

An aerial sketch of a university campus. The drawing is done in a loose, hand-drawn style with black outlines. Buildings are colored in shades of blue, red, and yellow. There are many green trees scattered throughout the campus. A river or stream flows along the right side of the image. The overall scene depicts a well-developed campus with various buildings and green spaces.

FEBRUARY 2023

Clemson University

Long-Range Framework Plan

East Sector Update Plan

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East Sector Area of Study in the Long Range Framework Plan

This study acts as an update to the 2017 Long Range Framework Plan (LRFP). The update concerns the area of study referred to as the East Sector, which encompasses the Ag Quad, East Academic Core, Bryan Mall, Douthit Hills and Thornhill components of the LRFP.





Barnett Hall pergola



Introduction

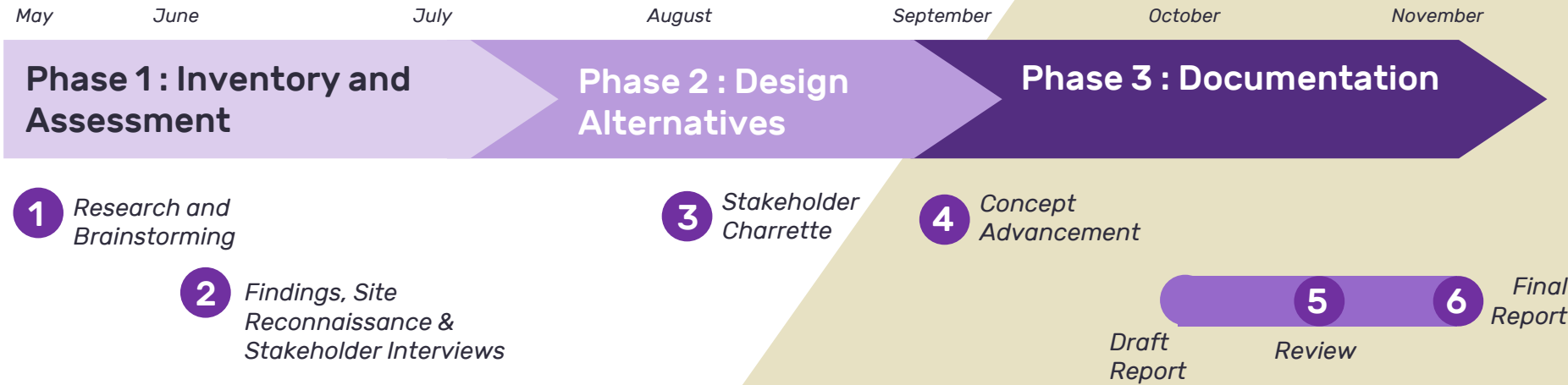
Introduction

Purpose of the East Sector Update Plan

The East Sector Update Plan addresses a range of issues and opportunities that have emerged since the completion of the 2017 Long Range Framework Plan (LRFP). The update documented herein focuses on the detailed recommendations for the East Sector in response to these issues and opportunities.

Planning Process

The planning process for the East Sector Update Plan commenced in May of 2022, moving through three phases of work: Phase 1 - Inventory and Assessment; Phase 2 - Design Alternatives; and, Phase 3 - Documentation, concluding in November of 2022. Six work sessions engaged the steering committee established for the project as well as other stakeholders. The work sessions included: Work Session 1 - Research and Brainstorming; Work Session 2 - Findings, Site Reconnaissance and Stakeholder Interviews; Work Session 3 - Stakeholder Charrette; Work Session 4 - Concept Advancement; Work Session 5 - Draft Report Review; and, Work Session 6 - Final Review. The Charrette work session took place on campus and engaged the stakeholders in an interactive process of identifying a preferred planning direction for the East Sector.



Initial Plan Drivers

The East Sector Update Plan was initiated due to a number of ongoing projects and studies with broader impacts on the East Sector. Through the master planning process, additional opportunities were identified and woven into a unified East Sector Update Plan.

- 1 “New College of Science Building”
- 2 Martin Hall Renovation
- 3 Long Hall Renovation and Expansion
- 4 “New Humanities Hall” (Construction Ongoing)
- 5 Hendrix Student Center Expansion
- 6 Schilletter (Demolition and Replacement)
- 7 New Douthit Hills Residential Building
- 8 New Parking at Douthit Hills
- 9 Perimeter Road Widening (Construction Ongoing)
- 10 “New Forestry Building”
- 11 Demolition of Redfern Health Center and redevelopment of site
- 12 Demolition of Lehotsky Hall and redevelopment of site
- 13 Demolition of Newman Hall and redevelopment of site
- 14 Redevelopment of the Thornhill Community
- 15 Bryan Mall Renovation and potential demolition and replacement of the Low Rise Residence Halls
- 16 Renovation of the High Rise Residence Halls
- 17 New Parking Structure



Relationship to the LRFP

The Long Range Framework Plan provides the overall direction for the East Sector Update Plan. In developing the recommendations, the key elements and Big Ideas of the LRFP provided direction and vision for the campus. The following summarizes key aspects of the Long Range Framework Plan:

LRFP Vision Elements

A focus on Mission, Place and People underlies the recommendations of the LRFP as expressed in three Vision elements: 1) Mission - promote engaged learning and research - a “high seminary of learning”; 2) Place - inspire great memories, delight, healthy living, innovation and ideas; and, 3) People - cultivate a special sense of community and encourage interaction.

LRFP Ten Big Ideas

Ten “Big Ideas” guide the planning and design recommendations of this LRFP.

1. Create a Flexible Framework
2. Reinvest and Grow Academics and Research
3. Preserve and Enhance Landscapes and Campus Character
4. Establish a New Culture of Mobility
5. Transform the Pedestrian Experience
6. Connect North and South Campus
7. Transform the East Campus
8. Renew the Student Centers
9. Plan for a New West Campus Neighborhood
10. Always Build Community

LRFP Guiding Principles

Articulated in five guiding principles, the LRFP sustains and enriches the physical expression of Clemson’s identity. It integrates learning, innovation, creativity, collaboration and community into all aspects of the campus—its landscapes, buildings, social spaces, learning and research environments, mobility systems and infrastructure networks. These include:



Green & Memorable

Respect and extend the established open space framework of the campus; identify new opportunities for campus traditions and special spaces.



Engaged & Innovative

Promote active learning, discovery, and collaboration through the deliberate placement and design of learning environments at the heart of the campus.



Warm & Welcome

Plan for a rich Clemson experience by promoting interactions, engaged living and learning environments, and a strong sense of community.



Engaged & Innovative

Plan for a greater variety of ways to get around the campus and the community, promoting pedestrian connectivity in the heart of campus.



Sustainable

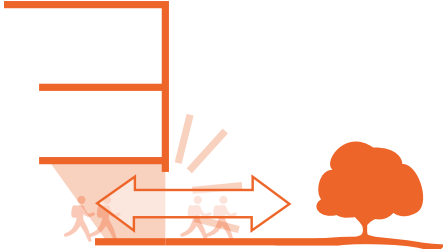
Promote integrated planning in order to achieve Clemson’s social, environmental, and economic objectives for the campus.

LRFP Urban Design Principles

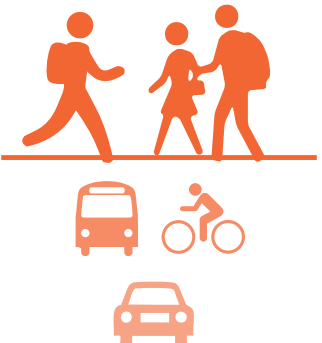
The vision for the East Sector responds to the Urban Design Principles set out in the LRFP including:



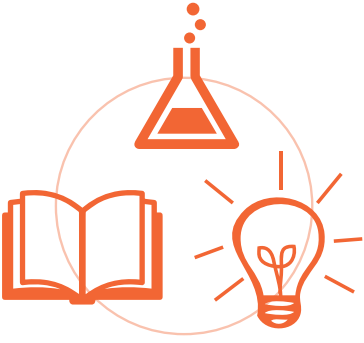
Enhance the campus open space network by preserving iconic landscapes and creating more special outdoor spaces that accommodate a variety of uses



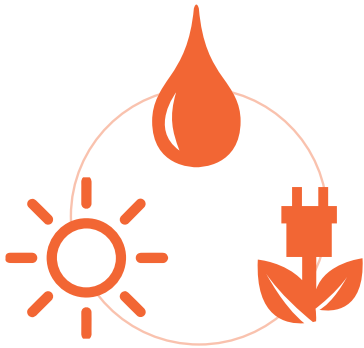
Reinforce the public realm by providing active ground floor use, indoor and outdoor connections, and environments that support human comfort.



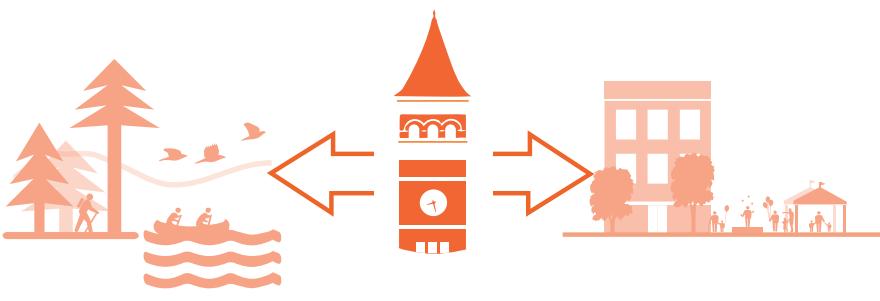
Prioritize pedestrian movement and create a mobility strategy that balances bikes, transit, and vehicular circulation and parking.



Accommodate growth with strategic infill, expansion, and land use synergies.



Foster sustainable development that is responsive to the climate storm water, energy, and context.



Improve connectivity to downtown Lake Hartwell and the Experimental Forest.



Create mixed used “neighborhoods” to build a sense of community reinforced with campus life amenities.

Project Objectives

The East Sector Update Plan is responsive to six objectives identified through research, site observation, and consultation with the stakeholder committee established to guide the development of the plan.

1,464
Net New Student Beds

660
Net New Dining Seats

597
Net New Parking Spaces

580,000 gsf
Net New Academic and Research Space, including offices and formal study space

166,000 gsf
Net New Campus Life Space, including dining, student activity and informal study space

OBJECTIVE #1

Space Needs

The initiatives which motivated the creation of an East Sector Update Plan include academic, housing and campus life expansion that integrate Clemson’s Research and Learning Capital Plan (2019) and Housing and Dining Master Plan (2021). In addition to meeting these needs, the East Sector Update Plan seeks opportunities to address space needs identified in the LRFP.

Academic Expansion

Academic expansion proposed in the East Sector Update Plan is informed by the Research and Learning Capital Plan completed in 2019. The East Sector Update Plan provides a scenario for facilities growth in the East Sector that meets many of these needs.

Labs & Research

A finding of the Long Range Framework Plan was that campus lab resources are over-utilized. Many programs demand newer and more specialized lab resources. Both research and teaching labs are needed to keep pace with growth especially in the College of Science and College of Agriculture and Life Sciences. The East Sector Update Plan identifies opportunities to provide new lab spaces and replace and modernize existing facilities like Poole Hall.

Study Space

There is a need for an additional 113,000 ASF of study space. While some of this will be met with the Cooper Library expansion, opportunities are identified to integrate more formal study space into the East Sector within academic buildings. Additionally the East Sector

Update Plan advocates for the creation of more informal and flexible study and assembly space integrated with campus life, residential and dining projects.

Housing

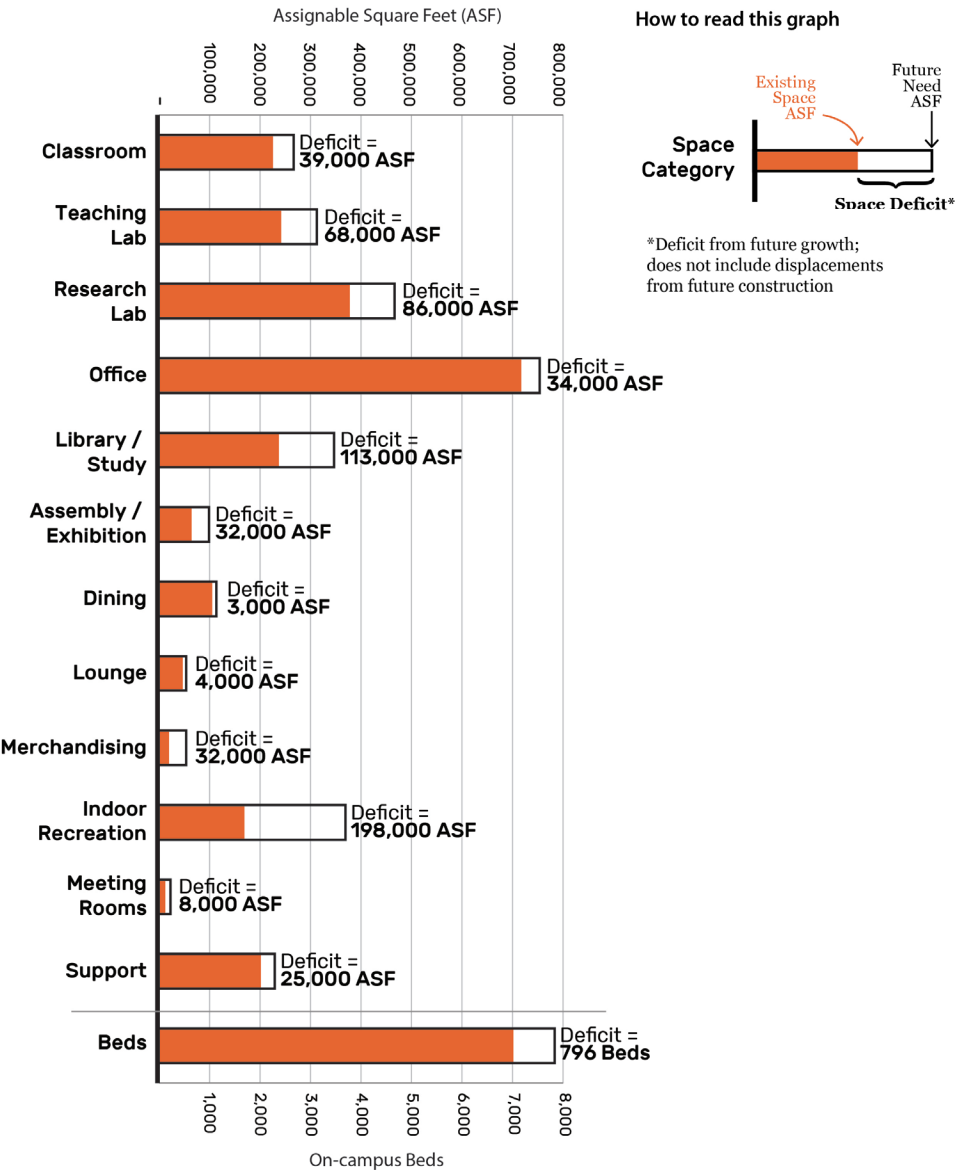
The Housing and Dining Master Plan identifies the need for 1200-1400 additional beds to keep pace with growth, in addition to existing housing stock that will soon require refurbishment or replacement.

Dining

The East Sector Update Plan identifies new dining facilities to serve the growth in the residential community as well as replace existing facilities in declining condition.

Recreation

The East Sector Update Plan does not propose expansions to indoor recreation space. The current campus strategy for indoor recreation space is to maximize scale efficiencies by centralizing recreation at select facilities. The East Sector Update Plan identifies opportunities for both active and passive outdoor recreation to serve new housing communities.



Space Needs in the Long Range Framework Plan

The Long Range Framework Plan identified programmatic areas where additional indoor space is needed to keep up with Clemson’s growth and student life, research and academic missions. Some of these space needs have been partially or completely met with projects completed since 2017.

▶▶ OBJECTIVE #2

Accessibility

The East Sector Update Plan expands on two Big Ideas of the LRFP; establishing a new culture of mobility and transforming the pedestrian experience to embrace the concept of universal access. In transforming the East Sector, the idea is to address the significant accessibility challenges resulting from challenging topography and stairways. To that end, the principles of Universal Design serve as guidance.

With these principles, the East Sector Update Plan locates new buildings on sites adjacent to existing accessible paths and major circulation routes as much as possible in order to reduce the level of effort needed to move between facilities throughout the day. Landscape design is used strategically to navigate changes in slope without the need for stairs and in a way that enhances the Campus experience for all users.

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Principles of Universal Design



Equitable Use

The design does not disadvantage or stigmatize any group of users.



Flexibility in Use

The design does not disadvantage or stigmatize any group of users.



Simple, Intuitive Use

Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current connection levels.



Perceptible Information

The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities.



Tolerance for Error

The design minimizes hazards and the adverse consequences of accidental or unintended actions.



Low Physical Effort

The design can be used efficiently and comfortably with a minimum of fatigue.

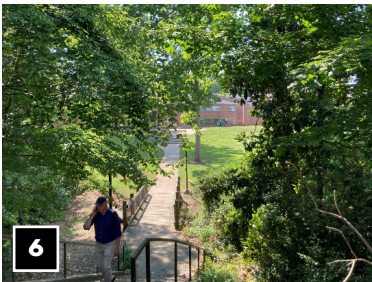
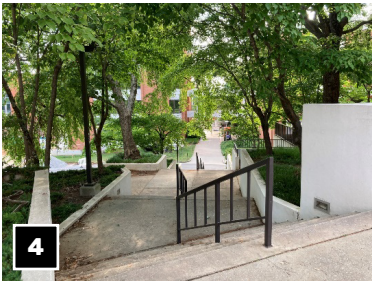
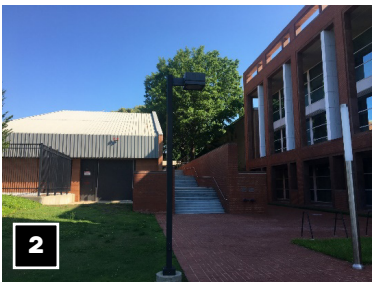


Size and Space for Approach and Use

Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of the user's body size, posture, or mobility,

Significant accessibility challenges identified in the East Sector include:

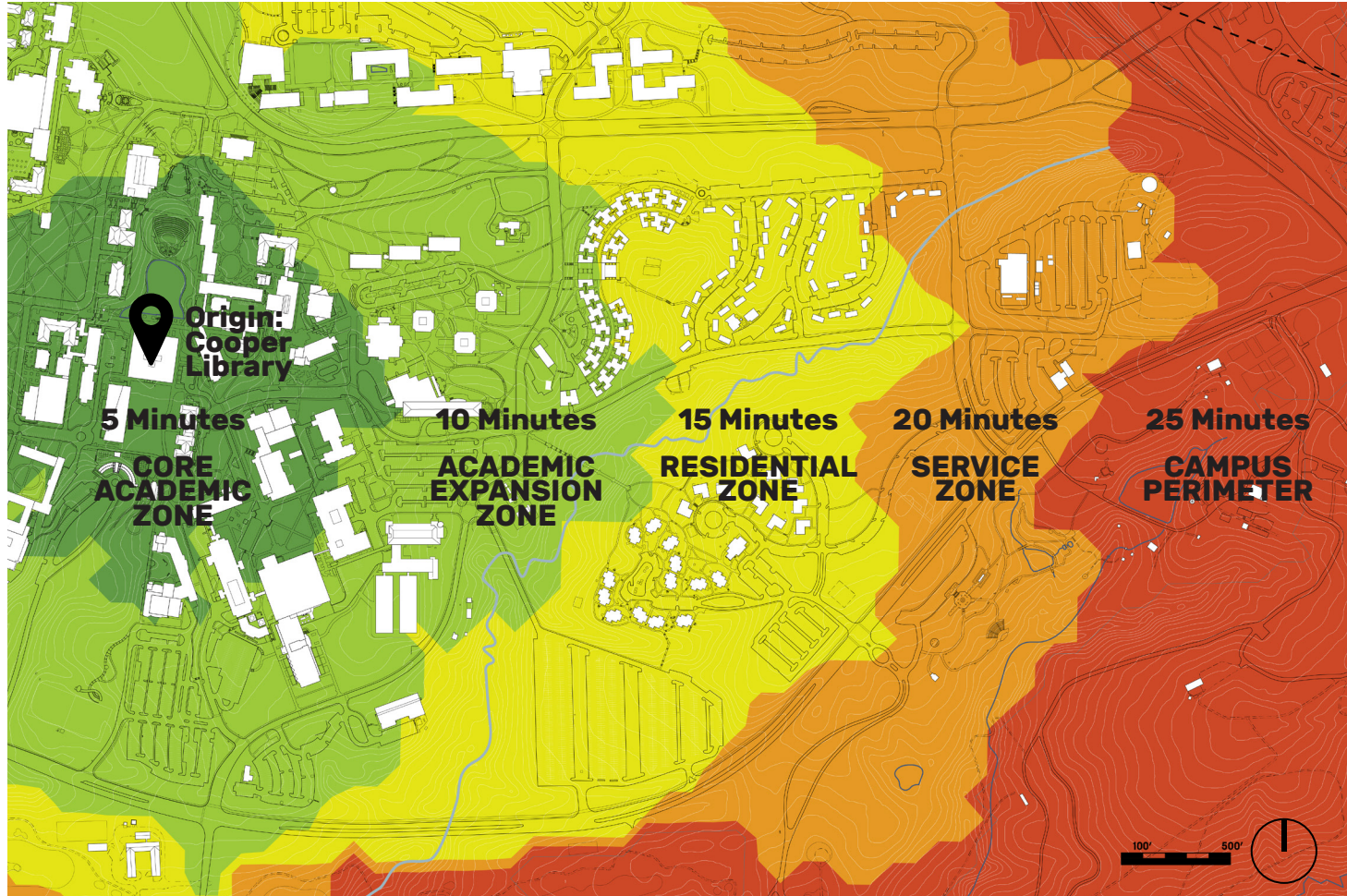
- 1 Humanities Addition Stairs
- 2 Poole and Chiller Plant Stairs
- 3 Jersey Lane Brooks Center Parking Lot Connection
- 4 Edwards-Jordan Plaza
- 5 Cherry Road to Calhoun Courts
- 6 Connection to Thornhill (Leading from Calhoun Bowl)



» OBJECTIVE #3

Connectivity

In support of the LRFP connectivity principle, a key objective of the East Sector Update Plan is to keep all general instruction and undergraduate academic spaces within a 10 minute walkshed of Cooper Library in order to facilitate student and faculty class changes. Residential uses should remain within a 15 minute walk of Cooper so that no major features of campus are more than a 30 minute walk from a residence.



