



July 2008



STRATEGIC PLAN
for
STUDENT HOUSING
UPDATE



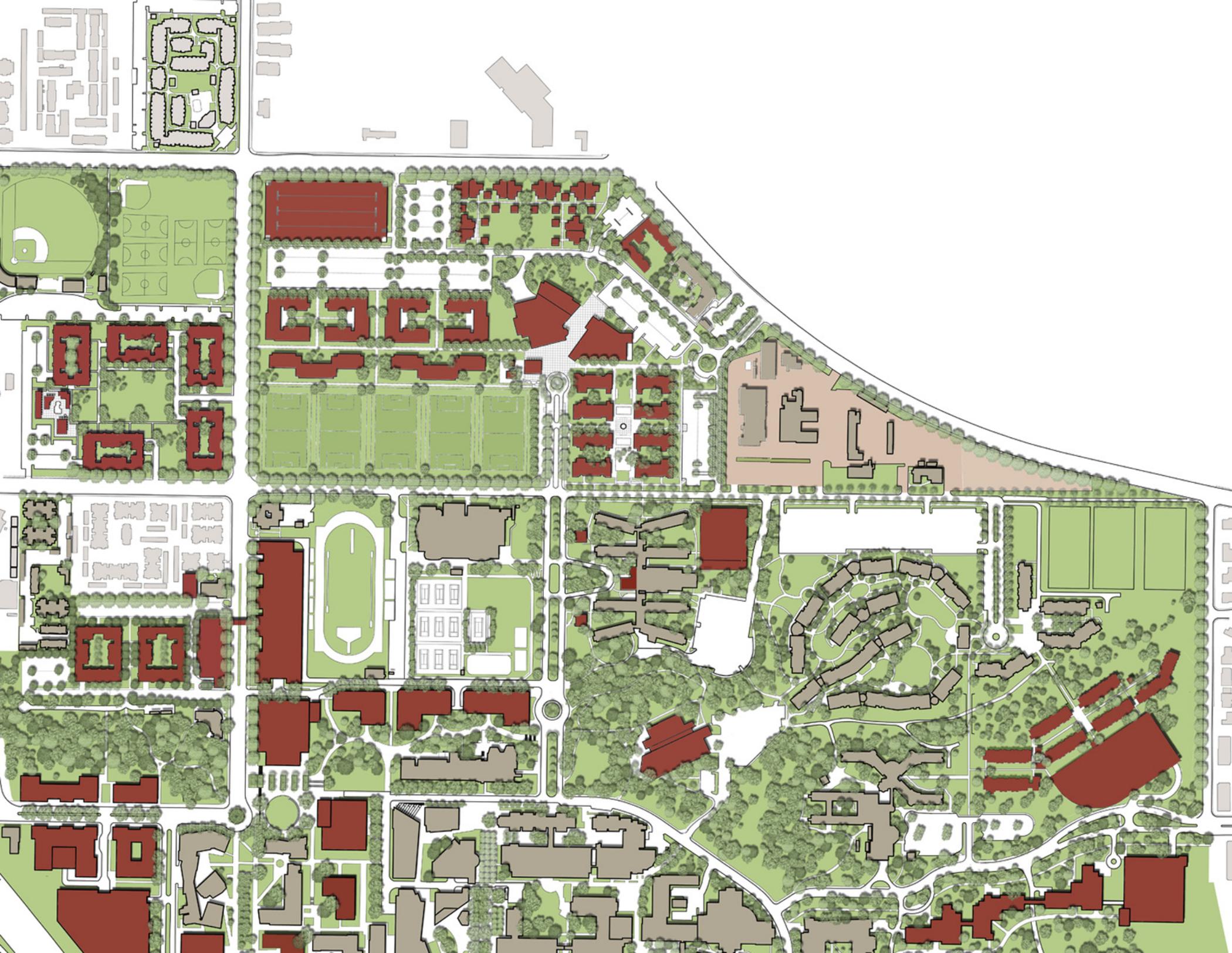


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The University of California, Riverside Strategic Plan for Student Housing is the result of a collaborative effort led by the Strategic Plan for Student Housing Update Planning Committee and Hanbury Evans Wright Vlattas + Company. The process included participation by resident and non-resident students, undergraduate and graduate students, special interest groups, University staff, and University administration. We also recognize the contribution of Walker Macy, the University's consultant for the Campus Aggregate Master Planning Study (CAMPS) who provided the whole campus rendering for this report. The Strategic Plan for Student Housing incorporates ideas generated through on-site workshops, focus groups, planning team meetings, presentations and reviews, the planning consultant's physical and community analysis and evaluation of the existing housing system, the campus fabric, and the context of the City of Riverside.

The entire planning team is grateful to all who have devoted their vision, time, ideas, and energy to the process of the planning and creation of the Strategic Plan for Student Housing.

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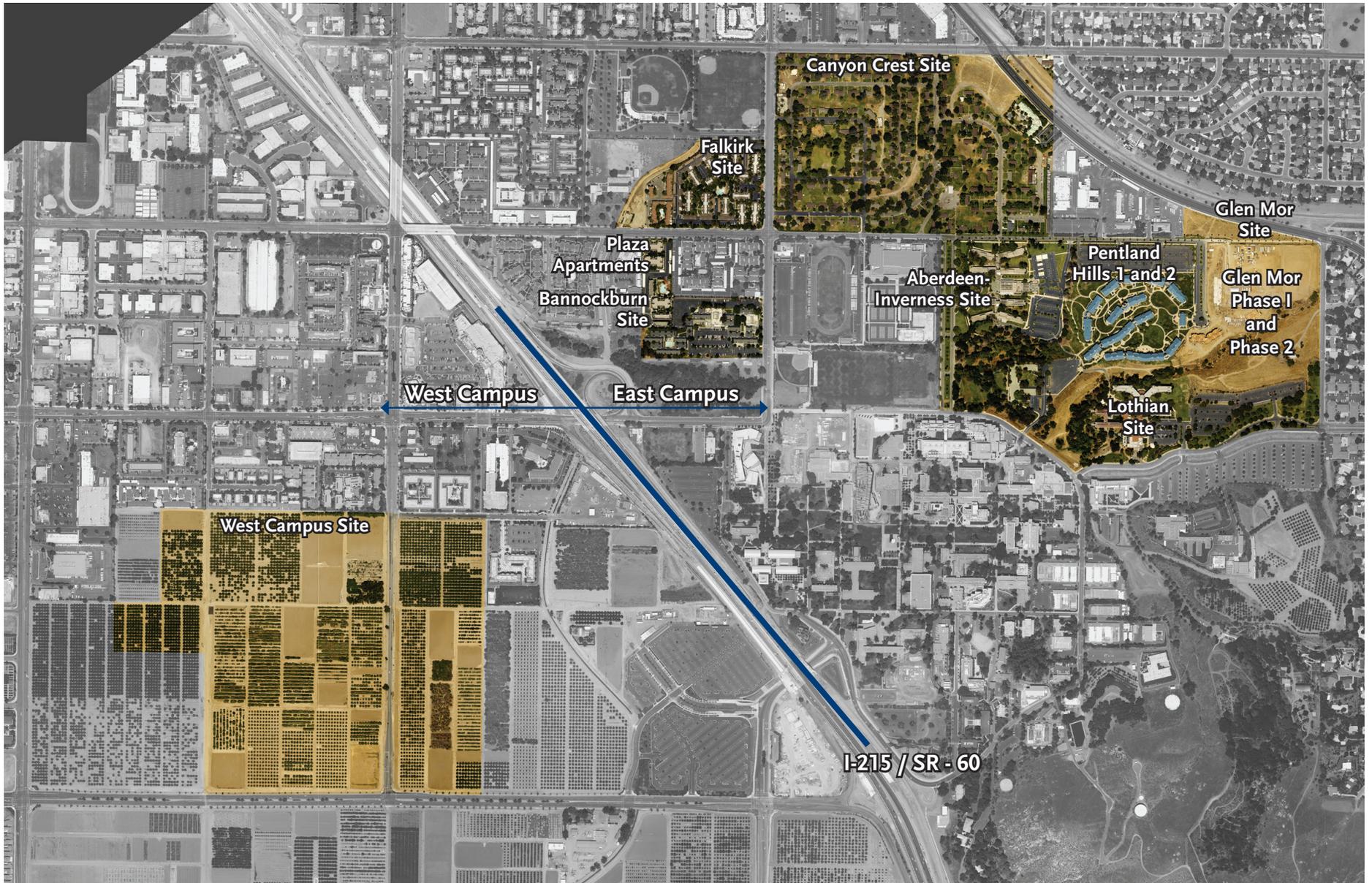
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New Housing Sites on East and West Campus



The University of California, Riverside (UCR) Strategic Plan for Student Housing advances the housing component of the University's 2005 Long Range Development Plan and provides a sustainable framework that supports the projected campus growth to 25,500 during the event horizon of the plan and recognizes an ultimate campus enrollment of 31,000 as projected in the 2008 Campus Aggregate Master Planning Study. This plan encourages the perpetuation of the signature strengths of the UCR campus and strives to achieve an ideal future residential community.

This plan achieves the residential goals of UCR's 2005 Long Range Development Plan (LRDP) over a 18-year time frame. This includes the accommodation of 50 percent of the UCR students (including 75 percent of the freshmen) in campus housing and a total projected enrollment growth to 25,500 students by 2026.

To achieve these goals, this plan requires nearly a \$1.3 billion dollar investment over five cycles of new construction within a 18-year time frame.

The primary organizing concept of this plan is the provision of new residential neighborhoods on the existing East Campus and on the proposed West Campus. These neighborhoods build on the strengths of the existing residential program and provide the University with the following:

Undergraduate Housing

- 3,000 total new residence hall-style beds and associated parking on the East Campus, providing programs and space allocations primarily targeted for first-year students, with space for returning students.

Upperclassmen and Graduate Student Housing

- Removal of 375 existing apartment beds at Bannockburn
- Removal of 450 existing apartment beds at Falkirk
- 4,288 total new apartment-style beds and associated parking on the East and West Campus, providing independent lifestyle living with all the conveniences of living on campus
- 336 small group housing beds and associated parking on the East Campus
- 300 apartment-style housing beds and associated parking on the West Campus for medical students

Family Housing

- Removal of 268 existing family units from the Canyon Crest Site on East Campus.
- 708 total new family housing units and associated parking in apartment and townhouse-style residences on the West Campus, targeted toward the needs of families with dependents.

Related Programs

Recreation, child care, dining, and student services facilities are provided throughout the new neighborhoods to meet the diverse needs of the residents and the University at large. These amenities shall be funded via their respective unit's budgets.

Recreation

- New recreation fields distributed to each neighborhood for use by residents, intramural sports and summer camp programs.

- New recreation building on the West Campus for use by the residents and the campus community.
- A swimming pool in each new residential neighborhood.
- Dedicated tot lots in each of the family housing blocks.
- Dedicated green space for each neighborhood for informal recreation.

Child Development Centers

- Two new child development centers for the West Campus to serve the resident population and the campus community.
- Dedicated parking for the child development centers.

Dining and Student Services

- One new full-service dining facility to serve the existing and proposed residence hall population.
- Existing dining facilities at Aberdeen-Inverness and Lothian to remain in operation to support the dining program and provide community space for the residents.
- A convenience store/deli to serve the residence hall population on the Canyon Crest Site.
- An emporium to be located at Aberdeen-Inverness Hall to support renovated student common spaces.
- Demolition of the existing Veitch facility and the construction of a multi-purpose student activities center incorporating Counseling and Health services on the Veitch Site.

This plan provides a phased approach, allowing the University to advance incremental components of the plan and the opportunity to accelerate, postpone, or adjust the phases to meet the changing needs of the University over the 18-year period and beyond.



UCR is experiencing a growth cycle with a present enrollment of approximately 16,500 (academic year 2006-07) students that is expected to increase to an estimated 20,000 students by 2012-13 projected and 25,000 students by 2025-26 projected. The University desires to align the housing program with the projected enrollment and physical campus growth. Further, it is the desire of the University, and the objective of the University's 2005 Long Range Development Plan (LRDP), to increase the housing goal from 35 percent to 50 percent of the UCR students (including 75 percent of the freshmen and 50 percent of transfer students) in University housing. In 2007, UCR housed approximately 30 percent of students.

The LRDP includes the following goals, which can be enhanced through the successful execution of the Strategic Plan for Student Housing:

- Increase the critical mass of the on-campus community and improve opportunities for social interaction, socialization, and learning.
- Improve University town/gown connections and interaction, including improving opportunities along University Avenue.
- Emphasize strong connection and accessibility within campus and within the surrounding community.
- Create a regional model of planning, design and environmental stewardship, protecting the natural environment and incorporating sustainable planning and design practices.
- Enhance the UCR image with a unique design expression.

With these goals, the Strategic Plan for Student Housing also must preserve UCR's current housing mission of providing residents responsive and supportive staff and superlative programs that foster student success.

The University's enrollment growth will create new demands for off-campus as well as on-campus housing. The University Community Plan, developed by the City of Riverside, and the University's LRDP, identify University Avenue as a unique opportunity to capture development and activity to benefit the city and the University.

As the Strategic Plan for Student Housing advances, it is recommended that the plan remain current and responsive to the private sector housing occupancy rates and the status of private sector housing, retail, and recreation proposals and projects. Pending the status of those initiatives, the University may choose to advance or delay certain components of the plan; however, it is not anticipated that the private sector development will alter the general targets / capacities recommended in the Strategic Plan for Student Housing.



In March 2007, The University of California, Riverside, commissioned Hanbury Evans Wright Vlattas + Company to update the 2003 Strategic Plan for Housing. The goal of the update is to accommodate UCR's residential growth over the next 18 years through the advancement of residential concepts in accordance with the basic land use development as established in the University's 2005 Long Range Development Plan (LRDP). This is achieved through the development of a sustainable housing plan that supports and accommodates the projected resident growth, encourages the perpetuation of signature strengths of the UCR campus, and strives to achieve an ideal residential community.

The following outline represents the primary areas of exploration and the framework that was developed, each of which is further defined in the context of this document.

Ideal Residential Community

The Ideal Residential Community Models are targeted for each student group, and the Principles of Planning define and provide the framework for the logical organization of the physical environment of each neighborhood.

Program Development

Program Development includes both interior and exterior space requirements. Building program models provide the framework for the area required per student. This is accomplished through the analysis of student community space programs, which model the size and quantity of spaces for each targeted student group.

Strategic Plan for Student Housing

The physical planning recommendations that accomplish the programmatic requirements of the plan to provide strong campus and community connections. It is responsive to each site's unique natural environment providing opportunities for strong student communities that enhance and diversify the residential living opportunities at UCR.

Phasing and Implementation Plan

The Phasing and Implementation Plan is a framework of action for targeted growth over 18 years. The targets specified will only be met as demand exists. The phasing plan is presented as a comprehensive total campus plan within the context of the site on a per-neighborhood basis, to accomplish an anticipated campus capacity for housing 50 percent of 25,500 students projected by 2026-27.



THE IDEAL RESIDENTIAL COMMUNITY

ideal residential models

The ideal residential community for UCR is one that is unique to student needs, offers an appropriate mix of living options, addresses the mission/vision of the University resident population, meets the targets as proposed in the LRDP, and enhances and contributes to the campus fabric, physically, socially, and academically.

The fundamental organizing element and signature strength around the existing residential communities at UCR is the identifiable neighborhood. Aberdeen-Inverness, Lothian, Pentland Hills, Glen Mor, and the various apartment neighborhoods are each unique in their offerings and identifiable as both physical and social communities.

This Strategic Plan for Student Housing recommends strengthening and extending the existing neighborhood concept as a model for future residential growth. To guide this growth successfully, this plan bases its proposed concepts on the development of Ideal Residential Community Models, which must be understood for each targeted student group, and on the Principles of Planning, which define and provide the framework for the logical organization of the physical environment of each neighborhood.

Ideal Residential Model

An Ideal Residential Model is shaped by the institution's unique physical and societal attributes of community, academics, and identity. At UCR, these attributes must be defined and balanced with the ability of the University to meet the needs of its student sub-markets, to be responsive to projected enrollment growth, to be informed by current and forecasted trends in student housing, and ultimately, to be framed in the context of UCR's signature strengths, campus fabric, and mission.

The characteristics of these attributes are defined below in general terms and in the roll that each attribute plays at UCR.

Community

The residential community is defined by the community response to the needs of the:

- individual student,
- residential community, and
- connections to the broader campus.

UCR's strong focus on first-year, transfer students and associated residence life programming, apartment communities for upperclassmen and graduate students, and the provision for family housing, are signature strengths of the housing system. In focus groups and open campus meetings, students identified the housing offerings as contributing to both their attraction to and their desire to remain at the University.

To meet the diverse needs of the individual student groups at UCR, new housing offerings should continue to allow students to "grow through the system," providing affordable, intentional, and desirable choices for entering freshmen, transfer students, upperclassmen, graduates, and families.

Academics

The residential community shall be supportive and reflective of the academic mission of the University.

This includes spaces for individual and group study and technology support, such as computer labs and printing centers. Additionally, as the University seeks to achieve world leadership in select academic areas, housing offerings can enhance and support this mission, particularly in the development of graduate housing for use in the recruitment of top students in these select fields.

Identity

Physical and social environments provide the greatest opportunities for sense of place and individual community identity.

The physical identity of UCR housing is predominately defined by the natural environment and the designed landscape. The social identity is predominately defined by the distinct neighborhood identity, the organization of the communities within each neighborhood, and the actual civic spaces for each community. Distinguishing features that shape the existing identity, and that will influence the new identity, include the park-like settings of the residence halls, the civic spaces and pools of the apartment communities, and the variety of green spaces in family housing, from tot lots to larger scaled parks. The recreation spaces for the individual neighborhoods provide open space identity to the residential areas.

A unique identity of the West Campus includes the citrus heritage, which can be incorporated through selective preservation or reference to existing citrus groves.

Ideal Residential Models are used to generate physical space program models for each neighborhood, so that the quantity and type of area required per student or per unit is understood and balanced against the programmatic objectives of the University and the students' needs. These program models can be found in the building programs section of this report and provide the basis for developing concepts that test the densities, capacities, and opportunities of each site.

The Principles of Planning guide conceptualization for each neighborhood, through the integration of the specific Ideal Residential Model and the unique opportunities of each site.

Each neighborhood is planned to have a discernible hierarchy that provides a sense of logic for the built and natural environment and the supporting systems of the community. The planning principles for each neighborhood shall include a strong sense of community and identity, identifiable edges and centers, and an intentional network of connections and destinations.

The Principles of Planning are used to generate and reinforce the physical site concepts for each neighborhood so that the quality of land use and placement of program space provide the maximum opportunity to build a strong resident community. These concepts are graphically presented in the Campus Housing Strategic Plan section of this report.

Community and Identity

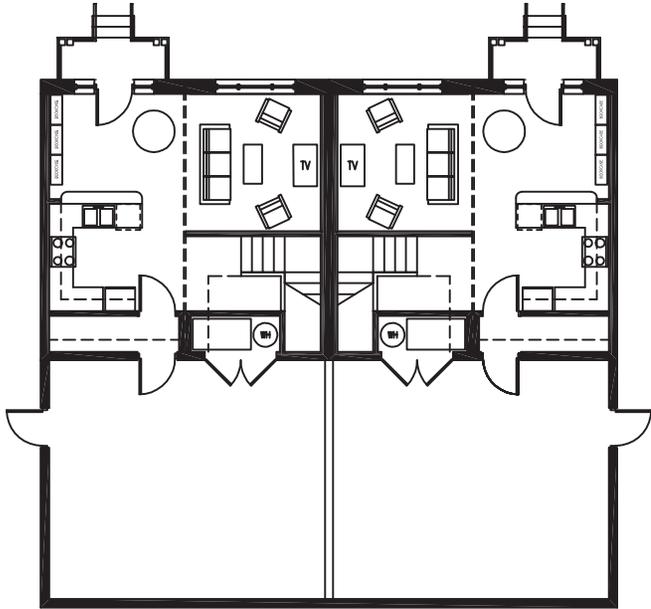
Each neighborhood shall provide a unique sense of identity and a strong sense of community for the residents. Identity and community emerge from both the physical and the social attributes of the neighborhood and the site. Physical features include geographic location, the natural and naturalized landscape environment, the architecture, and the campus and town relationships. The social environment is defined by the programmatic objectives of the neighborhood, the physical adjacencies, and the neighborhood amenities. The social environment is further enhanced through strong physical connections, defined sense of arrival, social nodes that provide opportunities for chance encounters and resident interaction.

Edges and Centers

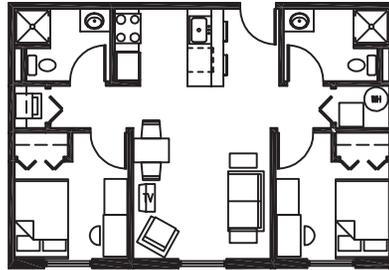
Each neighborhood shall have a structure with a defined center and discernible edges. The center shall be a focal point of the community, defined by civic spaces and community buildings, such as dining commons, student services, plazas, etc. These spaces and buildings shall occupy important sites, and they shall be oriented and designed to generate and terminate important view corridors. The edges can be less distinct and vary in character but generally define the limits of the community through natural features, landscape, open space, and background buildings.

Connections and Destinations

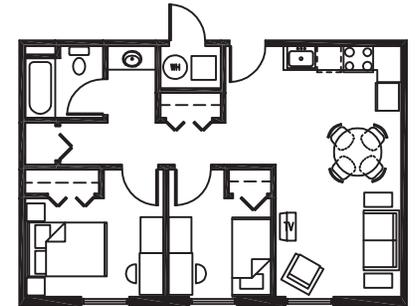
Each neighborhood shall have a circulation system that creates a hierarchy of public and residential paths and connections. The physical placement of pedestrian paths, transit connections, and neighborhood streets, shall take into consideration the natural desire lines and shall intercept public spaces to intentionally capture activities and increase the critical mass of on-campus community. This improves opportunities for informal interaction, socialization, and learning. Vehicular traffic in the neighborhoods is designed to be local, slow, and to minimize through-traffic to avoid pedestrian/bicycle/vehicular conflicts.



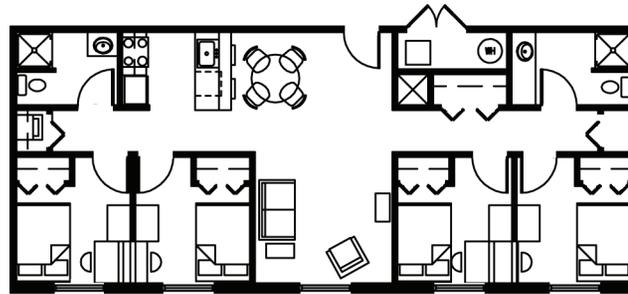
Staff Townhouse



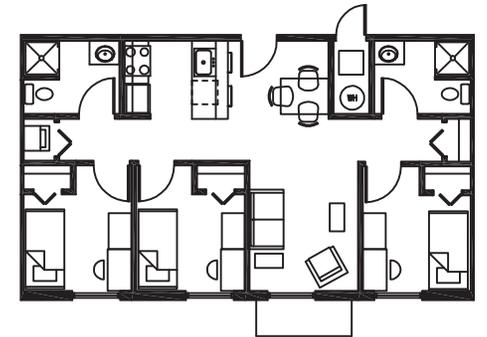
Typical Unit Plan



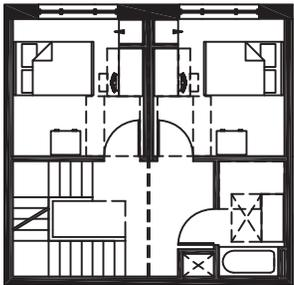
Two Bedroom Semi-Suite Apartment



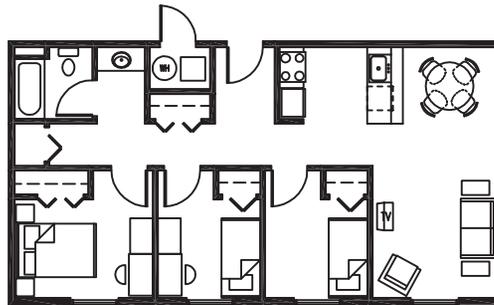
Typical Unit Plan



Three Bedroom Semi-Suite Apartment



Staff Townhouse Second Floor



Three Bedroom Family Unit

The building programs for each component of residence life is the translation of the Ideal Residential Model into specific spatial objectives, including quantity, size, and relationship of spaces for each student sub-market, including first-year students, transfer students, upperclassmen, graduate students, and families.

The program models are planning guides. The actual spaces and assignable to non-assignable space may vary in the final design. The goal of the program is to outline an informed and reasonable range of space detail so that reliable site tests and budgets can be articulated in preparation for the next phases of development.

The consensus of the University relative to attributes and amenities required by each student group is represented in the Student Lifestyles Matrix found on pages 14-15. The individual model programs also are included for residence halls, apartments, and family housing. The exterior space program is equally critical to the success of each neighborhood and the campus fabric. The general criteria for exterior space programming are outlined below.

General Exterior Program for Residential Communities at UCR

- The new residential areas shall be identifiable communities, each with its own unique expression.
- The residence hall communities and dining areas shall populate and invigorate the existing campus connections and paths, and shall reinforce UCR's unique landscape features.
- The circulation space and organization of all residences, and their relationship to each other, shall facilitate informal gatherings, chance encounters, and contact between neighbors.

- Community and support spaces shall be provided in each building/community to serve the needs of the residents. However, the larger community activities, such as dining for residence halls, computer lab use, etc., shall be visible, accessible, and centralized in neighborhood or regional centers to enhance the identity of the community. At the same time, these should be accessible and visible to serve the larger campus community.
- Each neighborhood shall have dedicated open space and outdoor rooms/gathering spaces to balance the individual living needs of students with social opportunities, creating a spirit of collegiality.
- Each neighborhood shall have dedicated exterior bike storage that is visible and accessible to residents.
- Each neighborhood shall integrate open recreation fields as articulated in the LRDP. These fields shall serve both the residents and the campus community.
- Neighborhoods shall have strong campus connections. Residents shall have appropriate access to their cars; however, the neighborhoods shall be organized around the pedestrian campus experience and shall promote walking, bicycle riding, and use of the transit system.
- Neighborhoods shall respond to regional climate and shall protect and enhance the natural environment.
- Neighborhoods shall have a unique design expression and shall complement the campus fabric through materials and landscape.

student lifestyles matrix

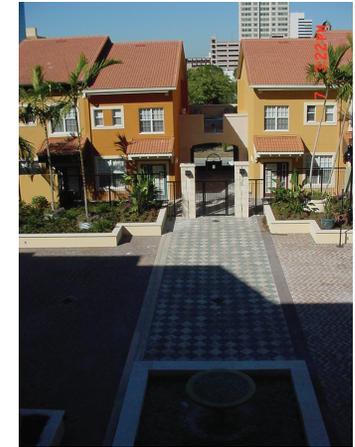
	1 INDIVIDUAL	2 RESIDENTIAL COMMUNITY	3 CAMPUS COMMUNITY
First Year	Privacy / Bath (low student: bath ratio; 4:1)	Desired Socialization	Mail / Front Desk
<i>Community Size: 1,000 - 1,200 Beds</i>	Connection between room and circulation;	Large program area (scheduled 1/ every 2 wks)	Visual and physical access to dining
<i>Residential Community Size: 500 - 600 Beds</i>	students want to prop doors open	Desire no door closers for socialization	Recreation
<i>Staff Ratio: 1:50 or less</i>	Security	Visual connection to other rooms is desired	Bike Storage
	Showers; dressing area desired	(non-contiguous communities are an issue)	Parking Ratio 1:4
	Big Windows	Small Meeting spaces	Transit Stops
		Game rooms	Dedicated green spaces
		Study areas and areas for academic support	Relationship to green space
		Flexible program areas / multi-purpose	After hours food service desired / C-Store
		Identity	Computer Lab / Print Center
		Laundry	Pool
		Gaming Lounge	Fitness Room
Transfers	Offer a package deal - appealing	Laundry/study space	Location to promote campus activities
<i>Integrated in all Neighborhoods</i>	Locate / live w/ other transfers	Small group study with storage	
	Desire apartments or single rooms	Mature environment	
		Gaming Lounge	
Upperclassmen	Privacy / quiet	Community Programs / Social	Bike Storage
<i>Community Size - 200 - 400</i>	Amenity balanced with affordability	Laundry in or proximate to living unit	Transit Stops
<i>Staff Ratio: 1:100</i>	Provide both furnished and unfurnished apts.		Computer Labs / Print Centers
			Apartments Parking Ratio 1:2
			Gaming lounge
Graduate		Laundry/study space	
<i>Community Size - 400</i>	Wireless Internet	Small group study with storage	Convenience Store
<i>(500 Max)</i>	Studio/efficiency units - high percentage	Mail	Recreation Space
<i>Single Student</i>	3 and 4 (single bedroom) units - low percentage	Vending	Bike Storage
<i>Family</i>	2 bedroom apartments	Medium conference room	Transit Stops
<i>Visiting Scholar (monthly rental)</i>	1 bedroom apartments	Social Lounge	Fitness room
		Computer Lab	Business Center
		Gaming Lounge	
		Mail boxes adjacent to lobby	

	1 INDIVIDUAL	2 RESIDENTIAL COMMUNITY	3 CAMPUS COMMUNITY
Medical Student		Laundry/study space	
<i>Community Size 150 - 300</i>	Wireless internet	Small group study with storage	Frequent Shuttle Pick-up
<i>Single Student</i>	Studio/efficiency units	Vending	Proximate Parking (Ratio 1:1)
<i>Family</i>	2 bedroom apartments - low percentage	Large conference room with kitchenette	Convenience store
<i>Visiting Scholar</i>	1 bedroom apartments	Mail boxes adjacent to lobby	Business Center
		Social Lounge	
		Computer Lab	
		Fitness room	
Family	Affordability	Community space	Child Development Center
<i>Community Size - 150 - 300</i>	2-bedroom and 3-bedroom units	Desire vertical vs. horizontal separation	Defined "identifiable" neighborhood
	Size less important than "home like"	Proximity to neighbors important	Recreation Fields, Recreation Center
	Personal yard space	Secure tot lots	Playground, tot lots, and picnic areas
	Personal Storage	Quiet study areas	Residential scale; 2-story desired vs. 3 story
	Flats	Computer lab	Proximate parking (Ratio 1.5:1)
	Townhouses		Pool
	Laundry		Retail food, but no formal dining facility
	High Speed Internet		Connections to campus - bike, pedestrian path, shuttles
	Unfurnished		Convenience store (at Recreation Center)
			Perceptual / actual community security
			Transit system families can use
Group Housing		Chapter room for 50	Gaming Lounge
<i>Community Size - 20 - 28 Beds</i>	Wireless internet	Study Room	Parking (Ratio 1:2)
	Houses	Yard space	Accommodate expansion
		Living Room	Close to campus
		Laundry	Gaming Lounge
		Full Kitchen	Bicycle Storage (Exterior)
		Architectural distinctiveness	Social event space for 100-200
		RA is part of the organization	Exterior Guest Parking
			Central Mail Pavilion

apartment program model

Space #	Space / Description	Quantity	ASF	Total ASF	Occupancy	Comments
Staff						
				0		
982	Staff Apartment	0	600	0	2	
Residential Spaces						
				65,376		
982	2 Bedrooms / 1 Bath	24	600	14,400	48	
982	3 Bedrooms / 2 Baths	12	748	8,976	36	
981	4 Bedrooms / 2 Baths Option 2	35	1,200	42,000	140	
Support Spaces						
				6,300		
720	Student Personal Storage	14	210	2,940	12	
402	Housekeeping/Custodial Closets	7	70	490	1	
920	Telecommunication Closets	7	70	490	1	
985	Laundry/Vending	14	170	2,380	6	
Total ASF				71,676		
Program Efficiency Ratio @ 66%						
Target GSF				108,600		
Target GSF/Bed				380		

- Notes:
- Residential spaces include space allocations for accessibility requirements
 - Exterior Space program included in Strategic Plan for Housing Document
 - 380 GSF/Bed is for planning and budget purposes; program refinement required in program and design phase
 - Non assignable area per U.C. program standards
 - Program assumes building to achieve the program bed count of 224 beds, including parking at the Ground Floor with three floors of residential above.

