | | | | |
| | Decorative railing at tunnel walk | 150 | lf | $ 18,750 | $ 125.00 | | | | |
| | Plexiglass canopy at tunnel walk | 1 | ls | $ 50,000 | $ 50,000.00 | | | | |
| | Structural modifications to tunnel allowance | 1 | ls | $ 50,000 | $ 50,000.00 | | | | |
| | Miscellaneous improvements allowance | 1 | ls | $ 10,000 | $ 10,000.00 | | | | |
| | **Direct Construction Cost Unit** | | | **$ 1,455,750** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | | $ 109,181 | | | | | |
| | Design & Estimating Contingency | 10.00% | | $ 145,575 | | | | | |
| | Construction Contingency | 7.00% | | $ 101,903 | | | | | |
| | Contractor Overhead and Profit | 6.00% | | $ 87,345 | | | | | |
| | **Construction Cost Unit** | | | **$ 1,899,754** | **$ 55.88** | | | | |

**Construction Cost Budgets - Renovation Type Unit Pricing**

**ELECTRICAL SERVICE UPGRADES**

| | Project System | | | LOW INTENSITY RENOVATION Amount $ | LOW INTENSITY RENOVATION Rate $/GSF | MEDIUM INTENSITY RENOVATION Amount $ | MEDIUM INTENSITY RENOVATION Rate $/GSF | HIGH INTENSITY RENOVATION Amount $ | HIGH INTENSITY RENOVATION Rate $/GSF |
|---|---|---|---|---|---|---|---|---|---|
| | AREA GSF | SF | | | | | | | |
| | Remove Existing Loop Switches | 25 | EA | $ 27,500 | $ 1,100.00 | | | | |
| | New SF-6 2-Way Loop Switches | 25 | EA | $ 900,000 | $ 36,000.00 | | | | |
| | Building Wall Penetrations | 25 | EA | $ 25,000 | $ 1,000.00 | | | | |
| | Trenching with Concrete (4) 5" 500' per building | 12,500 | LF | $ 312,500 | $ 25.00 | | | | |
| | 5" Sch 40 PVC | 50,000 | LF | $ 485,000 | $ 9.70 | | | | |
| | #4/0 15KV Cable | 75,000 | LF | $ 682,500 | $ 9.10 | | | | |
| | #2 THHN GR | 25,000 | LF | $ 53,750 | $ 2.15 | | | | |
| | Terminations (Sets) | 25 | EA | $ 42,500 | $ 1,700.00 | | | | |
| | 6" GRC (25 x 20') | 500 | LF | $ 22,500 | $ 45.00 | | | | |
| | Hi-Pot Testing | 25 | EA | $ 37,500 | $ 1,500.00 | | | | |
| | **Direct Construction Cost Unit** | | | **$ 2,588,750** | | | | | |
| | General Conditions (incl Bonds and Insurance) | 7.50% | | $ 194,156 | | | | | |
| | Design & Estimating Contingency | 10.00% | | $ 258,875 | | | | | |
| | Construction Contingency | 7.00% | | $ 181,213 | | | | | |
| | Contractor Overhead and Profit | 6.00% | | $ 155,325 | | | | | |
| | **Construction Cost Unit** | | | **$ 3,378,319** | **$ 270.27** | | | | |
| | | | | | (cost/LF) | | | | |