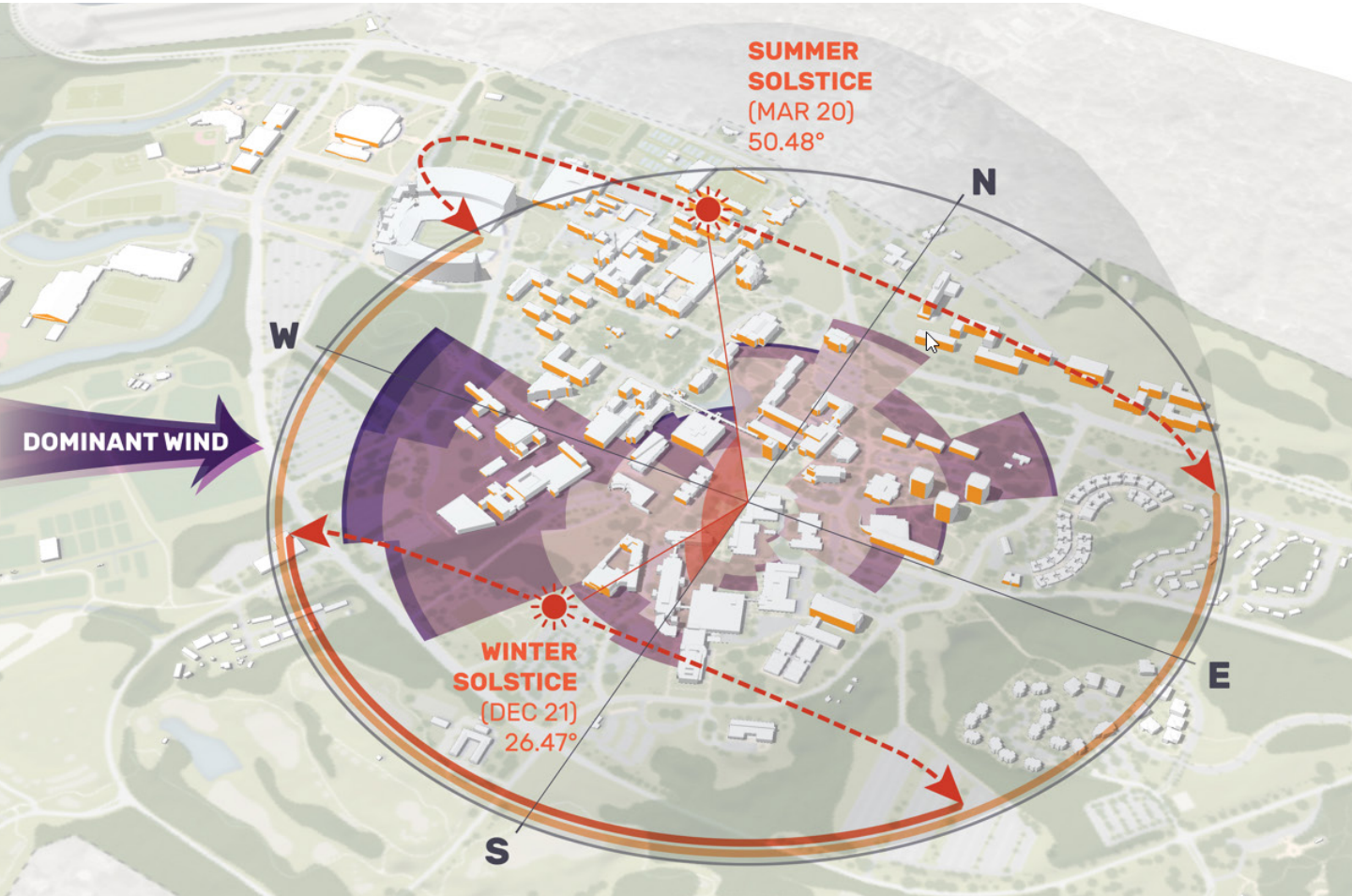
East Sector Walk Times

This walk time diagram maps the length of time an average human requires to walk from the reference point, in this case, Cooper Library, to destinations in the East Sector. Destinations which are within a 10 minute walk of Cooper Library are good candidates for general use instructional space. Locations on the edge of this walkshed are best reserved for more specialized research and academic programs, and residential uses.

» OBJECTIVE #4

Climate

Designing in response to the climate requires a consideration of building orientation, shade provided by trees and buildings, and heat islands (expansive areas of pavement exposed to the sun). The East Sector Update Plan provides urban design and planning guidance responsive to the climate and conditions of the campus.



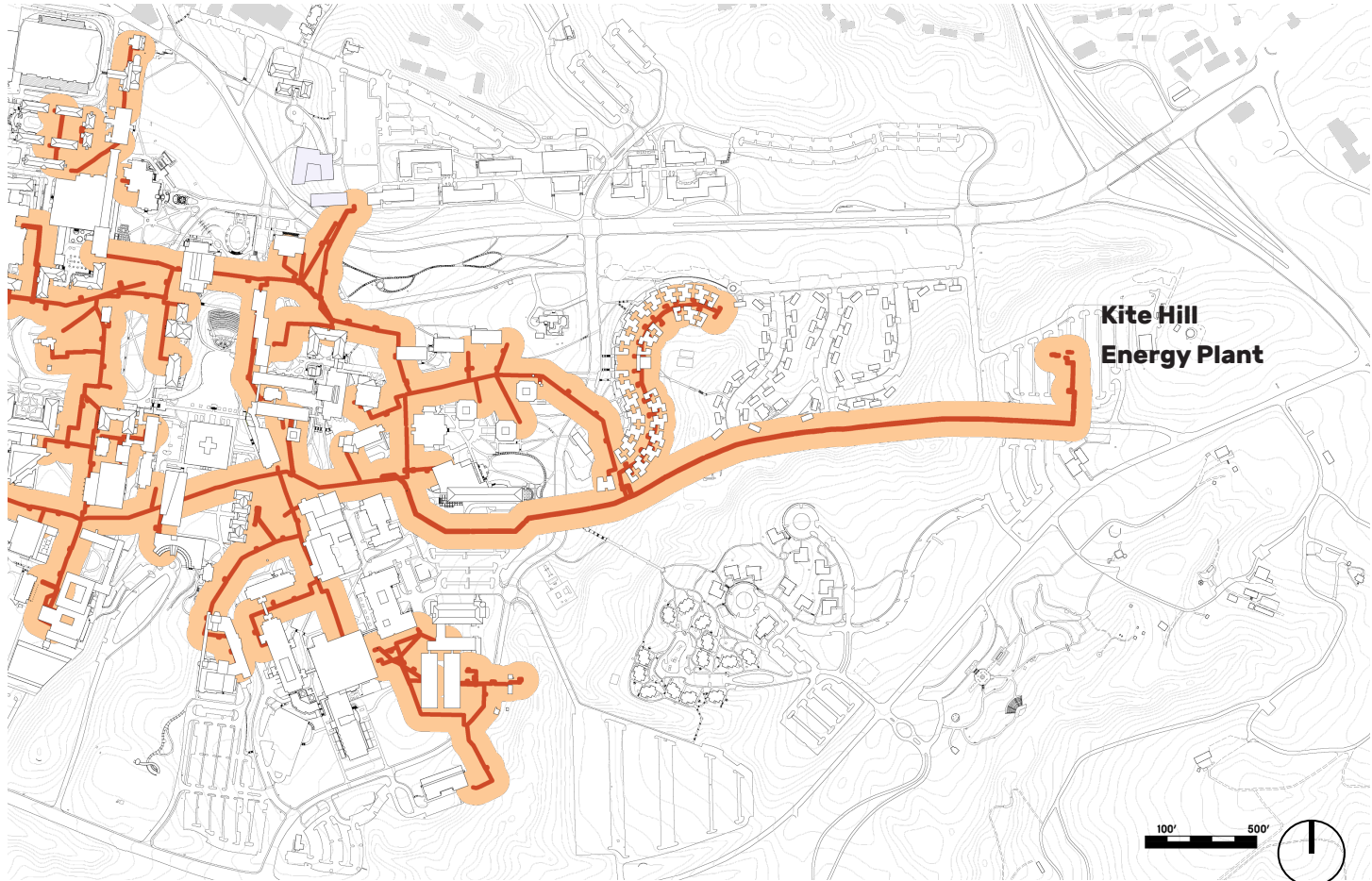
East Sector Climate

In the hot and humid Clemson climate, buildings should be oriented with their long facades facing north or south to facilitate control over solar gains and reduce building energy consumption. The Ag Quad was laid out at an angle that is not ideal for solar control. To the extent possible the East Sector Update Plan seeks to site new buildings in a more climate responsive way.

» OBJECTIVE #5

Infrastructure

Connectivity to the existing network of steam and chilled water lines should be pursued where new buildings are placed in proximity to these lines. New development is laid out to avoid disturbing existing steam lines which are difficult to relocate and require ample access for maintenance. Future development should consider alternative on-site, electric-based heating and cooling means like ground source and air source heat pumps, especially if those projects are not located on existing service lines or generate loads in excess of existing capacity.



East Sector Steam Tunnels

Steam is an important infrastructural layer to consider in the planning of new facilities. Steam lines and tunnels are expensive and difficult to relocate. They require clear and readily accessible sites for maintenance. The East Sector Update Plan avoids placing new facilities on top of existing steam tunnels.

» OBJECTIVE # 6

Campus Landscape

The notable and major landscape features and spaces of the East Sector inform the layout and design for proposed changes. The key features considered include:



The Centennial Oak

A landmark tree with a commanding presence and the potential to anchor a shaded open space in the East Sector. Currently, it is surrounded by parking lots and back-of house uses.



The Ag Quad

The Ag Quad is an iconic space offering opportunities to represent the values and academic missions of the surrounding Biological, Life Sciences, and Agricultural Sciences programs, expanding the learning environment into a comfortable, shade-filled landscape.



Calhoun Bowl

A space framed by a dense riparian wooded area and unique topography. With new housing and campus life amenities proposed at Thornhill, there is an opportunity to reactivate the “bowl” as a central green space in the East Sector.



Bryan Mall

With demand for new beds and campus life facilities, the existing Bryan Circle becomes an important place for study, play, socializing, and relaxation for residents of the surrounding mid-rises and high-rises in the East Sector.



Centennial Oak.

2

East Sector Vision and Placemaking

The East Sector Vision

The East Sector Update Plan establishes a vision for a vibrant academic and residential district connected by an accessible network of paths weaving together memorable green spaces and anchors of campus life. The plan addresses existing conditions and the sequencing required to build and refurbish facilities without loss of critical campus functions. While the entire East Sector will function as a whole, it can be subdivided into two main zones, each of which is further subdivided into “placemaking districts” that bear their own identity. The major opportunities, challenges and rationale for each of these districts is described in detail over the following pages.

Academic Zone

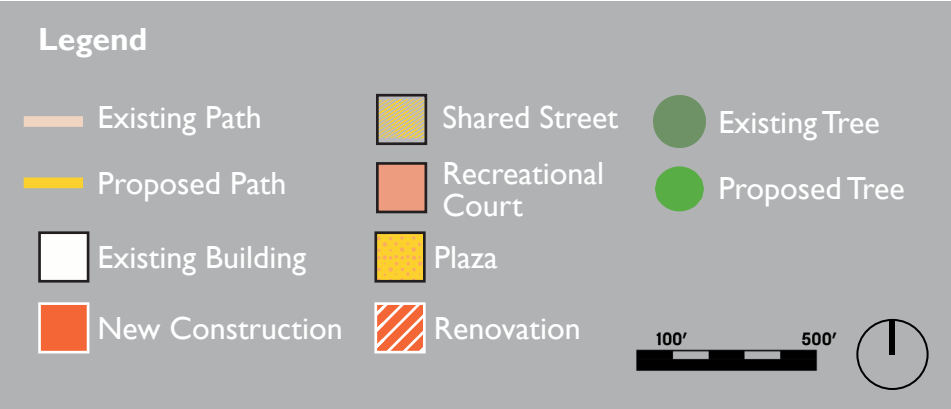
The Academic Zone encompasses areas within a 10 minute walk of Cooper Library with buildings serving instructional and research functions.

- 1 Southern Gateway
- 2 Ag Quad
- 3 East Academic Core

East Campus Neighborhood

The East Campus Neighborhood unites the housing and campus life functions of the East Sector into one cohesive community with dining and social gathering spaces acting as anchors.

- 4 Centennial Oak Square
- 5 Bryan Mall
- 6 Thornhill



Southern Gateway

Formerly a “back door” to campus, the intersection of Cherry Road and Perimeter Road will increasingly act as a gateway for visitors and commuters as more vehicular traffic is redirected to Perimeter Road and out of the campus core through campus-wide parking and roadway redesign efforts.

1 Parking Structure

Large parking structure intended to capture commuter traffic at the campus edge and redirect it to pedestrian and transit modes.

2 Mixed Use Building 1

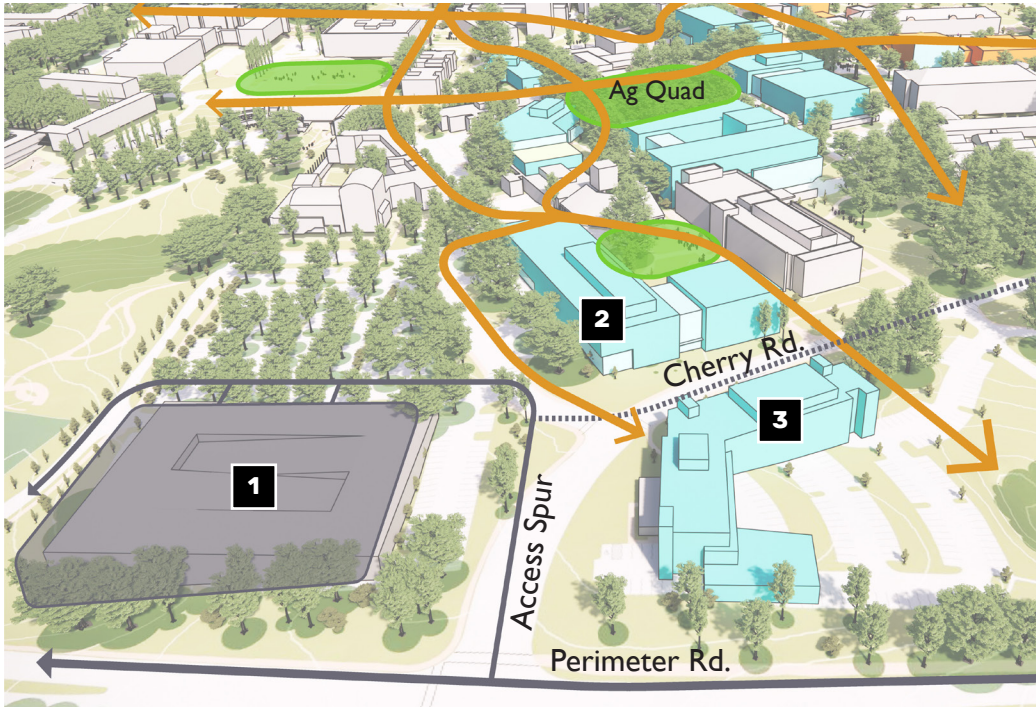
4-story mixed use building on a greenfield site adjacent to the LSB

3 Forestry Building

Building with instructional and office space intended for the Department of Forestry and Environmental Conservation

4 Lab Expansion

3-to-4-story Addition to the Godley-Snell Research Center

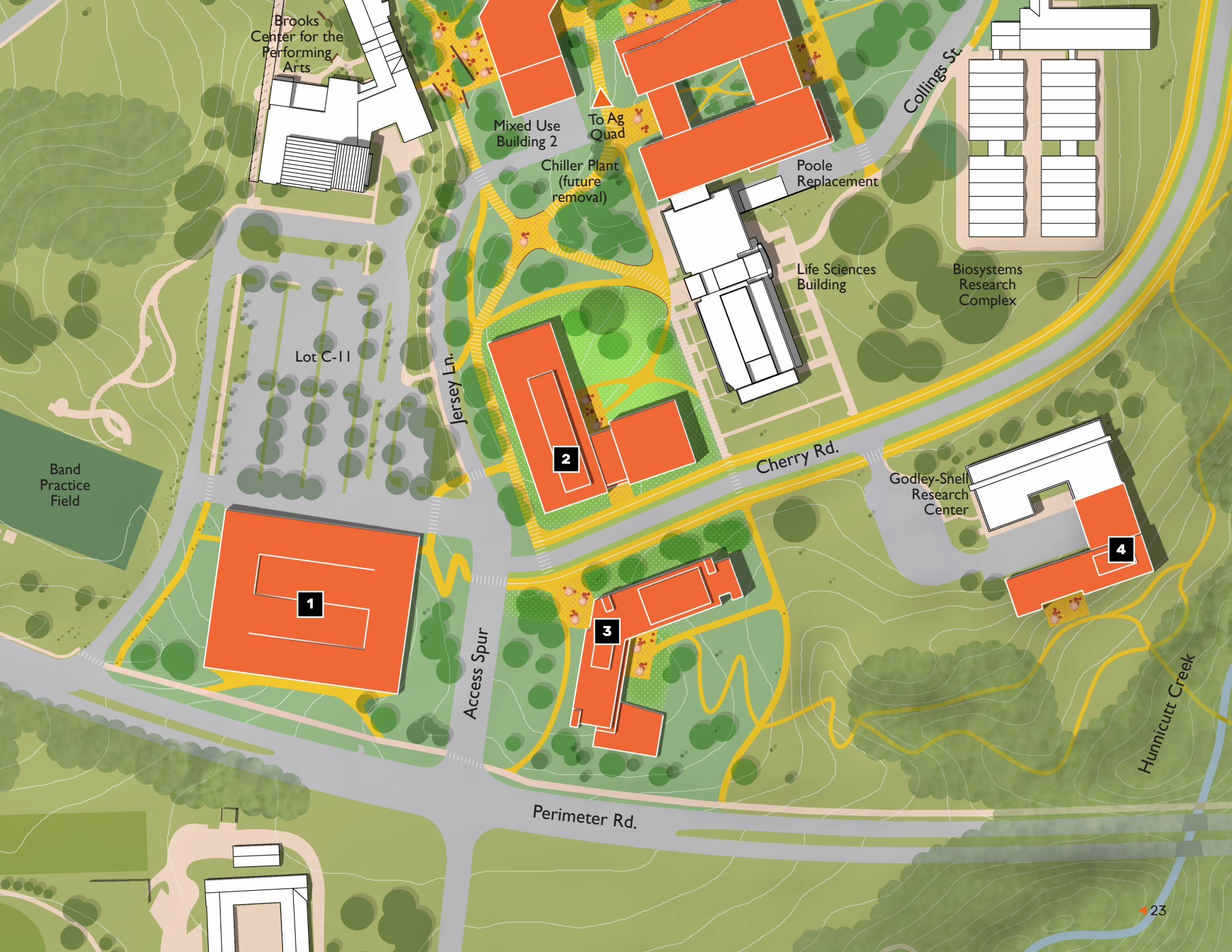


Cherry Road Realignment

The proposed Parking Structure at the Southern Gateway will require an access spur of sufficient length to allow queuing at the garage entrance and the signal on Perimeter Road. Currently, Cherry Road continues uninterrupted from Walter T. Cox Boulevard to Perimeter Road, offering a convenient and fast way for vehicles to cut across campus towards destinations further north or south. With the increase in student housing and campus life facilities this plan is proposing east of Cherry Road, this arterial road acts as an untenable barrier to the comfort and safety of the campus pedestrian experience. By realigning Cherry Road to tee into the access spur, traffic is calmed by introducing an obstruction to through-traffic. Jersey Lane is realigned and converted to a service and ADA access road. With the realignment of Newman road (further east) traffic is directed from Walter T. Cox to Perimeter Road, thus bypassing Cherry Road. The result is that Cherry Road can be narrowed and its edges dedicated to bike and pedestrian facilities in keeping with a low-traffic campus road.

Pedestrian Traffic

With the new Forestry building, Mixed Use Building 1 and large Parking Structure proposed at this intersection, pedestrian traffic volumes are expected to increase substantially. Mixed Use Building 1, in particular, will be a high volume building with large classrooms and high class turn-over. Two new pedestrian routes are dedicated to connecting this new southern academic anchor to the core campus, one is an extension of the Ag Walk concept from the LRFP. To make this route accessible requires removing the chiller plant and cross-cutting the slope that is currently traversed by a stairwell between the chiller and Poole. Until this can happen the accessible path of travel will be provided to the west of Mixed Use Building 2, taking advantage of the pedestrian improvements already made between Cooper Library and Lehotsky and extending this down and through the Mixed Use Building 1 site in a helix pattern. Both pedestrian routes lead across the narrower Cherry Road to connect to the new Forestry Building.



Ag Quad

The plan for a renewed and re-imagined Ag Quad preserves the iconic character of the open space and its towering oaks while addressing three major challenges: Land use efficiency, accessibility, and climate.