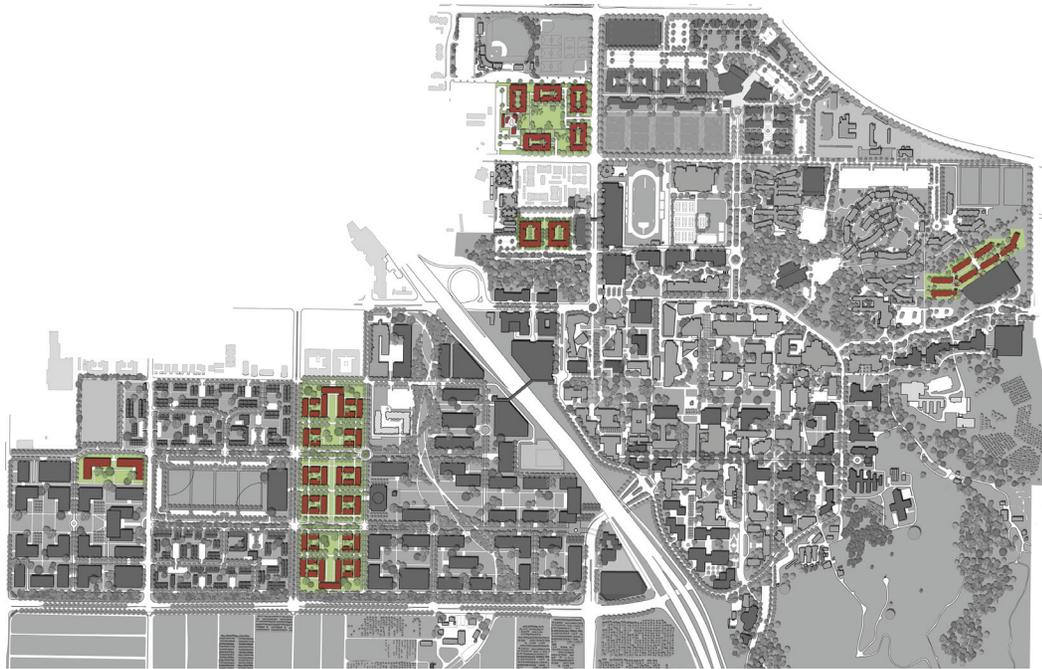


Entry
St. Petersburg, Florida



Residential Street Parking at Lower Level
St. Petersburg, Fla.

apartment program model



*Highlighted areas indicate
Apartment Housing*



*Elevated courtyard over parking
St. Petersburg, Fla.*

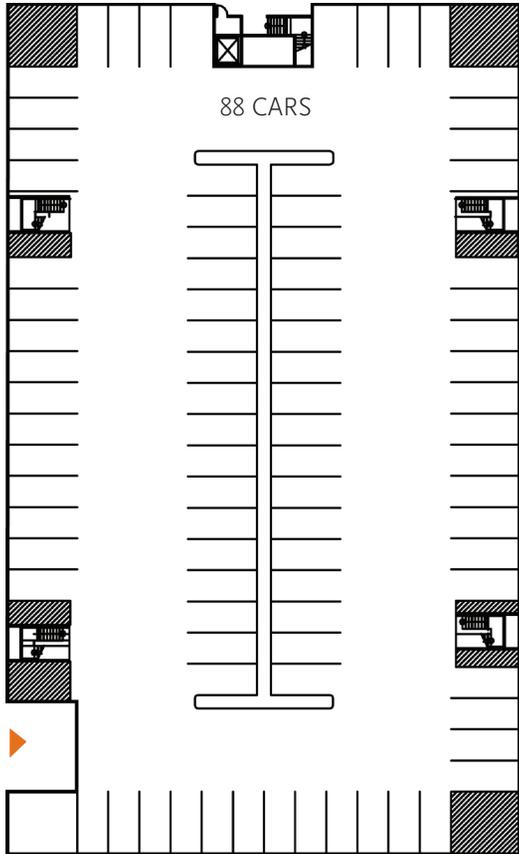
The program model for the student apartments is designed to be flexible to meet the needs of graduates and older undergraduate students. The program is composed primarily of apartment units with two, three, and four single occupancy bedrooms. The model is based on a community of 224 students to generate an area-per-unit for planning and budget purposes. Due to the varying sizes of the residential blocks and streets, program features, and phasing needs, the final community size/number of buildings/phase may vary; however, the planning figure of 380 gsf/bed should not be exceeded as an average for the total program.

The apartment program provides an ideal housing model to build over parking, providing secure parking and housing around an elevated courtyard. This concept allows the housing, parking, recreation and amenity densities desired by the LRDP to be met without increasing land area. The photographs shown on the facing page are examples of successful neighborhoods with similar residential/parking programs and configurations.

The plan diagrams shown on the following pages provide a basic urban block that responds to this program and were utilized in developing density tests. The actual configuration will vary to suit the site, capacity, and program needs of each neighborhood.

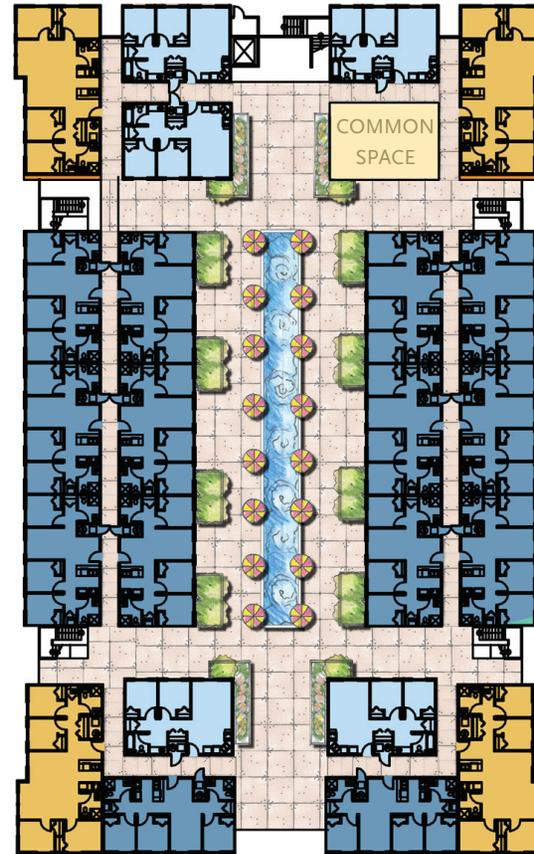
The apartment program for medical student housing is not intended to use the podium model. It is envisioned that the medical student housing program will utilize predominantly two-bedroom units.

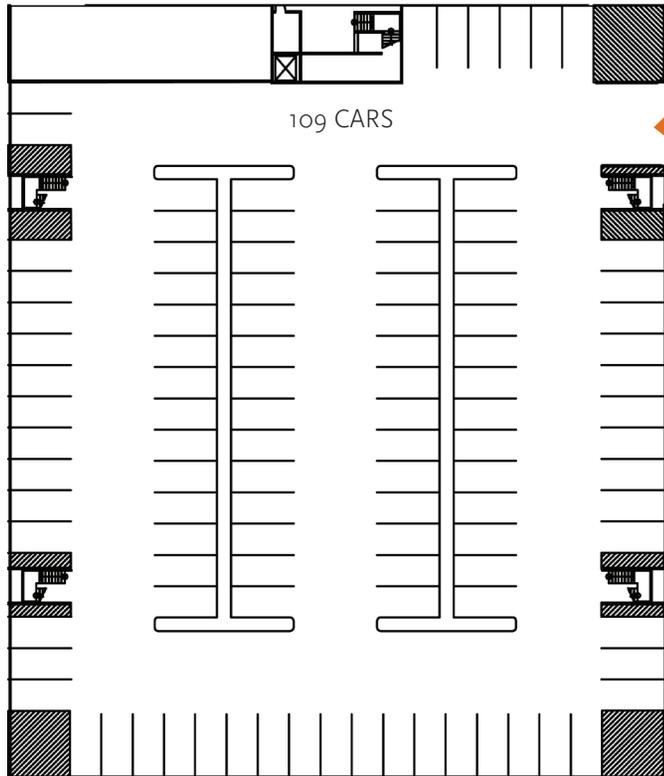
apartment program model



APARTMENT MODEL A
3 story over parking podium

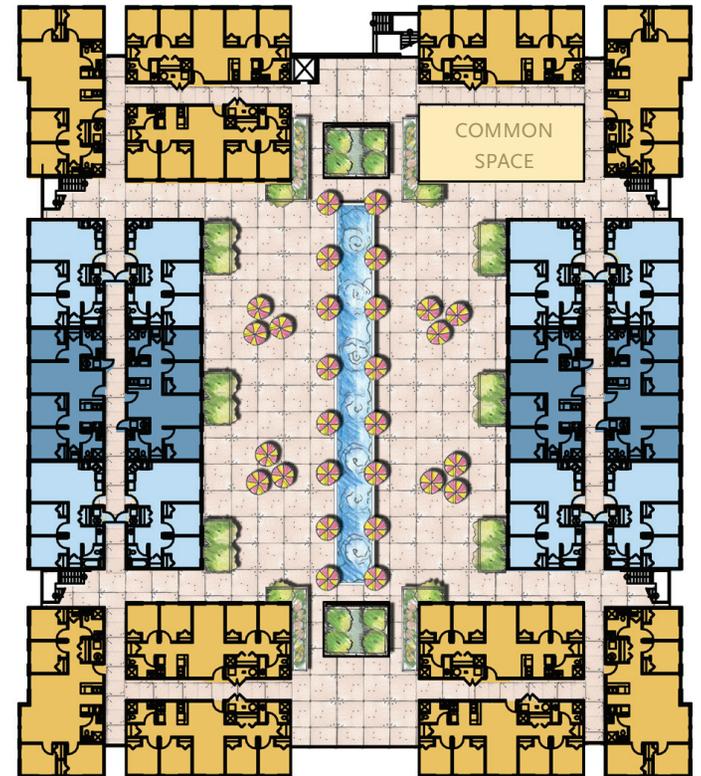
2 Bedroom Units	17
3 Bedroom Units	42
4 Bedroom Units	12
TOTAL BEDS	208





APARTMENT MODEL B
3 story over parking podium

2 Bedroom Units	24
3 Bedroom Units	12
4 Bedroom Units	35
TOTAL BEDS	224



residence hall program model

Space #	Space / Description	Quantity	ASF	Total ASF	Occupancy	Comments
Staff / Living Spaces				13,720		
982	1-Bedroom Apt. (2/Hall)	2	504	1,008	1	Head Resident Staff
911	1-Person Suite (1/Hall)	1	384	384	1	Program Coordinator
982	2-Bedroom Apt. (1/300)	4	810	3,240	2	Resident Director Staff
911	Bedrm w/Private Bath (1:38 +/-)	32	284	9,088	1	Resident Assistant (RA)
Student Residences				146,928		
914	4-Person Semi-Suite (2D)	240	562	134,880	960	
912	2-Person Semi-Suite (2S)	24	502	12,048	48	
913	3-Person Semi-Suite (1S/1D)	48	501	24,048	96	
911	1-Person Suite (1S)	0	284	0	0	
912	2-Person Suite (1D)	32	284	9,088	64	
Residential Community				23,520		
630	Student Lounges	32	550	17,600	15-30	
920	Hall Kitchen	32	140	4,480	15-30	
920	Trash & Recycle (Hall)	12	120	1,440	0	
Residence Services Office				3,667		
335	Lobby/Reception/Waiting	1	537	537	8	
320	Resident Director Office	1	120	120		
320	Head Resident Office	1	100	100		
320	RSO Manager Office	1	160	160		
320	Staff Offices	5	120	600		
335	Staff Workroom	1	225	225		
335	Staff Restroom	1	60	60		
335	Staff Workstations	3	120	360		
630/929	Staff Lounge/Kitchenette	1	120	120		
340	Conference Room	1	325	325		
410	Poster Room	1	160	160		
335	Storage	1	300	300		
615	Mail Room/Boxes	1	600	600		



Pentland Hills

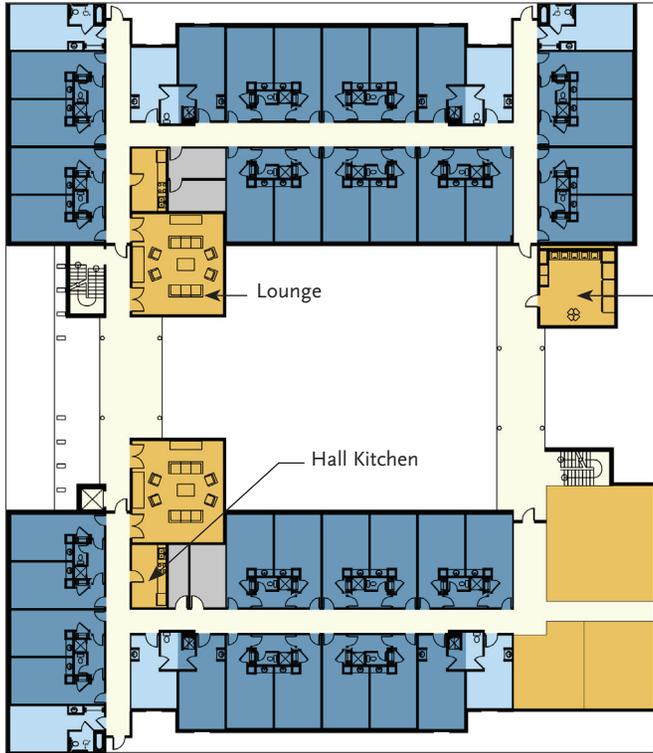
The program model for residence halls is designed to meet the study and living needs of the first-year student, the development of a strong residential community, and strong campus connections. The model is based on a community of 600 students to generate an area/student for planning and budget purposes. Due to the unique site features, program features and phasing needs, the final community size/building groups will vary in size; however, the planning figure of 280 gsf/bed should not be exceeded as an average for the total residence hall program.

residence hall program model

Space #	Space / Description	Quantity	ASF	Total ASF	Occupancy	Comments
Community / Academic				4,300		
130	Seminar rooms	4	300	1,200	0	
410	Small Group Study	6	150	900	0	
630	Fitness Room	1	1,000	1,000	0	
260/110	Computer Lab or Classroom	1	800	800	30	
630	Gaming Lounge	1	400	400	0	
630	Living Room	1	1,200	1,200		
340	Multipurpose Room	1	6,000	6,000		
Support Spaces				12,800		
985	Laundry/Vending	16	375	6,000	0	
335	Public Restrooms	2	250	0	0	Note 1
720	Student Personal Storage	2	600	1,200	0	
510	Mechanical Space	2	120	0	0	Note 1
920	Housekeeping Closets	32	80	0	0	Note 1
510	Telecommunications	32	100	3,200	0	
920	Trash Recycle Collection Room	4	500	2,000	0	
610	Unassigned	1	400	400	0	
Subtotal ASF				204,935		
Program Efficiency Ratio @ 70%						
Target GSF				292,764		
Target GSF/Bed @ 1168 Beds (1,207 beds including Staff)					280	

Note: 1 Non assignable area per U.C. program standards

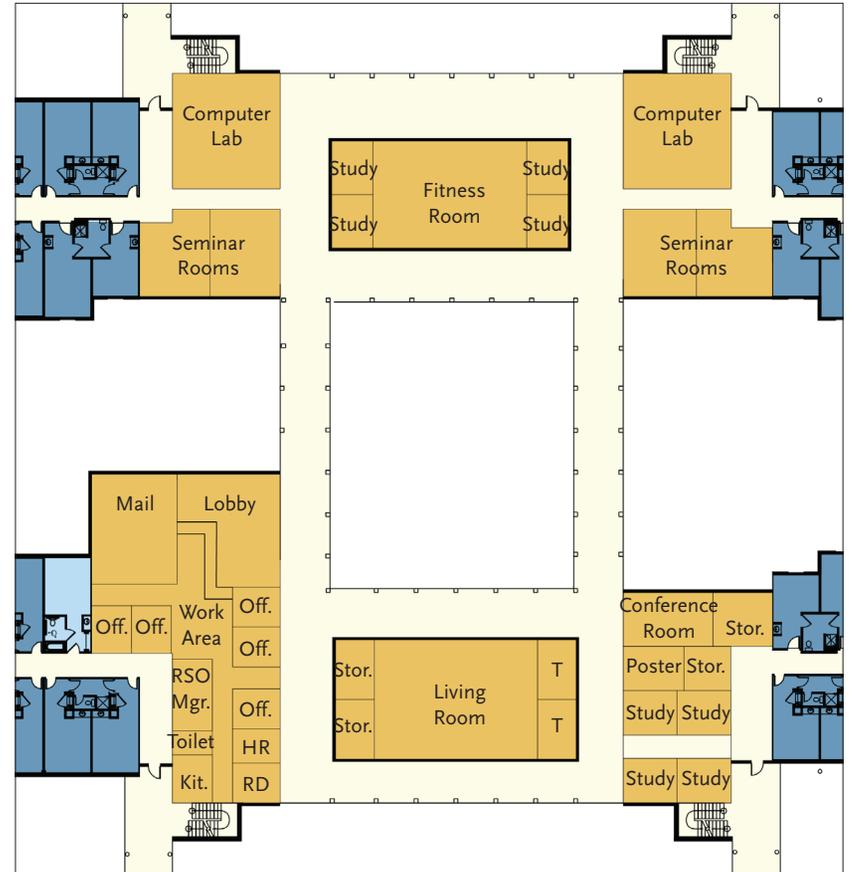
residence hall program model



Typical Residence Hall

LEGEND

- Single
- Double
- Community Space
- Support



RSO/Community Space



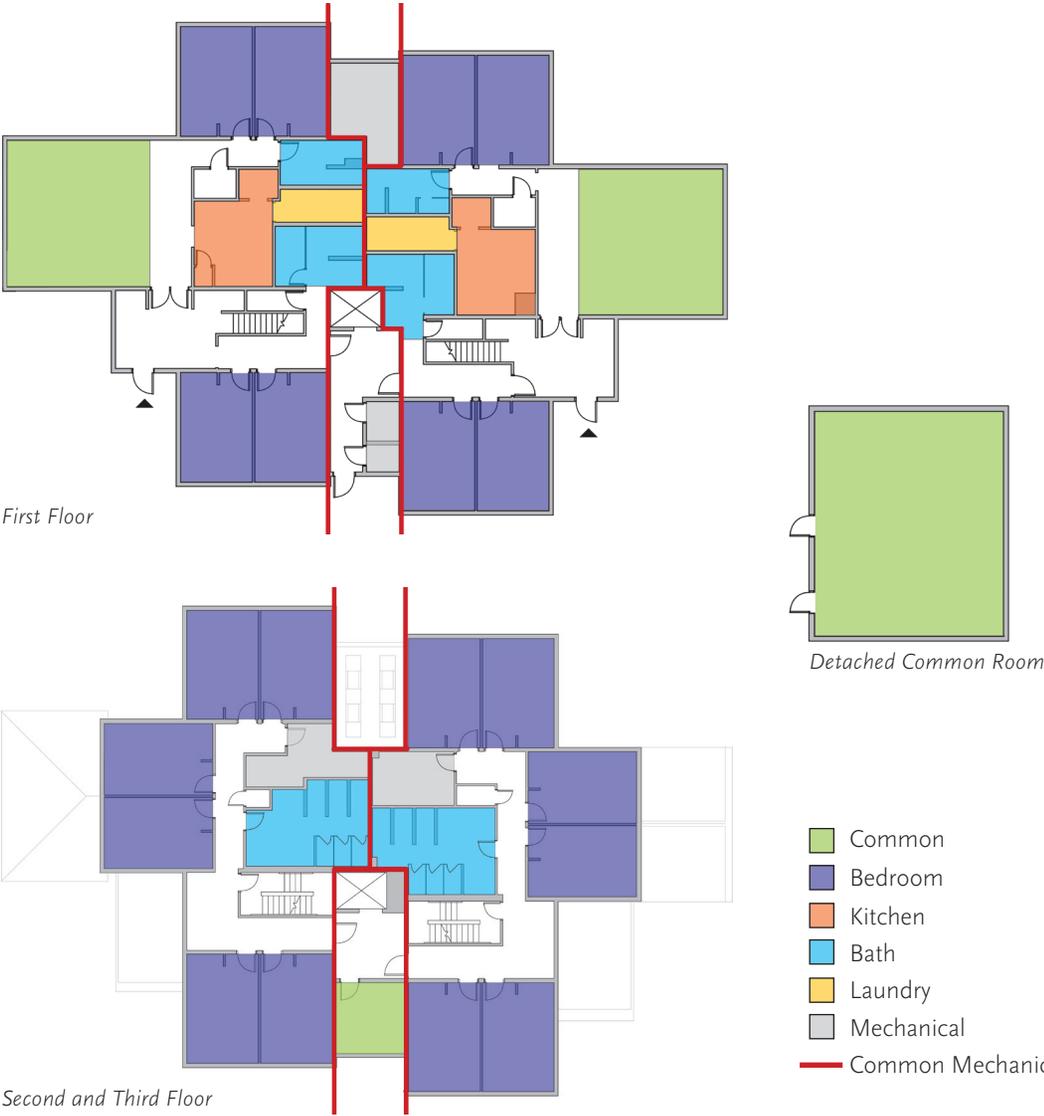
group housing program model

Space #	Space / Description	Quantity	ASF	Total ASF	Occupancy	Comments
Staff				432		
982	Housing Director Apartment 1:200 (2 bedroom Apt.)	0	756	0	1	
911	1-Person Bedroom	2	216	432	2	
Residential Spaces - Suites				7,548		
912	2-Person Bedrooms	28	216	6,048	56	
912	Bath-Suite	6	250	1,500		
Common Areas				2,185		
675	Entry Lobby	1	170	170		
630	Living Room	1	725	725	28	
920	Kitchen (Residential Scale)	1	200	200		
985	Laundry	1	70	70		
320	Office/Library	1	220	220		
935	Public Restrooms for the Chapter Room	2	50	0	Note 1	
630	Chapter Room	1	800	800		
630	Multi-Purpose Room (Shared with other Groups)	1	2,400		200	
Support Spaces				190		
920	Pantry/Housekeeping	1	60	60	0	
335	Storage	1	130	130	0	
510	Communication Closet	1	150	0	Note 1	
Total ASF				10,355		
Program Efficiency Ratio @ 70%						
Target GSF				14,793		
Target GSF/Bed						



Notes: 1 Non assignable area per U.C. program standards

group housing program model



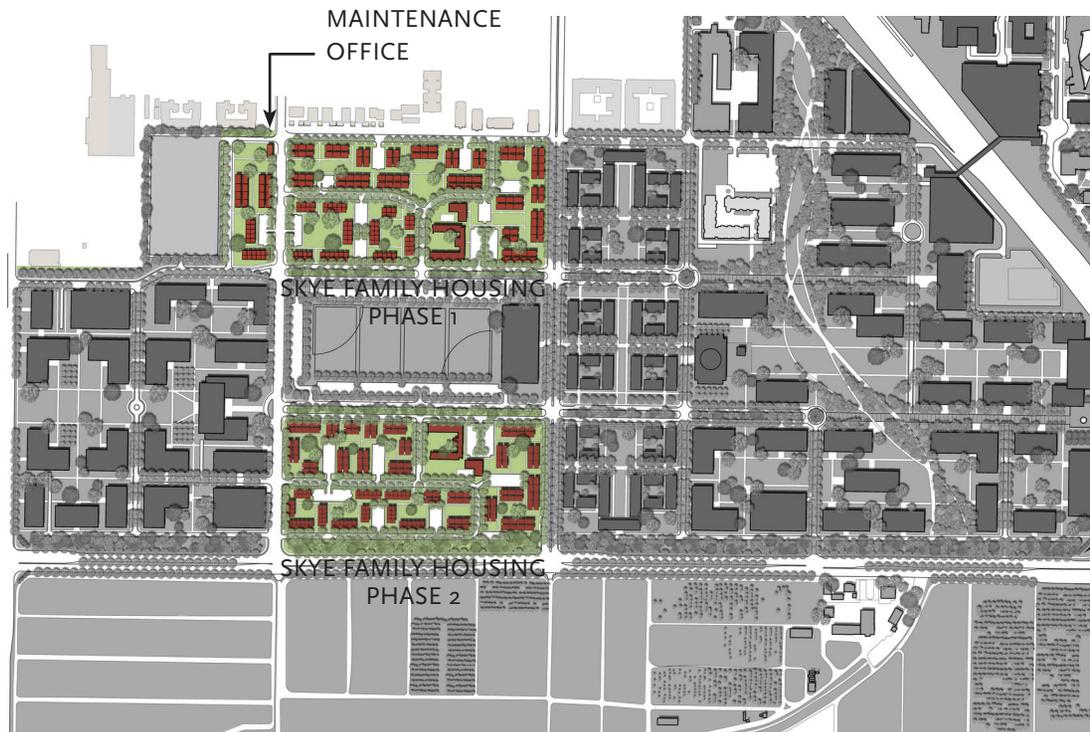
The program model for group housing provides an option for any student club and organization who wish to live in a small group house environment. The house model provides single or double occupancy bedrooms on each floor, with a common kitchen and living room at the first floor. The option exists for these groups to have a semi- or detached activities/meeting room sized to accommodate additional group members or invited guest to participate in group functions. It is anticipated that the group housing would be located on the north perimeter of the Canyon Crest site along Blaine Street. It is anticipated that the group houses would be configured as three story duplex buildings with two groups sharing a structure. Each individual group could accommodate between 20 and 28 beds for a potential total of 56 beds per house. This design allows a building scale and density along the street compatible with other university buildings nearby. The site provides an opportunity for 12 different groups to share a common lawn for activities and combined events.

family housing program model

Space #	Space / Description	Quantity	ASF	Total ASF	Comments
Residential Spaces				323,370	
982	2 Bed / 1 Bath Apartment	190	810	153,900	
981	3 Bed / 1.5 Bath Apartment	58	975	56,550	
982	2 Bedroom Townhouse	72	875	63,000	
982	3 Bedroom Townhouse	48	1,040	49,920	
Community Building				4,135	
675	Lobby/Reception and Vending	1	300	300	Resident Services Office
320	Resident Services Office Reception	1	100	100	
320	Resident Services Offices	4	110	440	
615	Mail Boxes	1	250	250	Based on 350 mail boxes
335	Staff Lounge and Kitchenette	1	195	195	
335	Copy and Work Area	1	80	80	
340	Conference Room	1	300	300	
335	Staff Restroom	1	140	140	
335	Facility Storage	1	160	160	
610/620	Multi-Purpose Room	1	1,200	1,200	After School Program
410	Computer Lab	1	350	350	
410	Library	1	400	400	
615	Kitchen	1	220	220	
Support Spaces				600	
510	Communications Closets	10	120	0	Note 1
920	Housekeeping Closets	10	120	0	Note 1
615	Pool Storage and equipment room	1	300	300	
335	Public Restrooms	2	150	0	Note 1. Located adjacent to pool area
510	Central Telephone Switching Room	1	300	300	
Total ASF				323,970	
Efficiency Ratio for Apartments @ 80%				263,063	
Efficiency Ratio for Townhouse @ 90%				125,467	
Efficiency Ratio for Community Space @ 70%				6,764	
Target GSF				395,293	

Notes: 1 Non assignable area per U.C. program standards

family housing program model



The program model for the family housing is designed to provide a comprehensive neighborhood for the conveniences and needs of family living, including townhouse and apartment-style residences, child care, and neighborhood amenities of a campus recreation center and swimming pool. The model is based on a community of 368 units to generate an area-per-unit for planning and budget purposes. Due to the varying sizes of the residential blocks, program features, and phasing needs, the final community size/number of buildings/phase may vary; however, the planning figure of 1,075 gsf/unit should not be exceeded as an average for the total family housing program.

Family housing is to be implemented in two phases of development. The first phase of 368 units and a second phase of 340 units. Each phase will include a child development center for 144 students, community center and swimming pool. A small maintenance office will be located at the eastern end of Phase I.