- 1

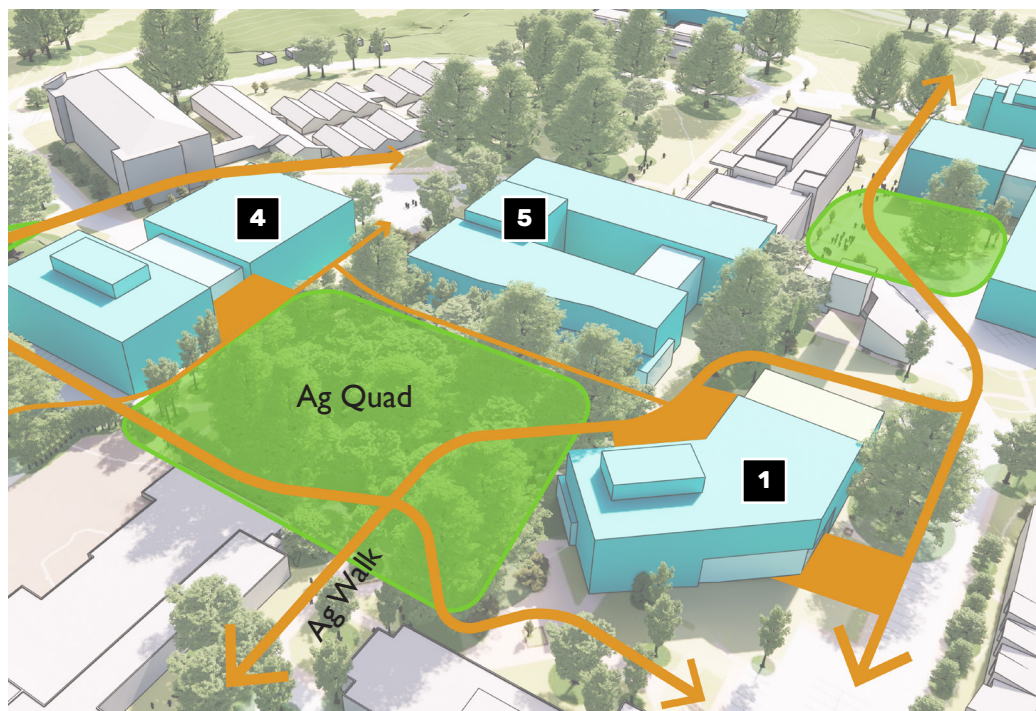
Mixed Use Building 2
4-story academic building replacing Lehotsky Hall. The building sits on a dramatic sloped site offering the potential to build up to 6-stories in height while maintaining an appropriate scale for the context.
- 2

Study Pavilion
Small expansion to the Academic Success Center
- 3

Mixed Use Building 3
4-story academic building replacing Redfern Health Center
- 4

Lab Building
4-story instructional lab building replacing Newman Hall
- 5

Poole Replacement
4-story mixed use building replacing Poole Agricultural Center



Land Use Efficiency

When the Ag Quad was originally constructed, this area was perceived as the periphery of the Clemson Campus. The buildings of Lehotsky, Newman and Poole (P&A) were built low and broad at 1-to-2-stories. As the Clemson Campus has grown and its space needs for Science, Agriculture and Life Science programs are rapidly mounting, the inefficiency of this land use is becoming apparent. As each of the Ag Quad's three main buildings reach the end of their useful life, renewal should increase land use efficiency by reconstructing at a height and density more typical of the rest of core campus. The additional height will help to better define the edges of the Ag Quad. Replacing low-turnover specialty labs and back of house spaces with high-traffic instructional space will also enrich the Ag Quad with a more consistent ebb and flow of students and faculty spilling out from adjacent facilities.

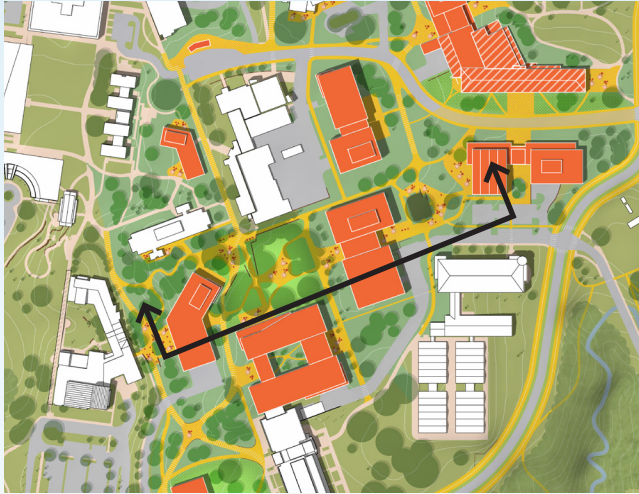
Accessibility

Today the Ag Quad is a tiered landscape divided by steps. To the west and southwest the only means of accessing the Ag Quad is via steps or using elevators internal to buildings. The re-imagined Ag Quad uses the demolition and redevelopment of the Lehotsky site into Mixed Use Building 2 as an opportunity to open up the landscape and use a gentle ramp to traverse the grade change. Eventually, when the existing chiller plant to the south of Lehotsky is depreciated, this plan recommends removing it and placing a path there that crosscuts the slope at an accessible grade.

Climate

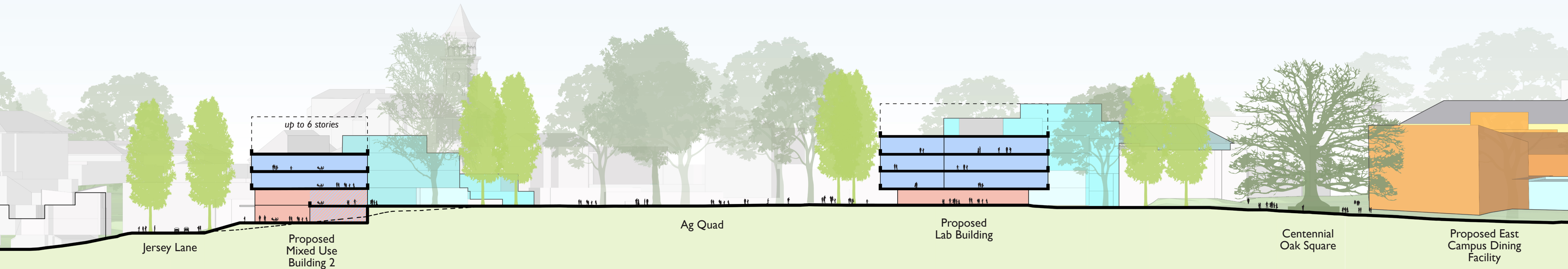
Today the Ag Quad is a unique quarter of the Clemson campus because all of its buildings have a distinct north-westerly orientation while most of the campus is oriented on cardinal directions. This grid shift creates buildings with long exposures to the east and west, where solar control is difficult. To the extent possible, replacement buildings are divided into bars with an east-west orientation to improve passive solar performance. Furthermore, both Poole and Newman Hall have deep floor plates that limit access of interior spaces to natural light and ventilation. The replacement buildings must have passive climate design features that allow the use of daylighting and passive ventilation.





Section

This section cuts through Mixed Use Building 2, the Ag Quad and future Lab Building. It demonstrates the challenge of grade change from Brooks Center to the Ag Quad. The plan introduces a new sloped landscape feature between Mixed Use Building 2 and Barre Hall. The first and second floors of Mixed Use Building 2 provide the opportunity to connect the two landscapes.



East Academic Core

The East Academic Core is a well established part of the Campus and consistent with its spatial and architectural identity. Few changes are proposed to the East Academic Core beyond renovation of existing facilities.

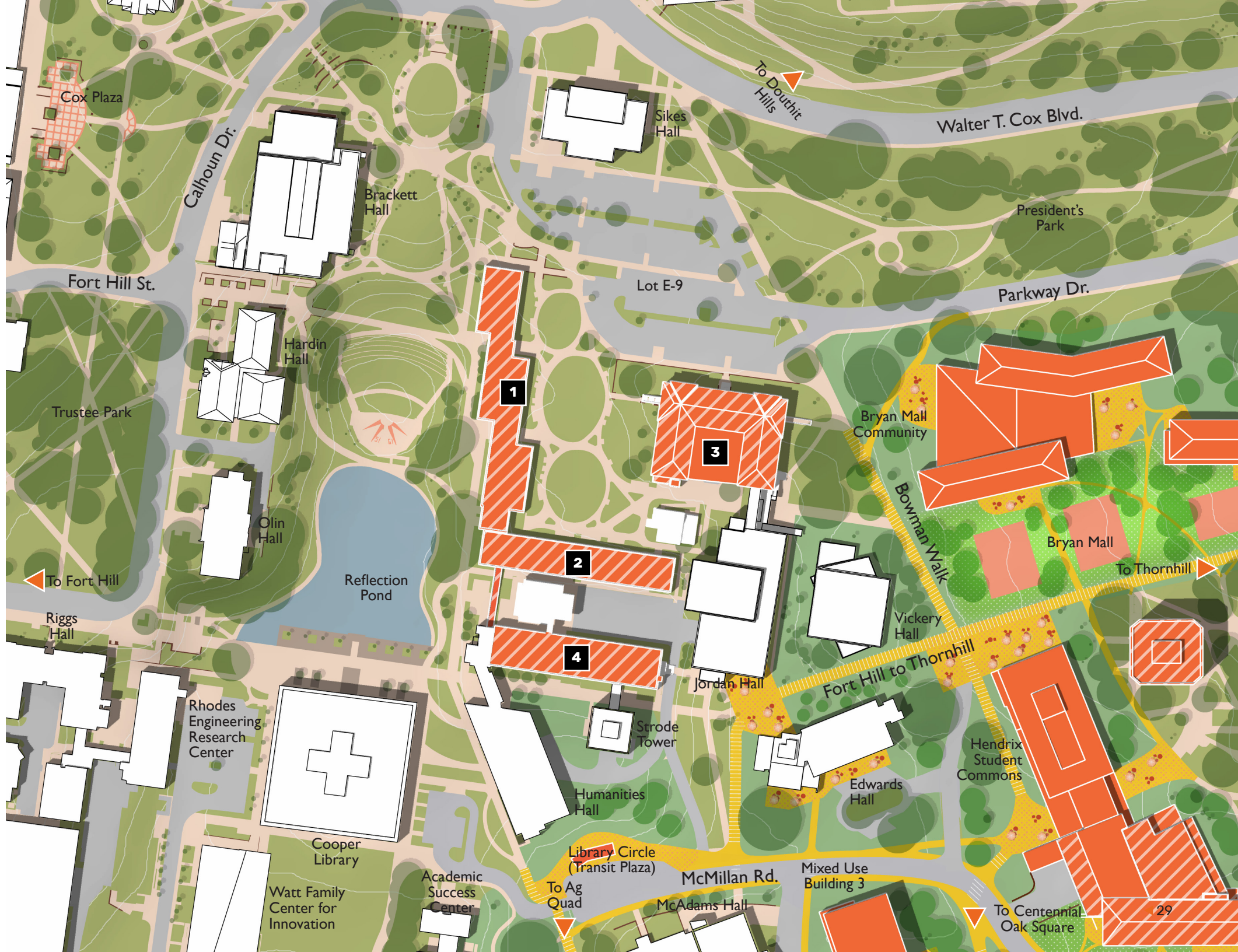
- 1

Martin Renovation
Martin Hall will be renovated to address ongoing maintenance needs, improve accessibility and building performance.
- 2

Kinard Renovation
The Kinard Renovation will address general facility condition.
- 3

Long Hall Renovation
Long Hall will be renovated to address general facility condition. An expansion has been proposed which utilizes the existing horseshoe courtyard as a central atrium space.
- 4

Daniel Renovation
The Daniel Renovation will address general facility condition.



Centennial Oak Square

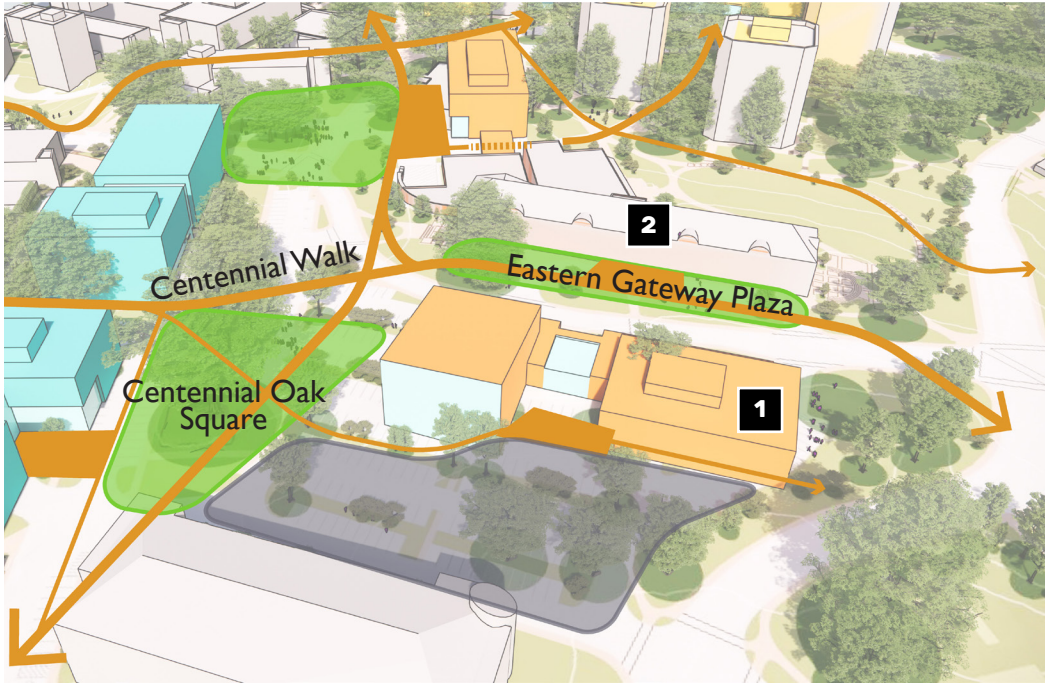
The Centennial Oak is a 133-year-old Oak with a complex branch structure and impressive canopy. The creation of a Centennial Oak Square establishes an iconic position for this monumental tree. The square also serves to link the Ag Quad to the East Campus Neighborhood.

1 East Campus Dining Facility

This Dining Facility accomplishes three goals: replacing Schilleter Dining, Accommodating East Campus Residential Growth and providing a dining location that can serve both academic daytime and residential morning/evening users.

2 Hendrix Student Commons

The Hendrix Student Commons combines a renovation to Hendrix with an expansion onto the Schilleter Dining site in order to establish a large student commons of the size and versatility needed to serve the entire student community.



Centennial Oak Square

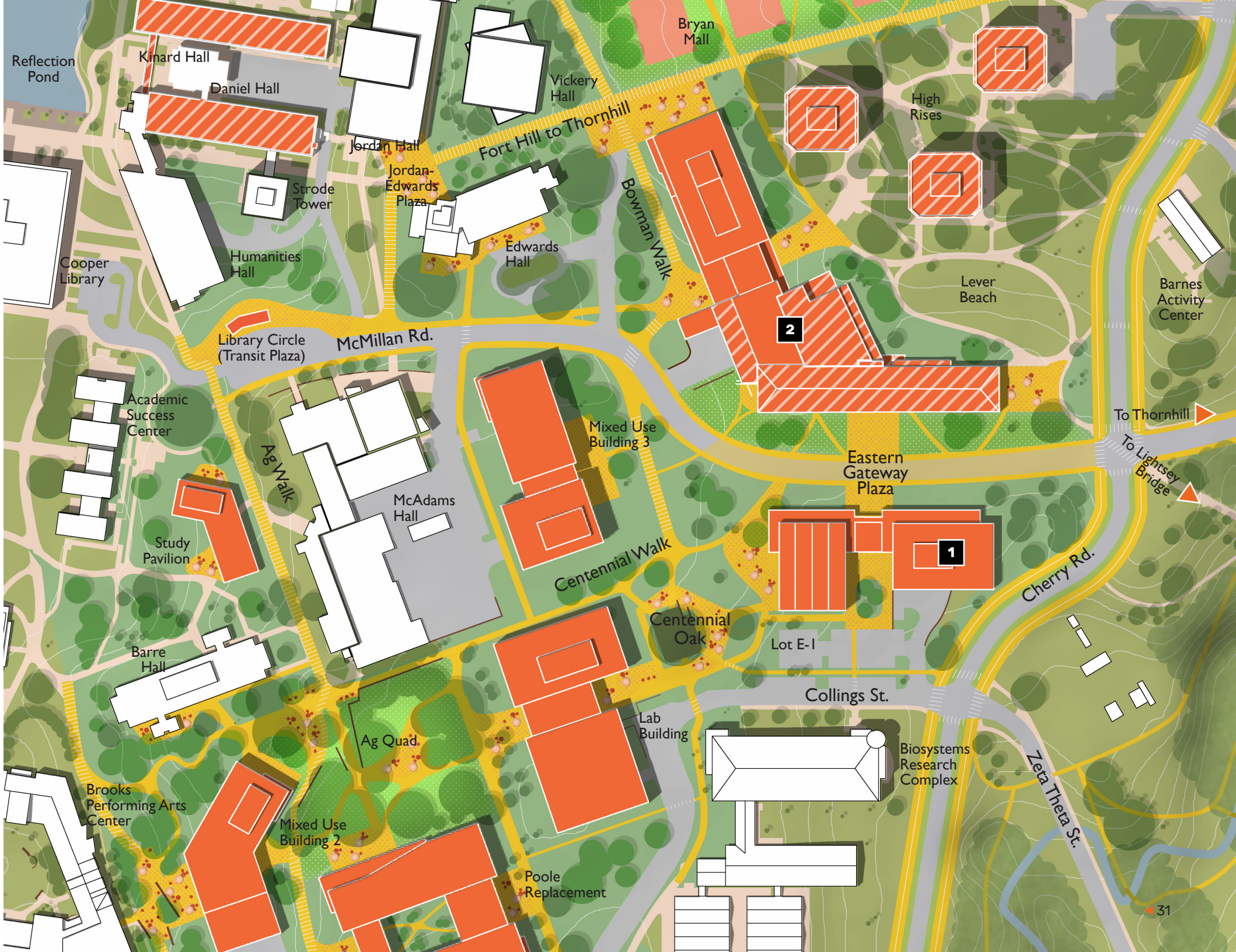
The Centennial Oak sits in a raised planting bed surrounded by shoulder height concrete retaining walls. For the health of the tree, this area should not be disturbed. However the Centennial Oak is currently surrounded by parking lots, a loading dock and service road. Centennial Oak Square is a green space created by removing these asphalt surfaces and surrounding the Oak with planted lawns and furnishings that will allow students to experience the Oak, take advantage of its shade and appreciate its storied branches. Centennial Oak Square becomes a point of entry for the renewed Ag Quad and a spill-over space for the East Campus Dining Facility. The East Campus Dining Facility should both respect the Oak in its design and frame views of the Oak from the interior. The Square provides a new pedestrian route to the Biosystems Research Complex, which prior was only accessible by crossing the E-1 parking lot.

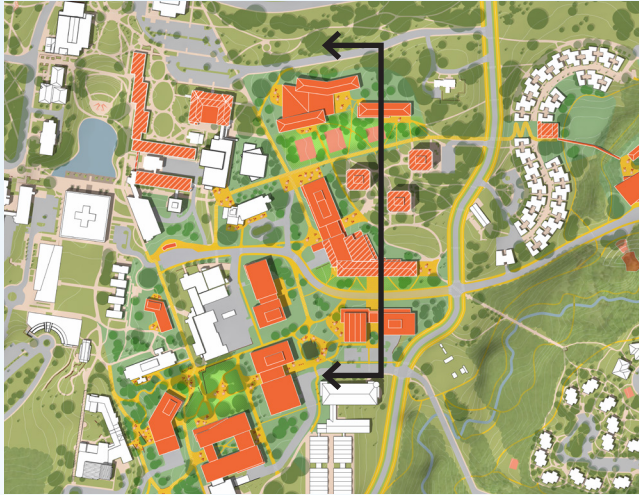
A New Eastern Gateway

The forecourt of Hendrix has acted as a defacto eastern gateway to the Campus with transit stops for local and regional bus lines. With the addition of the East Campus Dining Facility the role of this area as a gateway is reinforced by two long east-west loggias framing a pedestrian-focused plaza. With Hendrix affirming its role as a large student commons serving the entire campus, movement between Hendrix and the East Campus Dining Facility will make this a vibrant space for student life. It should be programmed to offer spill over for dining and student assembly occurring in both buildings. This will remain a key transit node and frame the entry of buses heading deeper into campus at the transit plaza south of Humanities Hall, also known as Library Circle.

Centennial Walk

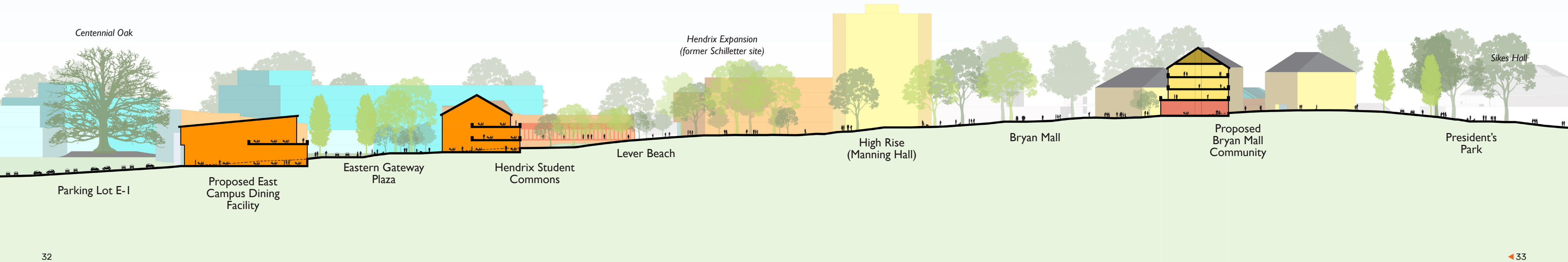
Centennial Walk is a pedestrian corridor that realizes the need for a legible pedestrian connection between the Lightsey Bridge Community and campus. Centennial Walk extends to Brooks Performing Arts Center in a switchback pattern which allows the accessible grading of a transition in elevation from the hills to the central campus valley.

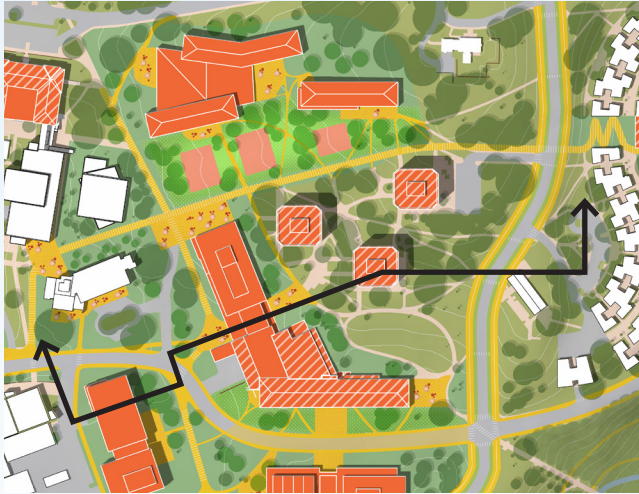




Section

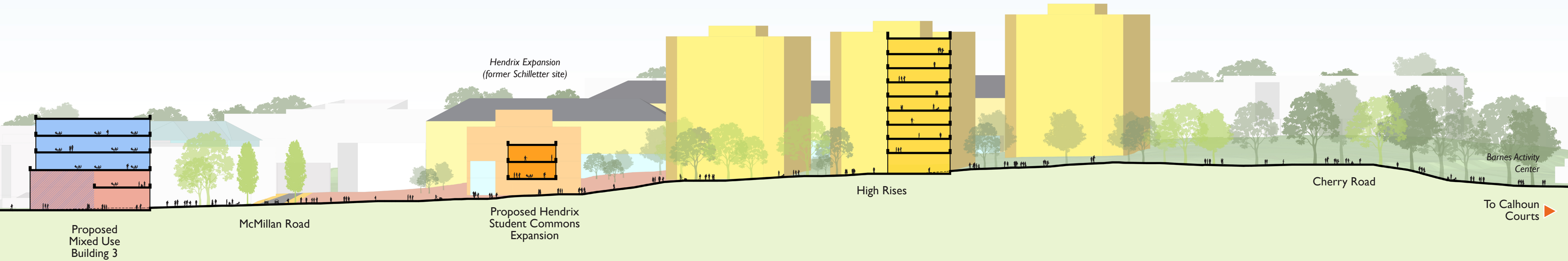
This section cuts through parking lot E-1, the East Campus Dining Facility, Hendrix Student Commons, High Rises Area and Bryan Mall Community before ending in President's Park. The section illustrates the way the Bryan Mall Community sits on a hilltop. Hendrix and the East Campus Dining Facility provide interior accessible connections across this large change in grade.





Section

This section cuts through Mixed Use Building 3, through the proposed sky bridge at the Hendrix Student Commons Expansion and into the High Rise Area. The section illustrates the way in which the expanded Hendrix Student Commons will act as a gateway into the High Rise Community and the need to maintain porosity of the building in all directions as a crossroads of the Campus.



Bryan Mall

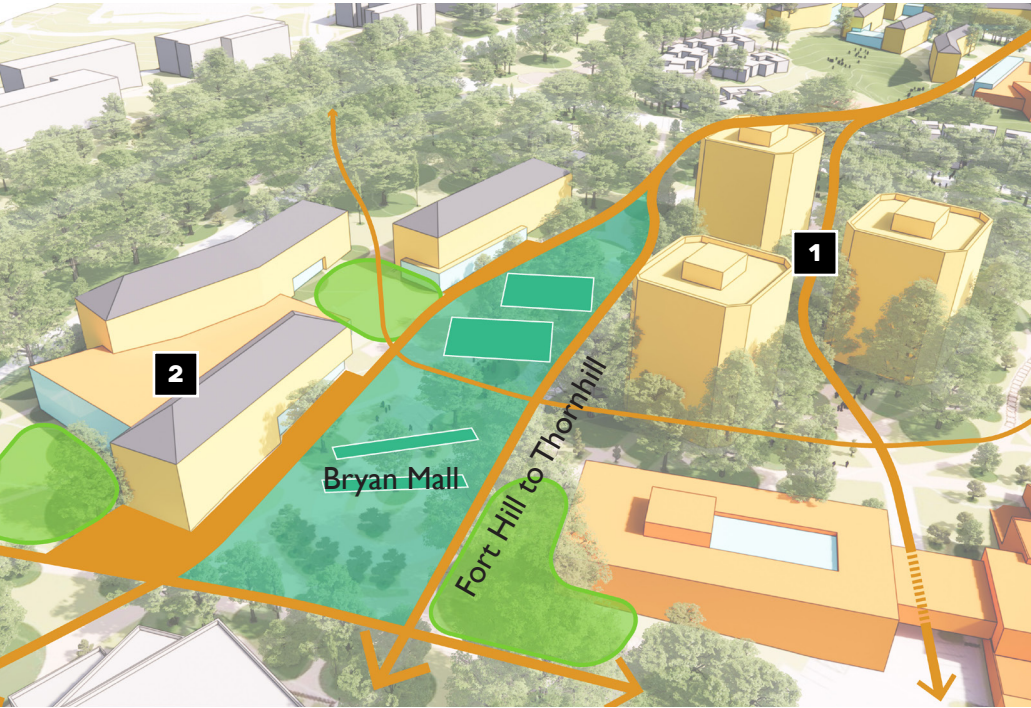
Bryan Mall is currently an oblong parking lot with a large planted median. It is flanked to the north by three small residence halls called the “low rises”. The future of Bryan Mall is a pedestrian and student recreation focused space that connects the East Campus Neighborhood to core Campus via the Fort Hill to Thornhill path.

1 High Rise Renovations

The planned renovations for the High Rises include improvements to envelope performance and energy systems along side an elevated podium landscape that creates more support spaces for the towers.

2 Bryan Mall Community

This cluster of three residence halls replaces the Low Rises slightly to the north of their current location. This expands the space of Bryan Mall so that it can include recreational features.

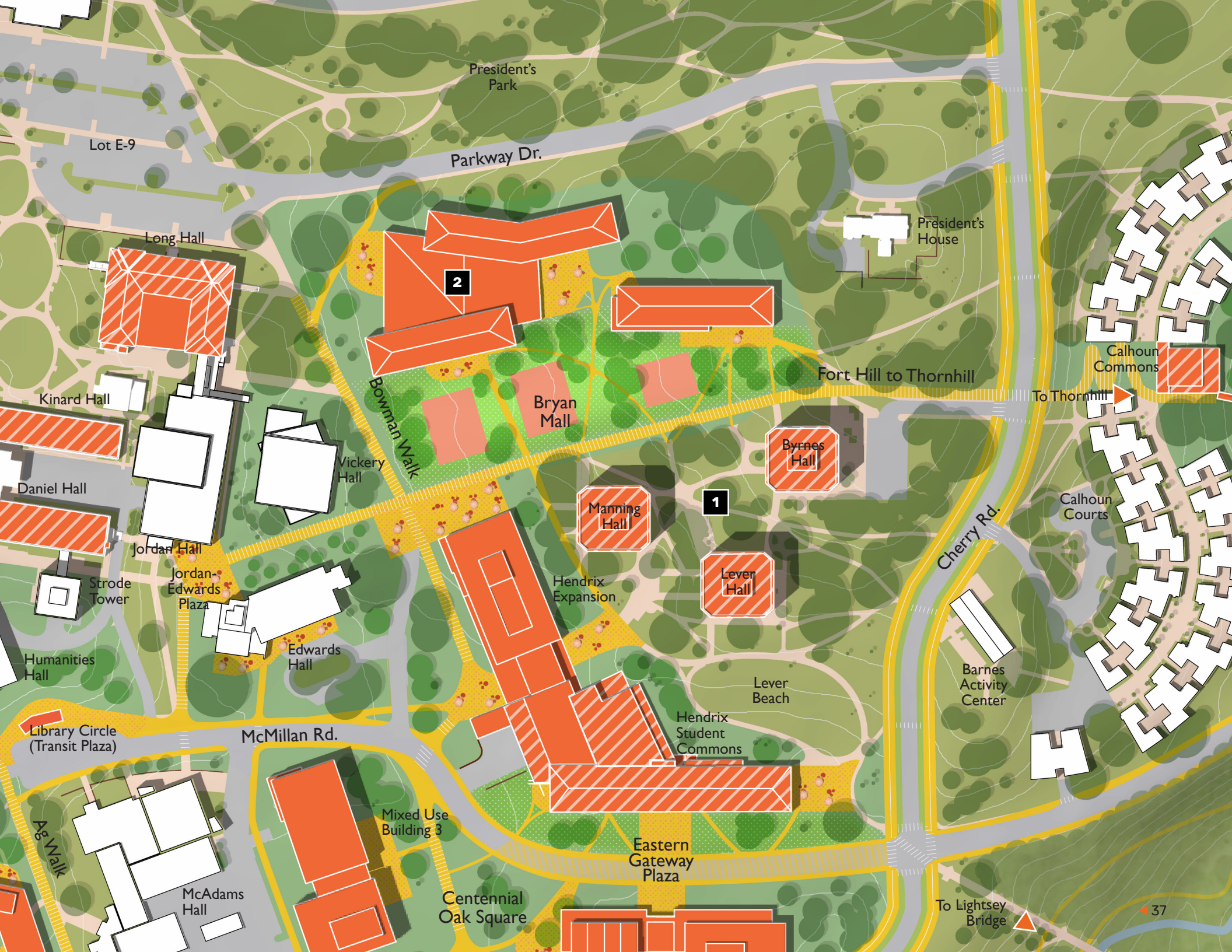


Bryan Mall Community

The Bryan Mall Community replaces the existing low rise residences halls. While the same height as the low-rises it is to have 200 more beds by utilizing more of the available land area to the north. The Community’s privileged position on the edge of the Academic Core and next to the President’s House and President’s Park suggests it should be special purpose housing for living learning or honors programs. A large amount of public space is shown in the design in a low one story podium that links the two western housing blocks. This space could have specialized living learning spaces, leisure skills classrooms and student affairs offices that serve both the community and the campus as a whole. The space orients itself toward Long Hall suggesting it is a space which can straddle both the Academic Core and East Campus Neighborhood.

Bryan Mall Landscape

The re-imagined Bryan Mall landscape should be both connective - acting as a crossroads for the Fort Hill to Thornhill and Bowman Walk paths - and recreational, a place for students to linger and engage in informal outdoor recreation. Bryan Mall’s landscape should be driven by the student community and include flexible recreational amenities which can be tailored to changing student culture over time.



Thornhill

Thornhill will be a new student community that's Commons becomes a center uniting the entire East Campus Neighborhood into one cohesive student life district. As a housing district, it will take on a distinct character that responds to native topography, streams and the surrounding forests.

1 Calhoun Commons Renovation

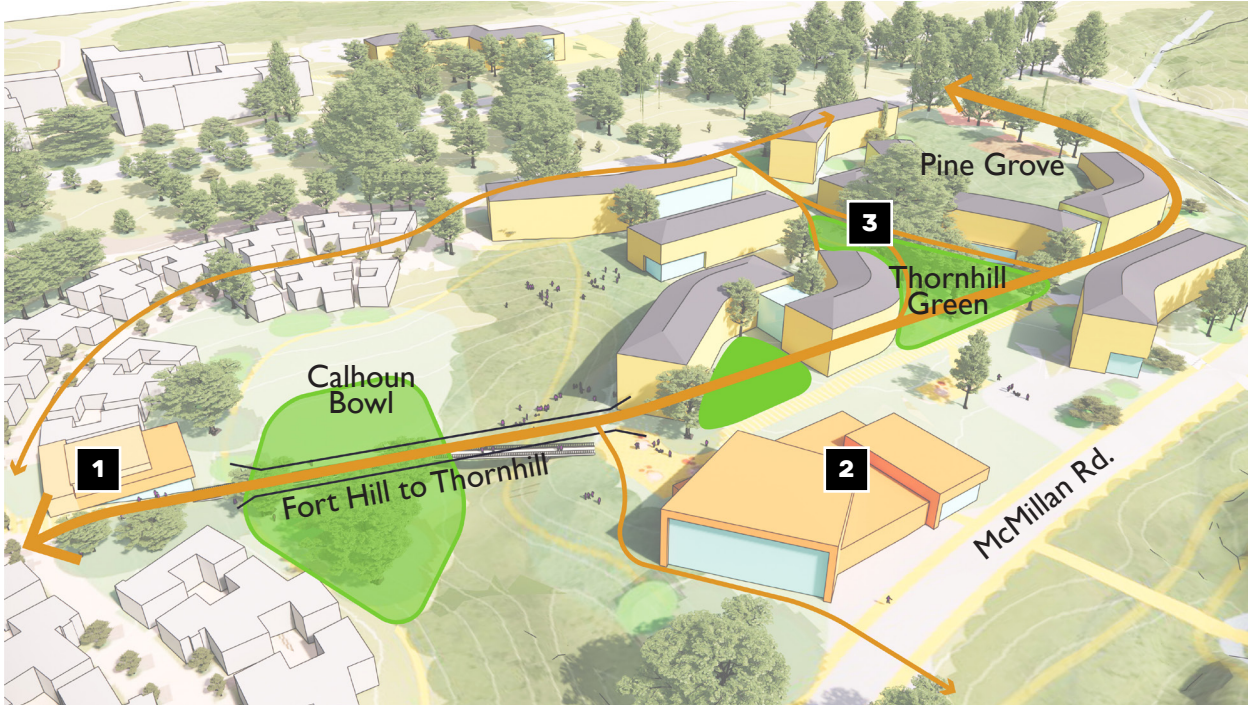
Renovation of this building should embrace its new role as a stepping stone along the Fort Hill to Thornhill path. The potential for expanding this facility should be explored.

2 Thornhill Commons

This multi-purpose building will act as a dining, support and student gathering space for the Thornhill Community and surrounding neighborhoods. The possibility of relocating the Student Health Center to this building should be further explored.

3 Thornhill Community

The Thornhill Community consists of 11 housing blocks with a total of 1200 student beds. The thin footprint of each housing block allows it to respond to topography and preserves as much of the existing landscape as possible.



Bridges

Thornhill is surrounded on three sides by streams and creeks. This existing hydraulic landscape should be respected and celebrated. Two bridges are proposed to link the Thornhill Commons to the adjacent neighborhoods of Calhoun Courts and Lightsey without disruption to stream hydrology. This will further cement the role of the Commons as a unifying center for these three housing districts, encouraging cohesion of the student community and increasing economies of scale for the student services that are deployed there.

Calhoun Bowl

Calhoun Bowl is a low-lying landscape dividing Calhoun Courts from Thornhill. This landscape is underutilized but currently has fire pits and volleyball courts. This area should be revitalized as a new recreational center for the East Campus Neighborhood.

Pine Grove

The Grove is an existing stand of mature pine trees that should be conserved in the design and construction of the Thornhill Community. The grove will serve as a backdrop to a small recreational landscape leading to the north branch of Hunnicutt Creek.

Hunnicutt Creek

Hunnicutt Creek is a defining feature of the East Sector but with limited pedestrian paths, its scenery is difficult to enjoy. Improvements to Hunnicutt Creek's pedestrian infrastructure are planned and will offer the residents of the East Campus Neighborhood a natural recreational experience to complement active and social outdoor recreation spaces like Calhoun Bowl.





Section

This section cuts through Calhoun Commons, the Calhoun-Thornhill Bridge and Thornhill Commons. It illustrates how both commons will function together through use of the bridge. The plan for the area celebrates its landscape and avoids disruptive regrading as much as possible.





Manning Hall

3 Frameworks

Frameworks

The East Sector Update Plan consists of functional and design frameworks that collectively form a comprehensive and coordinated system. They serve as a guide for future detailed design and planning work. Each framework diagram illustrates the principles of the East Sector Update Plan by isolating the functional and design elements and highlight key relationships. The frameworks include:

Land Use Framework

- Learning and Research Framework
- Campus Life Framework

Open Space Framework

Mobility Framework

- Pedestrian Framework
- Bike Framework
- Vehicular and Parking Framework
- Transit Framework

Land Use Framework

The Land Use Framework coordinates the overall land use recommendations of the LRFP with the specific recommendations for the East Sector. To that end, Academic and Research uses are located in established areas around the Ag Quad and the South Gateway expansion at the intersection of Perimeter Road and Cherry Road.

The framework maintains the existing residential land use designations for the mid-rises, high-rises, Douthit Hills, Calhoun Courts and the proposed redevelopment at Thornhill. Campus life functions are embedded in each of these residential areas to support quality of life objectives and student needs.



Learning and Research Framework

The Learning and Research Framework organizes space and programmatic requirements in support of Clemson Forward (the strategic plan), the needs of specific Colleges, and in response to long-term practical and aspirational goals for the East Sector. As articulated in the LRFP, the learning and research objectives for the campus include: 1) Accommodate the programmatic need for space; 2) Increase the presence and visibility of research; 3) Encourage interaction among diverse students, faculty and staff; 4) Provide high-quality research spaces and active learning classrooms to promote collaboration and engaged learning; 5) Focus academic and research facilities in the central core of the campus in support of a compact walking environment; and, 6) Increase connectivity between academic buildings and the campus and promote outdoor learning opportunities.

Renovations

- 1

Martin Hall (83,000 gsf)
The renovation of Martin Hall addresses facility depreciation and takes into consideration the collaboration and social study spaces proposed in the LRFP.
- 2

Long Hall (81,000 gsf)
Long Hall will be renovated following the relocation of life science and health professions programs to newer facilities.
- 3

Daniel Hall (65,000 gsf)
Daniel Hall’s renovation addresses general facility condition.
- 4

Kinard Hall (65,000 gsf)
Kinard Hall is home to the Department of Physics and Astronomy, six classrooms, 36 laboratory spaces and 69 offices. It has not been renovated in more than 50 years.

Instruction-Focused Facilities

- 5

Forestry Building (85,000 gsf)
The Forestry Building is dedicated to the Forestry program and appropriately sited with visual and physical access to the wooded areas of Hunnicutt Creek.
- 6

Mixed Use Building 1 (150,000 gsf)
Mixed Use Building 1 will be built adjacent to the existing Life Sciences Building and houses complementary programs.
- 7

Mixed Use Building 2 (100,000 - 150,000 gsf)
Mixed Use Building 2 will replace Lehotsky Hall. Depending on the height, it could provide as much as 150,000 gsf of new academic space.
- 8

Mixed Use Building 3 (150,000 gsf)
Mixed Use Building 3 replaces Redfern Health Center. It is an ideal location for general education courses given its proximity to the Student Commons and a high number of undergraduate beds.
- 9

Poole Replacement (200,000 gsf)
The replacement of Poole is made possible by relocating labs to the adjacent Lab Building. Poole may be designed to include instructional and research labs alongside general classroom and office space.

Research-Focused Facilities

- 10

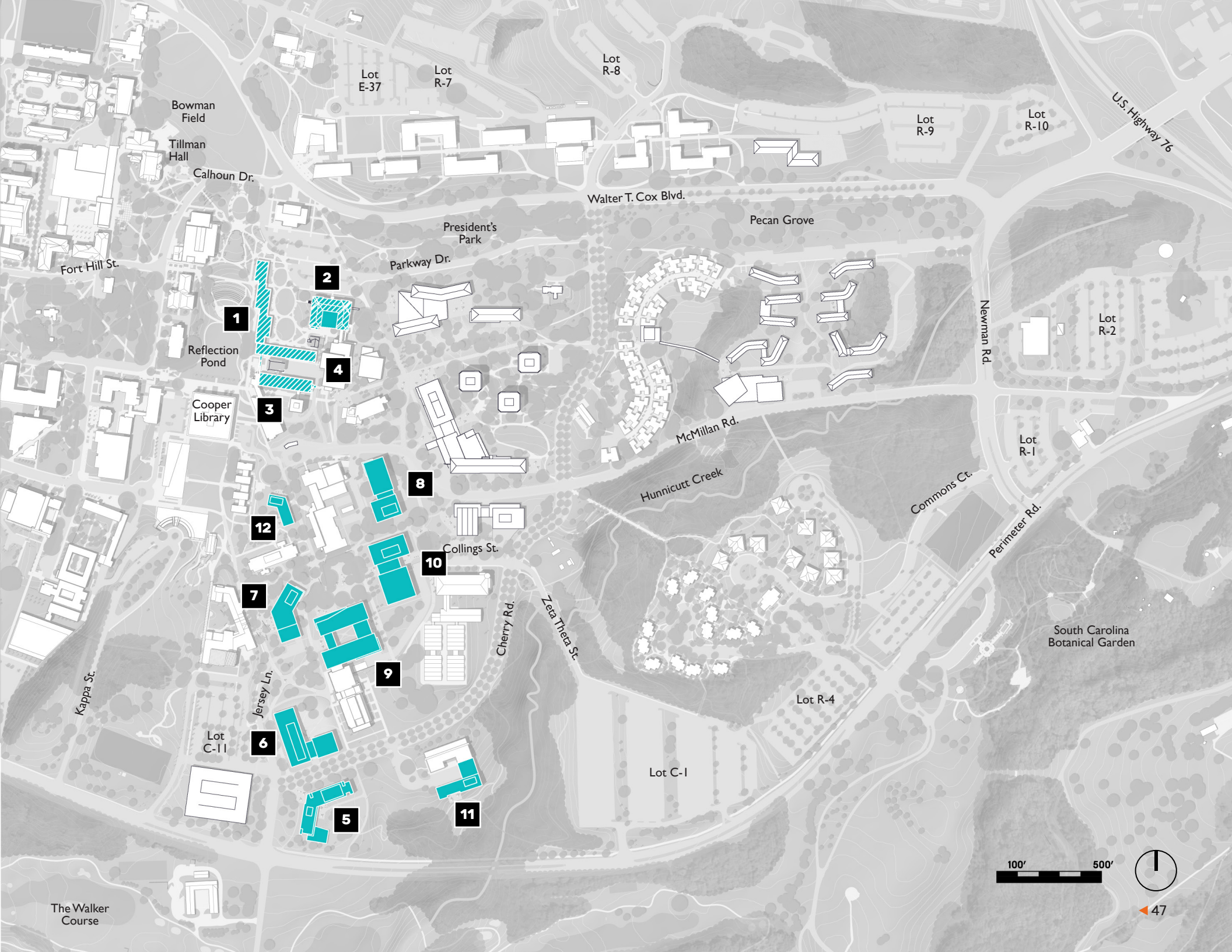
Lab Building (175,000 gsf)
The Lab Building is envisioned as a research-focused facility but may include instructional space to bridge the research and academic land use zones.
- 11

Lab Expansion (30,000 gsf)
This expansion to Godley-Snell Research Center will add a significant amount of space to the facility which could be used by a number of similar research programs.

Academic Support Facilities

- 12

Study Pavilion (20,000 gsf)
The Study Pavilion is envisioned as an expansion to the Academic Success Center an outdoor covered or underground connection should be considered in the design process.



Campus Life Framework

The Campus Life Framework fosters an inclusive campus experience by providing amenities, student commons, dining facilities and residential communities at key locations in the East Sector. The framework takes into consideration the population groups of the university including resident students, commuters, staff, faculty and the broader community of alumni and visitors. The LRFP sets out to create a “warm, welcoming campus” and to plan for a rich Clemson experience by promoting interactions, engaged living and learning environments, and a strong sense of community. Campus Life is supported by the following “Big Ideas” of the LRFP: 1) Renewed Student Centers - rejuvenate the network of student centers; 2) Grow on-campus housing; and 3) Recreation, Wellness and Active living - promote active recreation and fitness opportunities. The campus life objectives of the LRFP include: 1) Organize student housing and student centers in mixed-use neighborhoods complimented with distributed study and social space; 2) Provide sufficient on-campus housing options for all freshmen and to maintain 35 percent of undergraduate students on campus; 3) Provide fitness and recreation opportunities that reflect student interest in active, healthy lifestyles; and, 4) Maintain a vibrant distribution of housing and student amenities.

Student Centers and Dining / Food Service

The LRFP calls for the renewal of Student Centers across the campus taking into account the distributed nature of the population. In the East Sector, the idea calls for the renewal and expansion of Hendrix while considering the recently completed Douthit Hub. This plan departs from the LRFP plan with the addition of a new commons and food service center at Thornhill. In response, the East Sector Update Plan proposes a “triangle” of student centers consisting of the Douthit Hub, Hendrix Student Center and Thornhill Commons providing for a flexible distribution of services and amenities. Additional student life spaces will be incorporated into new housing, a renewed Calhoun Commons and the Barnes Activity Center to further support a diverse and distributed approach to student life.