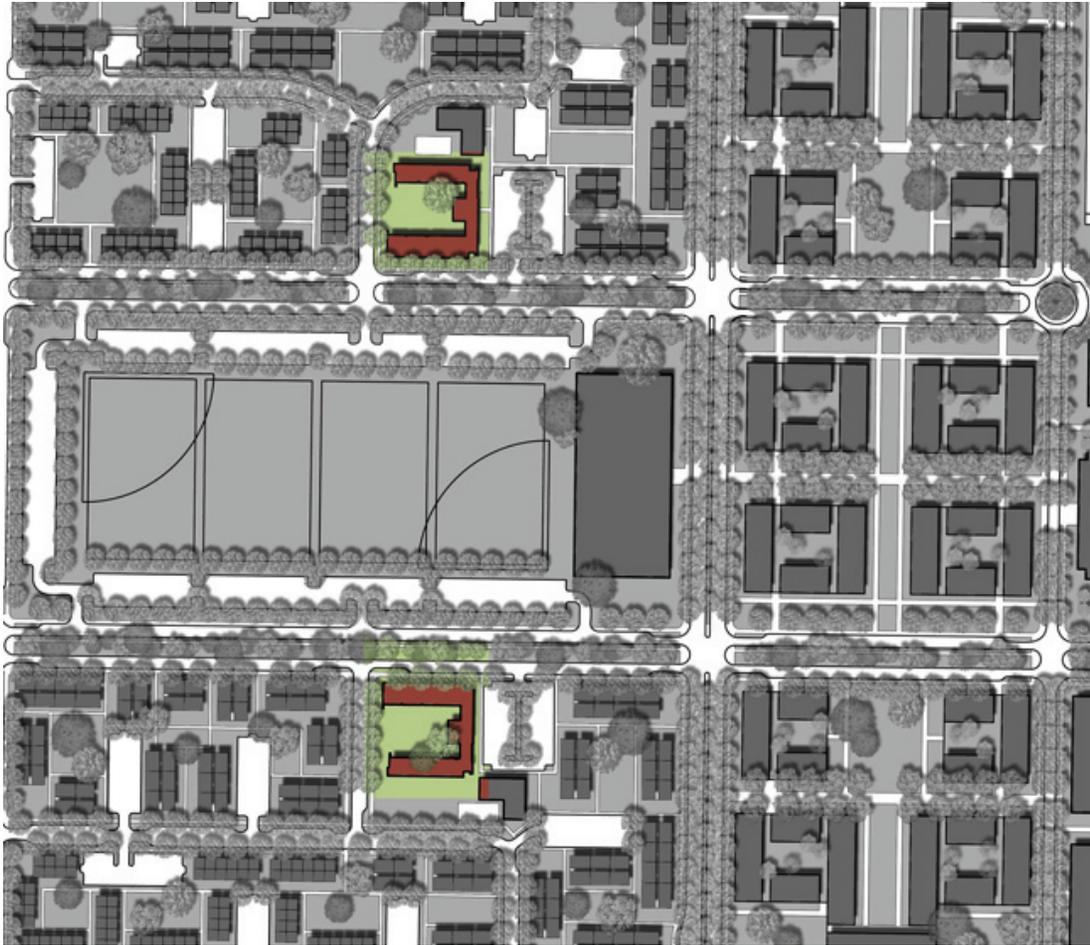
child development center program model

Space #	Space / Description	Quantity	ASF	Total ASF	Comments
Administrative				1,125	
675	Drop-off and Entry/Lobby/Car Seat/Stroller Storage	1	270	270	
675	Reception / Waiting / Check-in/-Out	1	220	220	
320	Offices	2	120	240	
670	Small Conference Room	1	70	70	
675	Staff Lounge / Kitchen	1	225	225	
335	Copy Center	1	100	100	
Child Care				8,386	
670	Infant Rooms / Sleeping / Play	1	800	800	
670	Toddler Room Class / Play Rooms	1	540	540	
670	Preschool Class / Play Rooms	3	930	2,790	
670	Children's Restrooms at Classrooms	7	75-123	801	
670	Mother's Room	1	100	100	
670	Toddler II Room: Older Toddlers or Pre-School	1	930	930	
670	Kindergarten Room	1	960	960	
675	Observation Room	5	80	400	
675	Storage Closet @ Classroom	7	30	210	
670	Curriculum Room	1	255	255	
670	Child Isolation room	1	100	100	
670	Child mildly ill room	1	500	500	
Commons Areas				380	
340	Conference/Multi-Purpose Room	1	380	380	
Support Area				787	
675	Kitchen/Pantry/Loading	1	375	375	
675	Laundry	1	72	72	
675	Maintenance / Access Control Office	1	75	75	
675	Staff Restroom	2	62	0	Note 1
675	Facility Storage	1	265	265	
335	Public Restroom	2	150	0	Note 1
Subtotal ASF				10,678	
Program Efficiency Ratio @ 73%					
Target GSF				14,627	



Notes: 1 Non assignable area per U.C. program standards

child development center program model



The child development center model is based on a model created for the expansion of the existing center on Watkins Drive. The program accommodates a maximum capacity of 144 students with associated open space. The building configuration shown on the plans reflects the floor plan to be used on the East Campus site. The area shown is the gross area and includes circulation and building systems but does not include exterior spaces.

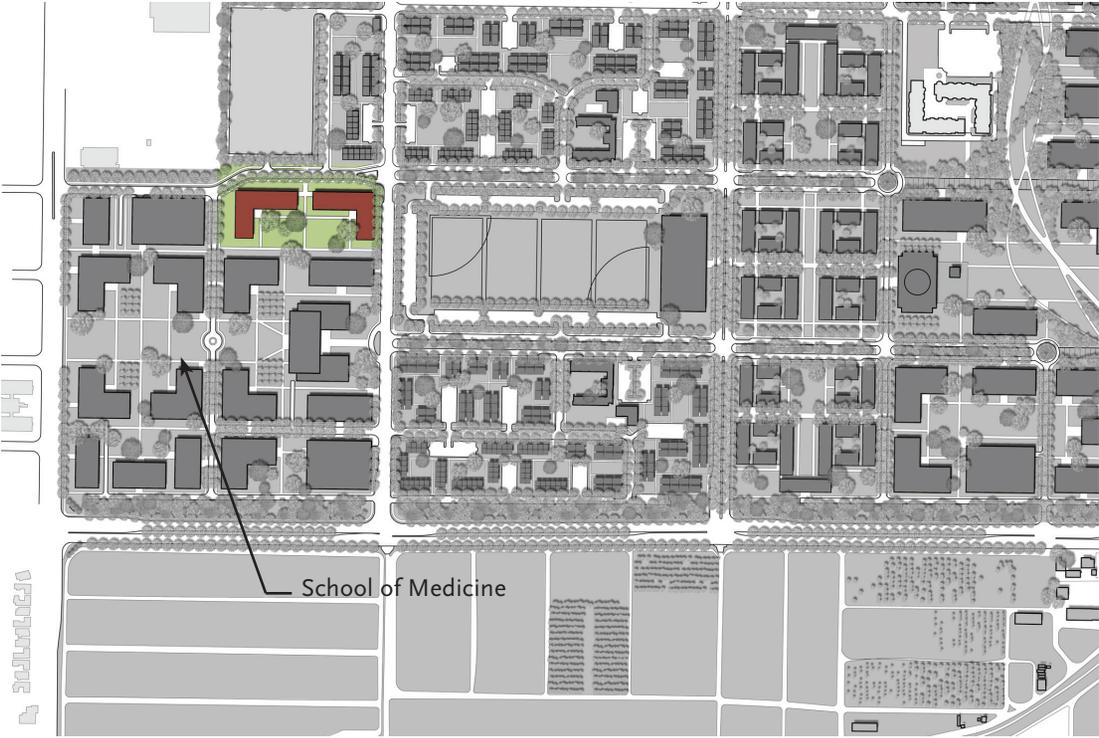
The child development centers will be located with the community center for each phase of family housing. It is anticipated that the two buildings will share a common parking lot.

medical student apartment program model

Space #	Space / Description	Quantity	ASF	Total ASF	Occupancy	Comments
Staff				600		
982	Visiting Scholar Apartment 1:150 (1 bedroom Apt.)	1	600	600	1	
Residential Spaces				94,660		
982	Efficiency/Studio	150	308	46,200	150	
982	2 Bedroom Apartment / 1 Bath	35	756	26,460	70	
981	4 Bedrooms Apartment / 2 Baths	20	1,100	22,000	80	
Community Spaces				5,030		
675	Lobby w/ Desk Area	1	400	400	20	
320	Staff Offices (with storage)	1	180	180	2	
410	Small Group Study with Storage	4	220	880	6 to 8	
670	Medium Conference Room	1	320	320	12	
670	Large Conference Room with Kitchenette	1	750	750	20+	
985	Laundry with Study Space	1	150	150	150	
615	Mail Boxes (adjacent to lobby)	1	150	150	0	
985	Vending	1	100	100	0	
935	Public Restrooms	2	150	0	0	Note 1
630	Social Lounge	1	550	550		
260	Computer Lab	1	400	400		
630	Fitness Room	1	400	400		
610	Business Center	1	250	250		
610/615	Convenience Store	1	500	500		
Support Spaces				0		
510	Telecommunications Closets	4	120	0	0	Note 1
920	Housekeeping Closets	4	120	0	0	Note 1
Total ASF				100,290		
Program Efficiency Ratio @ 70%						
Target GSF				143,271		
Target GSF/Bed						

Notes: 1 Non assignable area per U.C. program standards

medical student apartment program model



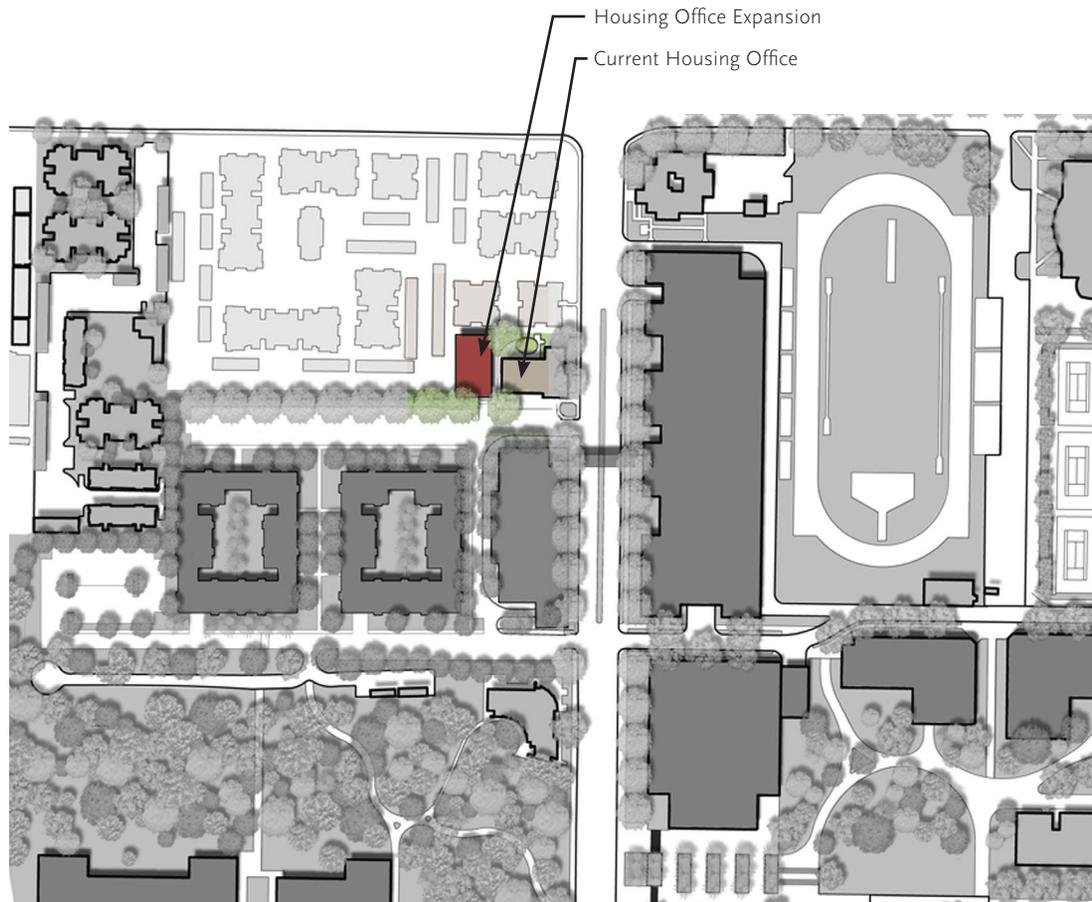
The School of Medicine (SOM) is to be located in the West Camps at the corner of Martin Luther King Boulevard and Chicago Avenue. It is anticipated that the school will accommodate approximately 300 students. Student housing plans to provide space for these 300 students in two 150 bed four-story buildings will be located on the Northeastern corner of the SOM site. Parking for the student housing will be located in an adjacent parking garage.

housing office expansion program model

Space #	Space / Description	Quantity	ASF	Total ASF	Comments
Housing Services Administrative Offices				3,957	
320	Lobby / Reception / Waiting	1	537	537	
335	Support Staff Work Stations	5	120	600	
340	Conference Room	2	325	650	
320	Executive Offices	5	200	1,000	
320	Private Offices	4	150	600	
630/920	Staff Breakroom / Kitchen	1	120	120	
335	Supply / Support / Copy / Printer	1	250	250	
335	Administrative Storage	1	200	200	
Support Spaces				0	
510	Mechanical Space	1	120	0	Note 1
920	Custodial Services	1	120	0	Note 1
920	Housekeeping Closets	1	80	0	Note 1
335	Public Restrooms	2	250	0	Note 1
510	Telecommunications	1	120	0	Note 1
Total ASF				3,957	
Internal Net to Gross Factor (70%)				5,653	

Note 1 Non assignable area per U.C. program standards

housing office expansion program model



The current housing office is located adjacent to Bannockburn Apartments on Canyon Crest Drive. Recent expansion of the student residence system has placed pressure on the current staff and as the system grows to accommodate the enrollment targets anticipated in the LRDP additional staff will be required.

The new facility will be located on the parking lot on the west side of the existing office. The building will be designed in such a way to share the existing courtyard on the north side of the existing office.

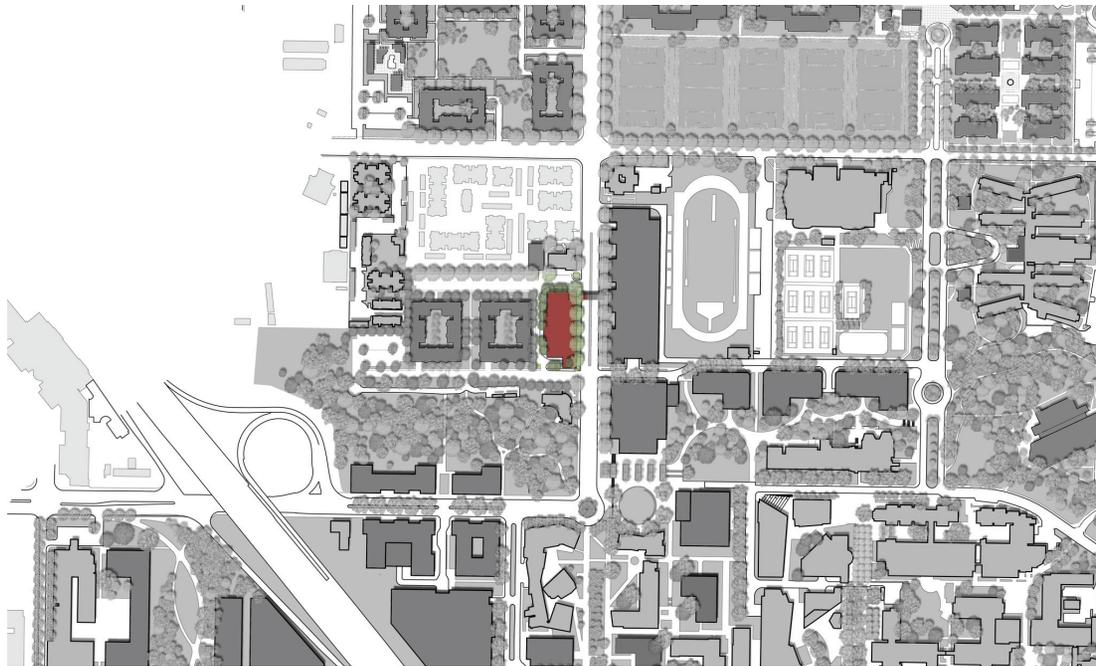
The new building will include public restrooms that can be accessed from either inside the building or from the courtyard.

bannockburn offices/retail program model

Space #	Space / Description	Quantity	ASF	Total ASF	Comments
Retail Spaces				71,500	
640	University Bookstore	1	50,000	50,000	
610/615	Food Venue / Restaurant	3	1,000	3,000	
640	Hair Salon	1	1,000	1,000	
640	Retail Vendors	4	1,000	4,000	
610/615	Coffee Bar / Convenience Store	1	1,500	1,500	
615	Computer Repair	1	2,000	2,000	
320	Unassigned Office Space	1	10,000	10,000	
Support Spaces				750	
510	Mechanical Space	1	120	0	Note 1
335	Public Restrooms (Male)	1	500	0	Note 1
335	Public Restrooms (Female)	1	750	0	Note 1
510	Telecommunications	1	120	0	Note 1
615	Loading Dock / Service Corridor	1	750	750	
Total ASF				72,250	
Unenclosed space (loading dock)		1	570	285	
Unenclosed space (Patio / café seating)		1	1,000	500	
Internal Net to Gross Factor (80%)				90,813	

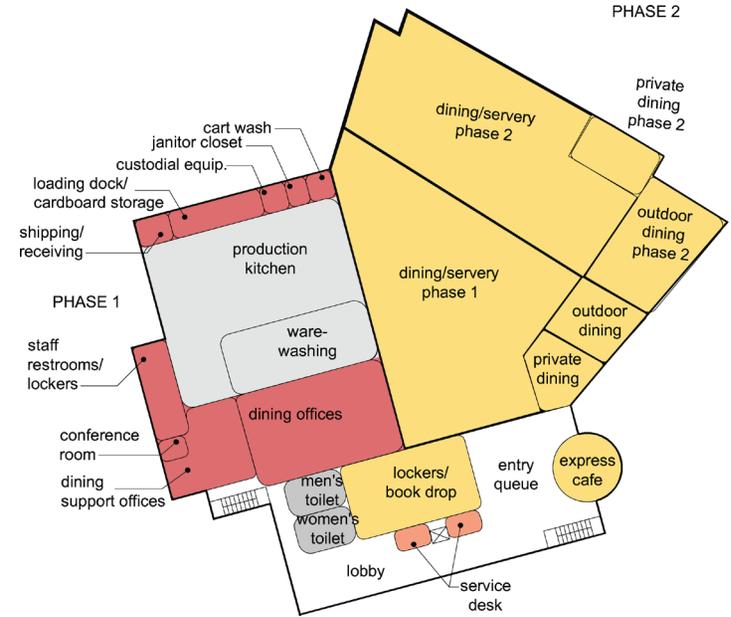
Note 1 Non assignable area per U.C. program standards

bannockburn offices/retail program model



The Bannockburn offices and retail program is intended to replace those services lost with the demolition of the existing Bannockburn residence and provide additional space for the relocation of the campus bookstore. A portion of the parking required for the facility will be located on site and a portion is anticipated to be provided in a proposed parking structure across the street. It is anticipated that the building will be three-stories and that a pedestrian bridge across Canyon Crest Drive will connect at the parking structure. Retail food service venues are expected to be located along the sidewalk on the West side of Canyon Crest Drive will take advantage of the pedestrian flow between campus and residences to the North.

dining hall program model



First Floor

dining hall program model



The program model for the new food service opportunities is designed to meet the diverse dining needs of residents and provide after-hours services, retail operations for the neighborhoods, campus community, teams, and others using the associated recreation fields. This plan recognizes a grill/deli at Glen Mor and dining facilities at Aberdeen-Inverness and Lothian residence halls. In addition, there are convenience stores and retail facilities associated with the West Campus development.

The Glasgow dining facility is proposed to be a two-phase project, coinciding with the associated residence hall construction. The first phase of the facility includes a main kitchen, serving platforms, a dining area serving 941 seats (total both phases), and retail food service. The service style will be “market place” in the main dining area and the retail food service will offer a dining alternative with outdoor seating and good proximity to the recreation fields.

Construction of the first phase of the dining facility will coincide with the second phase of the Dundee Residence Hall and will include construction of the main kitchen and some of the components of the platforms. The second phase of the dining facility will be implemented with the second phase of the residence halls. The phasing of the facility is a design as well as a programmatic issue and will need to be studied in massing and layout prior to finalizing which components occur in each phase.

dining hall program model

Space #	Space / Description	Quantity	Phase 1 ASF	Phase 2 ASF	Total ASF	Occupancy	Comments
Dining					16,756		
610	Marketplace Dining Area	1	4,116	6,160	10,276		
610	Private Dining Rooms	2	800	800	1,600		
610	Outdoor Marketplace Dining	1	800	2,080	2,880		
615	Lockers/Book Drop	1	2,000		2,000		
Servery					7,345		
615	Serving Platforms	1	4,800	2,545	7,345		
Production Kitchen					5,000		
615	Refrigerated Storage	1	800		800		
615	Frozen Storage	1	560		560		
615	Dry Storage	1	960		960		
615	Special Equipment Storage	1	300		300		
615	Table & Chair Storage	1	300		300		
615	Cold Food Preparation	1	960		960		
615	Hot Food Preparation	1	720		720		
615	Catering Staging	1	400		400		
Warewashing					1,900		
615	Warewashing	1	1,500		1,500		
615	Pot Washing	1	300		300		
615	Chemical Storage	1	100		100		
Dining Support					3,180		
615	Loading Dock (Compactor/Baler)	1	550		550		
615	Cardboard storage (at loading dock)	1	200		200		
615	Shipping & Receiving	1	200		200		
615	Cart Washing	1	120		120		
335	Staff Restroom & Lockers	1	700		700		
615	Janitor's Closet	1	120		120		
615	Custodial Equipment Room	1	150		150		
320	Director's Office	1	120		120		
320	Assistant Director's Office	1	120		120		
320	Receiving Office	1	120		120		
320	Food Production Office	1	120		120		
320	Food Production Manager's Office	1	300		300		
320	Student Manager's Office	1	240		240		
340	Conference Room	1	120		120		



dining hall program model

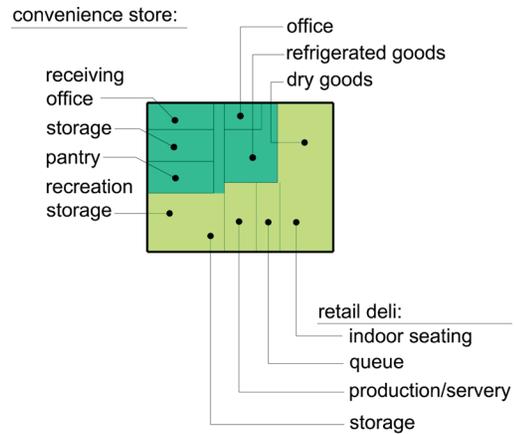


Space #	Space / Description	Quantity	Phase 1 ASF	Phase 2 ASF	Total ASF	Occupancy	Comments
Dining Offices					2,890		
610	Manager's Office	1	120		120		
610	General Office for 5 Work Stations	1	750		750		
610	Storage	1	300		300		
610	Dining Administrative Assistant Office	1	120		120		
610	Unit Manager Office (2 Work Stations)	1	300		300		
610	Catering Sales (2 Workstations)	1	300		300		
610	Catering Manager	1	120		120		
610	Cash Counting Office	1	120		120		
610	Cash Handler Office	1	400		400		
610	Cash Supervisor Office	1	120		120		
610	General Office	2	120		240		
Residence Life Offices					4,760		
610	Service Desk - Mail & Equipment	1	150		150		
610	Service Desk - Administration	1	150		150		
610	Lounge Seating	1	400	600	1,000		
610	RHA Staff Workstation Area	1	420		420		
610	RHA Offices - Private	2	120		240		
610	Residence Life Coordinator's Office	2	140		280		
610	RHA Storage	1	120		120		
615	Game Room	1	2,400		2,400		
Total ASF					41,831		
Program Efficiency Ratio @ 70%							
1st and 2nd Floor Dining Center					59,759		
	Basement Central Mechanical Space	1	1,800		61,559		

retail/deli program model

Space #	Space / Description	Quantity	Phase 2 ASF	Phase 3 ASF	Total ASF	Occupancy	Comments
Convenience Store					2,355		
640	Dry Goods Merchandising	1		630	630		
640	Refrigerated Goods Merchandising	1		500	500		
920	Office	1		120	120		
615	Pool Storage	1		300	300		
615	Pantry	1		300	300		
615	Receiving	1		150	150		
625	Recreation Storage	1		355	355		
Retail Deli					2,450		
610	Seating and Circulation - Indoor	1		640	640		
610	Seating and Circulation - Outdoor	1		640	640		
615	Cash Counting Room	1		70	70		
615	Storage and Support	1		600	600		
615	Production / Servicing	11		300	300		
615	Queuing	1		200	200		
Total ASF					4,805		
Program Efficiency Ratio @ 70%							
Target GSF					6,864		

retail/deli program model

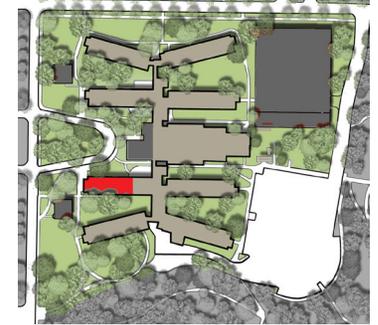


First Floor

The retail/deli program was developed during the Detail Planning Program (DPP) phase for the Dundee residence hall community. It shall be centrally located adjacent to the recreation fields and conference facility. The small community pool is located with the retail/deli to provide a community amenity. It is intended to provide extended service hours to accommodate recreation program activities that occur up to 11:00 p.m. on week nights.

emporium program model

Space #	Space / Description	Quantity	ASF	Total ASF	Comments
Emporium				2,900	
335	Entry vestibule	1	100	100	
615	Cashiering & Customer Queuing	1	250	250	
615	Coffee Platform & Customer Queuing	1	360	360	
615	Prepared Food Platform & Customer Queuing	1	360	360	
640	Retail Grocery Display Area	1	500	500	
640	Refrigerated Merchandiser	1	250	250	
610	Seating	1	1,080	1,080	
610	Outdoor Seating	1	800	400	Note: Not included in the Total ASF
Support Spaces				910	
615	Food Platform Support	1	300	300	
615	Storage	1	240	240	
920	Office	1	100	100	
615	Cash Room	1	60	60	
615	Janitor's closet	1	50	50	
610	Employee support	1	160	160	
Total ASF				3,810	
Internal Net to Gross Factor (10%)				381	
Target GSF				4,191	



Site Plan

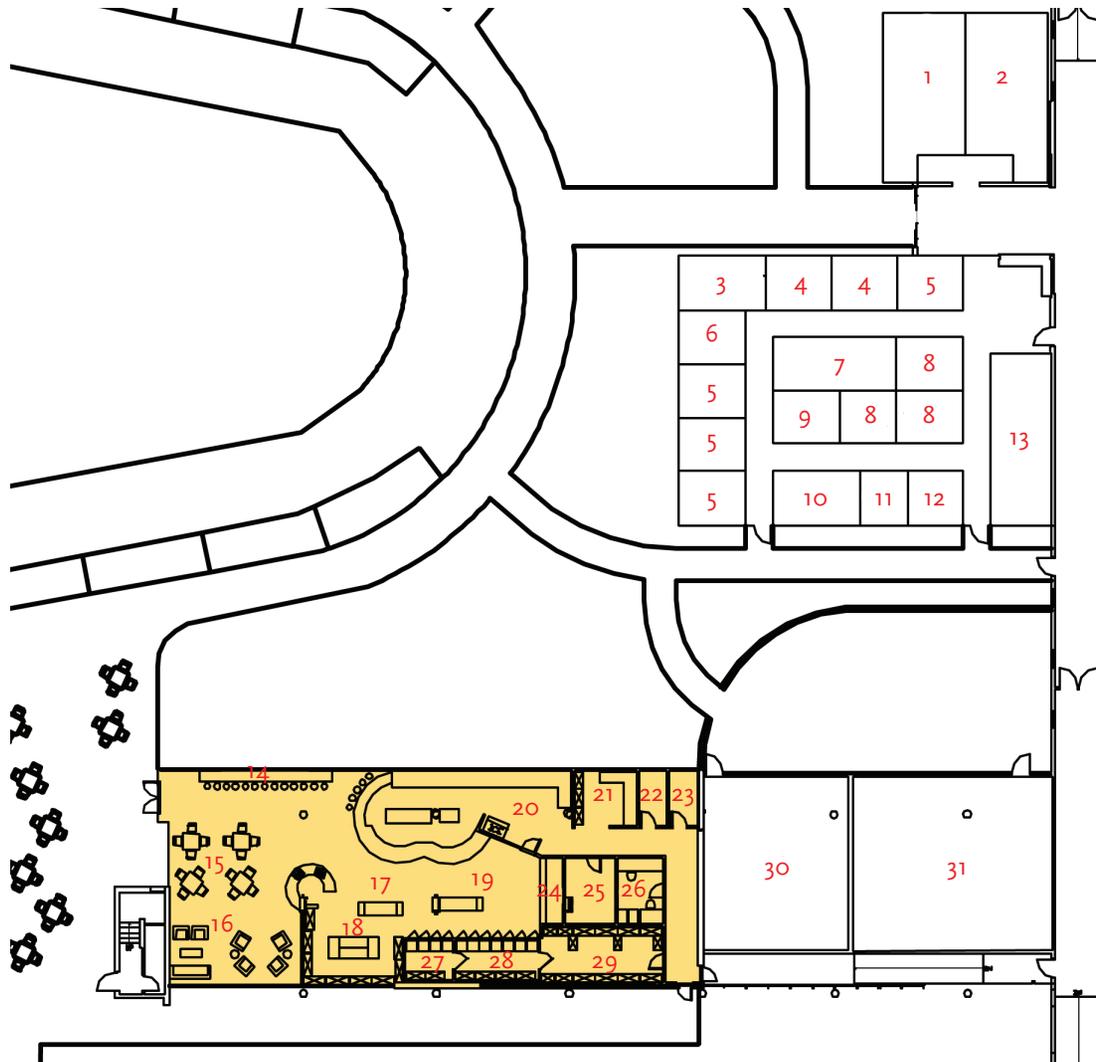
emporium program model

The Emporium will be located in the D Wing of Aberdeen-Inverness residence halls (A-I). Its location takes advantage of the pedestrian flow along Aberdeen Drive between the Canyon Crest site and the campus and the community spaces of A-I. An outdoor seating area takes advantage of the large shade trees around the drop-off.