0 Douthit Hub (Existing / 200 dining seats)

The East Sector Update Plan views Douthit Hub as part of the East Campus Neighborhood’s Dining and Student Center network. No change to the Hub is proposed per this plan.

1 Hendrix Student Center (130,000 gsf / 273 dining seats)

The East Sector Update Plan illustrates the expansion of the Hendrix Student Center, taking into consideration ongoing plans to re-purpose the bookstore for student engagement space. The recommendations build on those provided in the LRFP for renewing Hendrix as an East Sector Hub for residential and commuter students alike. Longer term, expansion of student life activities and functions extends northward to repurpose the existing Schilleter Dining Hall site.

2 East Campus Dining Facility (55,000 gsf / 800 dining seats)

As a replacement for the Schilleter Dining Hall, the plan locates a new dining commons south of Hendrix on the existing parking lot (E-1). This central location positions the dining commons for balanced use throughout the day—breakfast, lunch and dinner. Further, it positions the facility to serve a broad population including residents of new East Sector housing, Calhoun Courts, Lightsey Bridge and the Thornhill Community. The central location creates a new social center for the East Sector in combination with Hendrix Student Center. Given its easy accessibility for both service and passenger vehicles, the plan proposes relocating high-traffic venues, like ‘55 Exchange, to this building. Design of the building requires careful site planning given its visibility from all sides.

3 President’s Park Student Organization & Programming Space

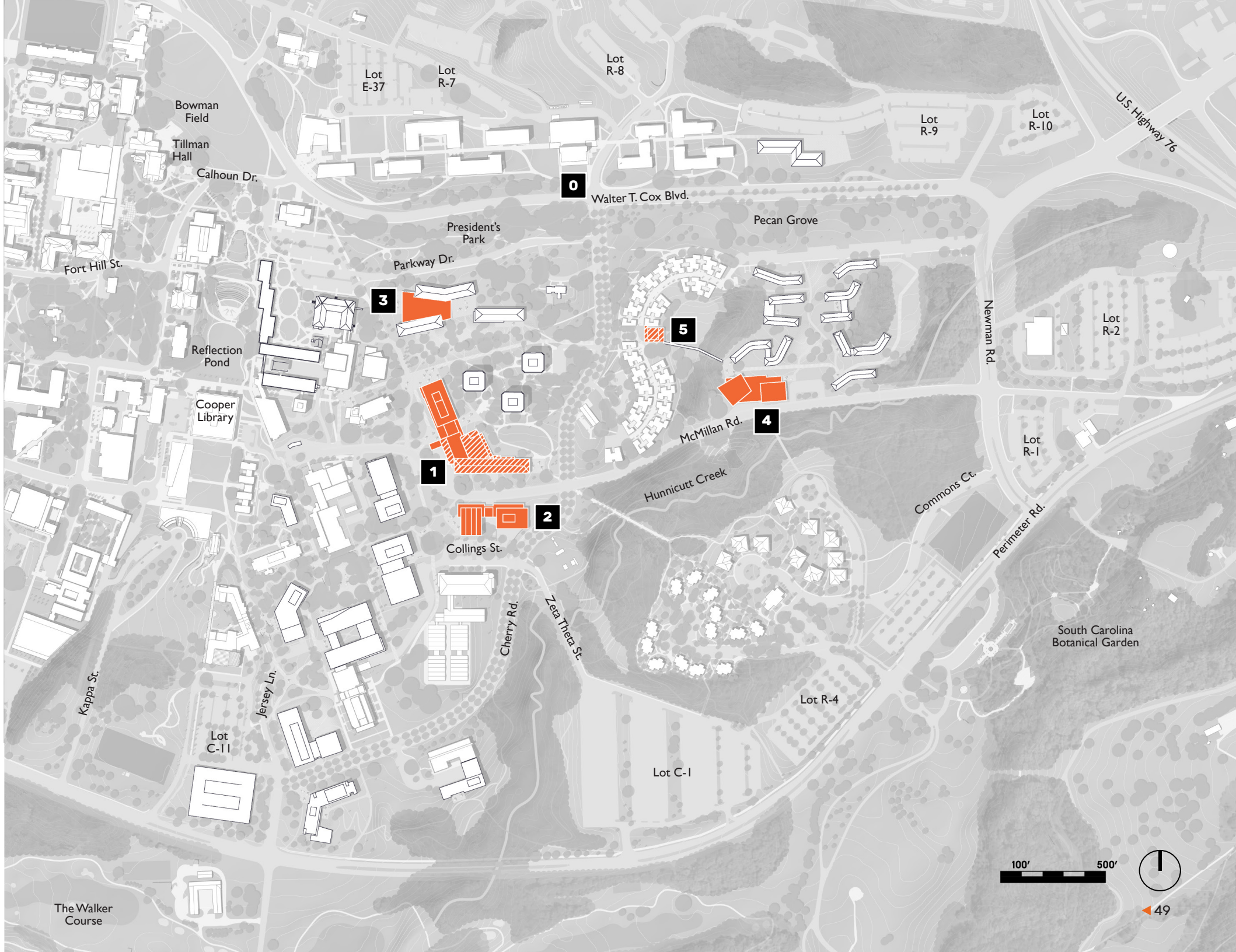
Replacement of the low rises (Mauldin, Barnett and Smith) provides the opportunity to incorporate additional student life, social and collaboration space on the ground floor of the new housing community. The space is well positioned to act as a special purpose living learning space and offices for student organizations and student-facing administrators.

4 Thornhill Commons (100,000 gsf / 500 dining seats)

Proposed along McMillan Road, Thornhill Commons provides dining and food services for East Sector population growth. The site engages with a new bridge connection to Calhoun Commons and offers links to the pathways proposed in the Hunnicutt Creek Greenway. It also offers flexibility in terms of the dining and other amenities within or adjacent to the building including social commons and collaboration space. Subject to future studies, the site is a potential location for a new student health center.

5 Calhoun Commons (3,000 - 10,000 gsf)

A renewal of the existing commons and surrounding landscape in Calhoun Courts provides an opportunity for social engagement and amenity along the Fort Hill to Thornhill accessible pathway. New ramps connecting Cherry Road to Calhoun Courts are an important aspect of the accessible route. These circulation improvements encompass general upgrades of the associated landscape to provide shade and amenity. Given Calhoun Commons proximity to Calhoun Court’s apartment style housing, the amenities should be geared towards the needs of upper division and graduate students as a complement to the intergenerational facilities at Thornhill Commons.



Housing

Proposed housing in the East Sector Update Plan embraces and further defines the recommendations of the recent housing master plan. The proposals build upon the flexibility of the LRFP which identified potential expansion housing sites at Douthit Hills and Thornhill. A departure from the LRFP includes the replacement of the low rises on Bryan Circle (Mauldin, Barnett and Smith) and takes into consideration the plans for renovating the high-rises. The goal of the housing framework is to unite the various housing districts of the East Sector into one contiguous East Campus Neighborhood with shared communal spaces, dining facilities and mobility infrastructure. This will promote intergenerational student cohesion and integrate the housing area into the core campus structure.

Fitness, Wellness, and Recreation

Recreation and wellness initiatives in the East Sector focus on the effective use of existing natural resources and heritage parks which frame the sector on all sides. The proposed Hunnicutt Greenway will act as a major recreational area for the entire Clemson community and provide East Sector residents with access to Walker Golf Course and the South Carolina Botanical Garden both located south of Perimeter Road.

Health and Counseling

Subject to further study, the Thornhill Commons area is a potential replacement site for the Redfern Health Center. Other options include a new facility adjacent to Fike Recreation Center on west campus.

Outdoor Recreation

The East Sector Update Plan includes the Lightsey Club Fields located at the northwest corner of Perimeter and Newman Roads. Additional small courts are proposed in Bryan Mall and on Thornhill. These courts should be flexibly designed to accommodate a range of outdoor games and adapt to changing student preferences.

Indoor Recreation

There are existing indoor fitness facilities at the Douthit Hub. No additional indoor fitness facilities are proposed in the East Sector owing to a campus-wide strategy to consolidate these facilities for staffing efficiency. Informal indoor recreation, social gathering, student club activities and games will be facilitated by multi-use student space at Hendrix Student Commons and integrated into housing itself.

- 1

Thornhill Community (495,000 gsf / 1200 beds)

Major housing redevelopment is proposed for the East Sector at Thornhill. The plan replaces the existing houses with four story buildings located in response to the topography of the site and in response to passive solar objectives. Buildings in general orient on the east - west axis, the optimal orientation for passive solar performance. A total of 1,200 beds in 11 rectangular blocks will respectful weaving into existing wooded areas. Accessibility is a key consideration in the site design process given the steep topography of the site. Accessible routes connect Morrison Street downhill to McMillan Road where dining commons, amenities and transit services are proposed.
- 2

Calhoun Courts (Existing / 546 beds)

Modifications to Calhoun Courts are not proposed by this plan. The Calhoun Courts provide apartment style housing to upper division students. The addition of new double and single occupancy style housing to nearby areas will help create a more intergenerational neighborhood.
- 3

High Rises (300,000 gsf renovation / 1,447 beds)

The Renovation of the High Rises addresses depreciated assets and improves envelope performance. This large housing community will remain a center of student density and is well served by its proximity to the new Hendrix Student Commons.
- 4

Bryan Mall Community (180,000 gsf / 600 beds)

The existing low rises of Mauldin, Barnett and Smith are replaced in the East Sector Update Plan with three new four-story structures oriented on the east-west axis. Redevelopment provides connections and views to a renewed Bryan Mall to the south and President's Park to the north. In combination with the ongoing renovation of the high-rises and landscape improvements directly associated with those buildings, the intent is to create a renewed housing district at the heart of the East Sector.
- 5

Douthit Hills Community (644,000 gsf (76,000 new) / 1,924 beds)

A new building is proposed at Douthit Hills, to be the "1" block in the series. This project serves as a catalyst for the housing system, providing swing space needed to redevelop the Bryan Mall area. This facility integrates with the existing development pattern and designs of the rest of Douthit Hills. With the addition of this housing block, Douthit Hills becomes the largest housing community on campus.
- 6

Lightsey Bridge Community (Existing / 853 beds)

Transfer students occupy the existing housing at Lightsey Bridge. A new bridge over Hunnicutt Creek links the area to the proposed Thornhill Commons and transit services along McMillian Road. Modification to the Lightsey Bridge Community is not proposed by this plan but it will be better integrated into the East Sector neighborhood by new pedestrian infrastructure, transit connections and access to student services.



Open Space Framework

The Landscape Framework, as defined by the open space structure, landscapes and circulation routes of the East Sector, is viewed comprehensively. The Framework builds upon the existing structure of the campus defined by its topography, hydrology and wooded areas. The outcome is a vision for universal access across the East Sector coordinated with the landscape and development strategy.

1 President’s Park and Pecan Grove

W.T. Cox on the North, Cherry Road on the East, and Parkway Drive on the South define the boundaries of President’s Park. The eastward extension proposed in the LRFP encompasses the existing Pecan Grove.

2 Hunnicutt Creek Greenway

The Hunnicutt Creek Greenway creates a new park-like environment with integrated stormwater management features. New pathways and connections within the East Sector link this network with Thornhill Commons.

3 Thornhill Woods

Existing wooded areas in the Thornhill area remain as a feature element in the landscape framework including those at the center of the site, those along Hunnicutt Creek North of McMillan Road and those West of Newman Road. Basketball, volleyball, and other outdoor recreation areas provide additional amenities in areas that are not wooded.

4 Calhoun Bowl

Redesign of “Calhoun Bowl” formalizes passive recreation fields and organizes circulation along a new bridge providing an accessible route from Calhoun Commons to the proposed Thornhill Commons. The steam corridor and wooded area between Calhoun and Thornhill include trails linking to the Hunnicutt Creek Greenway.

5 Bryan Mall

A renewed passive recreation landscape enhances this existing parking area and roadway. The idea is to create a central outdoor social space for surrounding residents. Although removal of general auto access and parking allows for the transformation, move-in and move-out access is maintained.

6 Lever Beach

A new accessible landscape linking Lever Beach with the improvements proposed along McMillian Road enhances this existing open space north of Hendrix. The goal is to provide meandering pathways in a landscaped setting transitioning the slope conditions in the service area between Hendrix and Schilleter, enhancing east-west pedestrian movements from the Cooper Library toward the Barnes Center.

7 Centennial Oak Square

Redevelopment of the Hendrix parking lot facilitates the creation of an open space around the Centennial Oak, providing a more appropriate setting for this specimen tree and a new landscape connecting Hendrix to the Biosystems Research Complex.

8 Eastern Gateway Plaza

The Eastern Gateway Plaza is an open spaced framed by the existing Hendrix loggia and new East Campus Dining Facility. It signifies the transition between common roadways to the east and the transit/ADA and service-only McMillan road to the west. The space should act as spillover and gathering space for the adjacent Campus Life facilities.

9 East Mall and Library Circle Transit Plaza

This segment of McMillan Road connecting Hendrix to Cooper Library is to be dedicated to transit, ADA and service vehicles only allowing expanded pedestrian facilities. The Library Circle Transit Plaza is the major terminus of many campus bus routes and will be anchored by a transit shelter south of Strode Tower.

10 Ag Quad

Long term redevelopment of the buildings defining Ag Quad maintains and enhances this open space while providing indoor and outdoor connectivity for future buildings.


11 Life Sciences Quad


A new quad defined by the existing Life Science Building and the proposed Science Building enhances southern reaches of the East Sector, enhancing the quality of the campus experience.


12 Academic Success Quad


The LRFP identifies a new open space east of the Academic Success Center incorporating Ag Walk and the view corridor toward Tillman Hall. This space is maintained with the option of providing a small development site, if needed.


Legend

 Campus Quad

 Neighborhood Green

 Plaza

 Heritage Park

 Natural Resource Area

52

Mobility Framework

The Mobility Framework promotes a balanced approach to campus circulation - an approach emphasizing universal access and human-powered movement. The aim is to enhance the overall campus environment and user experience by creating a pedestrian priority zone (PPZ) and minimizing single-occupancy vehicle use in the East Sector. Enhancements to the accessible pathways, bicycle pathways and transit ways contribute to this aim.

Pedestrian Framework

The proposed Pedestrian Priority Zone encompasses the areas east and north of Cherry Road along with the Calhoun Courts and Thornhill area. Vehicular routes along Cherry Road remain; however, traffic calming features at major crosswalks and intersections prioritize pedestrian movement. These locations include the intersection of W.T. Cox and Cherry Road, the Fort Hill to Thornhill Pathway and Barnes Center crossings at Cherry Road, the intersection of McMillan Road and Cherry Road, and the area of Cherry Road between the proposed Science and Forestry Buildings. Traffic calming along McMillan Road includes the crossing point at Thornhill Commons linking to the Hunnicutt Creek Greenway trail head and the proposed bridge to the Lightsey housing area. The pathway network focuses on universal accessibility across the East Sector with the goal of providing an inclusive experience for all campus users. This requires a clear strategy for removing impediments to vertical movement such as stairways and paths with slopes exceeding five percent. The mobility framework recommends accessible pathways coordinated with major landscape corridors. Such routes take into consideration a shade strategy for the East Sector, ensuring that trees cover major pathways leading to a pleasant user experience. The major pathways of the East Sector include the following, several of which are identified in the LRFP.

1 Fort Hill to Thornhill Path

A universally accessible pathway linking Fort Hill to Thornhill via the Library Bridge is made possible by the removal of stairways and other obstacles. The goal is to create an east-to-west route across campus with slopes of less than five percent (slopes of less than five percent are consistent with ADA guidance and do not require handrails). This includes a realigned route around the stairs at the Edwards-Jordan Plaza, a redesign of Bryan Mall to exclude vehicular traffic and parking, a new ramping system linking Cherry Road with the lower elevation of Calhoun Courts, and a new pedestrian bridge linking Calhoun Commons to Thornhill Commons over the Calhoun Bowl. Landscape improvements along the pathway contribute to an improved campus experience and include passive recreation facilities at Bryan Circle, Calhoun Bowl and in the Thornhill area.

2 East Walk

As defined in the LRFP, East Walk is the major north-south route connecting the new College of Business Building to Cooper Library and beyond to the Brooks Center for the Performing Arts. This route is currently accessible south of Library Bridge. Accessibility improvements will be required along East Walk north of Library Bridge.

3 Hunnicutt Creek Greenway Trails

Pathways in the East Sector link to trails proposed along the Hunnicutt Creek Greenway as part of ongoing stormwater and landscape improvements. Linking the trails into the overall pathway network creates an extensive circulation network. This includes trails along the stream located between Calhoun Courts and the Thornhill areas. The network, in turn, provides wellness and fitness opportunities for the campus population.

4 Bowman Walk - “Business to Bio”

This improved pathway connecting the new College of Business to a renewed west entry to Hendrix Student Commons provides north-south movement in the East Sector. The pathway continues southward to connect with Centennial Oak Common and the Biosystems Research Complex. It ultimately extends to connect with parking lot C-1 via Collings Street (north of Biosystems Research Complex) and Zeta Theta Street. It is envisioned as a shared accessible, pedestrian and bicycle route.

5 East Mall

The proposed McMillan transit way and pedestrian improvements in the vicinity of the existing library circle enhance the pathways connecting East Walk to the Hendrix Student Center and points eastward. A new accessible segment of the pathway located in the service area between Hendrix and Schilleter (Rho Tau Service Drive) provides access to Lever Beach and beyond to the Barnes Center.

6 Ag Walk

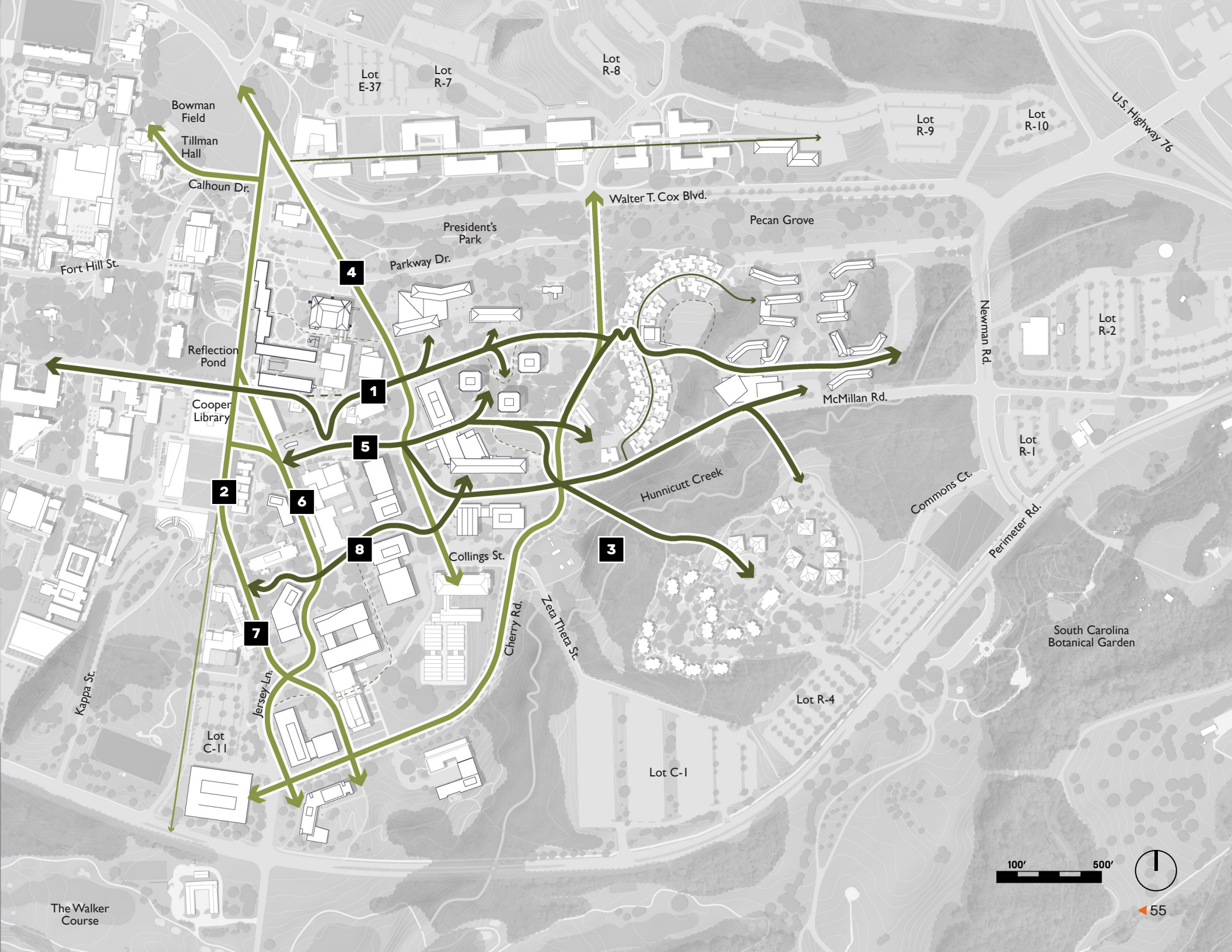
Proposed in the LRFP, Ag Walk connects Cooper Library Circle to the Ag Quad focusing on views of Tillman Hall. With modifications in the Ag Quad this route is accessible south of the new Humanities Hall.

7 Jersey Lane

Recent pathway improvements adjacent to the Samuel J. Cadden Chapel extend southward along Jersey Lane to create an accessible pathway linking the Cooper Library area to the new Forestry Building (northeast corner of Perimeter Road and Cherry Road).

8 Centennial Walk

An accessible pathway connects the Jersey Lane elevation to the Ag Quad elevation in association with the redevelopment of the Lehotsky site. This pathway extends through the Ag Quad to connect with the Centennial Oak Square and onward to the Hendrix area.



Bike Framework

Biking is an important component of a sustainable mobility strategy. The East Sector has three main East-West roads that lend themselves to functioning as major bike arteries drawing commuters into the core Campus from the town of Clemson and new parking facilities to the east: Walter T. Cox Blvd. McMillan Rd. and Perimeter Road. Once on campus, cyclists should be kept on the perimeter of quad areas, parking or dismounting on the edge of high volume pedestrian zones.