The Emporium is intended to supplement dining choices and the demand that will be generated by the first phase of 600 residence hall beds on the Canyon Crest site.

LEGEND

- | | |
|-----------------------|---------------------------|
| 1 Men's Room | 17 Prepared Food Platform |
| 2 Women's Room | 18 Retail |
| 3 RSO Manager | 19 Coffee |
| 4 Resident Director | 20 Prep Area |
| 5 Staff | 21 Pots |
| 6 Human Resources | 22 Janitor Closet |
| 7 Workroom | 23 Cash Room |
| 8 Workstation | 24 Beverage Station |
| 9 Kitchen | 25 Toilet/Lockers |
| 10 Poster | 26 Office |
| 11 Rest | 27 Freezer |
| 12 Telecommunications | 28 Cooler |
| 13 Mail | 29 Dry Storage |
| 14 Counter Seating | 30 Game Lounge |
| 15 Dining | 31 Living Room |
| 16 Soft Seating | |



conference services program model

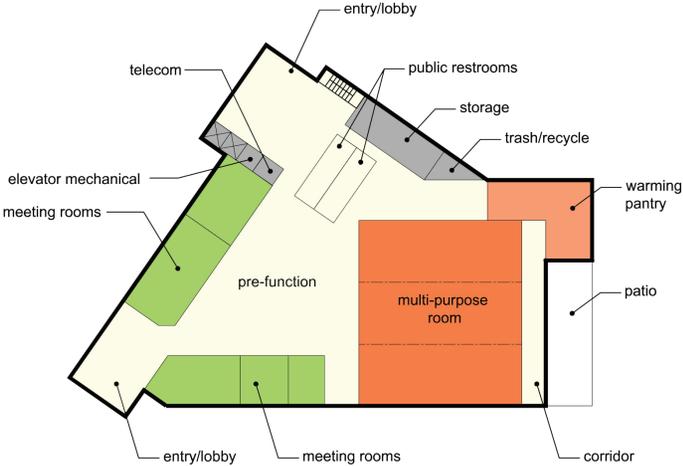
Space #	Space / Description	Quantity	ASF	Total ASF	Comments
Conference Services				1,710	
300	Administrative Assistant	1	120	120	
335	Service Desk - Mail & Equipment	1	150	150	
320	Conference Manager	1	120	120	
320	Sales Manager	1	120	120	
320	Conference Coordinator	2	120	240	
320	Financial Analyst	1	120	120	
335	Waiting/Reception	1	120	120	
320	Student Staff (20) Work Area	1	720	720	
Meeting / Academic / Programs				19,150	
340	Multi-Purpose (Sub-dividable)	1	7,500	7,500	
345	Pre-Function Area	1	3,750	3,750	
615	Catering Pantry	1	1,500	1,500	
345	AV Equipment Room	1	200	200	
345	Table and Chair Storage	1	750	750	
340	Seminar/Board Room	1	500	500	
340	Meeting Room (250 seats)	1	1,500	1,500	
340	Meeting Room (200 seats)	1	1,200	1,200	
340	Meeting Room (150 seats)	1	900	900	
340	Meeting Room (100 seats)	1	600	600	
340	Meeting Room (75 seats)	1	450	450	
340	Meeting Room (50 seats)	1	300	300	
Support Spaces					
510	Mechanical/Electrical Space	1	0	0	Note 1
335	Public Restrooms	4	150	0	Note 1
920	Housekeeping/Custodial Storage	1	120	0	Note 1
920	Trash/Recycle Room	1	120	0	Note 1
510	Telecommunications Closet	2	120	0	Note 1
Total ASF				20,860	
Program Efficiency Ratio @ 60%					
Target GSF				34,767	

Note: 1 Non assignable area per U.C. program standards

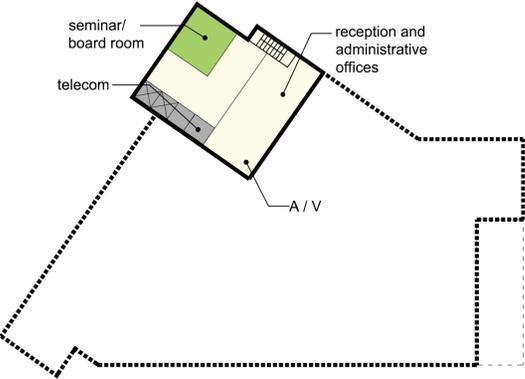


Site Plan

conference services hall program model



First Floor



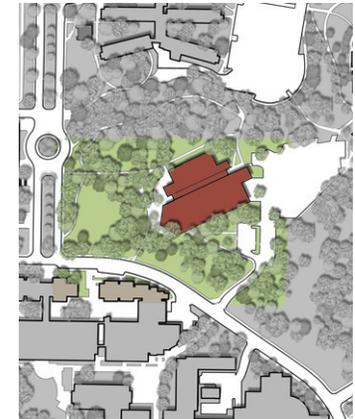
Second Floor

The conference services program provides expanded capability for UCR to accommodate the current and potential demand from outside groups for conference space. The facility will provide banquet seating for 500, lecture seating for 750, and classroom/breakout space for between 50 and 250 persons. Its location adjacent to the Glasgow Dining Facility provides appropriate proximity for catering support.

veitch student activity center program model

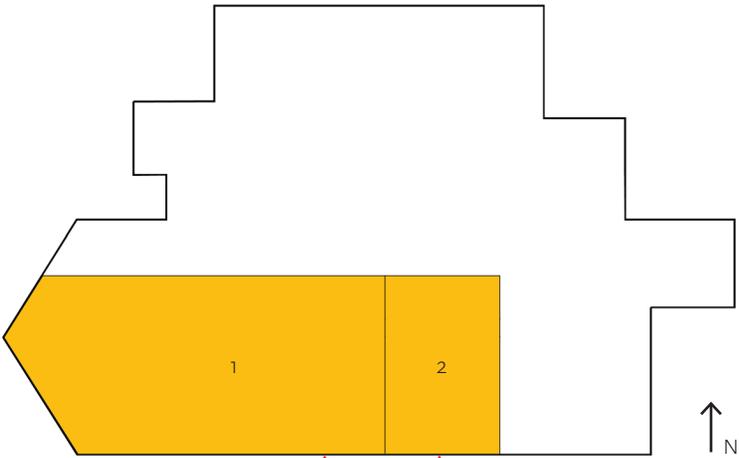
Space #	Space / Description	Quantity	ASF	Total ASF	Comments
Public / Common Areas				900	
335	Vestibule	1	400	400	
335	Lobby, Reception	1	500	500	
335	Public Restrooms (Male)	1	600	0	
335	Public Restrooms (Female)	1	1,200	0	
Program Event Spaces				30,300	
340	Large Multi-Purpose Room (Sub-dividable)	1	21,600	21,600	Garage doors open to the Glen
340	Medium sized Multi-Purpose Room	3	1,800	5,400	
630	Green Room Suite with Bathroom	1	200	200	
335	Event Storage Room	1	2,500	2,500	
335	Technical Equipment Room	1	600	600	
Administrative Office Area				400	
320	Office	2	140	280	
335	Administrative Storage	1	120	120	
Student Health and Counseling Center				11,222	
320	Student Health Center	1	8,341	8,341	
320	Counseling Center	1	2,881	2,881	
Food Service				1,950	
610/615	Convenience Store / Cafe	1	1,200	1,200	
985	Catering Pantry	1	750	750	
Support Spaces				2,550	
510	Mechanical Space	1	120	0	Note 1
920	Custodial Services	1	120	0	Note 1
920	Housekeeping Closets	1	80	0	Note 1
510	Telecommunications	1	120	0	Note 1
345	Portable Stage Storage	1	300	300	
615	Loading Dock / Service Corridor	1	1,500	1,500	
345	Table and Chair Storage	1	750	750	
Total ASF				47,322	
Unenclosed space (Patio on the Glen)		1	3,000	1,500	
Internal Net to Gross Factor (80%)				60,653	

Note 1 Non assignable area per U.C. program standards



Site Plan

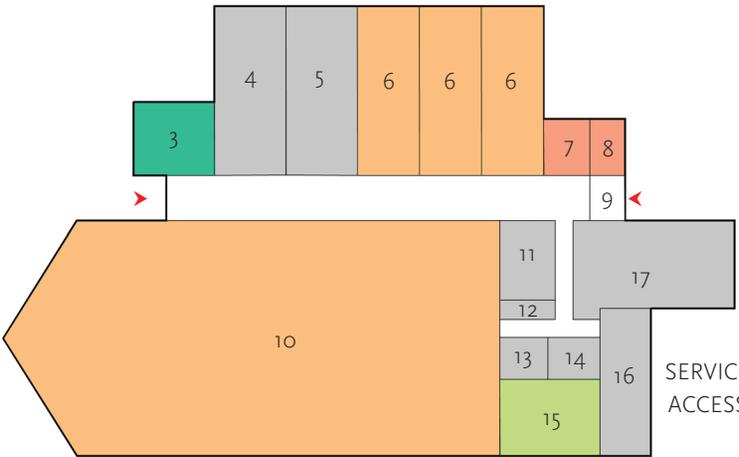
veitch student activity center program model



Lower Level – First Floor / at Grade

LEGEND

- 1 Student Health
- 2 Counseling Center
- 3 Convenience Store/Cafe
- 4 Women’s Restroom
- 5 Men’s Restroom
- 6 Medium Multi-Purpose Room
- 7 Lobby/Reception
- 8 Office
- 9 Vestibule
- 10 Large Multi-Purpose Room
- 11 Technical Equipment
- 12 Mechanical
- 13 Green Room
- 14 Support
- 15 Catering Pantry
- 16 Loading/Service
- 17 Storage



Main Level – Second Floor / at Grade

The Veitch site is the nexus of paths leading from the campus to the majority of the existing and proposed residence halls and creates a desirable location for a regional multi-purpose student services building. The site currently houses student health services, the counseling center and career services, and it is recommended that multi-purpose student services functions/programs be incorporated into the new Veitch facility with a retail deli and can incorporate a new student health and counseling center. The student services and deli will be located at the main level with a multi-purpose room opening into the large lawn space to the west. The student health and counseling centers will occupy the lower level of the building that takes advantage of the convenient location of the site and provides the privacy desired by those programs.

The Veitch site is a lush and inviting natural environment. The placement of a new building within this site should be handled sensitively so that the building takes advantage of the landscape with the paths and connections maintaining their ambiance as nature walks. Additionally, the building should create strong interior/exterior relationships that emphasize and celebrate visual and physical connections between the landscape and the civic spaces within the building.

Other key site development features shall:

- preserve natural surroundings.
- preserve emergency vehicle access and parking for students who need to be driven to the student services (e.g., health center).
- provide well-screened services and service truck access.

maintenance program model

Parking Deck Maintenance Lot 22

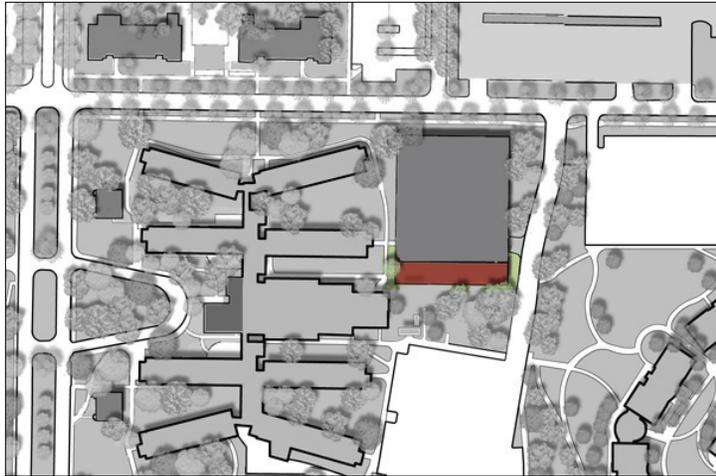
Space #	Space / Description	Quantity	ASF	Total ASF
Maintenance Administrative				2,860
320	Staff Offices	5	120	600
320	Work Room / Shared office	1	500	500
340	Conference Room	1	800	800
335	Staff Breakroom and Kitchenette	1	140	140
335	Staff Restrooms	2	150	300
335	Lockers	1	150	150
615	Shipping and Receiving Desk	1	120	120
985	Laundry Room	1	250	250
Maintenance Warehouse and Shops				6,300
610	Warehouse and Shops	1	4,000	4,000
610	Emergency Shower/eye wash station	1	100	100
610	Shop Space	1	500	500
610	Storage	1	1,200	1,200
615	Loading Dock	1	500	500
610	Electric Vehicle Battery Storage	1	100	100
Maintenance Exterior Spaces				
	Charging Stations for 17 electric powered carts			
	Parking for 10 Grounds and ride-on equipment			
	Parking for 20 Vehicles			
	Enclosure for 4, 4-cubic yard dumpsters			
	Enclosure for 2, 4-cubic yard recycling dumpsters			
	Enclosure for 2, 40-cubic yard green waste dumpsters			
	Total ASF			9,160
	Internal Net to Gross Factor (80%)			11,450

Footnote: Refrigeration Shops, Dining Equipment Shop, and Carpentry Shop square footages are included in 610 - Warehouse and Shops

West Campus Maintenance Facility

Space #	Space / Description	Quantity	ASF	Total ASF
Maintenance and Grounds Administrative				980
320	Staff Offices	2	120	240
335	Staff Breakroom and Kitchenette	1	200	200
335	Staff Restrooms	2	150	300
335	Lockers	1	240	240
Maintenance Warehouse and Shops				1,440
525	Grounds Shop	1	150	150
525	Maintenance Shop	1	150	150
525	Grounds Equipment Storage	1	900	900
615	Recreation Field Storage Room	1	240	240
Support Space				0
Total ASF				2,420
Internal Net to Gross Factor (75%)				3,227

maintenance program model



East Campus Maintenance Facility at First Floor of Parking Deck

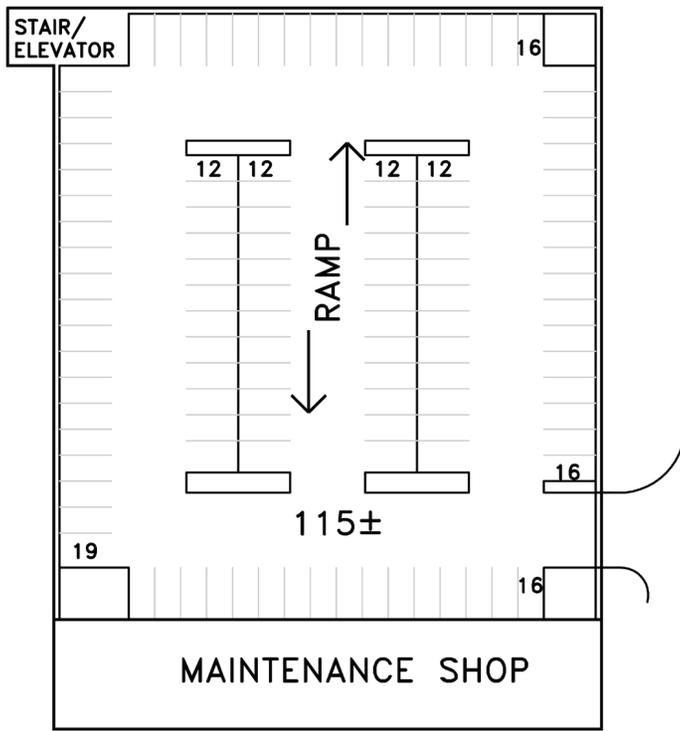


West Campus Maintenance Facility at Family Housing

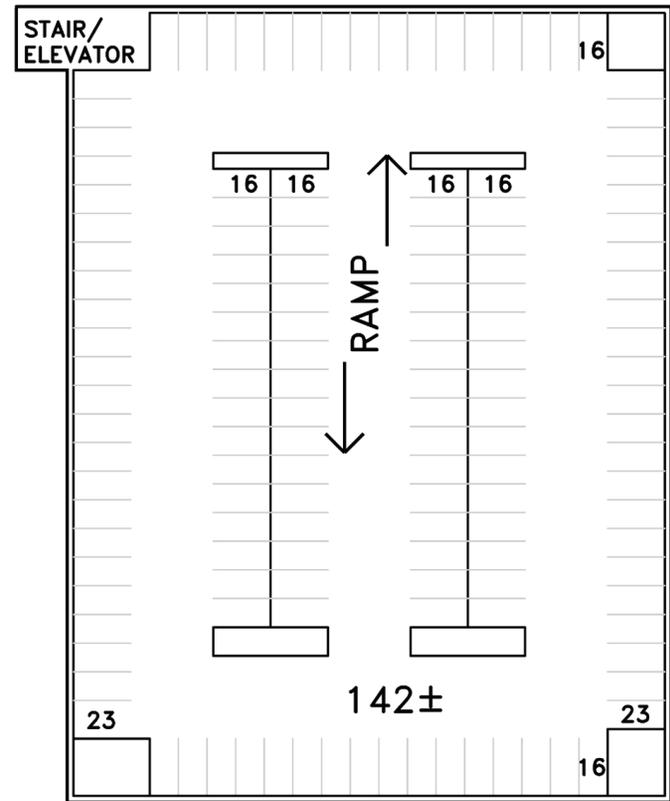
UCR's Housing Operation staff developed the model for the Maintenance and Operations programs. This facility is to be located with a proposed parking structure on Parking Lot 22 on the East Campus. This facility replaces existing buildings in the current Canyon Crest site (offices, warehouse, grounds shed, maintenance shop, and dumpsters) while adding space to serve the additional housing proposed in the plan.

A smaller, 3,227 sf facility, specifically for grounds and equipment storage, will be located on West Campus in association with Skye Family Housing.

parking garage program model



First Floor



Typical Floor

parking garage program model



During the Canyon Crest DPP process a preliminary study was conducted to evaluate the potential of providing a parking garage on the east side of Aberdeen-Inverness residence halls on the current site of Lot 22. The garage program includes:

- Approximately 500 cars including the quantity currently provided in Lot 22.
- A new Maintenance shop on the first floor to replace the current maintenance shop that will be lost at Canyon Crest.

recreation program model





In recent years, the recreation program at UCR has experienced growth exceeding the general student population growth. In the academic years 2005-06 and 2006-07, the recreation program saw a growth of 35.8 percent and 10.8 percent respectively. It is anticipated that the growth of the program will level off to a minimum of 6.5 percent per year, more commensurate with campus enrollment growth.

As of the 2007-08 academic year, there were 30 teams (five leagues of six teams) on each of four nights (Monday–Thursday) for a total of 120 teams that use the three fields at Glen Mor. In order to meet demand, recreation programming requires league play four nights per week (Monday–Thursday) from 5 p.m. to 12 a.m. There is a shared-use facility located at the southwest corner of Canyon Crest Drive and Blaine Street consisting of two softball fields jointly owned by the University and the City of Riverside. The University owns the right to use these fields Monday, Tuesday, Thursday, and Friday.

The Strategic Plan for Student Housing is consistent with the 2005 LRDP, and establishes three recreation program expansion sites within the new residential neighborhoods. The LRDP land area targets for each of these areas include:

- 4.6 acres at the Glen Mor site (completed in 2007)
- 11.3 acres at the Canyon Crest site
- 9.6 acres, including a new student recreation center of 55,000 gsf on the West Campus

The Canyon Crest site will accommodate five playing fields. The Glen Mor site provides three playing fields (completed 2007). The West Campus site will accommodate two softball fields and four playing fields.

The site layouts included in The Strategic Plan for Student Housing provide a concept layout for the fields; however, the final layouts may vary. The program for recreation establishes a minimum playing field of 55 yards by 100 yards, with an additional buffer area of 10 yards (minimum) around the perimeter of each field for intramural sports to accommodate soccer league play.

The recreation fields can be used for numerous activities such as housing activity programming, summer camps, athletics, and formal recreation programs.

The recreation center on the West Campus will include a smaller scale version of the recreation center on East Campus and will include community amenities for the family housing residents.

CAMPUS HOUSING STRATEGIC PLAN



The Strategic Plan for Student Housing meets the long-range objectives of the University's LRDP and provides the physical framework to balance the mix of human activity, space needs, and connectivity to the campus and the surrounding region.

In this plan each neighborhood represents the graphical translation of the Ideal Residential Model (building and exterior space program) and Principles of Planning. The concepts test the physical opportunities and the capacities of each site.

There are five identifiable neighborhoods, as well as a Student Activities/Student Services facility on the existing Veitch site, to serve existing and new residential neighborhoods:

East Campus

Canyon Crest – Residence halls, group housing, dining and conference facility

Glen Mor – Apartment-style housing

Bannockburn – Apartment-style housing, housing services expansion, and offices/retail/services

Plaza – Apartment-style housing

Falkirk – Apartment-style housing

Veitch – Student activities/services

West Campus

Skye Family Housing – Apartment-style housing, child development center and recreation center

West Campus Apartments – Apartment-style housing

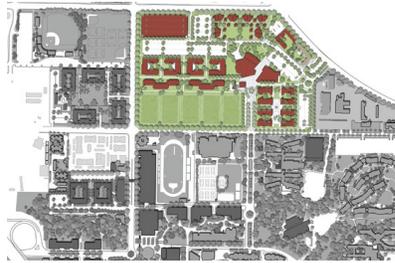
Medical School Housing – Apartment-style housing

The recommended neighborhood configurations are the product of rigorous investigation and reviews by the University Planning Committee and a variety of community and public forums.



EAST CAMPUS

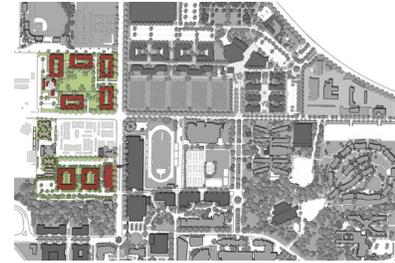
Canyon Crest



Glen Mor / Veitch / A-I



Bannockburn / Plaza / Falkirk



WEST CAMPUS

West Campus



Site	56.49± Acres 8 Total Phases	83.19± Acres 8 Total Phases	22.61± Acres 2 Phases	93.2± Acres 9 Total Phases
Housing	<p>Residence Halls 3,000 Beds 3, 3.5 and 4-Stories 1:4 Parking Space/Student Ratio 803 Parking Spaces³</p> <p>Group Housing 336 Beds 3-Stories 1:2 Parking Space/Student Ratio 208 Parking Spaces³</p> <p>Family Housing 268 Units Demolished</p>	<p>Apartments 800 Beds 3, 3.5 and 4-Stories 1:2 Parking Space/Student Ratio</p> <p>Parking Structure at A-I 500 Cars⁴</p> <p>Parking Structure at Glen Mor 600 Cars⁴</p>	<p>Apartments 448 Beds at Bannockburn 1,040 Beds at Falkirk 4-Stories 1:2 Parking Space/Student Ratio 400 Parking Spaces at Bannockburn¹ 600 Parking Spaces at Falkirk¹ 375 Beds Demolished at Bannockburn 450 Beds Demolished at Falkirk Housing Offices Expansion</p>	<p>Apartments 2,000+ Beds² 4-Stories 1:2 Parking Space/Student Ratio 1,172 Parking Spaces²</p> <p>Family Housing 708 Units 2-Stories 1.5:1 Parking/Space/Unit Ratio 1,062 Parking Spaces²</p> <p>Medical Student Housing 300 Beds</p>
Dining/Student Services	<p>Commons Dining – 941 Seats Retail Food Service Deli/Convenience Store Radio Station Demolished Child Care Center (Existing)</p>	<p>Aberdeen-Inverness Emporium Retail Store Renovated 1st Floor Commons/RSO</p> <p>Veitch Deli/Convenience Store Health Services Counseling Center Student Activities Center</p>	<p>Offices/Retail/Services 60 Parking Spaces</p>	<p>Retail/Convenience Store Retail/Student Services Child Development Centers (2@144 students each)</p>
Conference Services	Conference Services Center			
Recreation	5 Intramural Fields 1 Softball Field 1 Pool	3 Intramural Fields (Existing)	1 Pool/Club House (Falkirk)	Recreation Center 50 Parking Spaces 5 Intramural Fields 2 Softball Fields 2 Pools/Community Centers
Support	Maintenance Building			Grounds Maintenance Shop

¹ Parking distributes among the first floor of some buildings, on street and in surface lots.
² Provided in both surface lots, parallel parking on the street and in lots at the recreation fields.
³ Parking distributed in surface lots and parking structure.
⁴ Accommodates remainder of student parking, recreation parking, and replacement of existing spaces.



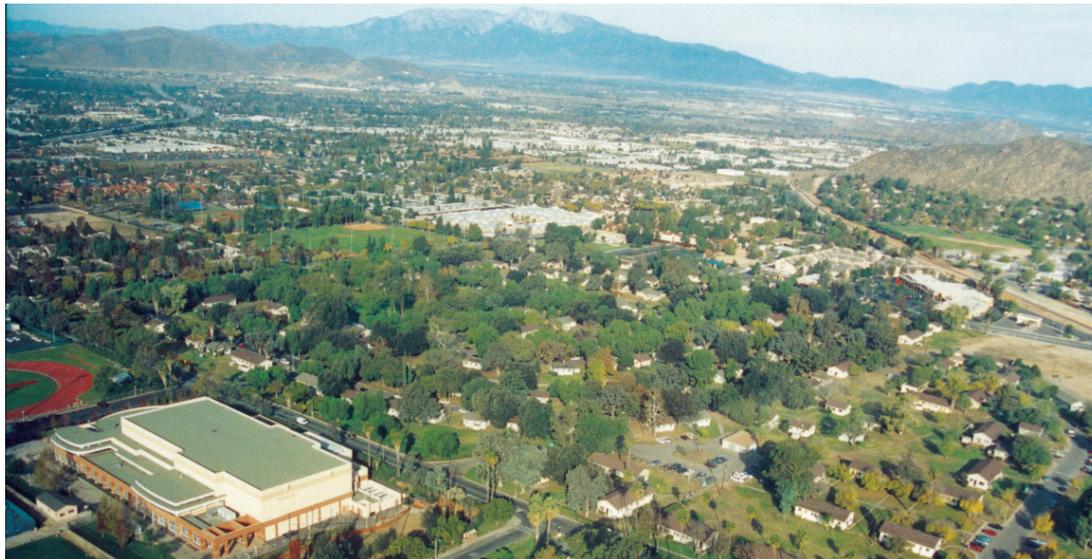
East Campus Sites



Bannockburn – Existing



Glen Mor Site



Canyon Crest Site

The East Campus is a residential and pedestrian friendly environment. The residential areas are distinct neighborhoods, each having its own social and physical identity. The existing landscape and network of paths and walks knit the neighborhoods together and create visual and physical connections to each other and to the broader campus community.

There are three proposed new neighborhoods on the East Campus plus the enhancement of the Veitch Site as a student services area serving all neighborhoods.

Canyon Crest

Dundee, Edinburgh, and Lennox residence halls, and the group houses compose the new neighborhood for undergraduates and upperclassmen.

Glen Mor Phase 2

New neighborhood for upperclassmen and graduates.

Bannockburn

Reconstructed neighborhood for upperclassmen and graduates.

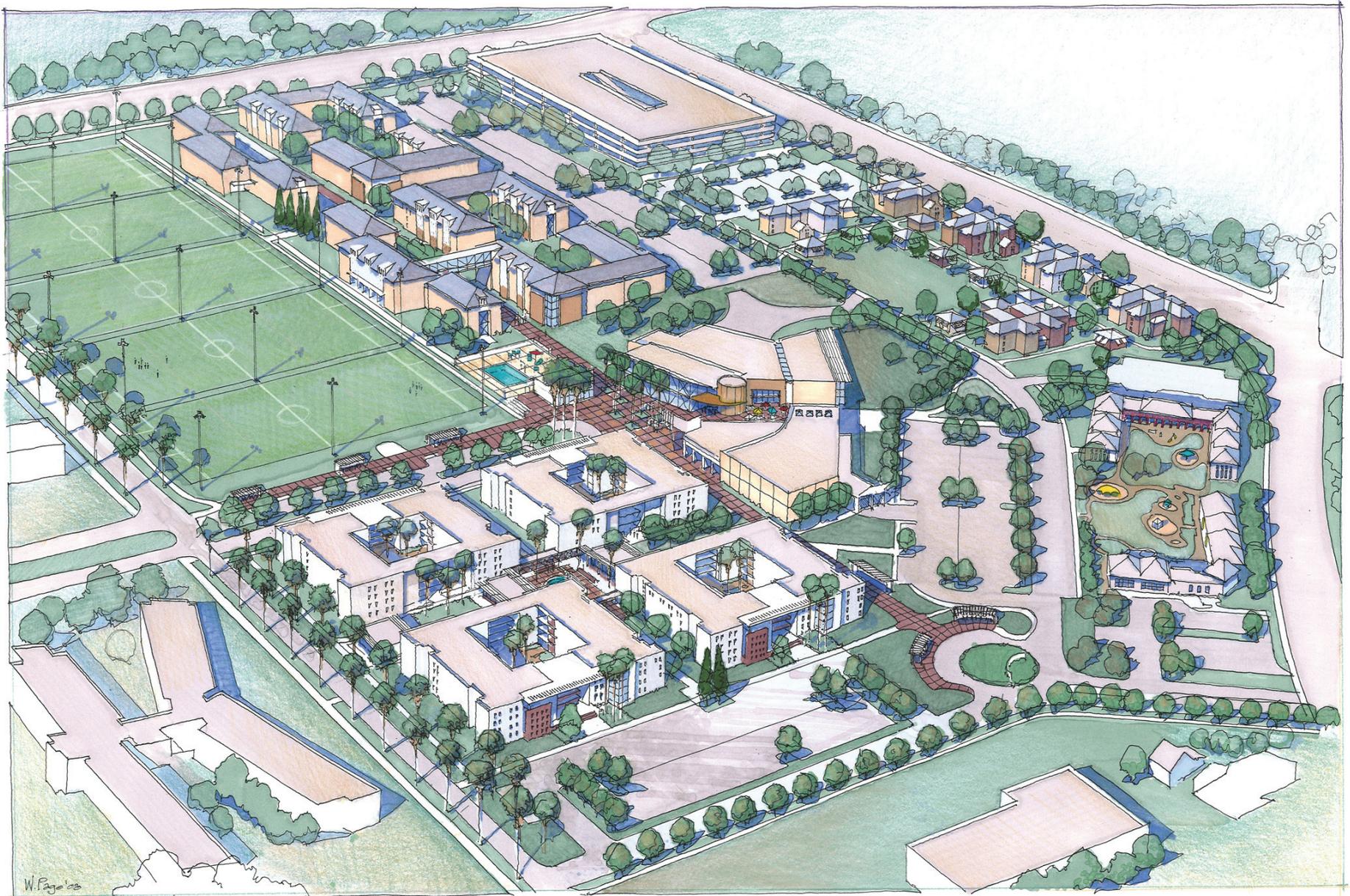
Falkirk

Reconstructed neighborhood for upperclassmen and graduates.

Veitch

Regional student activities and student services center.

The development of these neighborhoods and the primary circulation routes are consistent with the recommendation of UCR's 2005 Long Range Development Plan. Residential parking will be accommodated in each neighborhood.



Proposed Canyon Crest Site Development Concept

EAST CAMPUS canyon crest



Activity Spine Heading to Neighborhood Center

The Canyon Crest neighborhood achieves its identity and organization through a series of clustered courtyards, accommodating residence halls, small group houses, food service, administrative, community spaces, and recreation fields. The neighborhood commons and primary civic space are geographically centered in the neighborhood and provide a focal point for the neighborhood and a physical and visual link from Aberdeen Drive, a primary neighborhood entry and view corridor.

The courtyard composition is intentionally configured in a density higher than the density of the existing residence hall neighborhoods, providing both social and environmental response benefits. The intimate courtyards provide the opportunity for a heightened sense of community, a unique neighborhood identity, and a pleasant functional relationship between interior and exterior spaces. The courtyards are scaled to be “self-shading,” and open-ended to encourage air movement within and between courtyards. The courtyards have the opportunity to provide a significant degree of identity for the residents within the neighborhood, through size, scale/height, and variety in the landscape material. In addition to the courtyards, the neighborhood has a defined recreation zone serving the residents, the adjacent recreation complex, and the campus community.

As referenced in the group housing program model, the houses and their associated open spaces create the opportunity to bring together various clubs and organizations. The scale of the buildings provide a transition between the larger residence hall buildings and the lesser scale buildings on the north side of Blaine Street.

east campus canyon crest

The Group Houses are organized around an activity space with pedestrian paths and yard spaces that weave the residential, social spaces, and the primary community spaces into a comfortable low-scale urban village.

Other key site development features:

- secure edge (architectural streetscape along Blaine Street)
- future 1,500-2,000 car parking garage for commuters and a portion of residential users at Blaine and Canyon Crest
- internal vehicular circulation with access from Blaine Street and Watkins Drive per LRDP
- site entry off of Watkins accommodates child development center expansion
- paths create pedestrian connection between off-campus neighborhoods and campus
- recreation fields serve intramural sports and summer conferences
- dining, retail, and restrooms proximate to recreation fields
- pool and community spaces encourage opportunity for 24-hour activity
- clearly defined phasing options



View North to Market Place Dining Center from Intersection of Aberdeen Drive and Linden Street



Glen Mor Phase 2

The Glen Mor neighborhood achieves its identity and organization through its response to open space, primarily the recreation fields and the naturalistic features of the site.

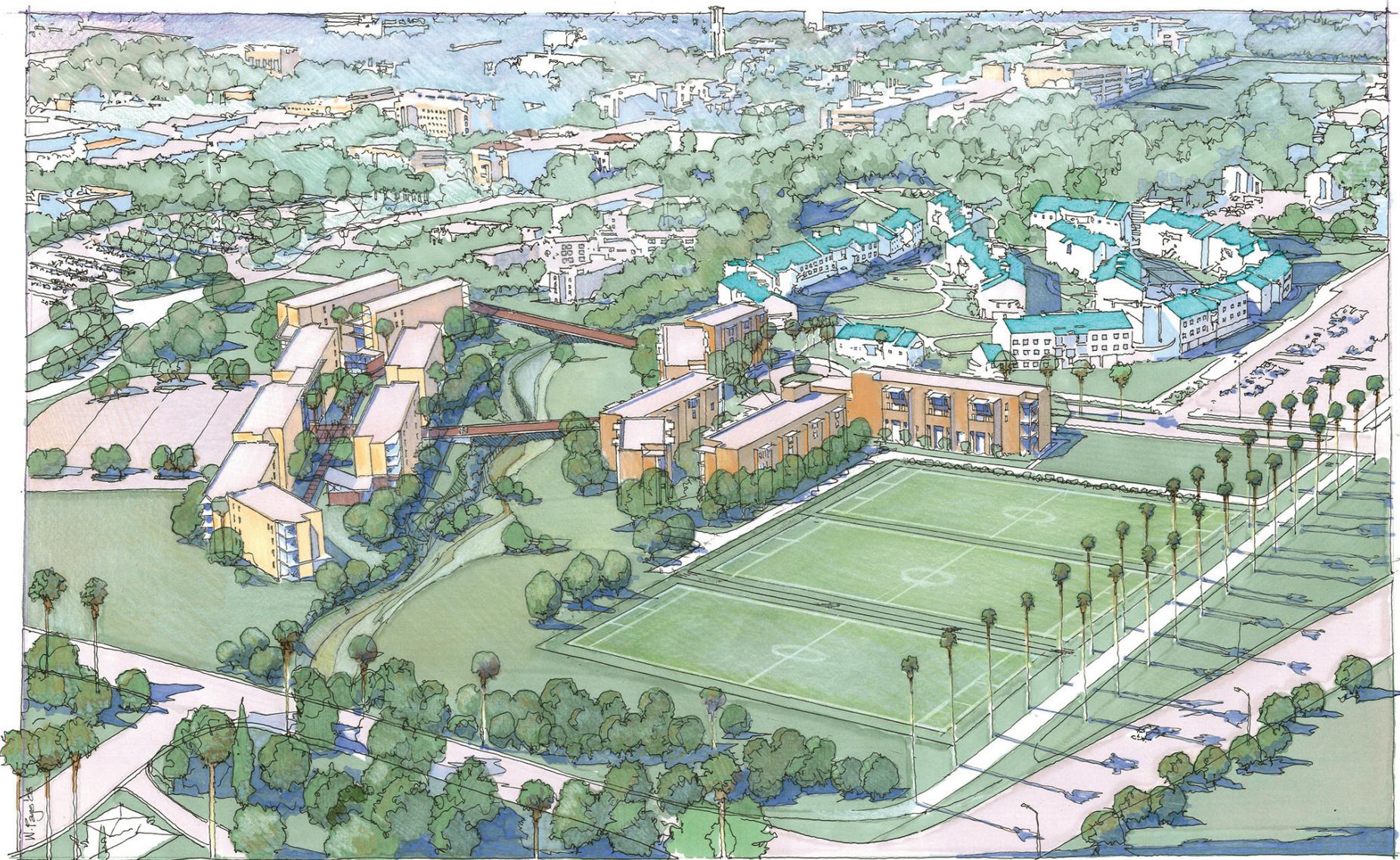
Phase 1 of the Glen Mor apartment neighborhood and its retail grill and community spaces opened in the fall of 2007. The buildings occupy the southern edge of the site and its three recreation fields are located along the north edge along Watkins Drive and Valencia Hill Drive. A landscape buffer is provided between the recreation fields and the adjacent private residential neighborhood along Valencia Hill Drive.

On the south edge of the site, the ridge and the arroyo create a unique setting for Phase 2, with buildings that step along the ridge in a “hill-town” fashion, complementing, conceptually, the narrow passages in Pentland Hills. Glen Mor Phase 2 will be connected to Phase 1 via two footbridges that cross the arroyo.

The arroyo will remain undisturbed, reflecting the natural environment.

The neighborhood pedestrian paths complement the existing paths and connections from Lothian and Pentland Hills and to the campus. The grade differential from the ridge to the road, along the southernmost edge, provides a natural location for a parking structure. It is recommended that the upper level deck be designed as an extension of the green space or as additional recreation fields.

east campus
glen mor





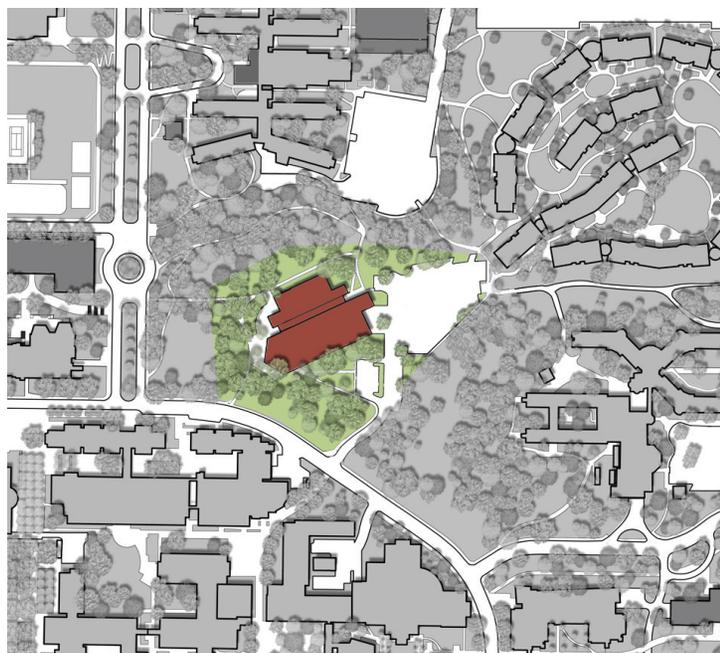
Glen Mor Phase 1

Other key site development features:

- focus view from housing back to Carillon Tower on campus
- 100-foot buffer along Valencia (berms, evergreen trees, shade trees, groundcovers)
- grill and convenience store to serve all phases of Glen Mor and Pentland Hills neighborhoods provided in fall of 2007
- Phase 2 residences on the ridge and their community spaces overlook the arroyo and boast views of surrounding mountains



Glen Mor Phase 1



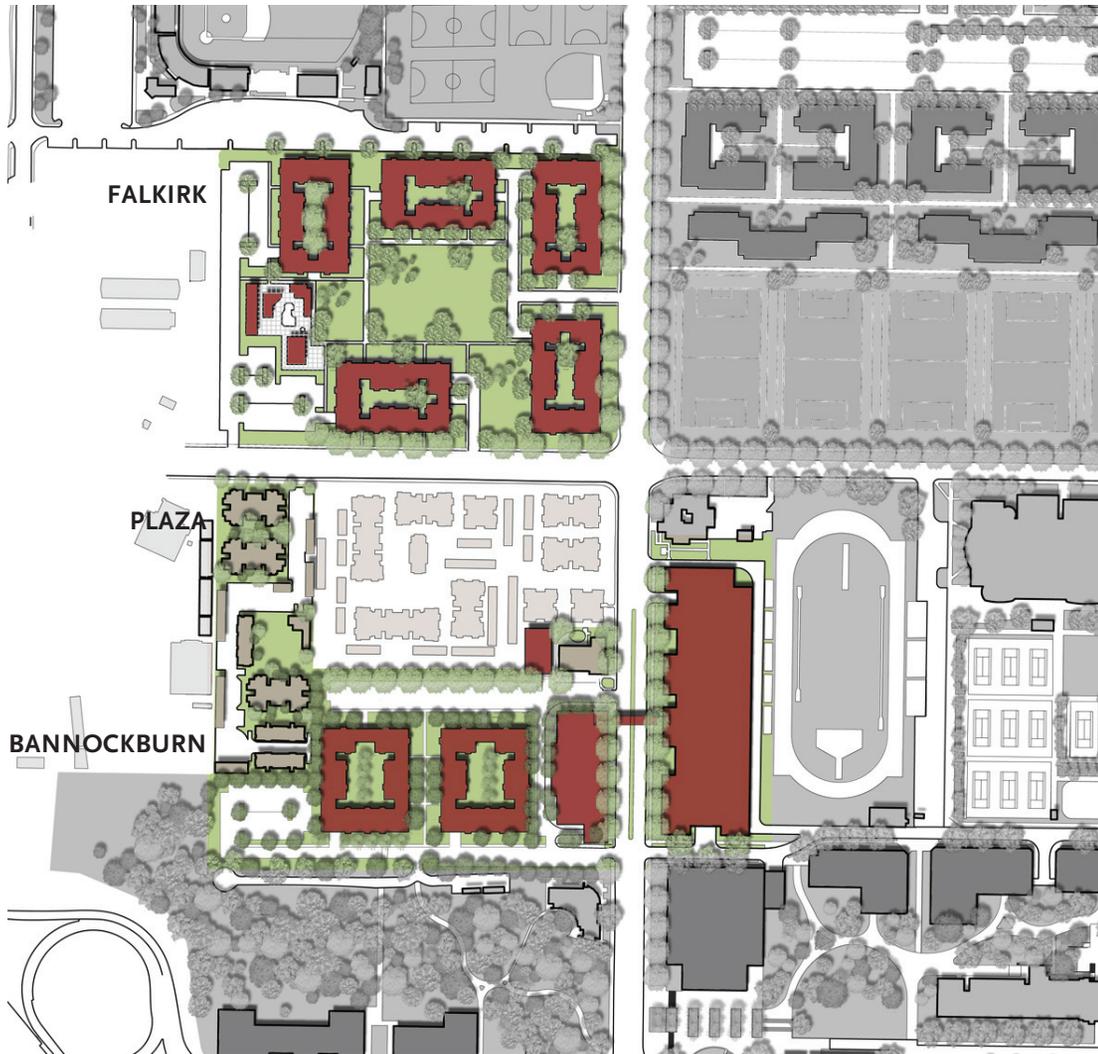
Veitch Site

The Veitch site is the nexus of paths leading from the campus to the majority of the existing and proposed residence halls. This creates a desirable location for a regional multi-purpose student activities and student services building. The site currently houses student health services, the counseling center and career services. It is recommended that student health and counseling programs be incorporated into the new Veitch facility at the lower level of the building to insure privacy for those entering the building. It is anticipated that career services will be relocated to another part of campus. The student activities functions/programs will occupy the main floor level, with the large student activities room opening via large doors onto the existing lawn to the west. A retail deli/convenience store will be located on the main level to provide retail food service before and after special functions and to serve students moving between the core campus and the adjacent residence halls.

The Veitch site is a lush and inviting natural environment. The placement of the new building within this site should be handled sensitively so that the buildings don't dominate the landscape and the paths and connections maintain their ambiance as nature walks. Additionally, the building should create strong interior/exterior relationships that emphasize and celebrate visual and physical connections between the landscape and the civic spaces within the building.

Other key site development features:

- preserve natural surroundings
- pedestrian bridge connecting the building to the campus
- preserve emergency vehicle access and parking for students who need to be driven to the student services (e.g., health center)
- provide well-screened service access





The redevelopment of the Bannockburn and Falkirk sites is driven predominately by issues of obsolescence and the need to create a more easily maintained and suitable living environment for students. Additionally, the capacity of the site is directly related to the parking capacity.

The site plan defines a new public identity for Bannockburn with a strong retail and services edge along Canyon Crest Drive, with the apartments utilizing a podium parking model. Community spaces for Bannockburn and Falkirk will be located on the plaza level of the podium. It is anticipated that Bannockburn residents will share the pool located at Plaza Apartments. The pool club house would need to be renovated/expanded. The Falkirk site will house its own pool and club house.



The buildings of both communities are organized to provide a residential scale yet maximize the density of the housing. To accomplish this, as referenced in the apartment program model, the apartments and their associated courtyards are built over one level of parking. This concept provides the desired number of parking spaces proximate to the residents, yet reinforces the neighborhood's pedestrian environment of courtyards and paths.

The elevated courtyards are scaled to be “self-shading,” and open-ended to encourage air movement within and between courtyards. The courtyards also have the opportunity to provide a significant degree of identity for the residents within the neighborhood, through size, scale/height, and variety in the landscape material.

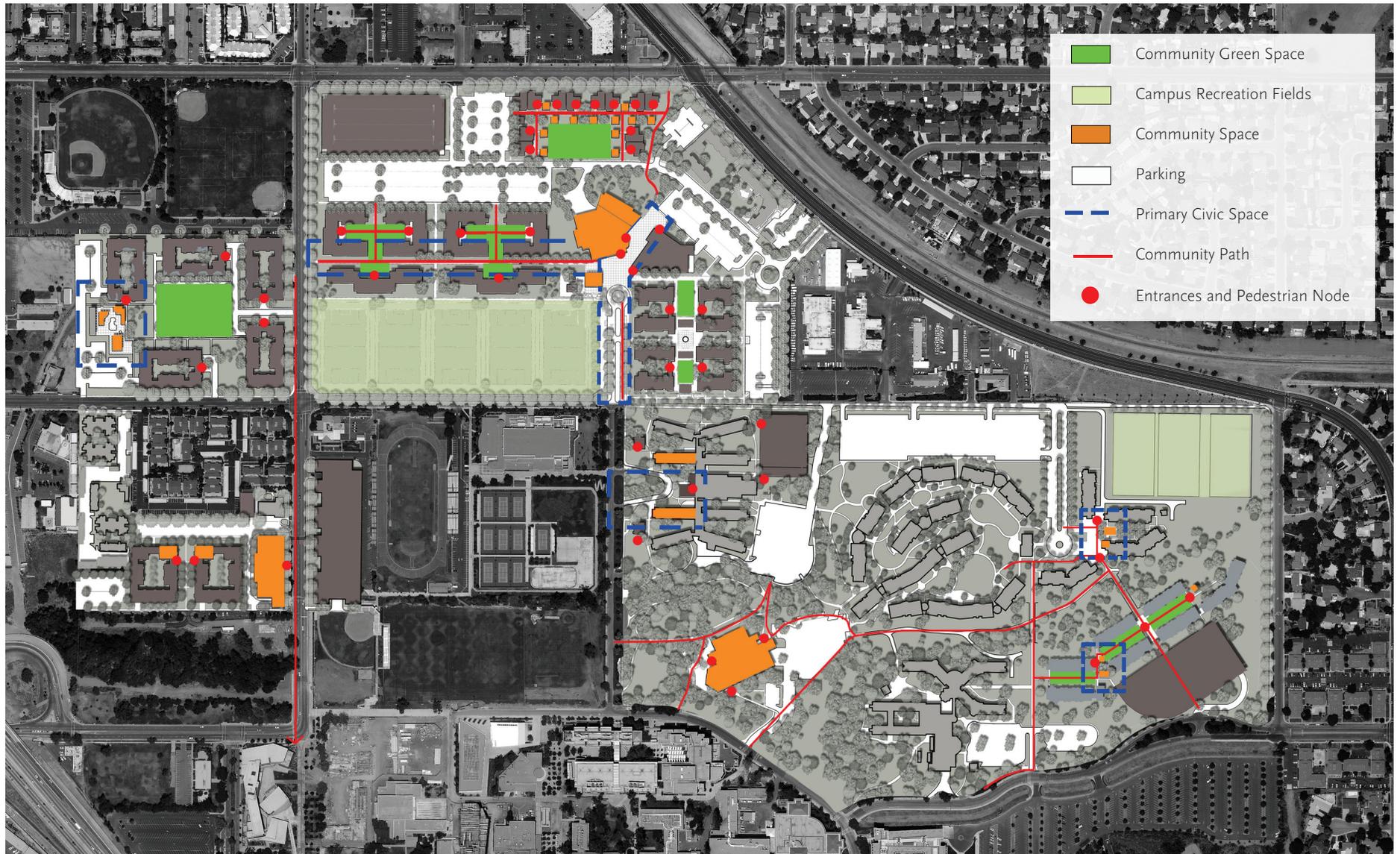
Key site development features:

- new construction of Bannockburn accommodates 448 students (vs. 375 in current configuration)
- new construction of Falkirk accommodates 1,040 students (vs. 450 in current configuration)
- Bannockburn site includes 90,000 gsf of retail/office/services (three-story) with parking for 60 cars
- central pedestrian path connects apartment buildings and adjacent off-site apartments to retail and services on Canyon Crest Drive
- green space area available for all apartment residents
- additional surface parking on the north, south and west sides of the site
- Bannockburn creates a strong linkage to existing Plaza Apartments

Shown on the following pages are the planning principles that will guide development on the East Campus. The principles were discussed at length on page 11 in the section titled, “Ideal Residential Community” and include:

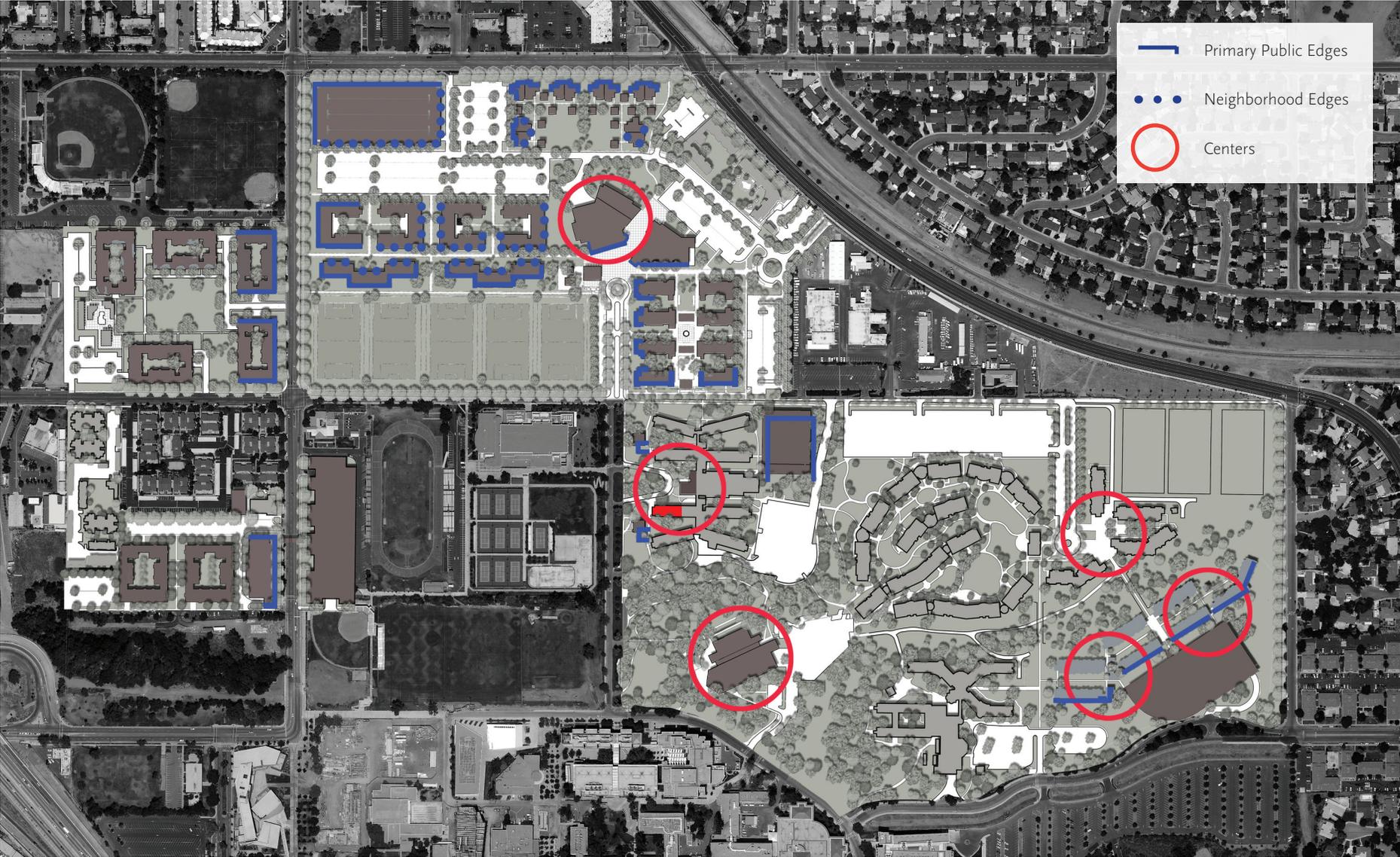
- Community and Identity
- Edges and Centers
- Connections and Destinations

east campus
planning principles
community + identity



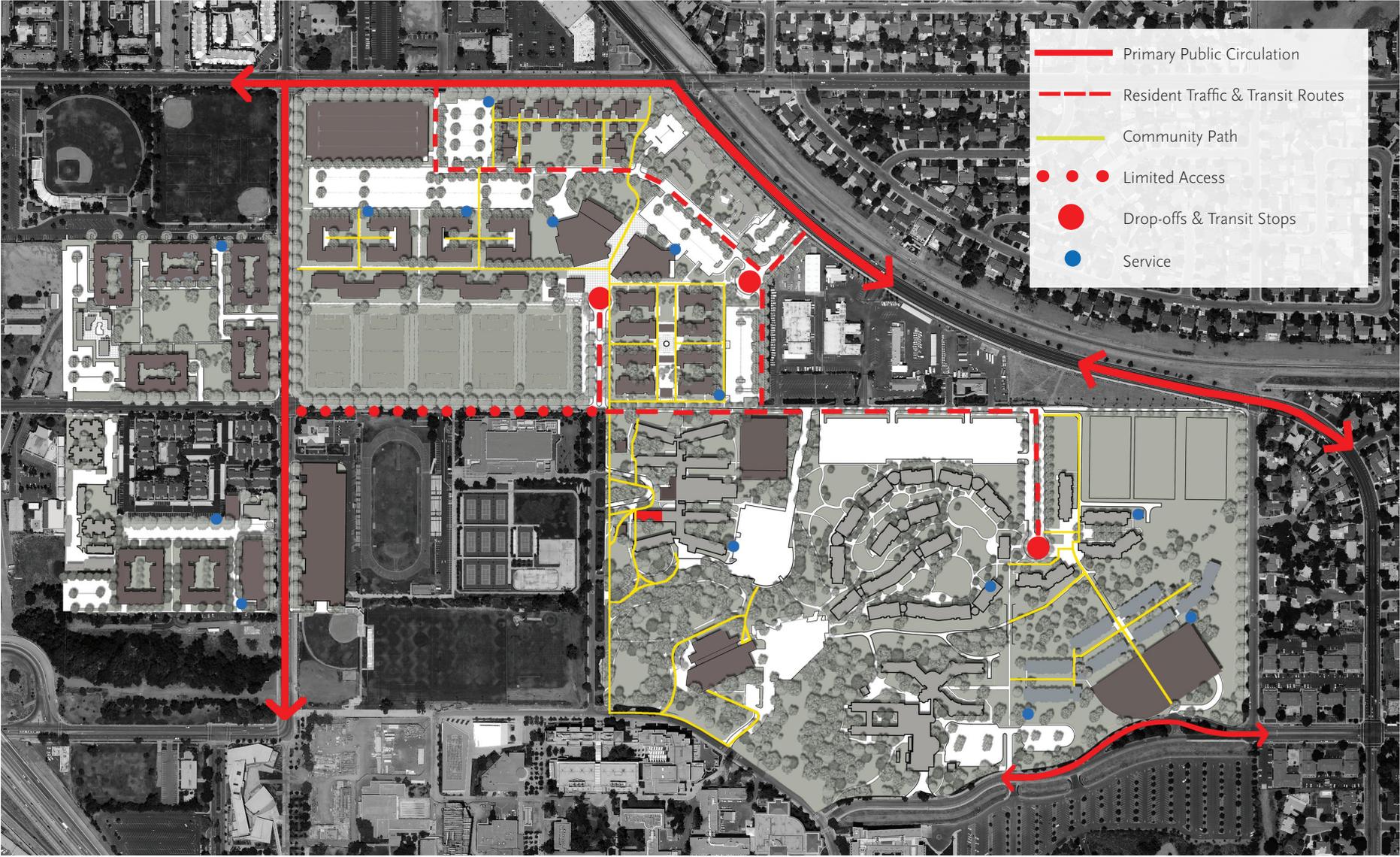
Community + Identity

east campus
planning principles
edges + centers

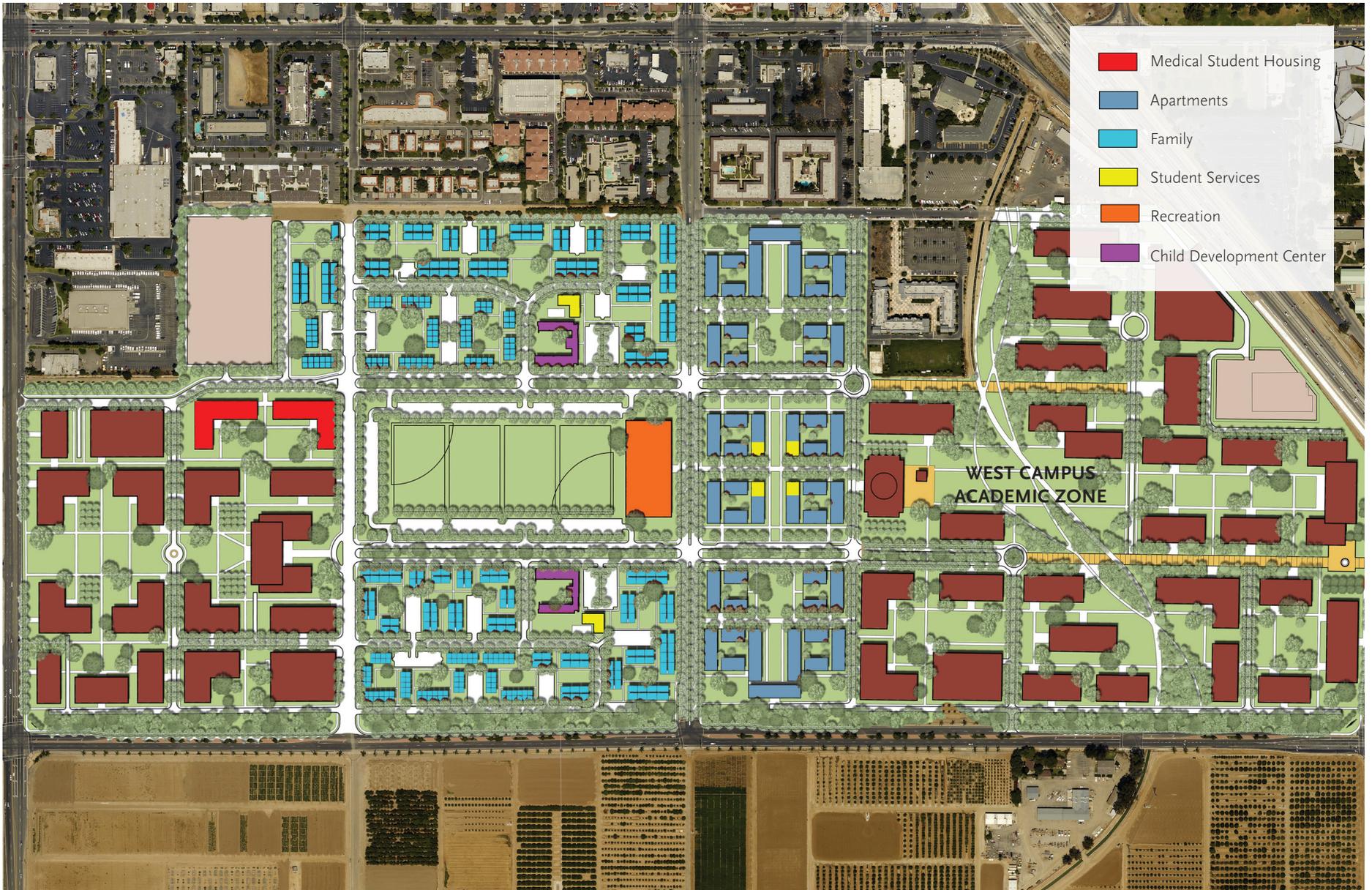


Edges + Centers

east campus
planning principles
connections + destinations



Connections + Destinations



West Campus – Proposed Development Scheme for Skye Family Housing, West Campus Apartments, and Medical Student Apartments