1 McMillan Road Bikeway Improvements

This plan recommends adding dedicated bike facilities to McMillan Road east of Cherry Road to connect to commuter parking lots to the east and encourage human-powered mobility on the “last-mile” of commuter journeys. West of Cherry Road McMillan becomes a pedestrian focused Mall with a complete streets concept.

2 South Palmetto Pathway

This existing east-west multimodal pathway is critical to the campus bike system, redirecting bike traffic away from the high congestion Library Bridge and connecting west campus to the McMillan Road East Mall and Fort Hill to Thornhill path.

3 Cherry Road Protected Bike Lane

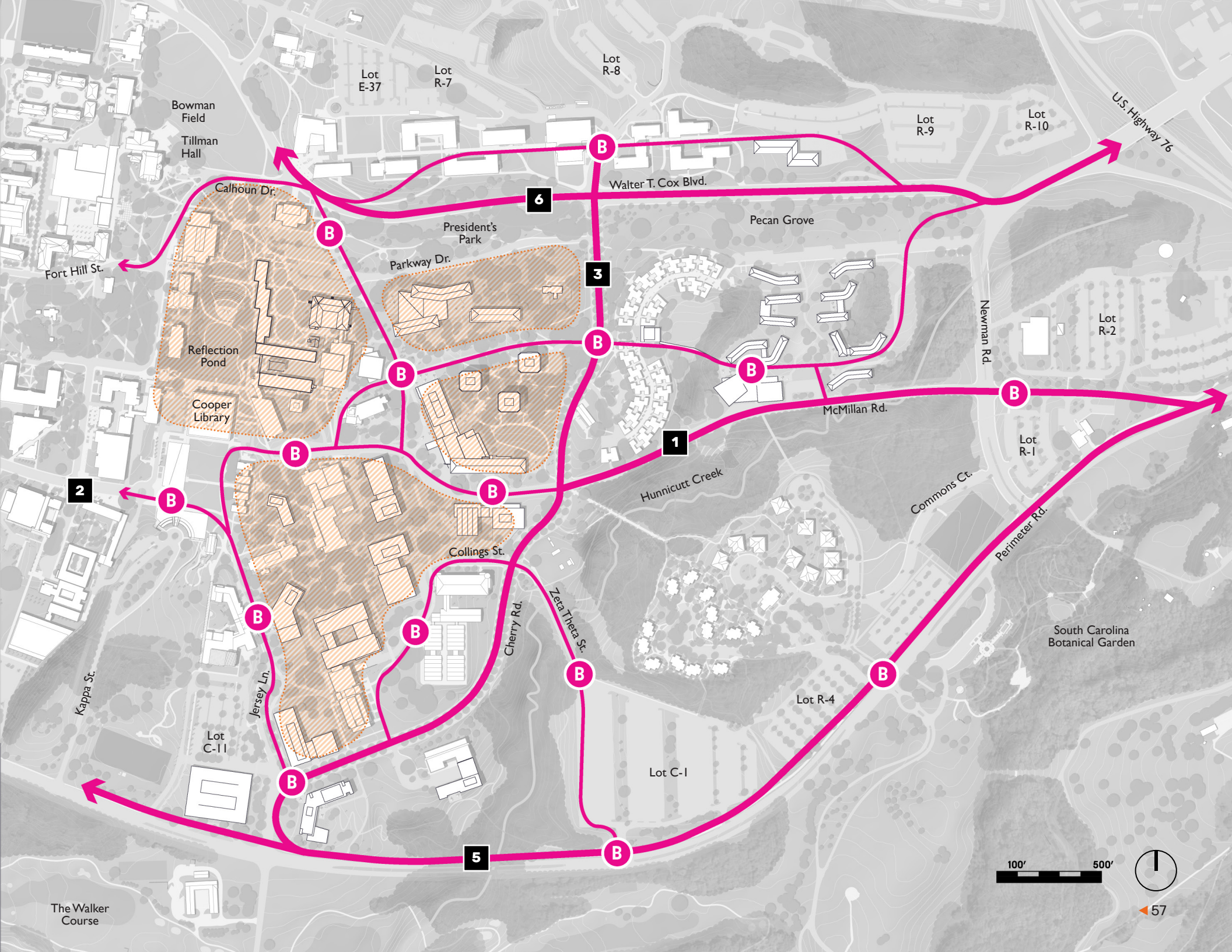
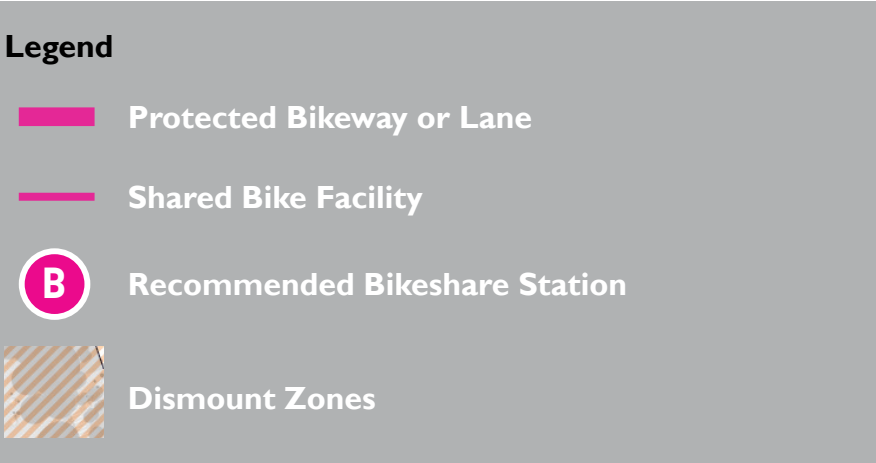
This plan de-emphasizes the use of Cherry Road as a north-south vehicular route and converts it into a campus street. Cherry Road’s traffic calming and road narrowing improvements will include new protected bike facilities. North of McMillan, bike lanes are maintained to connect with Douthit Hills. The bike lanes extend southward to connect with the proposed Forestry and Life Sciences buildings.

5 Perimeter Road Multimodal Trail

A shared trail is under construction on the north side of Perimeter Road east of Cherry Road providing links to the parking areas at Kite Hill and east of Highway 76. West of Cherry Road, the pathway joins with existing bike lanes on Perimeter Road.

6 Walter T. Cox Bikeway Improvements

This plan recommends implementation of protected bikeways or lanes along Walter T. Cox Boulevard in conjunction with the ongoing redirection of vehicular traffic toward Perimeter Road.



Vehicular Mobility Framework

The East Sector Update Plan continues Clemson's efforts to prioritize sustainable mobility and pedestrian experiences by redirecting single-occupancy vehicles to the campus perimeter. Vehicular circulation within campus is limited to service and emergency vehicles, ADA permits and transit. This creates a pedestrian priority zone or PPZ.

1 W.T. Cox / Newman Road Intersection

A reconfigured intersection in the form of a T-Junction creates a gateway to the north campus area building upon the memorable landscape character of this route leading to the iconic heart of the campus at Bowman Field and beyond to downtown Clemson.

2 Perimeter Road / Newman Road

Improvements and widening of Perimeter Road establishes a gateway to campus from Highway 76 near the existing pillars.

3 South Gateway - Cherry Road / Perimeter Road

A reconfiguration of the roadway prioritizes movement to the proposed Brooks Garage. The proposed Forestry Building, landscape and signage improvements enhance this important gateway to the East Sector and the broader campus.

4 Cherry Road

Cherry Road will be transformed from a high-speed through-road to a low-speed campus street. Proposed traffic calming measures emphasize pedestrian, bicycle and transit movement. The removal of parking within the proposed PPZ, notably Lot E-1 south of the Hendrix Student Center, diminishes the need for private vehicle access. A reconfiguration of the Cherry Road and Perimeter Road intersection contributes to the South Campus Gateway which channels traffic toward the parking garage south of the Brooks Center. The reconfiguration deemphasizes through traffic on Cherry Road by means of a T-Junction and the introduction of crossing points between the proposed Science and Forestry Buildings.

5 Jersey Lane

Jersey Lane is realigned and transformed into a service and ADA only access spur.

6 Collings Street

Collings Street, located north of the Biosystems Research Complex, remains as a service drive to Life Sciences and the redevelopment sites at Poole and Newman Halls.

7 McMillan Road

West of Cherry Road, McMillan Road is re-imagined as a pedestrian, bicycle and transit way providing access to ADA parking at the Cooper Library. East of Cherry Road, McMillan remains open to general vehicular and bicycle traffic. McMillan Road will continue to function as a main transit gateway for the East Sector.

Parking Framework

The East Sector Parking strategy supports the goal of creating a pedestrian priority zone in the East Sector by intercepting vehicular traffic on the campus perimeter and redirecting it into other "last-mile" modalities like pedestrian pathways, bikeways and transit services. Parking will be removed from the academic core and relocated to perimeter facilities. New parking projects are needed to replace lost inventory and support the growth in residential population. While much of the long-term parking in the PPZ is being removed, it is important to retain ADA parking, short term curb-side pick-up / drop-off spaces and consider ways of incorporating move-in day access near residences.

8 Brooks Parking Structure (1000 spaces)

This four story facility consolidates commuter and visitor parking displaced from the East Sector. It is expected to be a new gateway to campus linking to pedestrian and transit improvements.

9 R-4 Extension (312 spaces)

The R-4 Extension adds residential parking capacity and allows the possibility of a transit cut-through from Perimeter Road to Cherry Road.

10 R-9 Extension and R-10 (350 spaces)

The R-9 Extension and addition of the R-10 lot provide addition resident parking.

11 Kite Hill R-2 Extension (400 spaces)

The extension of R-2 parking provides additional resident parking.

Legend

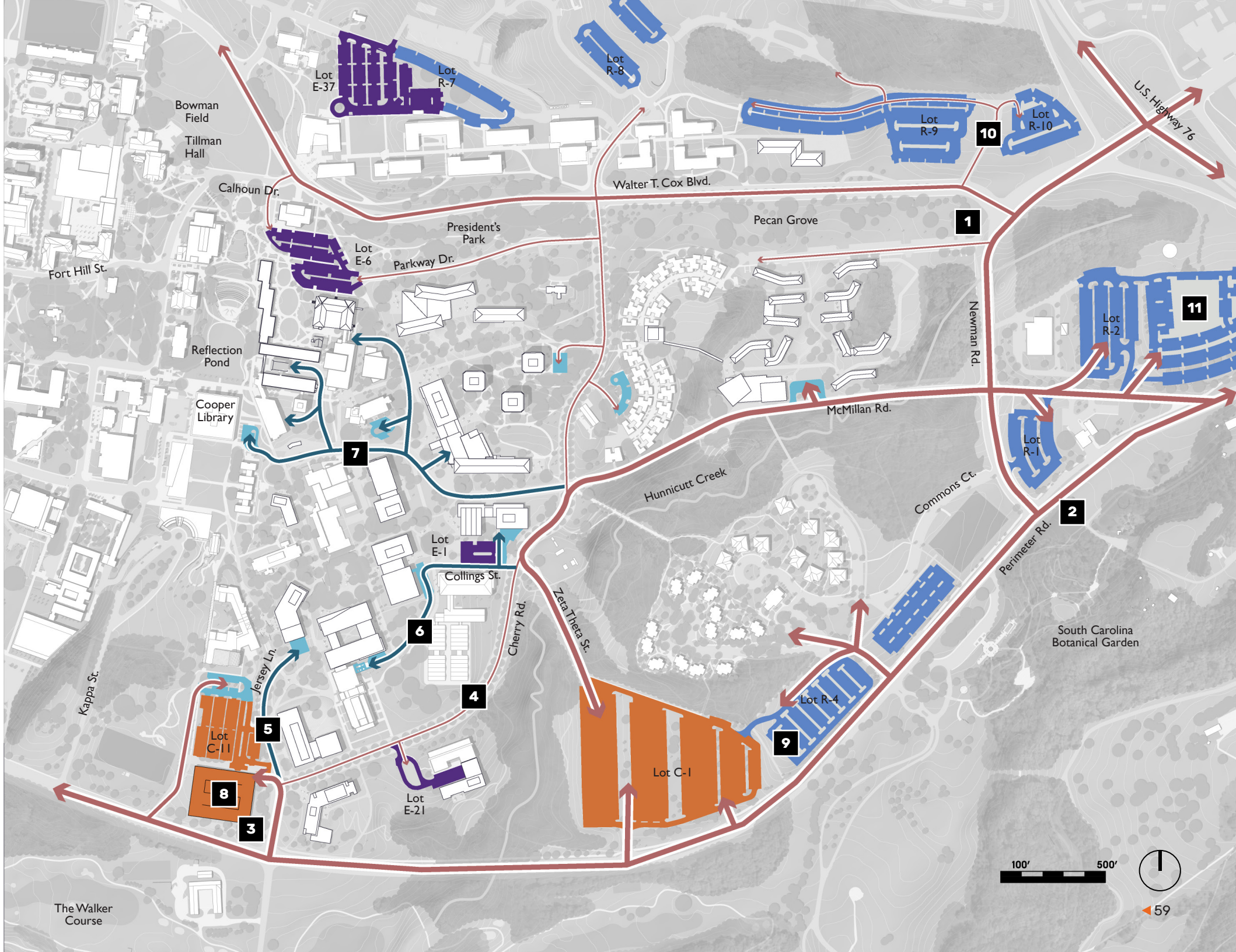
Roadway Types

- Major Roadway
- Minor Roadway
- Roadway in the PPZ:
Service / ADA and Transit

Parking Types

- ADA* / Service
- Commuter / Visitor
- Employee / Visitor
- Resident

**Indicates areas which are specifically designated for ADA permit holders in order to provide proximate parking to building entrances. All other parking facilities must also include ADA permit spaces according to the law.*



Transit Framework

Transit in the East Sector focuses on McMillian Road, which is envisioned as a transit way linking commuter parking areas at Kite Hill and east of Highway 76 with the Library Circle Transit Plaza on the East Mall. This concept builds upon the ideas for McMillan Road in the LRFP and includes additional transit hubs in response to proposed development. It also considers the idea of providing access to the Pedestrian Priority Zone as designated in the LRFP. Transit hub locations include the Kite Hill parking area, Thornhill Commons, Eastern Gateway Plaza and Library Circle (East Mall). The idea is to provide quick and convenient access to the core of campus from the peripheral commuter parking areas with the commuter experience in mind.

1 Library Circle Transit Plaza on East Mall

Library Circle currently acts as a major transit gateway to the core campus. The East Mall creates a new transit plaza that formalizes this condition. The East Mall will be a pedestrianized, transit priority corridor. This will be the major terminus on the East Campus for both local and regional bus routes.

2 Eastern Gateway Plaza

Transit stopping at Eastern Gateway Plaza can take advantage of the amenities available here. Transit-users are more likely to wait for transit if they can use their wait to enjoy dining or retail services. Currently this area also acts as a transit hub for long-range bus lines like the ICAR link and that relationship can continue.

3 Thornhill Commons

Located in conjunction with the proposed commons and a potential location for health services, this hub provides access to the housing at Thornhill and other services and amenities supportive of the residential and commuter experience.

4 Kite Hill Transit Hub

As parking is enlarged at Kite Hill, transit service expansions will be critical to making the last mile connection to residential areas.

5 C-1 Park-and-Ride

With the R-4 parking extension a potential transit link is completed through C-1 parking lot. This can increase opportunities for park-and-ride services that pass through the commuter lot to and from core campus destinations. RF gates or other means should be employed to prevent cut-through by unauthorized vehicles.

6 Brooks Park-and-Ride and Southern Gateway

New transit stops should correspond with the introduction of a large number of new parking spaces at the Brooks Parking Structure. The southward expansion of academic facilities created by Mixed Use Building 1 and the Forestry Building demands a southern transit stop to correspond to those provided on the north end of the Ag Quad.

7 Douthit East Station

Douthit residents currently have a transit stop at the far west and center of the district. An eastern addition is needed to correspond to the eastward expansion and new parking facilities introduced at R-9 and R-10 lots.

8 Calhoun Commons

Calhoun Commons is an ideal location for a transit stop carrying passengers to West Campus destinations.

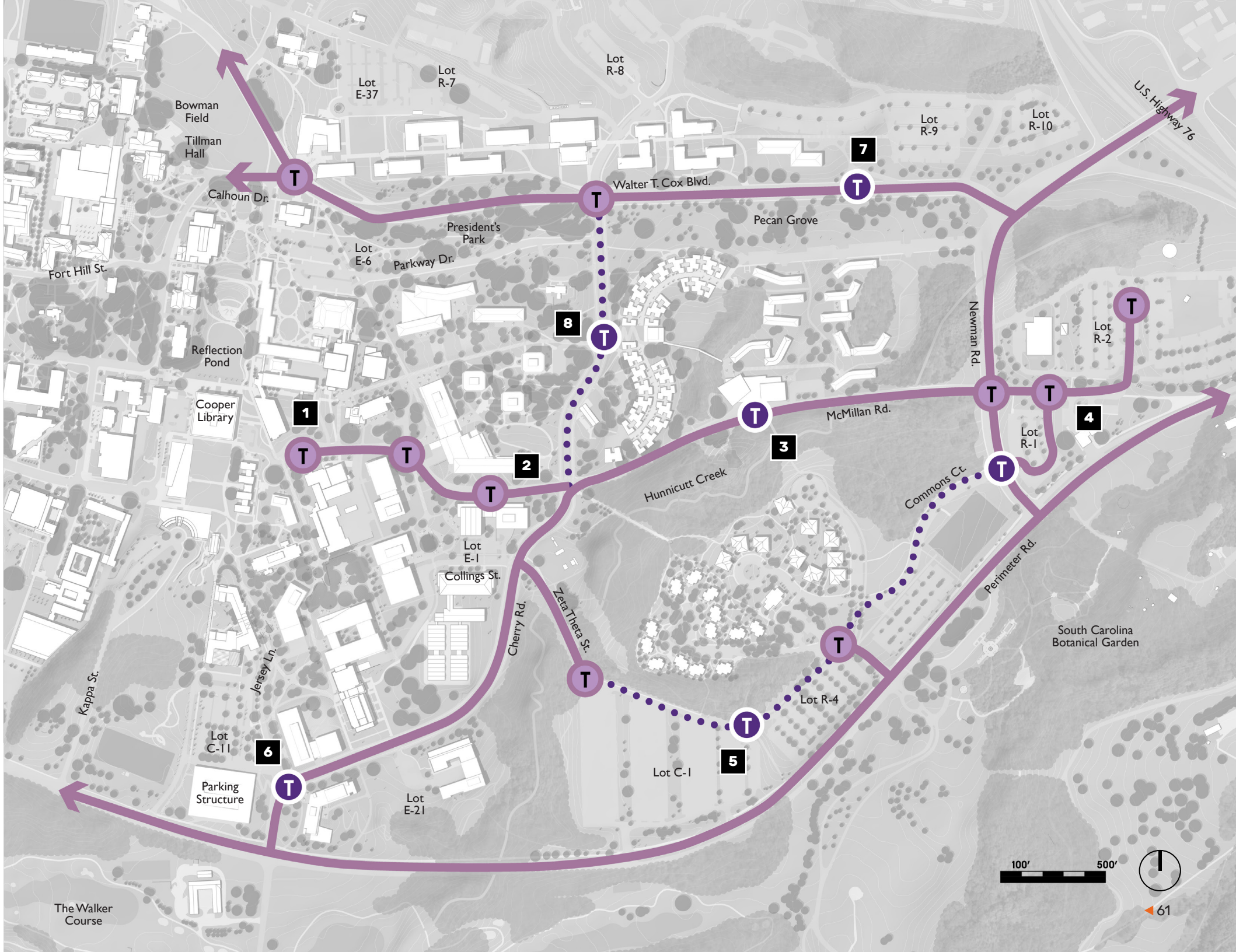
Legend

Existing Transit Route

Potential Transit Route

Existing Transit Stop

Recommended Transit Stop





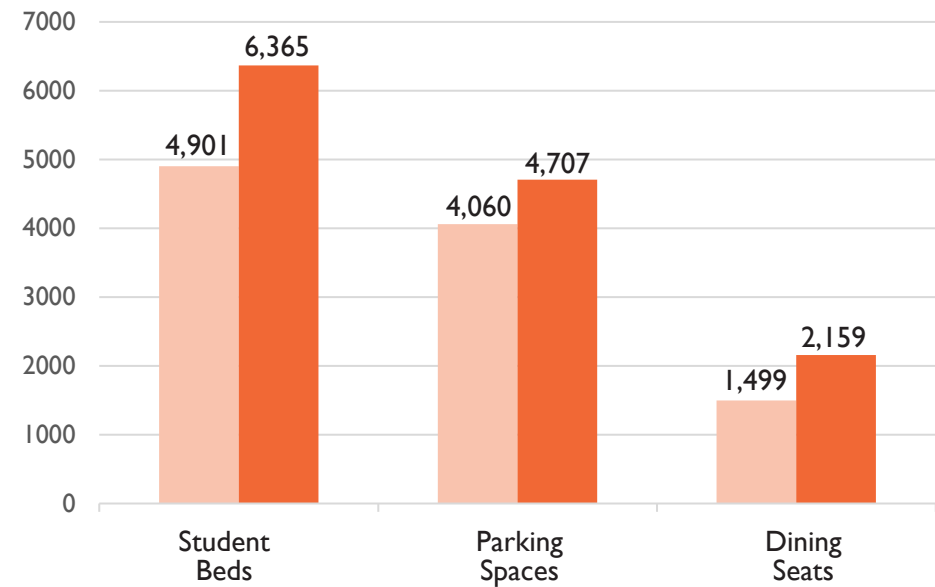
4 Implementation

Cooper Library and Reflection Pond

Implementation

The implementation and phasing strategy for the East Sector takes into consideration the established priorities, funding streams and catalyst projects of Clemson University. This phasing strategy highlights the relationship between projects and the investments that need to be made in tandem to achieve an accessible, functional and memorable campus environment at every stage of development. The phasing diagrams are accompanied by a “dashboard” of figures that suggest how building space, parking spaces, bed counts and dining seats could change over time. These are estimates that require continual review to align with changing campus needs and the development of detailed designs for the proposed projects.