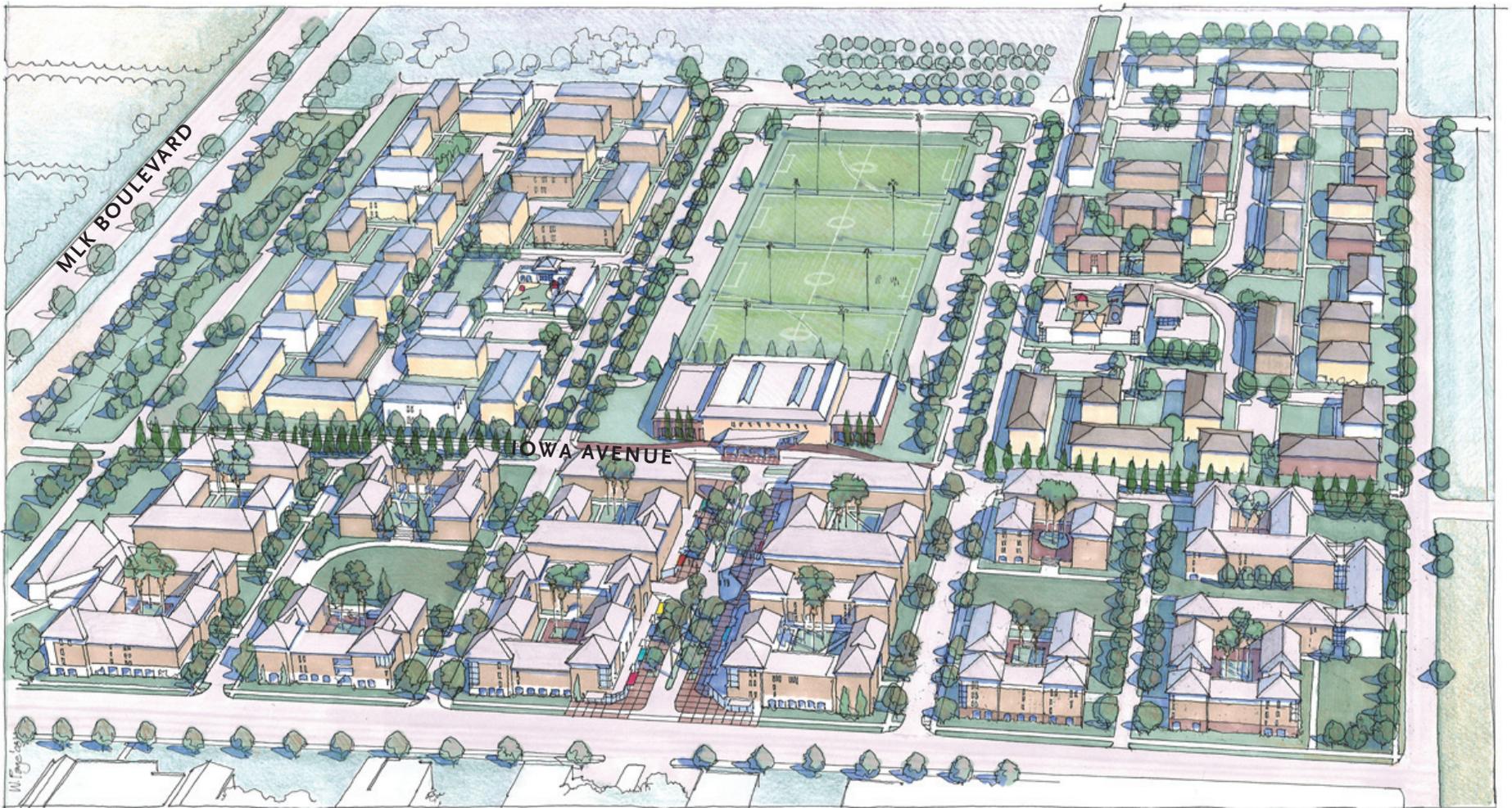
UCR's 2005 Long Range Development Plan identifies the West Campus as the primary expansion opportunity for academic, residential, and recreational growth. This Strategic Plan for Student Housing refines those strategies that pertain to the residential and student services planning and phasing concepts for West Campus.

There are two primary residential neighborhoods proposed for West Campus, the Skye neighborhood west of Iowa Avenue for family housing, targeting students with dependents, and an apartment neighborhood east of Iowa Avenue for graduate and upper division students. The neighborhood east of Iowa develops strong pedestrian and student service connections to the West Campus and academic core.

The development of these neighborhoods, densities, and the primary circulation routes are consistent with the recommendations of UCR's 2005 Long Range Development Plan. This document places emphasis on the contiguous zoning of the family area as self inclusive with recreation, community centers, and child development centers exclusively to the west of Iowa Avenue to avoid the need for families with young children to cross major vehicular routes.

Family Housing

The Skye family housing neighborhood is organized around neighborhood parks that will provide open play space and intentionally will minimize through traffic. The parks will define the residential zone and will be used by the residential community for informal as well as special neighborhood events.



Proposed Skye Site Development Concept



In addition to townhouses, two- and three-bedroom apartments will define the neighborhood blocks in the family housing zone. Both the townhouses and the apartments will have defined “front doors” facing the parks or the streets, with backyards/tot lot space, to create a secure and welcoming environment. The family housing units shall be two stories in height. There will be a combination of street parking and on-site parking in accordance with the LRDP.

Graduate and Upper Division Students

The neighborhood east of Iowa Avenue is organized in urban blocks utilizing elevated courtyards and housing, as referenced in the apartment program model. The apartment blocks are organized around central lawns to extend the campus fabric and to create logical and functional hierarchy in open spaces and connections to the academic and student services zones.

The apartment blocks have a retail and student services spine as a central organizing element. This spine functionally links the family housing neighborhood, the apartments, and the academic zone.

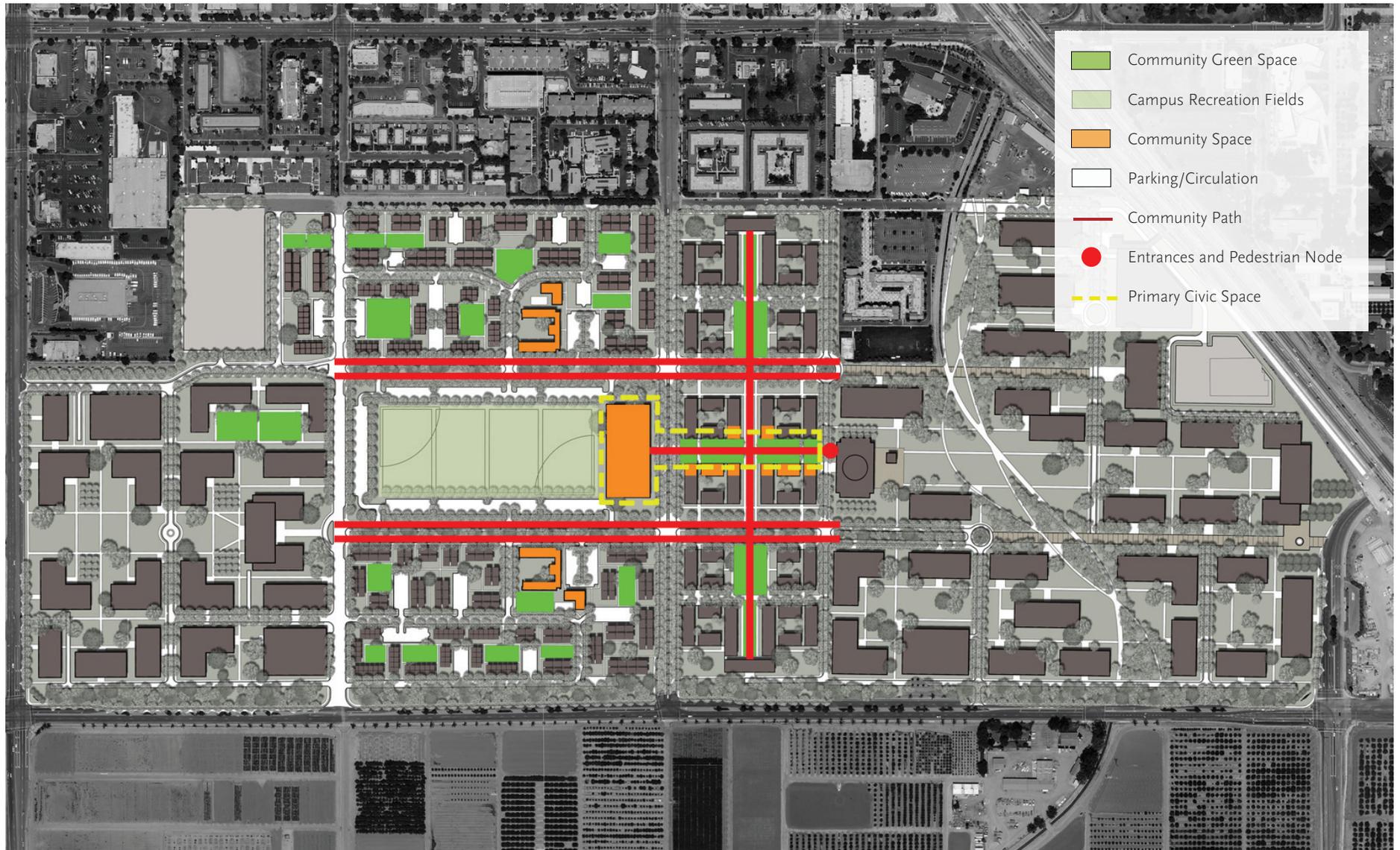
Other key site development features:

- 55,000 sf recreation center with swimming pool and intramural fields centrally located to the family and apartment housing, with a strong link to the West Campus academic core
- two child development centers accessible by neighborhood walks within the family housing neighborhood (approx. 144 children each)
- phasing strategy allows each phase of development to be complete (if total plan is not implemented for several years)
- future campus support/physical plant area located with access from Chicago Avenue

Shown on the following pages are the planning principles that will guide development on the East Campus. The principles were discussed at length on page 11 in the section titled, “Ideal Residential Community” and include:

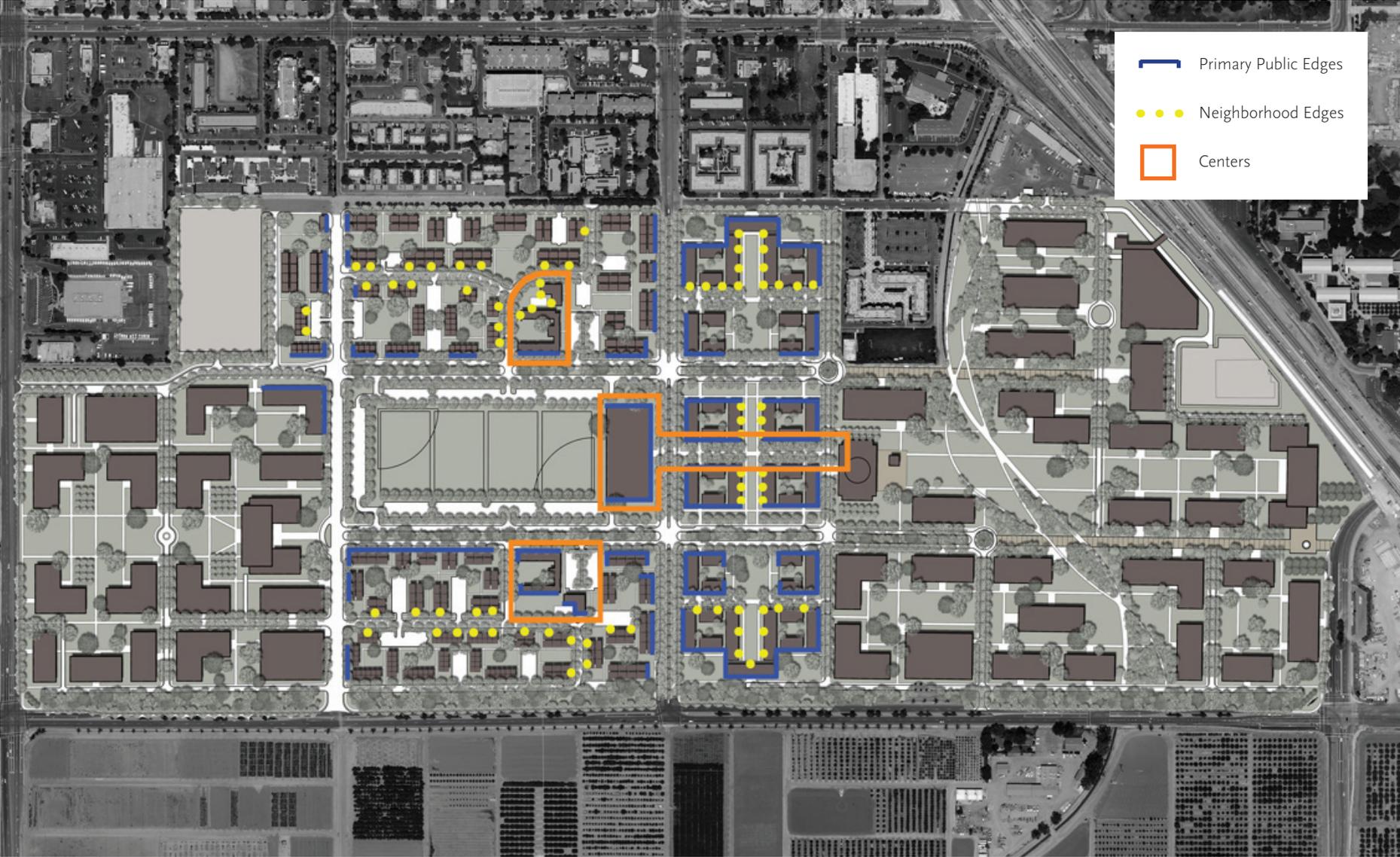
- Community and Identity
- Edges and Centers
- Connections and Destinations

west campus
planning principles
community + identity



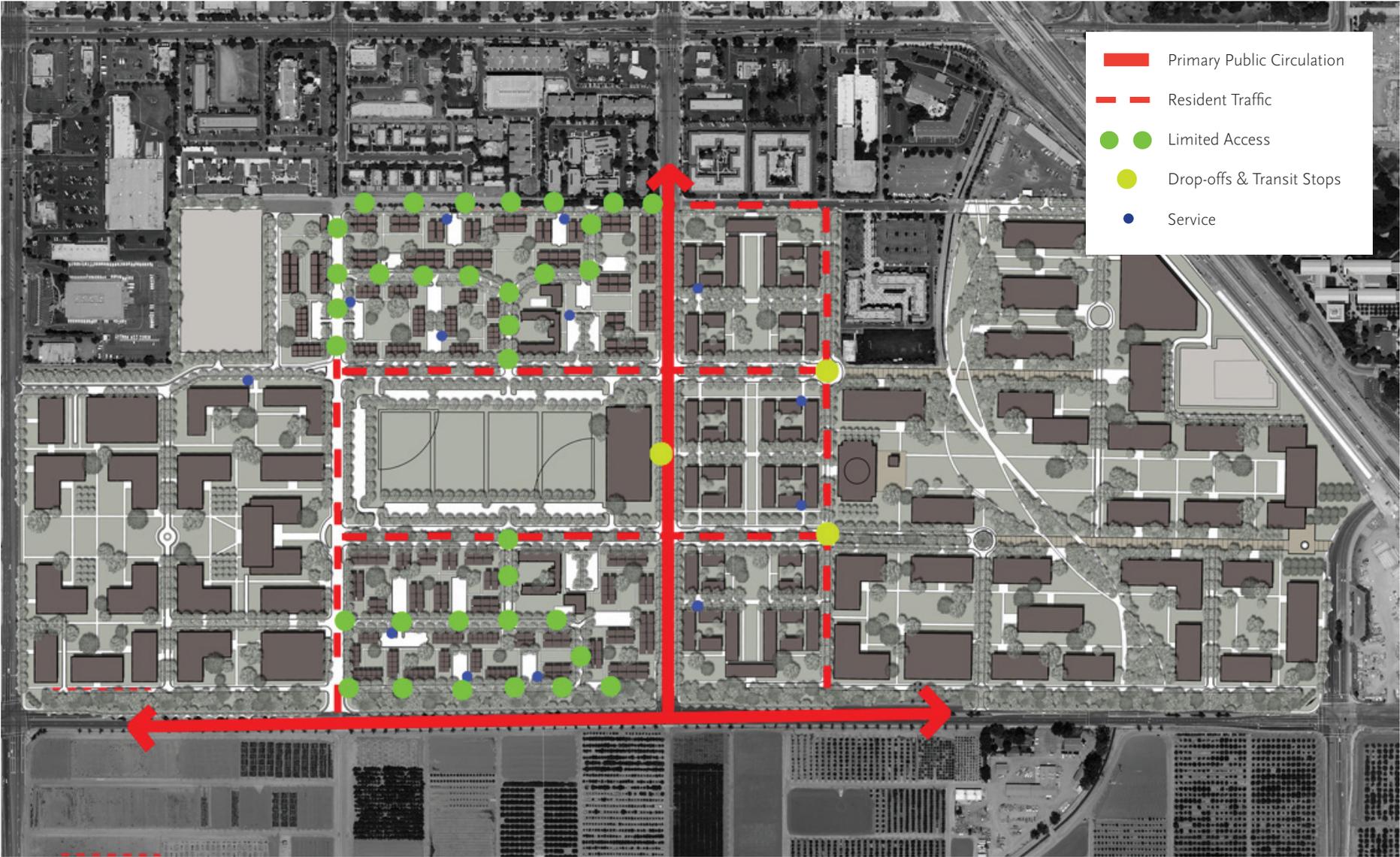
Community + Identity

west campus
planning principles
edges + centers



Edges + Centers

west campus
planning principles
connections + destinations



Connections + Destinations

targeted 2008 construction costs

Group Housing	\$178/gsf
Residence Halls	\$210/gsf
Apartments.....	\$178/gsf
Apartments over Parking*.....	\$248/gsf
Family Housing Apartments	\$132/gsf
Family Housing Townhouses	\$142/gsf
Glasgow Dining/Retail**	\$408/gsf
Conference Center	\$295/gsf
Retail/Convenience Stores**	\$408/gsf
Veitch Student Services	\$295/gsf
Child Development Center	\$203/gsf
Community Building.....	\$203/gsf
Offices/Services	\$200/gsf
Recreation Building**	\$220/gsf
Recreation Fields.....	\$12/sf
Additive premium for piles/special foundation needs on the Glen Mor Phase 2 Site	\$7/sf

* Podium level parking at \$70/sf and housing level at \$178/sf.

** Equipment costs are not included in the \$/gsf. Food service equipment is included with total project costs on the following pages.

The costs (left) represent construction dollar values for 2008. The implementation plans that follow are total project costs, which represent an itemized list of related project costs of building, site, parking, utilities, and streets. The cost per square foot data is drawn from benchmarking projects of similar scale and detail at other campuses, from the RS Means Cost data for 2008, a Schedule of Values for the recently completed Phase 1 of Glen Mor Housing, and from budget plans in DPPs for Canyon Crest, West Campus, and Arroyo. Project cost escalation is calculated at 5% per year from 2008 until 2026.

2008 Unit Costs for	Site Improvements	Site Utilities
Aberdeen-Inverness	\$ 5	\$ 2
Canyon Crest	\$ 10	\$ 4
Glen Mor	\$ 5	\$ 2
Veitch	\$ 5	\$ 2
Campus Apartments	\$ 10	\$ 4
West Campus	\$ 12	\$ 5
Podium Parking	\$ 52	
Building Demolition (Bannockburn, Falkirk, Veitch)	\$ 9	
Building Demolition (Canyon Crest)	\$12,852 /each	
Site Demolition	\$ 0.50	
Surface Parking	\$ 12	

PHASING AND IMPLEMENTATION PLAN

To develop budget projections for the Strategic Plan for Student Housing, the Planning Team utilized pricing data from the Canyon Crest DPP, West Campus Family Housing DPP, and the Glen Mor Phase I Schedule of Values.

A key factor in the establishment of budgets for any project is the desired quality level and the proposed delivery methodology. Due to the variety of housing types and possible construction and delivery methodologies, a wide range of costs are discussed for the larger project types.

The figures to the left represent the baseline assumptions for construction cost per square foot in 2008 dollars, based on the above criteria.

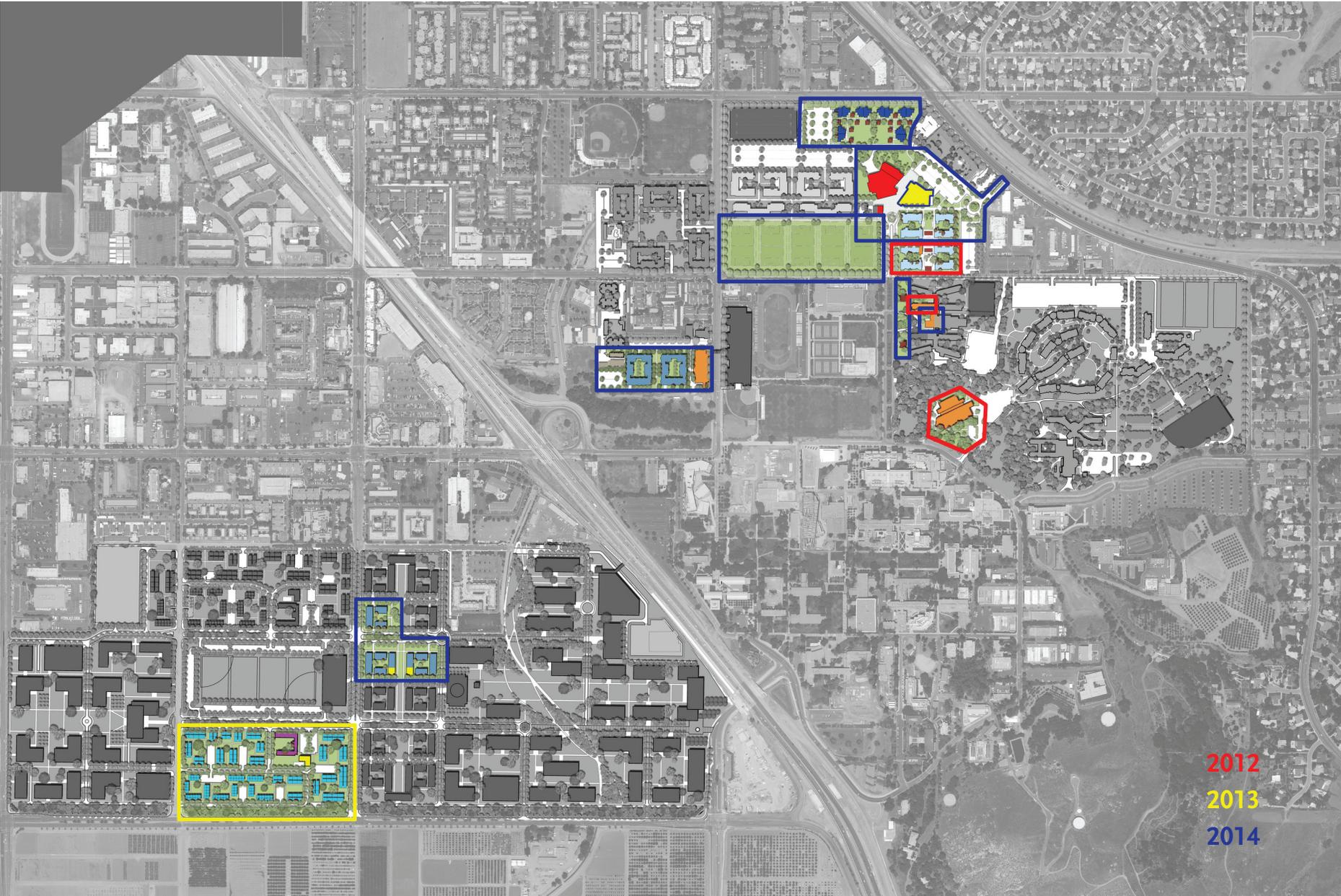
The construction delivery methodologies have not yet been determined by the University. Traditional delivery, as well as alternate and third-party development, have been considered; however, recent discussions question the financial advantages of third-party approaches, if the debt remains on the University's balance sheet. Additionally, the University desires to manage the facilities as opposed to having an independent property manager typical to many developer models.

The delivery methodology should be considered on a per project / per neighborhood basis, and the operations and quality of construction features should be assessed along with the financial advantages. It is recommended that the University consider alternate delivery methods, especially to the West Campus, particularly the family housing. At the end of this section is a brief definition of construction delivery methodologies.

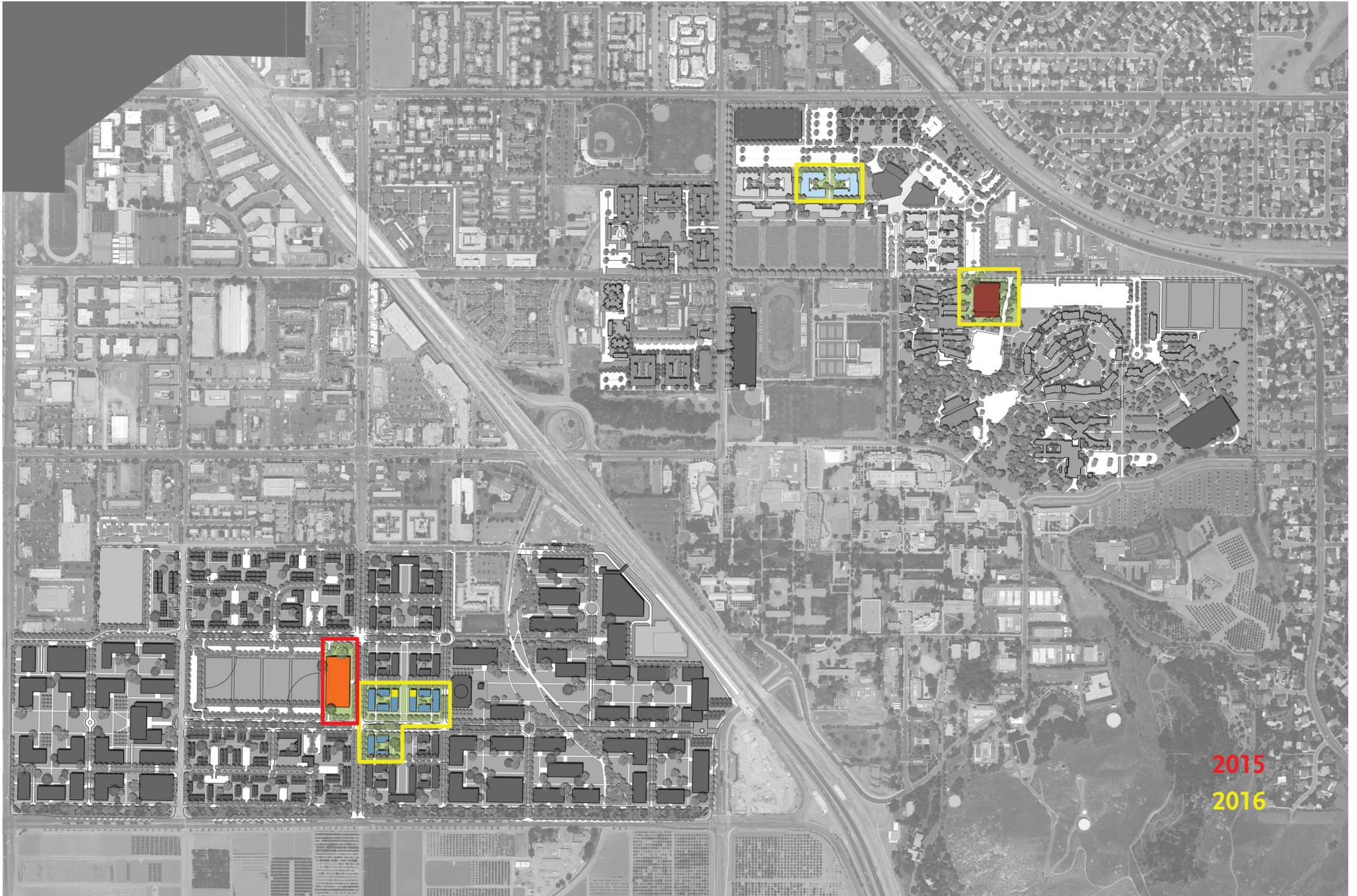
The sections that follow provide an overview of phasing and costs on a per project basis in both a comprehensive phasing plan and a phasing plan per neighborhood. The comprehensive phasing plan is presented in a series of three-year cycles commencing in 2008 and tracking the LRDP's targeted campus enrollment projects through 2025-26. The years and capacities shown in this phasing and implementation plan represent the earliest targeted completion dates based on the assumptions of this report. Under the proposed plan, the University's goal of achieving 50 percent resident population can be accomplished by 2025-26. The phases of this plan are flexible and may be accelerated or postponed to adjust to meet the changing needs of the University and in response to the schedules and capacities realized in the off-campus housing initiatives or other institutional forces.



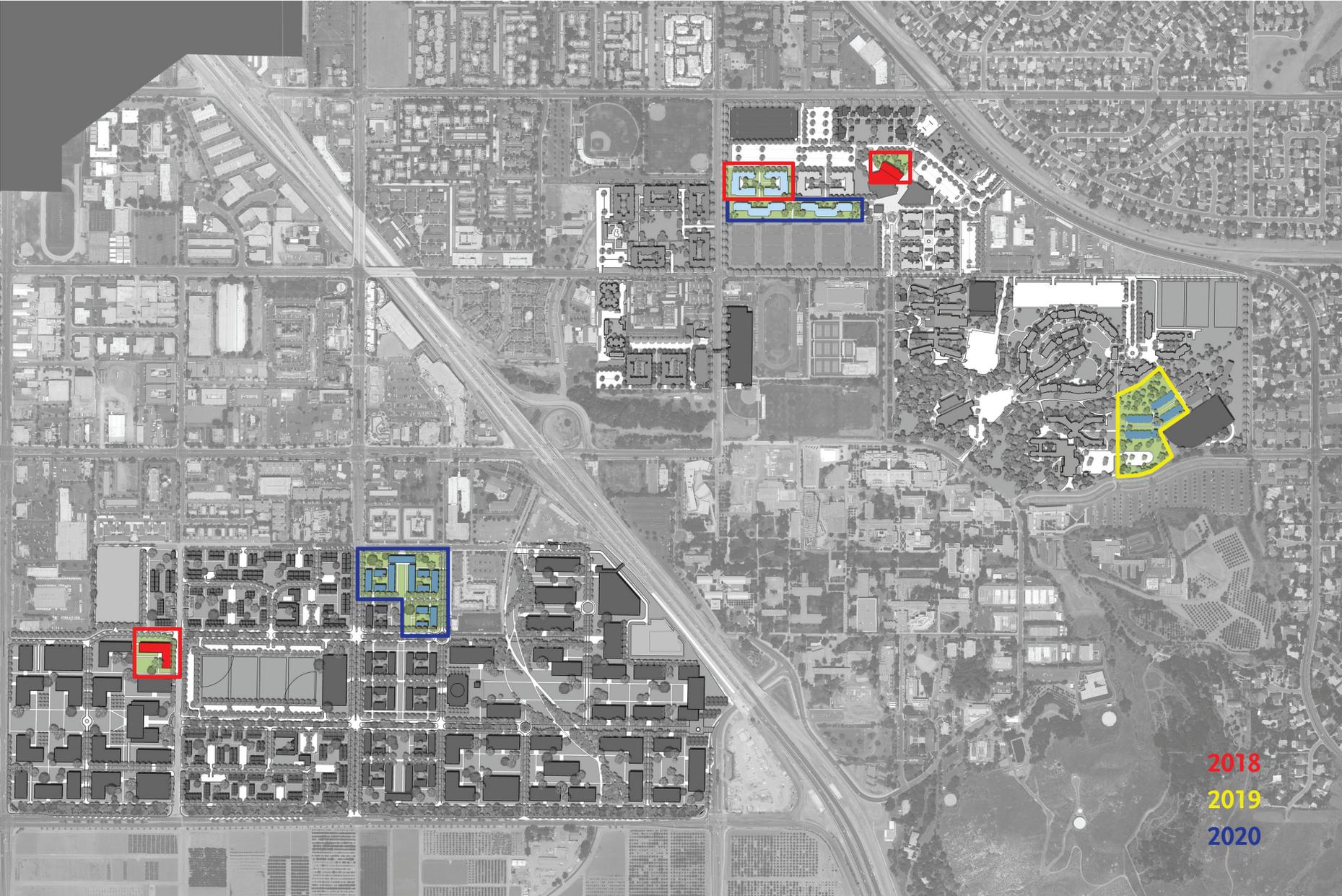
	2009					2010					2011				
	Capacity			Program	Total Cost	Capacity			Program	Total Cost	Capacity			Program	Total Cost
	RH	A	FH			RH	A	FH			RH	A	FH		
EXISTING															
Housing (exclusive of overflow beds)						0									
EAST CAMPUS															
Aberdeen-Inverness Renovation	0					0			2,880,701		0				
Emporium									AI Emporium						
Commons				Wing A off line for renovation					Community Space					Wing B off line for renovation	
Faculty/Staff Housing															
Canyon Crest					0				1,277,407						0
Housing	0	0	0			0	0	-50			0	0	0		
Dining															
Recreation Fields															
Parking Deck/ Maintenance Building															
Other															
Glen Mor					0				0						0
Housing	0	0	0			0	0	0			0	0	0		
Dining - "Grill" & Conv. Store															
Recreation Fields															
Garage															
Veitch					0				349,965						0
Veitch Student Services	0	0	0			0	0	0	off line		0	0	0	off line	
Health / Counseling Services															
Campus Apartments					5,954				1,741,648						0
Bannockburn									Housing Office Expansion						
Falkirk															
Plaza															
Potential Acquisition		270		Purchased											
WEST CAMPUS															
West Campus					0				0						118,753,001
Housing		0	0				0	0				0	368	Phases 1 Family Housing	
Day Care (144 child capacity / phase)														Complete	
Community Center														Complete	
Retail / Convenience Store															
Recreation Fields														Complete	
Recreation Building															
	Capacity			Total	Total Cost	Capacity			Total	Total Cost	Capacity			Total	Total Cost
	RH	A	FH			RH	A	FH			RH	A	FH		
Totals / Year	0	270	0	270	5,954	0	0	-50	-50	6,249,721	0	0	368	368	118,753,001
Cumulative Totals	2,920	765	268	3,953		2,920	765	218	3,903		2,920	765	586	4,271	
Enrollment Projections / Year				18,050					18,849					19,651	
Transfers				1,200					1,250					1,300	
Graduate Students				2,195					2,366					2,564	
Total % Resident Population				21.90%					20.71%					21.73%	



	2012				Total Cost	2013				Total Cost	2014				Total Cost
	Capacity			Program		Capacity			Program		Capacity			Program	
	RH	A	FH			RH	A	FH			RH	A	FH		
EXISTING															
Housing (exclusive of overflow beds)															
EAST CAMPUS															
Aberdeen-Inverness Renovation	0				845,208	0				0				3,393,936	
Emporium															
Commons				Wing B Community Space					RSO off line for renovation				RSO and public restroom expansion		
Faculty/Staff Housing													Faculty/Staff Housing		
Canyon Crest					65,604,699					0				142,971,403	
Housing	600	0	-147	Dundee Phase 1 Complete		0	0	0		936	0	-41	Dundee Phase 2 / Group Housing		
Dining													Phase 1 complete and Deli		
Recreation Fields													Complete		
Parking Deck/ Maintenance Building															
Other															
Glen Mor					0					0				0	
Housing	-506	506	0	RH to Apt		0	0	0		0	0	0			
Dining - "Grill" & Conv. Store															
Recreation Fields															
Garage															
Veitch					28,793,371					0				0	
Veitch Student Services	0	0		0 Complete		0	0	0		0	0	0			
Health / Counseling Services				Complete											
Campus Apartments					2,701,989					0				111,270,323	
Bannockburn		-375		Demolition							448		Office/Retail and Apartments		
Falkirk															
Plaza															
Potential Acquisition															
WEST CAMPUS															
West Campus					0					105,180,388				68,197,966	
Housing	0		0			0		340	Phase 2 Family Housing		500	0	Phase 1 Podium Apartments		
Day Care (144 child capacity / phase)									Complete						
Community Center									Complete						
Retail / Convenience Store															
Recreation Fields															
Recreation Building															
	Capacity				Total	Capacity				Total	Capacity				Total
	RH	A	FH			RH	A	FH			RH	A	FH		
Totals / Year	94	131	-147	78	97,945,267	0	0	340	340	105,180,388	936	948	-41	1,843	325,833,628
Cumulative Totals	3,014	896	439	4,349		3,014	896	779	4,689		3,950	1,844	738	6,532	
Enrollment Projections / Year				20,174					20,856					21,413	
Transfers				1,160					1,220						
Graduate Students				2,788					3,040						
Total % Resident Population				21.56%					22.48%					30.50%	



	2015				2016				2017						
	Capacity			Program	Total Cost	Capacity			Program	Total Cost	Capacity			Program	Total Cost
RH	A	FH	RH			A	FH	RH			A	FH			
EXISTING															
Housing (exclusive of overflow beds)															
EAST CAMPUS															
Aberdeen-Inverness Renovation	0				0				0					0	
Emporium															
Commons															
Faculty/Staff Housing															
Canyon Crest					76,545					124,795,044					0
Housing	0	0	0			600	0	-30	Edinburgh Phase 1		0	0	0		
Dining															
Recreation Fields															
Parking Deck/ Maintenance Building									Maintenance Warehouse/Shop						
Other									Parking for 500 Cars						
Glen Mor					0					0					0
Housing	0	0	0			0	0	0			0	0	0		
Dining - "Grill" & Conv. Store															
Recreation Fields															
Garage															
Veitch					0					0					0
Veitch Student Services	0	0	0			0	0	0			0	0	0		
Health / Counseling Services															
Campus Apartments					0					0					0
Bannockburn															
Falkirk															
Plaza															
Potential Acquisition															
WEST CAMPUS															
West Campus					24,399,144					73,072,994					0
Housing		0	0				500	0	Phase 2 Podium Apartments			0	0		
Day Care (144 child capacity / phase)															
Community Center															
Retail / Convenience Store									Complete						
Recreation Fields															
Recreation Building									Complete						
	Capacity			Total	Total Cost	Capacity			Total	Total Cost	Capacity			Total	Total Cost
Totals / Year	0	0	0	0	24,475,689	600	500	-30	1,070	197,868,039	0	0	0	0	0
Cumulative Totals	3,950	1,844	738	6,532		4,550	2,344	708	7,602		4,550	2,344	708	7,602	
Enrollment Projections / Year				21,956					22,302					22,694	
Transfers				855					900					1,000	
Graduate Students				1,812					1,900					2,000	
Total % Resident Population				29.75%					34.09%					33.50%	



2018
2019
2020



	2018				2019				2020									
	Capacity			Program	Total Cost	Capacity			Program	Total Cost	Capacity			Program	Total Cost			
RH	A	FH	RH			A	FH	RH			A	FH						
EXISTING																		
Housing (exclusive of overflow beds)																		
EAST CAMPUS																		
Aberdeen-Inverness Renovation	0				0				0					0				
Emporium																		
Commons																		
Faculty/Staff Housing																		
Canyon Crest					102,569,501				0					74,370,240				
Housing	600	0	0	Lennox Phase 1				0	0	0				600	0	0	Edinburgh/Lennox Phase 2	
Dining				Phase 2 Complete														
Recreation Fields																		
Parking Deck/ Maintenance Building																		
Other																		
Glen Mor					0				54,357,849					0				
Housing	0	0	0					0	400	0	Ph IIA complete				0	0	0	
Dining - "Grill" & Conv. Store																		
Recreation Fields																		
Garage																		
Veitch					0				0					0				
Veitch Student Services	0	0	0					0	0	0				0	0	0		
Health / Counseling Services																		
Campus Apartments					0				0					0				
Bannockburn																		
Falkirk																		
Plaza																		
Potential Acquisition																		
WEST CAMPUS																		
West Campus					18,894,330				0					81,835,174				
Housing		150	0	Phase I Medical Student Housing				0	0					500	0		Phase 3 Podium Apartments	
Day Care (144 child capacity / phase)																		
Community Center																		
Retail / Convenience Store																		
Recreation Fields																		
Recreation Building																		
	Capacity				Total	Total Cost	Capacity				Total	Total Cost	Capacity				Total	Total Cost
Totals / Year	600	150	0	750	121,463,831			0	400	0	400	54,357,849	600	500	0	1,100	156,205,414	
Cumulative Totals	5,150	2,494	708	8,352			5,150	2,894	708	8,752			5,750	3,394	708	9,852		
Enrollment Projections / Year				23,054							23,377							
Transfers				1,000							1,000							
Graduate Students				2,000							2,000							
Total % Resident Population				36.23%							37.44%						41.61%	



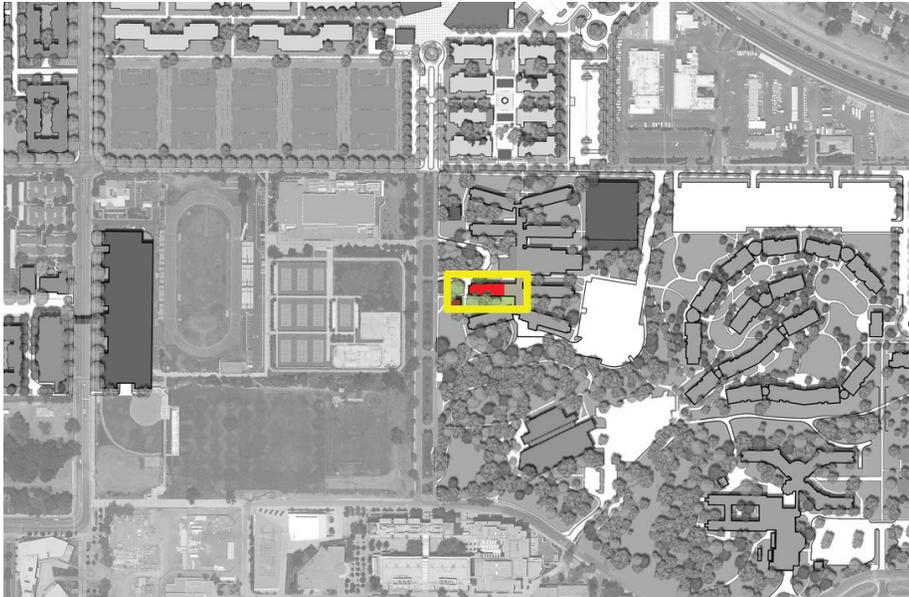
	2021				2022				2023																											
	Capacity			Program	Total Cost	Capacity			Program	Total Cost	Capacity			Program	Total Cost																					
RH	A	FH	RH			A	FH	RH			A	FH																								
EXISTING																																				
Housing (exclusive of overflow beds)																																				
EAST CAMPUS																																				
Aberdeen-Inverness Renovation	0				0				0					0																						
Emporium																																				
Commons																																				
Faculty/Staff Housing																																				
Canyon Crest					0				0					0																						
Housing	0	0	0		0	0	0		0	0	0		0	0	0																					
Dining																																				
Recreation Fields																																				
Parking Deck/ Maintenance Building																																				
Other																																				
Glen Mor					58,010,337				0					0																						
Housing	0	400	0	Ph IIB complete		0	0	0		0	0	0		0	0																					
Dining - "Grill" & Conv. Store																																				
Recreation Fields																																				
Garage																																				
Veitch					0				0					0																						
Veitch Student Services	0	0	0			0	0	0		0	0	0		0	0																					
Health / Counseling Services																																				
Campus Apartments					0				0					0																						
Bannockburn																																				
Falkirk																																				
Plaza																																				
Potential Acquisition																																				
WEST CAMPUS																																				
West Campus					0				21,413,574					0																						
Housing		0	0				150	0	Phase 2 Medical Student Housing		0	0																								
Day Care (144 child capacity / phase)																																				
Community Center																																				
Retail / Convenience Store																																				
Recreation Fields																																				
Recreation Building																																				
	Capacity				Total				Total Cost				Capacity				Total				Total Cost															
	RH	A	FH		RH	A	FH		RH	A	FH		RH	A	FH		RH	A	FH		RH	A	FH		RH	A	FH		RH	A	FH		RH	A	FH	
Totals / Year	0	400	0	400	58,010,337	0	150	0	150	21,413,574	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Cumulative Totals	5,750	3,794	708	10,252		5,750	3,944	708	10,402		5,750	3,944	708	10,402		5,750	3,944	708	10,402		5,750	3,944	708	10,402		5,750	3,944	708	10,402		5,750	3,944	708	10,402		
Enrollment Projections / Year				23,985					24,297					24,613					24,613					24,613					24,613							
Transfers				1,000					1,000					1,000					1,000					1,000					1,000							
Graduate Students				2,000					2,000					2,000					2,000					2,000					2,000							
Total % Resident Population				42.74%					42.81%					42.26%					42.26%					42.26%					42.26%							



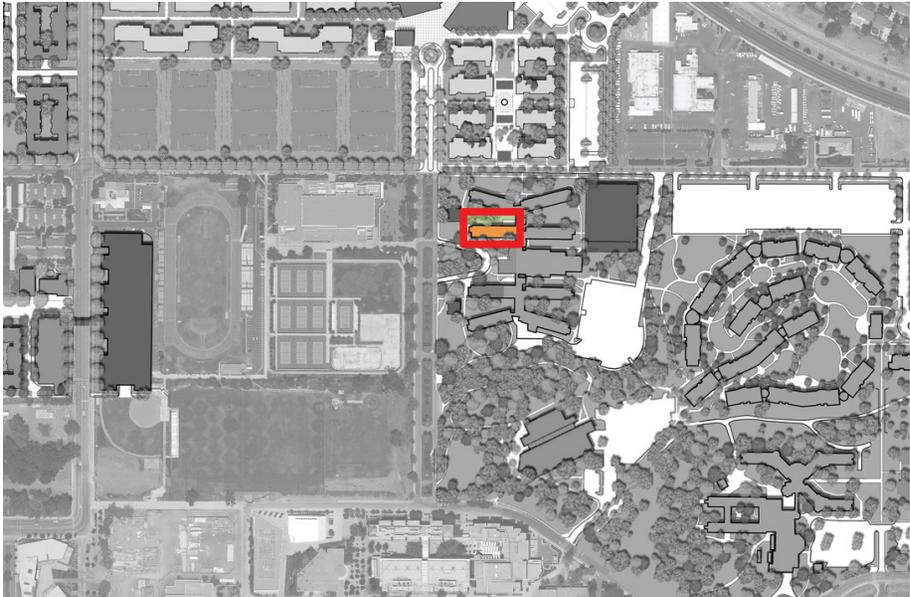
	2024				2025				2026						
	Capacity			Program	Total Cost	Capacity			Program	Total Cost	Capacity			Program	Total Cost
RH	A	FH	RH			A	FH	RH			A	FH			
EXISTING															
Housing (exclusive of overflow beds)															
EAST CAMPUS															
Aberdeen-Inverness Renovation	0				0				0					0	
Emporium															
Commons															
Faculty/Staff Housing															
Canyon Crest					0				0					0	
Housing	0	0	0		0	0	0		0	0	0		0	0	0
Dining															
Recreation Fields															
Parking Deck/ Maintenance Building															
Other															
Glen Mor					0				0					0	
Housing	0	0	0		0	0	0		0	0	0		0	0	0
Dining - "Grill" & Conv. Store															
Recreation Fields															
Garage															
Veitch					0				0					0	
Veitch Student Services	0	0	0		0	0	0		0	0	0		0	0	0
Health / Counseling Services															
Campus Apartments					5,031,445									126,745,252	
Bannockburn															
Falkirk		-450		Demolition									1,040		
Plaza															
Potential Acquisition															
WEST CAMPUS															
West Campus					91,568,232				0					0	
Housing	500	0	0	Phase 4 Podium Apartments				0	0				0	0	
Day Care (144 child capacity / phase)															
Community Center															
Retail / Convenience Store															
Recreation Fields															
Recreation Building															
	Capacity			Total	Total Cost	Capacity			Total	Total Cost	Capacity			Total	Total Cost
Totals / Year	0	50	0	50	96,599,677	0	0	0	0	0	0	1,040	0	1,040	126,745,252
Cumulative Totals	5,750	3,994	708	10,452		5,750	3,994	708	10,452		5,750	5,034	708	11,492	
Enrollment Projections / Year				24,933					25,257					25,585	
Transfers				1,000					1,000					1,000	
Graduate Students				2,000					2,000					2,000	
Total % Resident Population				41.92%					41.38%					44.92%	

aberdeen-inverness phasing
2010, 2012, 2014

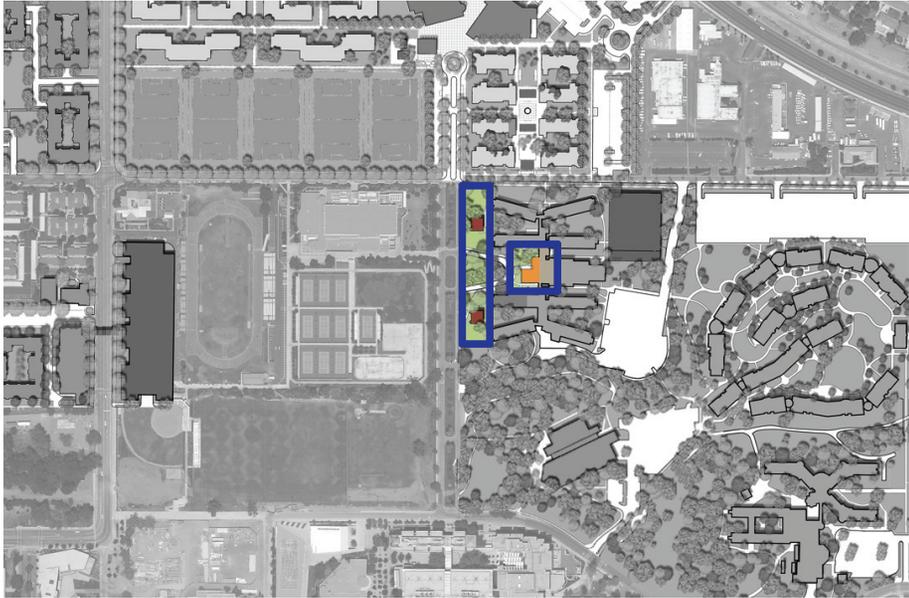
2010



2012



2014



Year 2010	Capacity			Area		Cost	Constr. Costs	Total Costs
	Residence Halls	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work								
Site Improvements						22,000	5.00	110,000
Site Utilities						22,000	2.00	44,000
Community Spaces				2,860			75.00	214,500
C-store Deli				4,191			408.00	1,709,928
Subtotal	0	0	0	7,051	22,000			2,078,428
5% Contingency								103,921
20% Soft costs								436,470
Subtotal								2,618,819
Escalation			2.00					2,880,701
Total	0	0	0	7,051	22,000			2,880,701

Year 2012	Capacity			Area		Cost	Constr. Costs	Total Costs
	Residence Halls	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work								
Site Improvements						22,000	5.00	110,000
Site Utilities						22,000	2.00	44,000
Community Spaces				5,400			75.00	405,000
Subtotal	0	0	0	5,400	22,000			559,000
5% Contingency								27,950
20% Soft costs								117,390
Subtotal								704,340
Escalation			4.00					845,208
Total	0	0	0	5,400	22,000			845,208

Year 2014	Capacity			Area		Cost	Constr. Costs	Total Costs
	Residence Halls	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work								
Site Improvements						26,000	5.00	130,000
Site Utilities						26,000	2.00	52,000
Resident Services Office				4,380			200.00	876,000
Head Resident (A)	2			2,160			75.00	162,000
Staff Housing (TH)	4			6,000			142.00	852,000
Subtotal	0	0	0	12,540	26,000			2,072,000
5% Contingency								103,600
20% Soft costs								435,120
Subtotal								2,610,720
Escalation			6.00					3,393,936
Total	0	0	0	12,540	26,000			3,393,936

canyon crest phasing
2010, 2012, 2014, 2015

2012



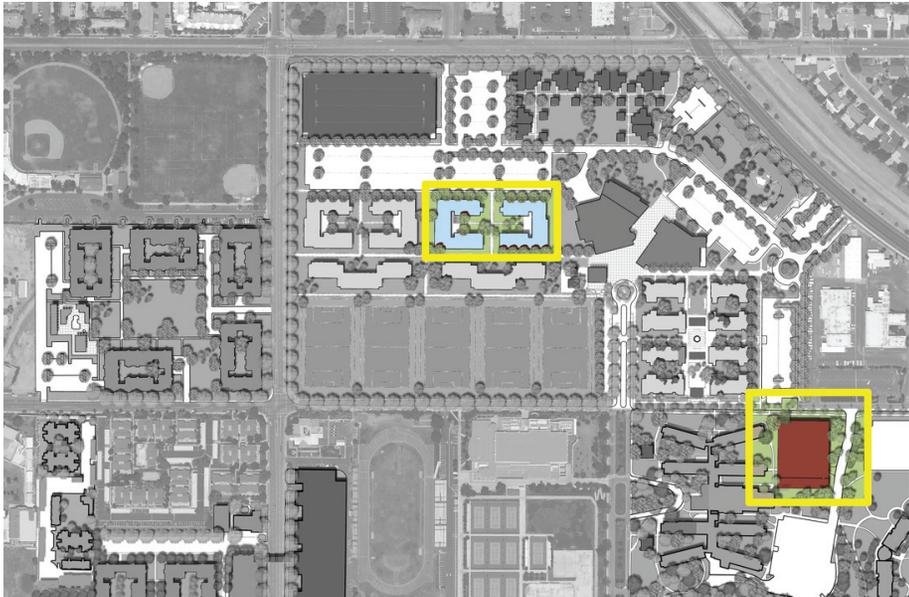
2014



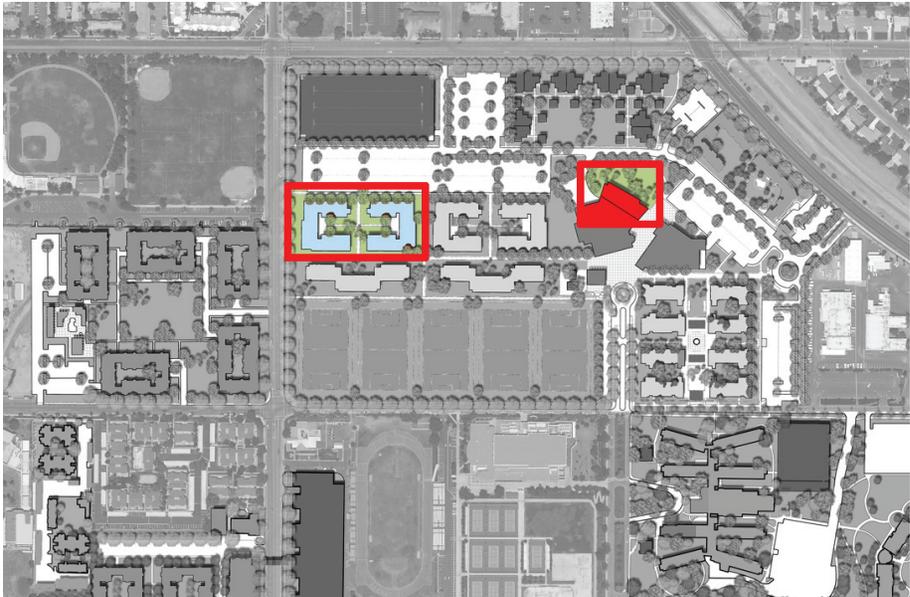
Year 2010	Capacity				Area		Cost	Constr. Costs	Total Costs
	Residence Halls	Apartment Beds	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work									
Building Demolition				-50	50		14,533.00	726,650	
Site Demolition						390,000	0.50	195,000	
Subtotal	0	0	0	-50	0	390,000		921,650	
5% Contingency								46,083	
20% Soft costs								193,547	
Subtotal								1,161,279	
Escalation				2.00				1,277,407	
Total	0	0	0	-50	0	390,000			1,277,407
Year 2012	Capacity				Area		Cost	Constr. Costs	Total Costs
Scope of Work	Residence Halls	Apartment Beds	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Site Improvements						390,000	10.00	3,900,000	
Site Utilities						390,000	4.00	1,560,000	
Res Halls (beds)	600				168,000		210.00	35,280,000	
Building Demolition				-147	147		14,533.00	2,136,351	
Site Demolition						1,026,000	0.50	513,000	
Subtotal	600	0	0	-147	168,000	1,416,000		43,389,351	
5% Contingency								2,169,468	
20% Soft costs								9,111,764	
Subtotal								54,670,582	
Escalation				4.00				65,604,699	
Total	600	0	0	-147	168,000	1,416,000			65,604,699
Year 2014	Capacity				Area		Cost	Constr. Costs	Total Costs
Scope of Work	Residence Halls	Apartment Beds	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Site Improvements						533,772	10.00	5,337,720	
Site Utilities						533,772	4.00	2,135,088	
Res Halls (beds)	600				168,000		210.00	35,280,000	
Group Housing	336				90,000		178.00	16,020,000	
Dining (seats)				378	46,840		408.00	19,110,720	
C-store Deli					6,864		408.00	2,800,512	
Recreation Fields						492,228	12.00	5,906,736	
Building Demolition				-41	41		14,533.00	595,853	
Site Demolition						195,000	0.50	97,500	
Subtotal	936	0	0	-41	311,704	1,221,000		87,284,129	
5% Contingency								4,364,206	
20% Soft costs								18,329,667	
Subtotal								109,978,003	
Escalation				6.00				142,971,403	
Total	936	0	0	-41	311,704	1,221,000			142,971,403
Year 2015	Capacity				Area		Cost	Constr. Costs	Total Costs
Scope of Work	Residence Halls	Apartment Beds	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Site Demolition						90,000	0.50	45,000	
Subtotal	0	0	0	0	0	90,000		45,000	
5% Contingency								2,250	
20% Soft costs								9,450	
Subtotal								56,700	
Escalation				7.00				76,545	
Total	0	0	0	0	0	90,000			76,545