Proposed Growth Targets



Academic Space: + 555,000 GSF
Campus Life Space: + 166,000 GSF
Residential Space: + 546,000 GSF

Existing
At Full Implementation

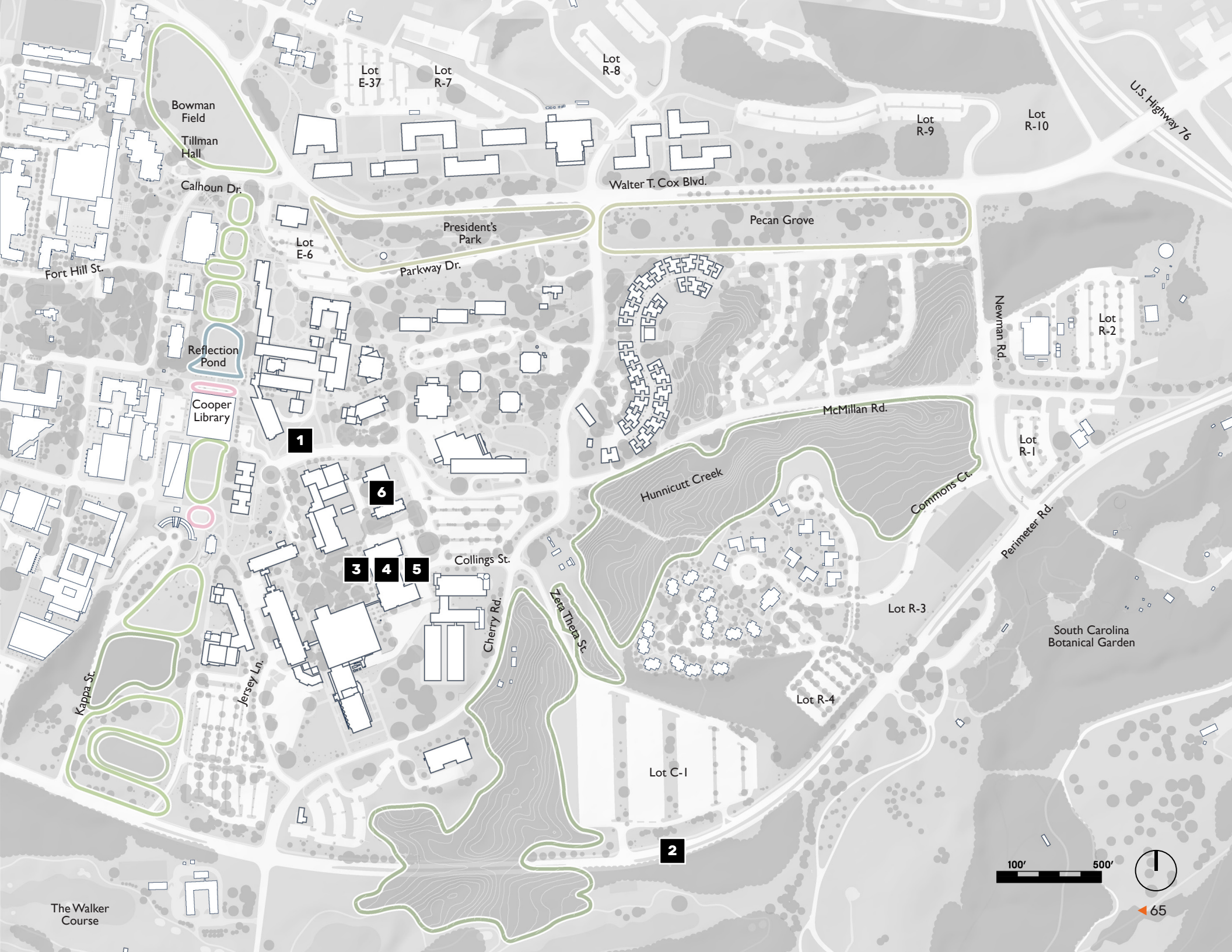
Ongoing Projects

- 1 Humanities Hall**
At the time of this study the new Humanities Hall was nearing substantial completion and is considered as an existing condition to this plan.
- 2 Perimeter Road Widening**
At the time of this study the widening of perimeter road was underway. The existing conditions plan reflects the completed perimeter road project.

Enabling Projects

These enabling projects don’t happen in the East Sector itself but are necessary to realize this plan’s proposals by decanting existing structures and readying them for demolition.

- 3 Meat Lab Relocation**
The Meat Lab is a meat processing plant located in Newman Hall. This use is incompatible with the higher density future planned for the East Sector. The Meat Lab should be relocated to a related agricultural facility in a location more readily accessible to large delivery trucks.
- 4 Blue Cheese and Dairy Lab Relocation**
This dairy plant is located in Newman Hall and should be relocated to a related agricultural facility in a location more readily accessible to large delivery trucks.
- 5 Packaging Lab Relocation**
The packaging lab is located in Newman Hall but would be more logically located at the Sonoco Institute of Packaging Design and Graphics on West Campus.
- 6 Redfern Health Center Relocation**
Redfern Health Center is undersized for the growing campus population. It’s one-story structure under-utilizes this high value central campus location. In the LRFP the functions of the Health Center were proposed to be relocated to an enlarged wellness center located at Fike Recreation Center, symbolically and spatially uniting health, fitness and social wellbeing in one place. During the planning process it was also suggested that the Thornhill Commons could act as a future location for campus Health Services.



Phase 1

Phase 1 addresses near term projects of the Clemson Academic Facility Plan. The construction of the new Forestry building and Mixed Use Building 1 create a new southern academic anchor on campus. A new northwest pedestrian corridor and realignments of roadways at the “southern gateway” address the new pedestrian traffic volume these facilities are expected to attract. The construction of these facilities replaces two existing parking lots. Removal of these parking lots, the widening of Perimeter Road, and the Newman Road extension greatly reduces the need for vehicular traffic on Cherry Road between McMillan Road and Jersey Lane which enables further pedestrian improvements. Jersey Lane becomes a service road serving the Chiller Plant and Lehotsky Hall.

Dashboard

Program	Demo	New	Reno	Change to date
Academic	-0	+242,000	157,000	+242,000
Housing	-0	+76,000	300,000	+76,000
Campus Life	-0	+0	0	0
Total	-0	318,000	457,000	+318,000

Total parking spaces: 4,381 Change to date: +321

Change in parking spaces this phase: 662 - 341 = +321

Total student beds: 5,181 Change to date: +280

Change in student beds this phase: 280 - 0 = +280

Total dining seats: 1,499 Change to date: +0

Change in dining seats this phase: No change this phase

- 1

Forestry (New: 85,000 gsf)

Design development of a new forestry building is currently underway and this will be one of the first projects implemented from this plan. The new forestry building provides the academic space necessary to decant Lehotsky Hall. The construction of this facility removes 199 existing parking spaces.
- 2

Mixed Use Building 1 (New: 150,000 gsf)

Mixed Use Building 1 provides classroom, office and instructional lab space mainly for undergraduate programs. The construction of this facility removes 142 existing parking spaces.
- 3

Southern Gateway Traffic Realignments

The traffic realignments at the southern gateway should be completed in phase 1 in tandem with new adjacent academic facilities. The improvement will act to calm traffic on Cherry Rd. and convert Jersey Ln. into a service road.
- 4

Martin Hall Renovation (Reno: 83,000 gsf)

The renovation of Martin Hall will be undertaken to improve facility condition, address accessibility needs and improve connectivity of adjacent open spaces.
- 5

Long Hall Renovation (Reno: 74,000 gsf New: 7,000 gsf)

The Long Hall renovation is enabled by the decanting of instructional spaces to other facilities. An infill addition to the courtyard has been proposed to create a deeper footprint for larger assembly spaces which are currently lacking in this building.
- 6

High Rise Renovations (Reno: 300,000 gsf)

The renovation of the high rises will improve the performance of the exterior envelope and address overall facility condition. Ground level improvements are proposed to create a “podium” landscape for student gathering that also integrates additional spaces for back of house and service functions.
- 7

Douthit Hills Building “I” (New: 76,000 gsf / 280 beds)

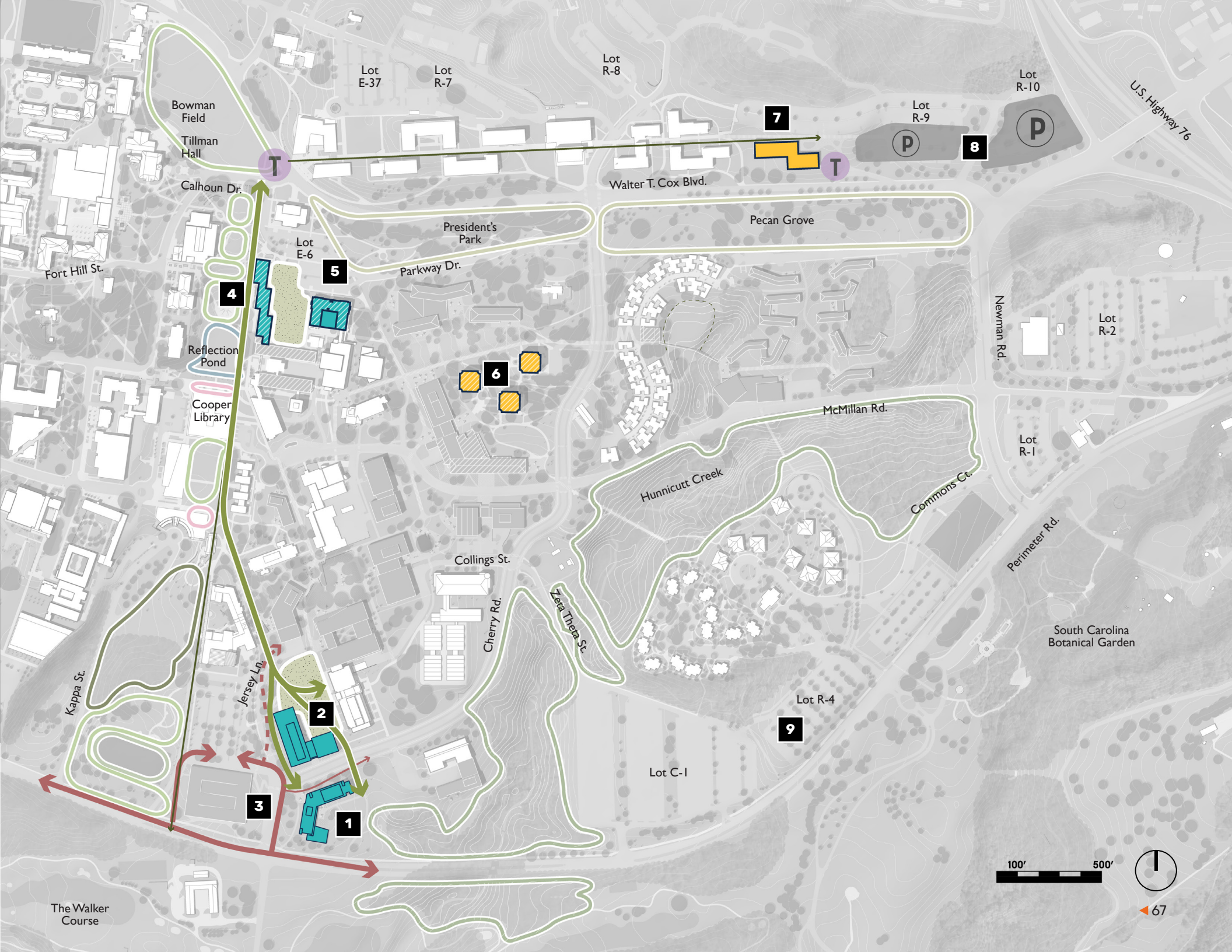
Douthit Building I completes the Douthit Hills master plan with an additional 280 beds.
- 8

Douthit Hills Parking Expansion (+350 spaces)

This parking expansion provides additional residential storage parking to keep pace with anticipated growth.
- 9

R-4 Parking Expansion (+312 spaces)

This parking expansion provides additional residential storage parking to keep pace with anticipated growth.



Phase 2

Phase 2 is focused on the realization of the Thornhill Community in a way that unites the existing Bryan Mall, Calhoun Courts, Douthit Hills and Lightsey Bridge districts through the central placement of a new commons. Phase 2 improvements provide both indoor and outdoor campus life amenities necessary to serve a growing residential population in the East Sector. Phase 2 sees the realization of traffic realignments which ultimately redirect campus commuters and through traffic to Perimeter Road and enable traffic calming and pedestrian improvements along Cherry Road, McMillan Road and Walter T. Cox Boulevard.

Dashboard

Program	Demo	New	Reno	Change to date
Academic	-0	+0	0	+242,000
Housing	-105,000	+495,000	0	+466,000
Campus Life	-0	+155,000	3,000	+155,000
Total	-105,000	+650,000	3,000	+863,000

Total parking spaces: 3,864 Change to date: -196

Change in parking spaces this phase: 60 - 577 = -517

Total student beds: 6,205 Change to date: +1,304

Change in student beds this phase: 1,200 - 176 = +1,024

Total dining seats: 2,799 Change to date: +1,300

Change in dining seats this phase: 1,300 - 0 = +1,300

- 1

East Campus Dining Facility (New: 55,000 gsf / 800 seats)
The New East Campus Dining Facility is intended to meet increased demands from residential growth in the East Sector and enable the smooth transition of service out of Schilleter Dining Hall. The construction of this facility removes 247 existing parking spaces. 60 will remain for ADA, employee and customer parking.
- 2

Thornhill Commons (New: 100,000 gsf / 500 seats)
Thornhill Commons is a multi-purpose campus life facility that acts as a student social, enrichment and dining facility serving adjacent residence halls. It may also function as the new Student Well-Being center for the entire campus, enabling the demolition of Redfern Health Center. A new 60 space parking lot accompanies the project.
- 3

Thornhill Residence Halls (New: 495,000 gsf / 1200 beds)
The Thornhill Residence Halls replace an existing village of bungalows containing a total of 176 beds and 330 parking spaces. The new 4-story residential community responds to topography and preserves existing wooded areas for outdoor recreation.
- 4

Lightsey-Thornhill Bridge
This new bridge connects the Lightsey neighborhood to the Thornhill Commons to allow residents to access Thornhill's new recreational and campus life facilities and better integrate Lightsey as part of a larger East Campus Neighborhood.
- 5

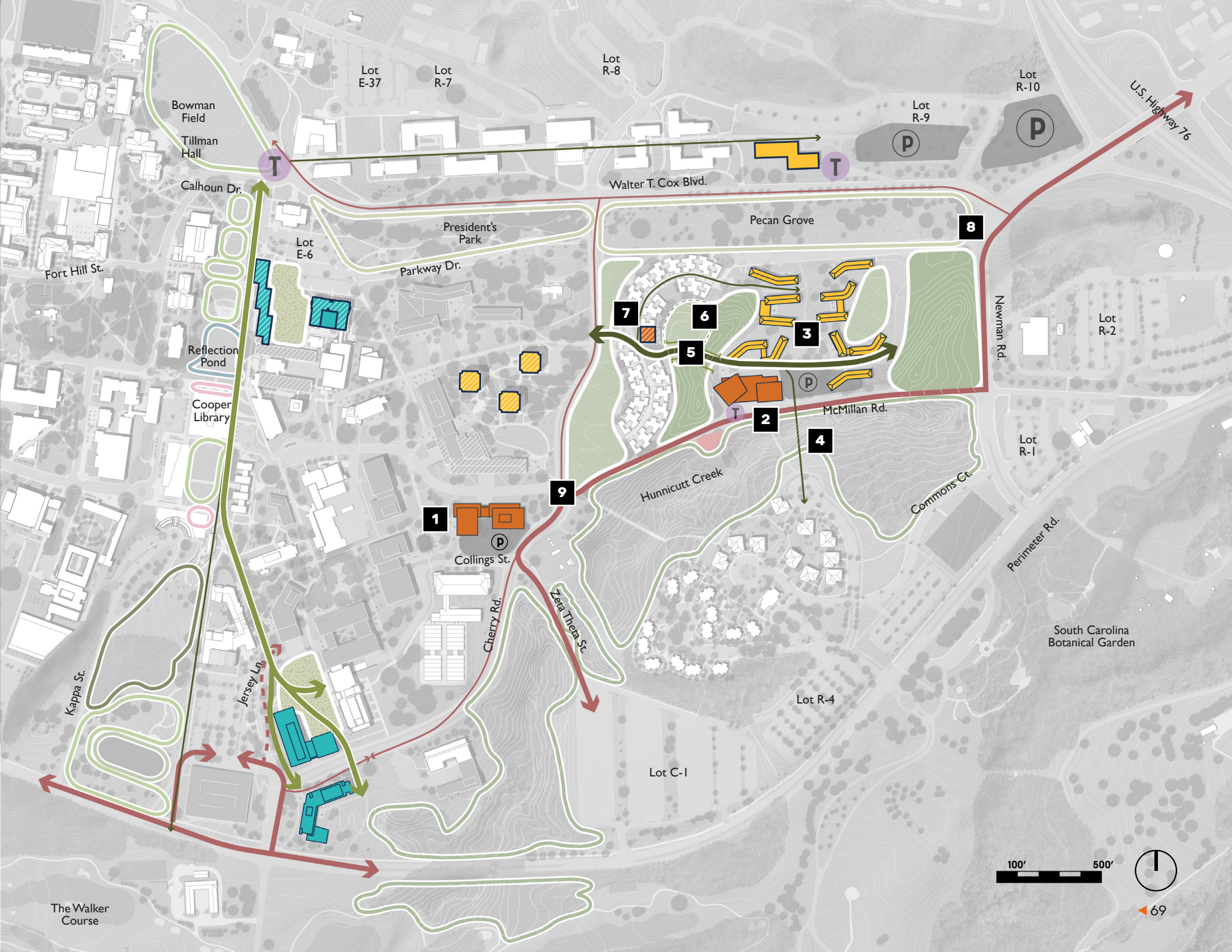
Thornhill to Fort Hill Path - East Segment
The East Segment of the Thornhill to Fort Hill pathway includes a bridge to allow an accessible connection of Calhoun Commons and Thornhill Commons.
- 6

Calhoun Bowl
The Calhoun Bowl is an existing underutilized recreational landscape adjacent to Calhoun Courts. It is improved to act as a central outdoor recreational amenity and gathering space for the entire East Campus Neighborhood.
- 7

Calhoun Commons Renovation (Reno: 3,000 gsf, New: Optional)
Calhoun Commons is a small residential community center serving Calhoun Courts. Its prominent position as a stepping stone along the new Thornhill to Fort Hill path and its adjacency to the Calhoun Bowl creates an opportunity for a renovation and potential expansion that offers student services, recreation and communal gathering space.
- 8

Newman Road Realignment
The realignment of Newman Road redirects traffic to Perimeter Road and away from Walter T. Cox Boulevard. This project will also reduce traffic volumes on Cherry Road.
- 9

Traffic Calming and Pedestrian Improvements
The reduction of traffic on Cherry Road enables it to be narrowed to a minimally sized two lane road. The land area recovered will be dedicated to pedestrian improvements to correspond with the increased population and pedestrian volumes of the East Sector.



Phase 3

Phase 3 focuses on the completion of the East Campus Neighborhood concept, adding the Hendrix Student Commons and Bryan Mall Community as a symbolic gateway into the neighborhood. Construction of Mixed Use Building 2 is enabled by the relocation of the Forestry program from Lehotsky to the new Forestry Building. The construction of the Bryan Mall Community is enabled by the new student beds available at Douthit and Thornhill which will compensate from the interim loss of inventory.

Dashboard

Program	Demo	New	Reno	Change to date
Academic	-80,000	+100,000	65,000	+262,000
Housing	-100,000	+180,000	0	+546,000
Campus Life	-32,000	+75,000	75,000	+198,000
Total	-212,000	+355,000	140,000	+1,006,000

Total parking spaces: 4,130 Change to date: +70

Change in parking spaces this phase: 400 - 134 = +266

Total student beds: 6,365 Change to date: +1,464

Change in student beds this phase: 600 - 440 = +160

Total dining seats: 2,159 Change to date: +660

Change in dining seats this phase: 100 - 740 = -640

1 Hendrix Commons (New: 55,000 gsf, Reno: 75,000 gsf)

The demolition of Schilletter (32,000 gsf / 740 seats) enables the renovation and expansion of Hendrix into a large student commons featuring an additional 100 seats for retail dining and 55,000 gsf of additional space for student assembly, exhibition and enrichment activities.

2 Bryan Mall Community (New: 180,000 gsf / 600 beds)

The Bryan Mall Community features 4-story residences halls replacing the existing 440 beds in the Low Rises. A large ground floor is envisioned at the west end of the community to provide space for student services, offices and informal gathering.

3 Bryan Mall

This landscape improvement provides outdoor amenities relating to residential and campus life facilities. 80 parking spaces will be removed in the landscape redesign but continued access for emergency and service vehicles may be required.

4 Thornhill to Fort Hill Path - West Segment

This segment of the Thornhill to Fort Hill path completes the concept and links to the Library Bridge. Redesign of the Jordan-Edwards Plaza area is required to eliminate stairs and improve accessibility.

5 Bowman Walk - North Segment

Bowman Walk, also called “Business to Bio” provides a link between north and south campus on the east end of the academic zone. This portion of the walk requires consolidating and expanding existing pedestrian facilities.

6 Kinard Renovation (Reno: 65,000 gsf)

This renovation improves facility conditions and performance.

7 Study Pavilion (New: 20,000 gsf)

This small building is a potential expansion to the Academic Success Center and anchor of the Academic Success Quad.

8 Mixed Use Building 2 (New: 100,000 - 150,000 gsf)

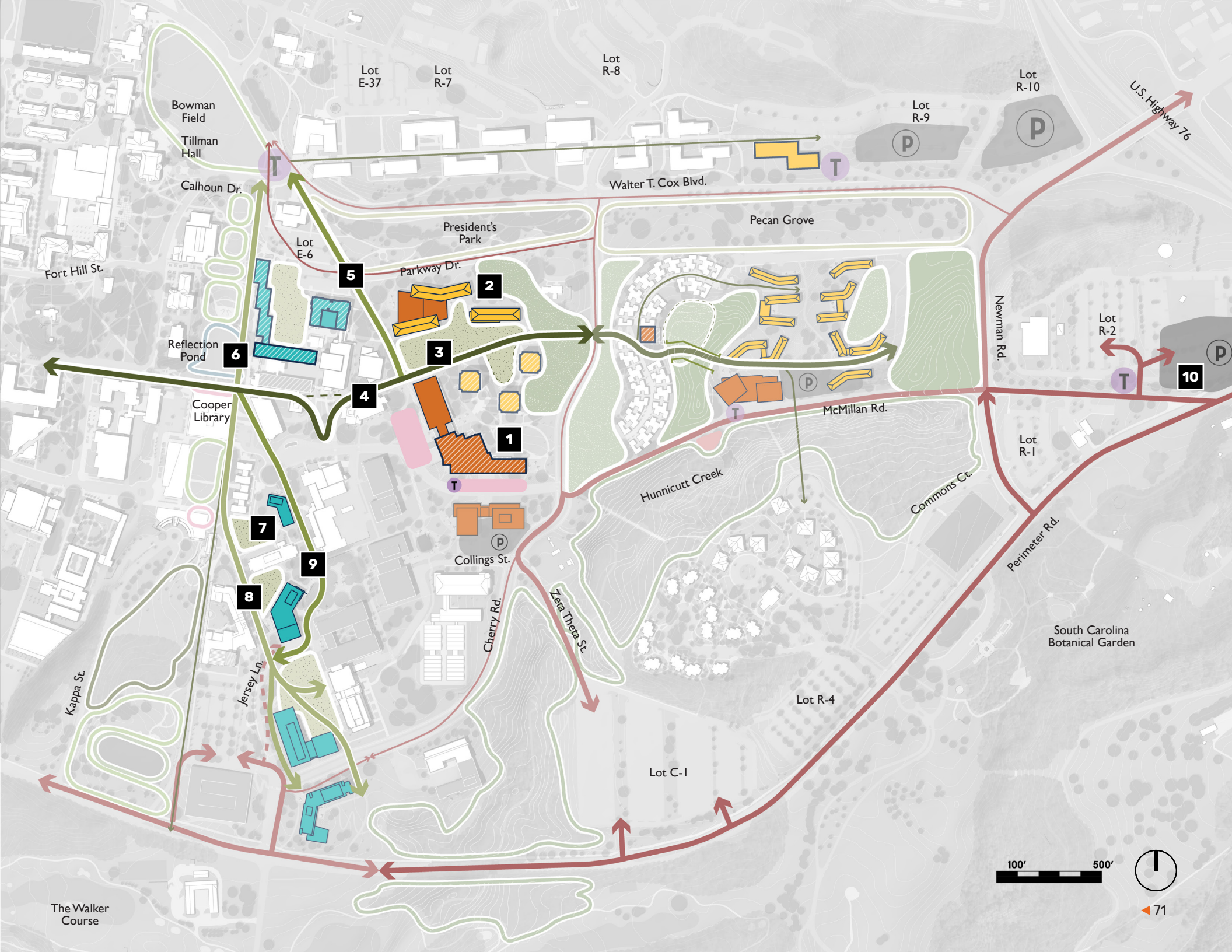
Mixed Use Replaces Building 2 replaces 54 parking spaces and Lehotsky Hall (80,000 gsf). It is envisioned as a 4-story building but could be up to 150,000 gsf if constructed at 6-stories.

9 Ag-Walk

Ag-Walk is an existing pathway that should be formalized and improved in Phase 3.

10 Kite Hill Parking Expansion (400 spaces)

The Kite Hill Parking Expansion provides resident parking to keep pace with the increased residential population proposed in this plan.



Phase 4

Phase 4 focuses on Centennial Oak Square and surrounding buildings. This area of campus is currently inefficiently utilized. Phase 4 projects elevate the area into one of a density and character more typical of the rest of campus.

Dashboard

Program	Demo	New	Reno	Change to date
Academic	-50,000	+355,000	0	+527,000
Housing	-0	+0	0	+546,000
Campus Life	-32,000	+0	0	+166,000
Total	-82,000	+330,000	0	+1,279,000

Total parking spaces: 3,947 Change to date: -113

Change in parking spaces this phase: 0 - 183 = -183

Total student beds: 6,365 Change to date: +1,464

Change in student beds this phase: No change this phase

Total dining seats: 2,159 Change to date: +660

Change in dining seats this phase: No change this phase

1 Bowman Walk - South Segment

This segment completes the Bowman Walk concept and creates a robust connection of the Centennial Oak Square with Bowman Field, two iconic campus open spaces.

2 East Mall and Library Circle Transit Plaza

The removal of parking and redirection of vehicular traffic to Perimeter Road via the Newman Extension allows the pedestrianization of the East Mall into a complete-street. This should correspond with a new Library Circle Transit Plaza anchored by a small transit shelter. Pedestrianization of the East Mall removes 76 parking spaces.

3 Centennial Oak Square

Centennial Oak Square is to be a keystone open space in the Clemson Campus. Creating the square requires peeling away existing hardscape and creating a generous lawn that gives the tree necessary breathing room. This removes 70 parking spaces

4 Centennial Walk

Centennial Walk connects the new Centennial Oak Square to the East Walk via the Ag Quad. Where the walk meets Mixed Use Building 2 a steep drop in elevation must be navigated by a series of switchback ramps in order to preserve universal access.

5 Mixed Use Building 3 (150,000 gsf)

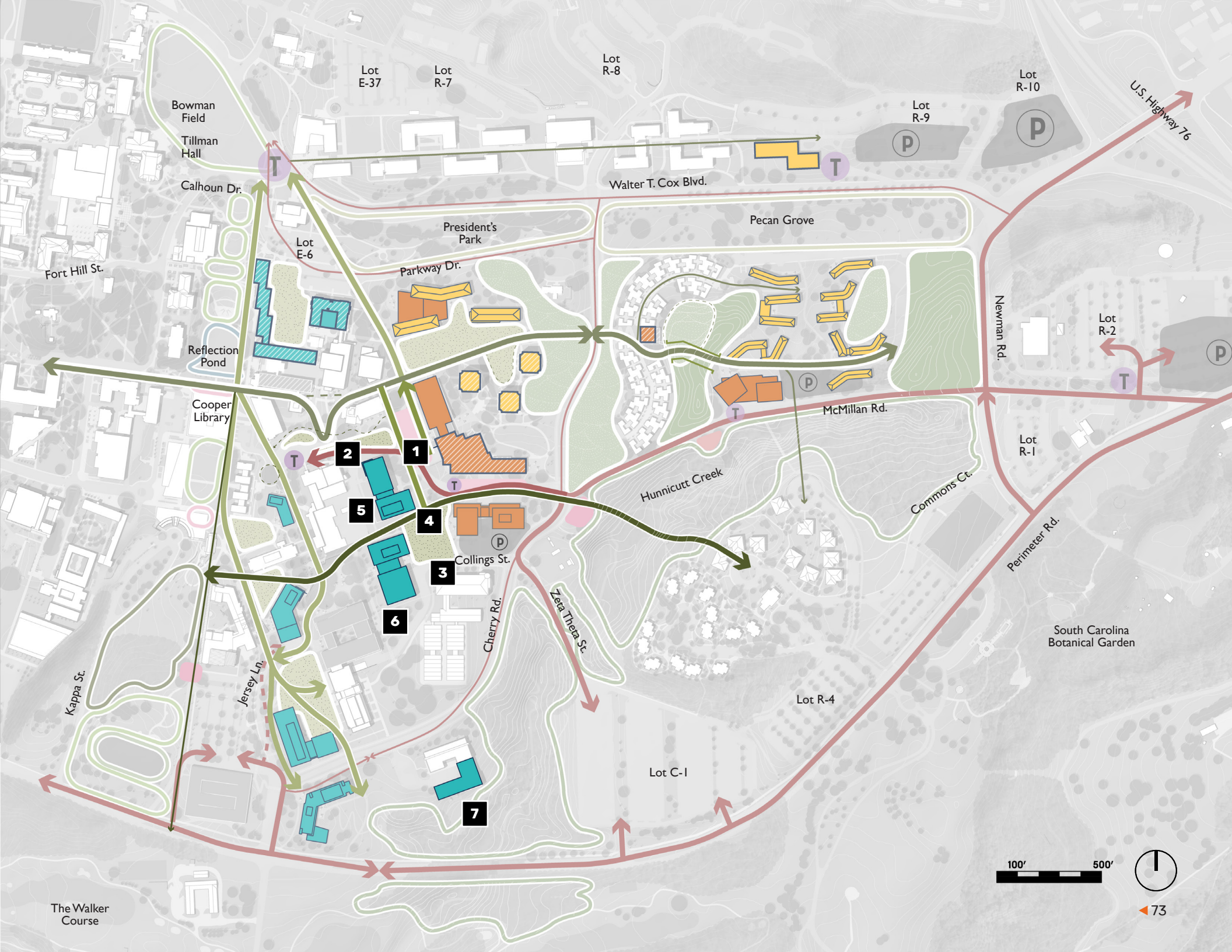
Mixed Use Building 3 replaces Redfern Health Center (32,000 gsf) and 37 parking spaces with a 4-to-5 story building. This adds academic space a transit and amenity rich location that is currently underutilized. This project requires that Campus Health Services are relocated to a new home.

6 Lab Building (175,000 gsf)

The Lab Building replaces Newman Hall (50,000 gsf). Existing parking is to remain. The building can take advantage of existing service access from Collings St. and is a logical location for more service and back-of-house intensive research uses. Construction requires the relocation of the Meat Lab, Dairy Production Lab and Packaging Lab to other locations.

7 Lab Expansion (30,000 gsf)

Expands the footprint of the Godley-Snell Research Center. Existing parking can be integrated into the new design. The design can take advantage of the change in grade to achieve 3-4 stories of height in the new wing while still aligning on the north with the 1-story existing building.



Phase 5

Phase 5 sees the final project in the redevelopment of the Ag Quad, replacement of Poole. With this project the Ag Quad can be renewed. The Brooks Parking structure is included in phase 5. The timing of its completion has not been determined in the planning process and it could occur at any phase.

Dashboard

Program	Demo	New	Reno	Change to date
Academic	-187,000	+200,000	0	+580,000
Housing	-0	+0	0	+546,000
Campus Life	-0	+0	0	+166,000
Total	-0	+0	0	+1,292,000

Total parking spaces: 4,707 Change to date: +647
Change in parking spaces this phase: 1000 - 240 = +760

Total student beds: 6,365 Change to date: +1,464
Change in student beds this phase: No change this phase

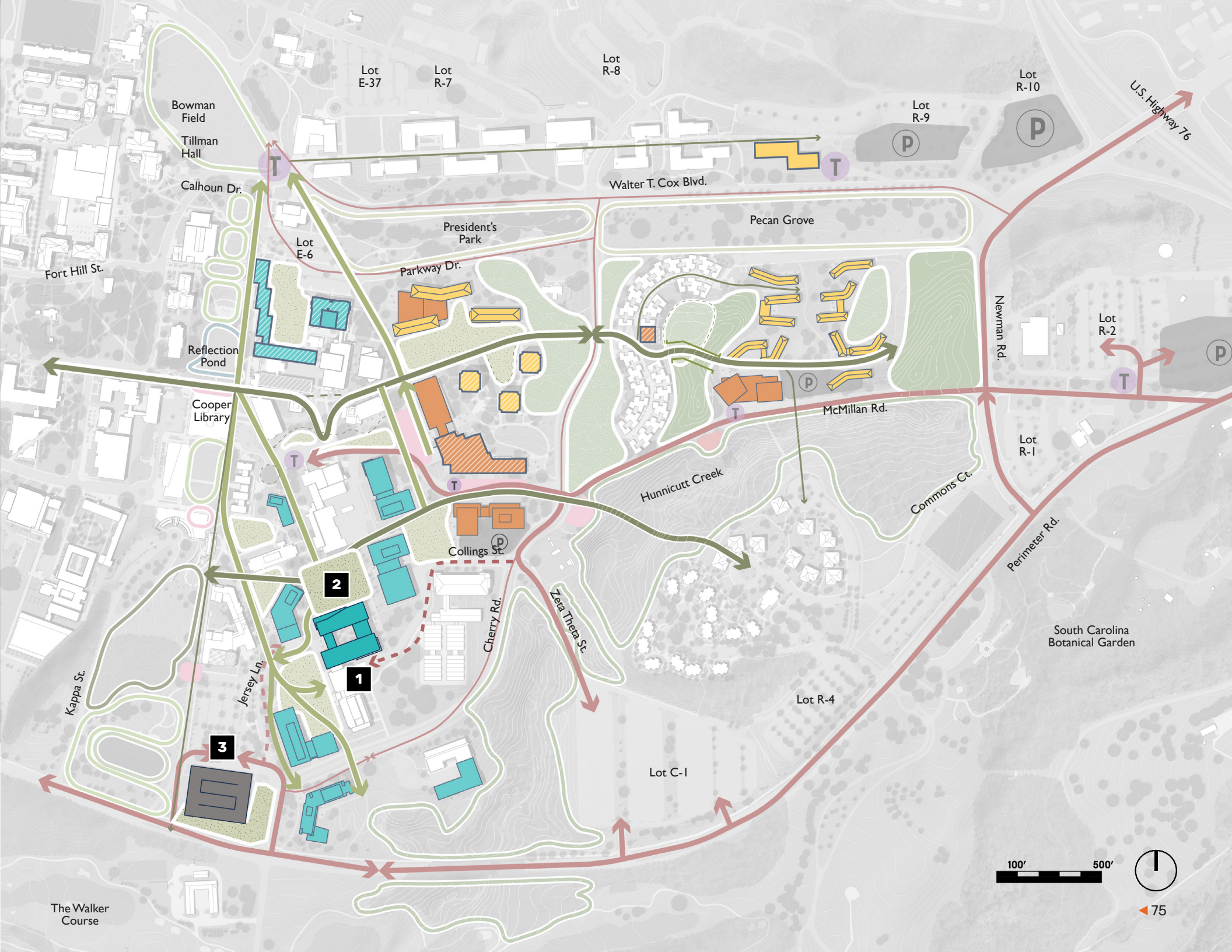
Total dining seats: 2,159 Change to date: +660
Change in dining seats this phase: No change this phase

- 1

Poole (P&A) Replacement (200,000 gsf)
Replaces the existing 2-story building (187,000 gsf) with a 4-story building that offers more light and air exposure to interior spaces by creating a courtyard. This project is enabled by the new lab and academic space constructed in phase 4.
- 2

Ag Quad Refurbishment
With the completion o the Poole Replacement, new construction projects occurring directly adjacent to the Ag Quad are complete. This enables the Ag Quad to be refurbished with the confidence investments will not be disturbed by new construction work.
- 3

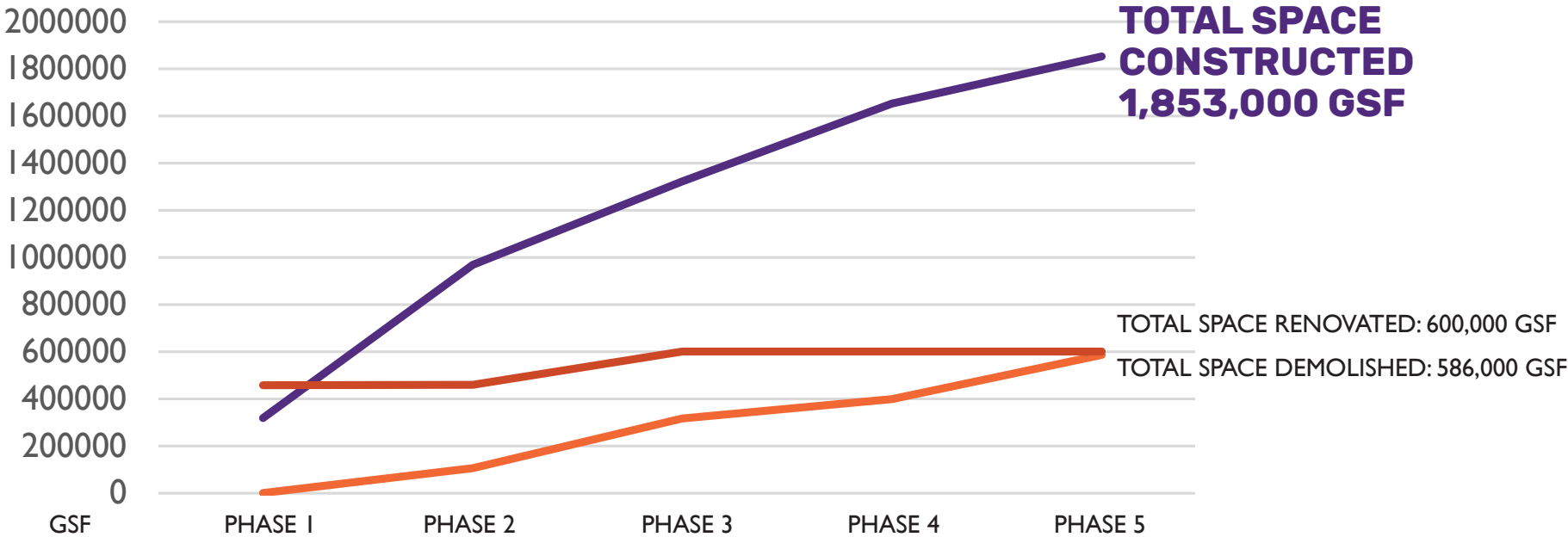
Parking Structure (+ Optional Office Space)
This parking structure replaces 240 existing spaces with a 1000-space 4-story parking structure. Depending on need and the availability of funding, additional office space could be included in the structure.



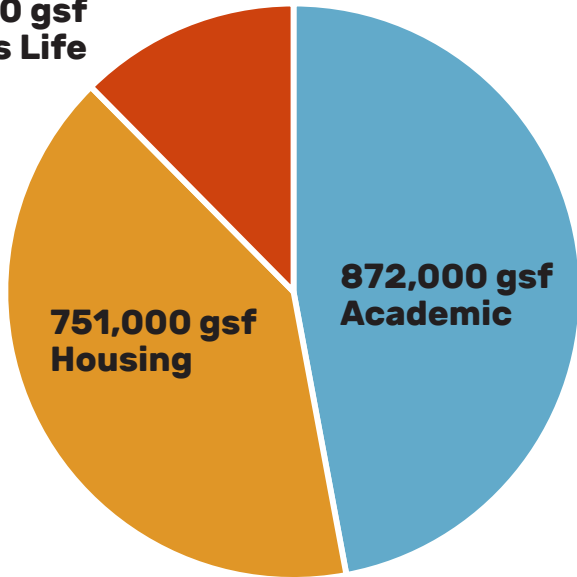
Full Implementation

At full implementation of the East Sector Update Plan, Clemson will have added a significant number of new beds and dining seats to its portfolio, renewed and expanded academic spaces significantly, and shaped new open spaces which are likely to become memorable features of the campus. The proposed implementation strategy takes into account necessary sequencing of development. It distributes capital investment evenly over time. The exact time frame of each phase will need to be considered alongside campus-wide capital planning and financing plans.

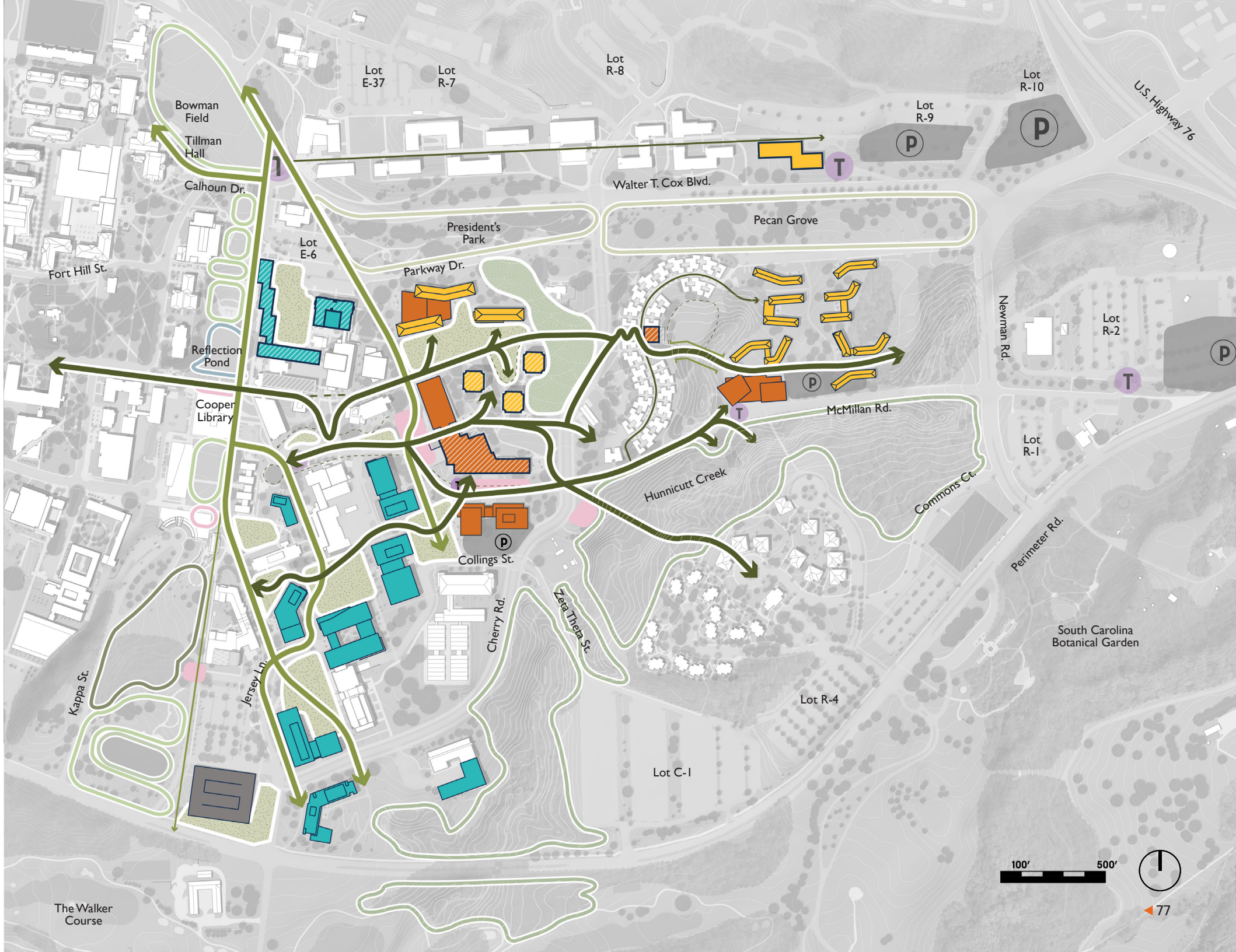
	Beds	Dining Seats	Parking Spaces
Removed	-616	-740	-1,475
Added	+2,080	+1,400	+2,122
Change	+1,464	+660	+597



230,000 gsf
Campus Life



TOTAL SPACE CONSTRUCTED 1,853,000 GSF



Conclusion

The long term vision for the East Sector aligns with and updates the recommendations of the LRFP taking into account the emerging needs and aspirations of the university. It does so with the aim of providing flexibility in response to emerging and evolving needs including strategies for the Student Centers and Health Centers. The Update sets out a vision that will require reexamination as the plan is implemented and as other goals emerge for the university. It will also need to be reviewed relative to Clemson's climate action and carbon neutrality goals, especially given the growing population and associated space requirements.