canyon crest phasing
2016, 2018, 2020

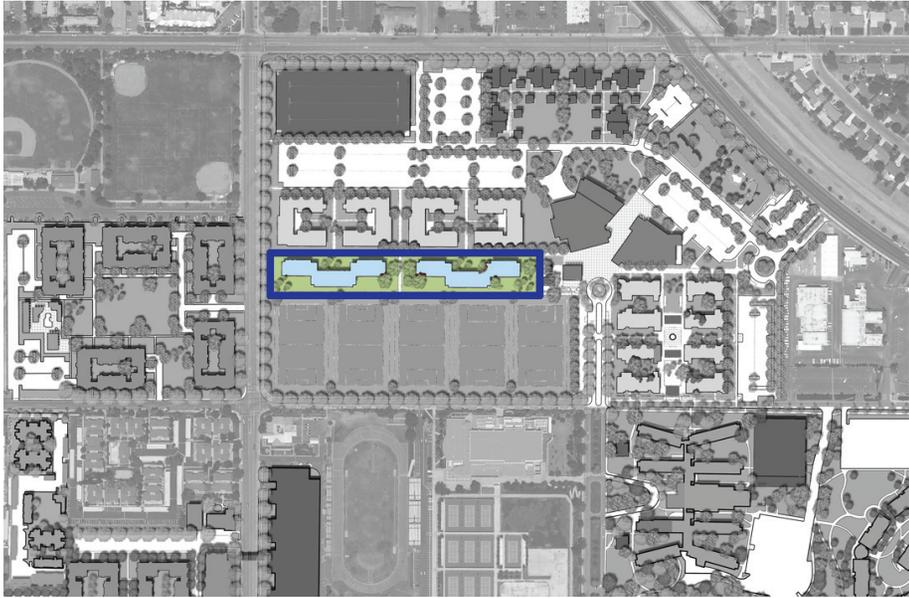
2016



2018



2020



Year 2016	Capacity				Area		Cost	Constr. Costs	Total Costs
	Residence Halls	Apartment Beds	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work									
Site Improvements							285,000	10.00	2,850,000
Site Utilities							285,000	4.00	1,140,000
Res Halls (beds)	600				168,000		210.00		35,280,000
Parking Deck/Maint. Bldg					191,000		162.00		30,942,000
Building Demolition				-30	30		14,533.00		435,990
Site Demolition							195,000	0.50	97,500
Subtotal	600	0	-30		359,000	480,000			70,745,490
5% Contingency									3,537,275
20% Soft costs									14,856,553
Subtotal									89,139,317
Escalation				8.00					124,795,044
Total	600	0	-30		359,000	480,000			124,795,044
Year 2018	Capacity				Area		Cost	Constr. Costs	Total Costs
Scope of Work	Residence Halls	Apartment Beds	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Site Improvements							195,000	10.00	1,950,000
Site Utilities							195,000	4.00	780,000
Res Halls (beds)	600				168,000		210.00		35,280,000
Dining (seats)				565	14,714		408.00		6,003,312
Conference Center					34,767		295.00		10,256,265
Subtotal	600	0	0		217,481	195,000			54,269,577
5% Contingency									2,713,479
20% Soft costs									11,396,611
Subtotal									68,379,667
Escalation				10.00					102,569,501
Total	600	0	0		217,481	195,000			102,569,501
Year 2020	Capacity				Area		Cost	Constr. Costs	Total Costs
Scope of Work	Residence Halls	Apartment Beds	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Site Improvements							115,000	10.00	1,150,000
Site Utilities							115,000	4.00	460,000
Res Halls (beds)	600				168,000		210.00		35,280,000
Subtotal	600	0	0		168,000	115,000			36,890,000
5% Contingency									1,844,500
20% Soft costs									7,746,900
Subtotal									46,481,400
Escalation				12.00					74,370,240
Total	600	0	0		168,000	115,000			74,370,240

glen mor phasing
2019, 2021

2019



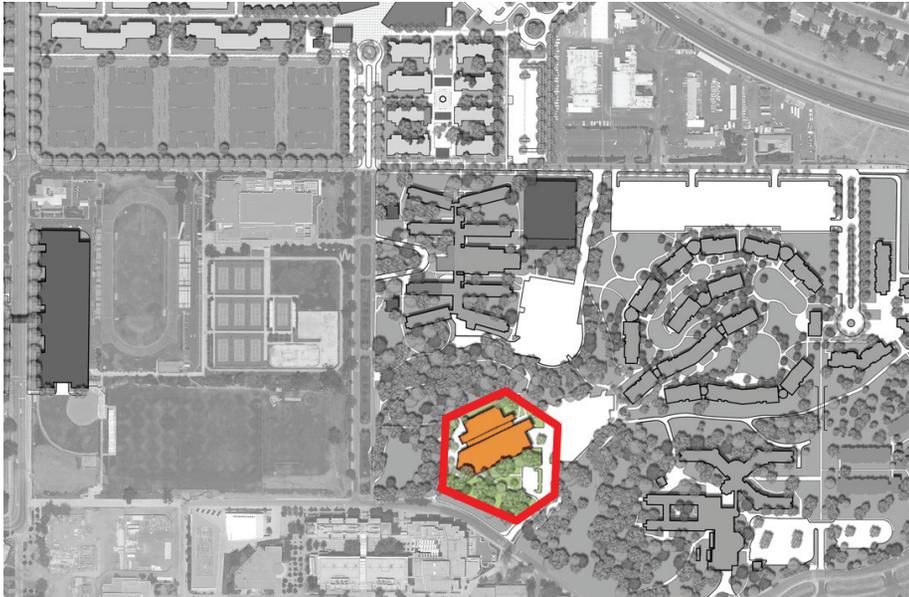
2021



Year 2019	Capacity			Area		Cost	Constr. Costs	Total Costs
	Residence Halls	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work								
Site Improvements						111,000	5.00	555,000
Site Utilities						111,000	2.00	222,000
Apartments (beds)		400		152,000			178.00	27,056,000
Subtotal	0	400	0	152,000	111,000			27,833,000
5% Contingency								1,391,650
20% Soft costs								5,844,930
Subtotal								35,069,580
Escalation								54,357,849
Total	0	400	0	152,000	111,000			54,357,849
Year 2021	Capacity			Area		Cost	Constr. Costs	Total Costs
	Residence Halls	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work								
Site Improvements						121,000	5.00	605,000
Site Utilities						121,000	2.00	242,000
Apartments (beds)		400		152,000			178.00	27,056,000
Subtotal	0	400	0	152,000	121,000			27,903,000
5% Contingency								1,395,150
20% Soft costs								5,859,630
Subtotal								35,157,780
Escalation								58,010,337
Total	0	400	0	152,000	121,000			58,010,337

veitch phasing
2010, 2012

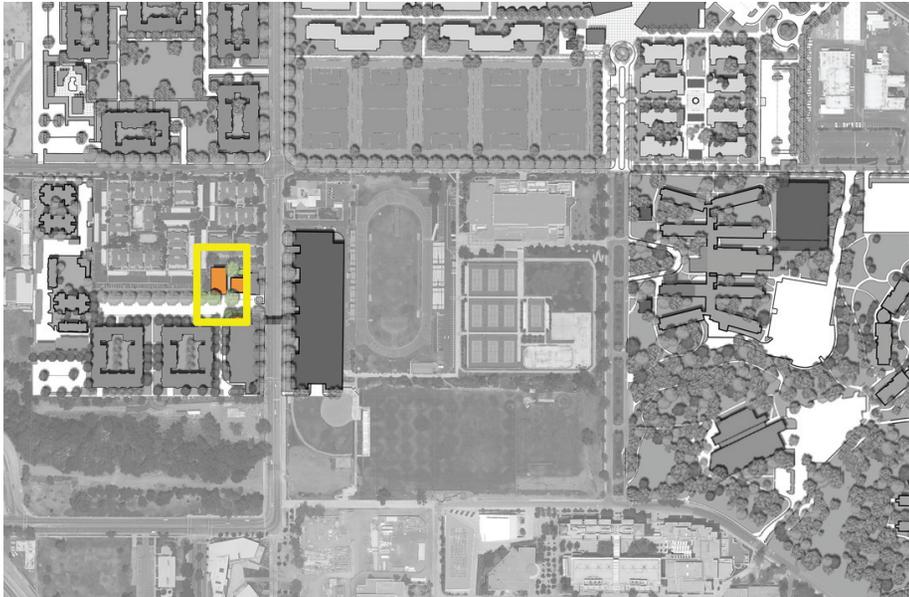
2012



Year 2010	Capacity			Area		Cost	Constr. Costs	Total Costs
				(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work								
Building Demolition				20,000		9.00	180,000	
Site Demolition					145,000	0.50	72,500	
Subtotal	0	0	0	20,000	145,000		252,500	
5% Contingency							12,625	
20% Soft costs							53,025	
Subtotal							318,150	
Escalation			2.00				349,965	
Total	0	0	0	20,000	145,000			349,965
Year 2012	Capacity			Area		Cost	Constr. Costs	Total Costs
Scope of Work				(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Site Improvements					145,000	5.00	725,000	
Site Utilities					145,000	2.00	290,000	
Student Activity Center				59,453		295.00	17,538,635	
C-store Deli				1,200		408.00	489,600	
Subtotal	0	0	0	60,653	145,000		19,043,235	
5% Contingency							952,162	
20% Soft costs							3,999,079	
Subtotal							23,994,476	
Escalation			4.00				28,793,371	
Total	0	0	0	60,653	145,000			28,793,371

campus apartments phasing
2009, 2010, 2012, 2014

2010



2014



campus apartments phasing
2009, 2010, 2012, 2014

Year 2009	Capacity		Area		Cost	Constr. Costs	Total Costs
	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work							
Apartments/Existing	270					0	
Site Demolition	0				9,000 0.50	4,500	
Subtotal	0	270	0	0	9,000	4,500	
5% Contingency						225	
20% Soft costs						945	
Subtotal						5,670	
Escalation			1.00			5,954	
Total	0	270	0	0	9,000		5,954

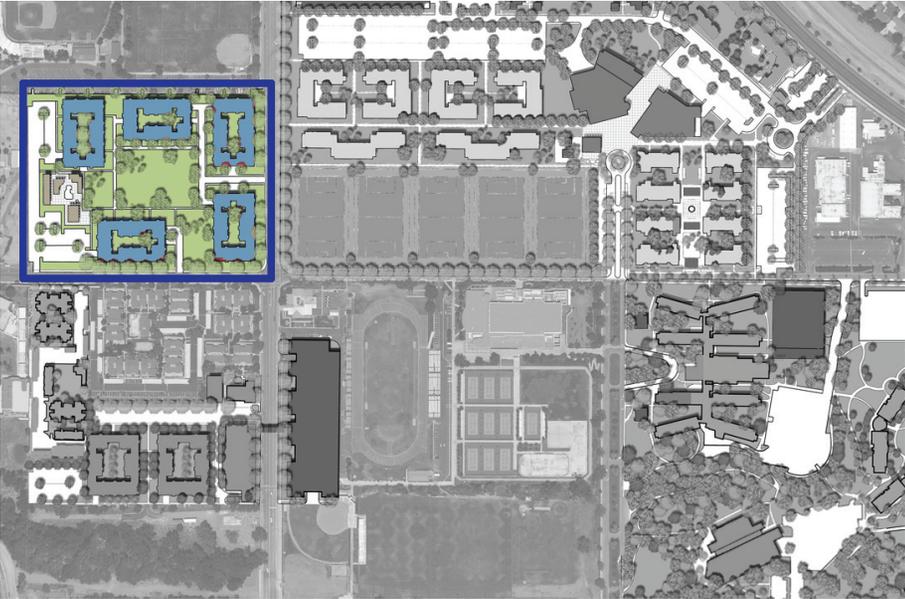
Year 2010	Capacity		Area		Cost	Constr. Costs	Total Costs
	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work							
Site Improvements					9,000 10.00	90,000	
Site Utilities					9,000 4.00	36,000	
Retail/Office		0	5,653		200.00	1,130,600	
Subtotal	0	0	5,653	9,000		1,256,600	
5% Contingency						62,830	
20% Soft costs						263,886	
Subtotal						1,583,316	
Escalation			2.00			1,741,648	
Total	0	0	0	5,653	9,000		1,741,648

Year 2012	Capacity		Area		Cost	Constr. Costs	Total Costs
	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work							
Building Demolition	-375		181,670		9.00	1,635,030	
Site Demolition				304,000	0.50	152,000	
Subtotal	0	-375	181,670	304,000		1,787,030	
5% Contingency						89,352	
20% Soft costs						375,276	
Subtotal						2,251,658	
Escalation			4.00			2,701,989	
Total	0	-375	0	181,670	304,000		2,701,989

Year 2014	Capacity		Area		Cost	Constr. Costs	Total Costs
	Apartment Beds	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work							
Site Improvements				304,000	10.00	3,040,000	
Site Utilities				304,000	4.00	1,216,000	
Parking Podium Level				82,000	70.00	5,740,000	
Parking (surface)				51,000	12.00	612,000	
Apartments/Podium	448		220,000		178.00	39,160,000	
Retail/Office			90,813		200.00	18,162,600	
Subtotal	0	448	310,813	437,000		67,930,600	
5% Contingency						3,396,530	
20% Soft costs						14,265,426	
Subtotal						85,592,556	
Escalation			6.00			111,270,323	
Total	0	448	0	310,813	437,000		111,270,323

campus apartments phasing
2024, 2026

2026



Year 2024	Capacity			Area		Cost	Constr. Costs	Total Costs
	Apartment Beds	Other		(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work								
Building Demolition	-450			216,000		9.00	1,944,000	
Site Demolition	0				548,900	0.50	274,450	
Subtotal	0	-450	0	216,000	548,900		2,218,450	
5% Contingency							110,923	
20% Soft costs							465,875	
Subtotal							2,795,247	
Escalation			16.00				5,031,445	
Total	0	-450	0	216,000	548,900			5,031,445
Year 2026	Capacity			Area		Cost	Constr. Costs	Total Costs
Scope of Work	Apartment Beds	Other		(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Site Improvements					548,900	10.00	5,489,000	
Site Utilities					548,900	4.00	2,195,600	
Parking Podium Level					180,400	70.00	12,628,000	
Parking (surface)					65,000	12.00	780,000	
Apartments/Podium	1,040			395,200		178.00	70,345,600	
Community Building				4,600		202.00	929,200	
Pool				17,000		202.00	3,434,000	
Subtotal	0	1,040	0	416,800	794,300		95,801,400	
5% Contingency							4,790,070	
20% Soft costs							20,118,294	
Subtotal							120,709,764	
Escalation			1.00				126,745,252	
Total	0	1,040	0	416,800	794,300			126,745,252

west campus phasing
2011, 2013, 2014

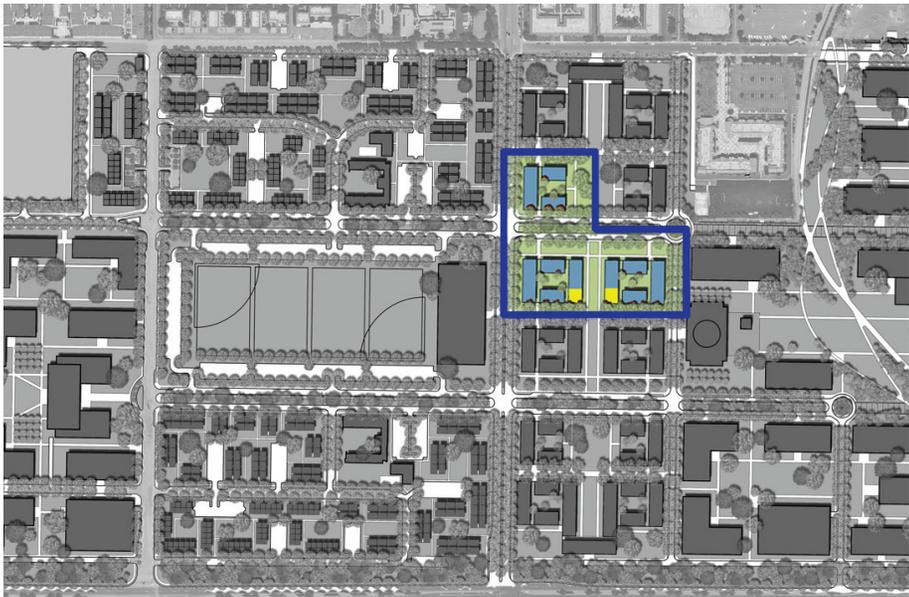
2011



2013



2014



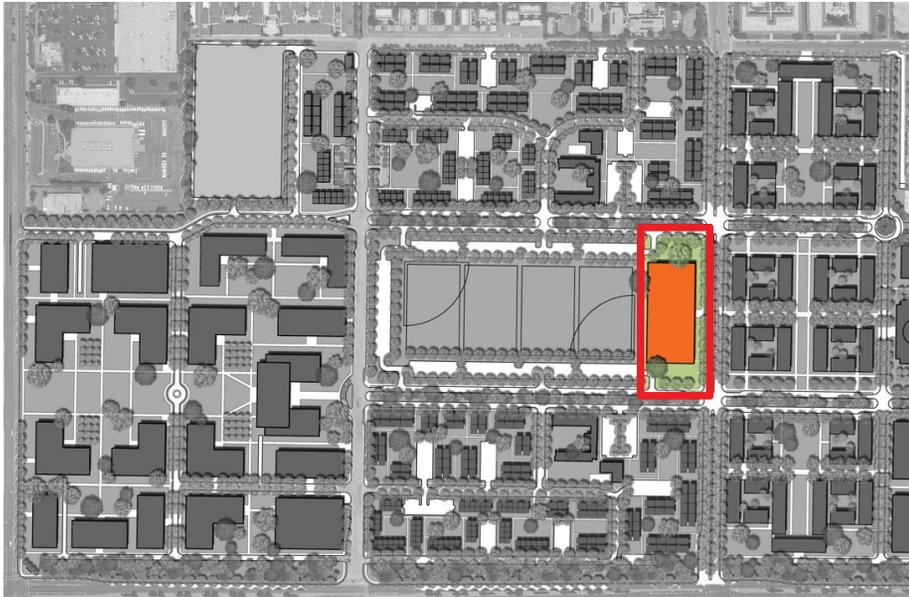
Year 2011	Capacity				Area		Cost	Constr. Costs	Total Costs	
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)			
Scope of Work										
Site Improvements							533,610	12.00	6,403,320	
Site Utilities							533,610	0.00	2,532,600	
Streets								0.00	7,476,300	
Family Housing (Apt.)		248			283,063			132.00	37,364,316	
Family Housing (TH)		120			125,467			142.00	17,816,314	
CDC building					14,627			203.00	2,969,281	
CDC site							51,340	20.00	1,026,800	
Recreation Fields							302,742	9.50	2,876,049	
Recreation Fields Parking							121,968	12.00	1,463,616	
Maintenance Building					3,227			162.00	522,774	
Maintenance Bldgs Site Work								13,068	10.00	130,680
Community Center					6,764			203.00	1,373,092	
Subtotal	0	368	0		433,148	1,022,728			81,955,142	
5% Contingency									4,097,757	
20% Soft costs									17,210,580	
Subtotal									103,263,479	
Escalation				3.00					118,753,001	
Total	0	368	0		433,148	1,022,728			118,753,001	

Year 2013	Capacity				Area		Cost	Constr. Costs	Total Costs
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work									
Site Improvements							480,200	12.00	5,762,400
Site Utilities							480,200	5.00	2,279,340
Streets								0.00	3,467,800
Family Housing (Apt.)		248			265,950			132.00	35,105,400
Family Housing (TH)		92			96,045			142.00	13,638,390
CDC building					14,627			203.00	2,969,281
CDC site							51,340	20.00	1,026,800
Recreation Fields							121,968	9.50	1,158,696
Community Center					6,764			203.00	1,373,092
Subtotal	0	340	0		383,386	653,508			66,781,199
5% Contingency									3,339,060
20% Soft costs									14,024,052
Subtotal									84,144,311
Escalation				5.00					105,180,388
Total	0	340	0		383,386	653,508			105,180,388

Year 2014	Capacity				Area		Cost	Constr. Costs	Total Costs
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)		
Scope of Work									
Site Improvements							300,000	12.00	3,600,000
Site Utilities							300,000	5.00	1,500,000
Streets								0.00	1,294,900
Parking Podium Level							80,000	70.00	5,600,000
Apartments (beds)	500				190,000			156.00	29,640,000
Subtotal	500	0	0		190,000	380,000			41,634,900
5% Contingency									2,081,745
20% Soft costs									8,743,329
Subtotal									52,459,974
Escalation				6.00					68,197,966
Total	500	0	0		190,000	380,000			68,197,966

west campus phasing
2015, 2016, 2018, 2020

2015



2016



2018



2020



Year 2015	Capacity				Area		Cost (\$ per SF)	Constr. Costs	Total Costs
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)			
Scope of Work									
Site Improvements						132,000	12.00	1,584,000	
Site Utilities						132,000	5.00	660,000	
Recreation Building					55,000		220.00	12,100,000	
Subtotal	0	0	0		55,000	132,000		14,344,000	
5% Contingency								717,200	
20% Soft costs								3,012,240	
Subtotal								18,073,440	
Escalation				7.00				24,399,144	
Total	0	0	0		55,000	132,000			24,399,144

Year 2016	Capacity				Area		Cost (\$ per SF)	Constr. Costs	Total Costs
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)			
Scope of Work									
Site Improvements						300,000	12.00	3,600,000	
Site Utilities						300,000	5.00	1,500,000	
Streets							0.00	1,084,600	
Parking Podium Level						80,000	70.00	5,600,000	
Apartments (beds)	500				190,000		156.00	29,640,000	
Subtotal	500	0	0		190,000	380,000		41,424,600	
5% Contingency								2,071,230	
20% Soft costs								8,699,166	
Subtotal								52,194,996	
Escalation				8.00				73,072,994	
Total	500	0	0		190,000	380,000			73,072,994

Year 2018	Capacity				Area		Cost (\$ per SF)	Constr. Costs	Total Costs
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)			
Scope of Work									
Site Improvements						65,000	12.00	780,000	
Site Utilities						65,000	5.00	325,000	
Medical Students (Apt.)	150				57,000		156.00	8,892,000	
Subtotal	150	0	0		57,000	65,000		9,997,000	
5% Contingency								499,850	
20% Soft costs								2,099,370	
Subtotal								12,596,220	
Escalation				10.00				18,894,330	
Total	150	0	0		57,000	65,000			18,894,330

Year 2020	Capacity				Area		Cost (\$ per SF)	Constr. Costs	Total Costs
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)			
Scope of Work									
Site Improvements						290,000	12.00	3,480,000	
Site Utilities						290,000	5.00	1,450,000	
Parking (spaces)						35,237	12.00	422,844	
Parking Podium Level						80,000	70.00	5,600,000	
Apartments (beds)	500				190,000		156.00	29,640,000	
Subtotal	500	0	0		190,000	405,237		40,592,844	
5% Contingency								2,029,642	
20% Soft costs								8,524,497	
Subtotal								51,146,983	
Escalation				12.00				81,835,174	
Total	500	0	0		190,000	405,237			81,835,174

west campus phasing
2022, 2024

2022



2024



Year 2022	Capacity				Area			Cost	Constr. Costs	Total Costs
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)			
Scope of Work										
Site Improvements							65,000	12.00	780,000	
Site Utilities							65,000	5.00	325,000	
Medical Students (Apt.)	150				57,000			156.00	8,892,000	
Subtotal	150	0	0		57,000	65,000			9,997,000	
5% Contingency									499,850	
20% Soft costs									2,099,370	
Subtotal									12,596,220	
Escalation				14.00					21,413,574	
Total	150	0	0		57,000	65,000				21,413,574

Year 2024	Capacity				Area			Cost	Constr. Costs	Total Costs
	Apartment Beds	Family	Family	Other	(Bldg - GSF)	(Site - SF)	(\$ per SF)			
Scope of Work										
Site Improvements							290,000	12.00	3,480,000	
Site Utilities							290,000	5.00	1,450,000	
Streets								0.00	204,000	
Parking Podium Level							80,000	70.00	5,600,000	
Apartments (beds)	500				190,000			156.00	29,640,000	
Subtotal	500	0	0		190,000	370,000			40,374,000	
5% Contingency									2,018,700	
20% Soft costs									8,478,540	
Subtotal									50,871,240	
Escalation				16.00					91,568,232	
Total	500	0	0		190,000	370,000				91,568,232

DESIGN AND CONSTRUCTION DELIVERY METHODOLOGIES

The University has many processes and methods available to advance this work. The outline below is focused on design and construction methods. In addition to these choices, the University also must engage in design/construction team procurement methods, total project management and interface between multiple sites, contractors and phases, and the various contract options.

Traditional Design/Bid/Build

This is the traditional design and construction approach for institutional construction. While institutions are more frequently utilizing alternate processes, this process allows for the traditional reviews and design assurances desired by many colleges and universities. Traditionally the architect is responsible for the coordination of the design team, the design and the production of construction documents and the project is put out to bid. The bid list can be open or a select list of bidders. The owner has independent contracts with both the architect and the contractor.

Benefits

- Owner has a clear picture of the design/end product
- Owner has participated and provided input in the design process
- Competitive bidding
- Architect is typically qualifications-based; selected by the University

Challenges

- Two points of contact for the University
- Typically, the longest project delivery schedule

- In public sector work, the low bidder typically is awarded the work and this may not yield the greatest value for the Owner
- Requires a good construction management team by the University, which typically yields higher total project costs

Design/Build

There are many versions of design/build. However, the hallmark of the system is one source of responsibility, as the design and the construction are executed by a team. The team may be one firm or a conglomerate of firms. Variations of this approach primarily are involved with the selection process. In the most common method, the selection process is a design/cost proposal in which a qualifications proposal produces a shortlist of teams. In this case, each shortlisted team advances a design and presents a total package – design and a budget. The University selects the best total package/value. Typically a stipend is allocated to each shortlisted team. In some instances the selection process is qualifications-based, and this allows the University to establish a budget and participate in the design process once the team is on board.

Design/Build/Qualifications Based

Benefits

- Owner has an opportunity to participate and provide input in the design process
- Consolidated schedule for team selection and design/pricing
- Owner has a single contract and source of responsibility
- Early lock-in on project costs that meet the Owner's budget
- Single selection process
- Frequently results in reduced total costs

design and construction delivery methodologies

Challenges

- Owner cannot independently select architect and contractor and may not favor the paired options
- Owner's involvement, while positive, will reduce a key value of the design/build process
- Owner does not have enough data at the point of selection to guarantee the quality of the project
- University must be positioned to make accelerated decisions
- Requirements imposed by many state institutions may offset the theoretical advantages of the process

Design/Build/Design and Price Proposal Based

Benefits

- Owner has an opportunity to participate and provide input in the design process
- Consolidated schedule for team selection and design/pricing
- Owner has a single contract and source of responsibility
- Early lock-in on project costs that meet the Owner's budget
- Single selection process
- Frequently results in reduced total costs

Challenges

- Owner has limited opportunity to participate and provide input in the design process
- Team comes on board with many decisions made and changes to the design, post selection, offset the value of the process
- Owner cannot independently select architect and contractor and may not favor the paired options

- Owner has limited data at the point of selection to guarantee the quality of the project
- University must be positioned to have key decision makers present at the selection process and to make accelerated decisions in the initial phases of the work
- Requirements imposed by many state institutions may offset the theoretical advantages of the process

Construction Management

The hallmark of the Construction Management (CM) process is to bring a contractor on board in the initial phase of the work providing their expertise in construction methods and costs early, toward the benefit of the design and budget decisions. The CM can act in this capacity independent of the actual contractor procurement process or can perform as a "CM at Risk," where the CM guarantees the construction cost at a designated point in the project and essentially acts as the general contractor. The CM process is typically qualifications-based and occurs at or before Schematic Design to provide the greatest value to the University.

Benefits

- Early design and budget decisions have the value of contractor involvement
- Costs are monitored independent of the design team
- University is not locked into the contractor
- Equity relationship between all parties to reach the owner's goals

Challenges

- Typically the Construction Manager desires to wait until Construction Documents to lock in the price, and the “at risk” factor is lost
- Limited positive impact on construction schedule, contractor procurement or design process
- The quality of the contractor’s cost resources are sometimes limited pending the current bidding climate
- Contractors have a greater desire to build than to estimate; the value of the process varies greatly with the contractor

Independent Project Management

Independent project management is a management process not a specific delivery methodology; however, it is a method for selecting and managing delivery methodologies on multi-phase, multi-site projects. The Project Management Team monitors the interface between phases or projects and creates a single source of responsibility for all schedules and the respective budgets. The Project Management process is typically qualifications-based, and like the CM process, occurs at or before schematic design to provide the greatest value to the University. An architect, a contractor, or a firm that specializes in project management can perform this role.

Benefits

- Single source of schedule and budget management between multiple sites that may have integrated design issues such as infrastructure or phased completion
- Costs and schedule are monitored independent of the design and construction team
- Project Manager’s prime incentive is to work in the best interest of the owner

- Works well for owners who do not have the trained staff or infrastructure to manage the project for the University

Challenges

- Doesn’t work well on small projects
- Adds a layer of cost to a project that may be redundant with University processes

Private Developer

The privatized development process is new to most colleges and universities. The developer, on land leased from the University, owns the project. In some cases, the University can arrange to manage the project; however, the developer typically manages the property as well. In the past, the value to the University has been the ability to advance the project without adding debt to the University’s balance sheet; however, recent discussions at UCR have indicated that this may not currently be possible.

Benefits

- Minimizes level of University financial and construction risk
- Maximum schedule and cost advantages, as the processes do not involve institutional processes, reviews, and typically adhere only to local code building (not institutional) standards
- Minimizes impact on University staffing needs for new projects
- Alternative financing opportunities
- Alternative if the institution does not have the resources or capacity to meet their needs in a timely fashion

design and construction delivery methodologies

Challenges

- Minimal level of University involvement
- Project is “on campus” and is at risk for not meeting the University standards for image, construction, and management
- University has minimal control over the process or operations
- May not reflect the institutional mission
- Ties up land for a specific length of time which might interfere with newer institutional goals

In addition to the methods above, there are opportunities to blend the methods and create scenarios that best fit the University's agenda and the specific project plans. In a plan of this scale, the University would be well served to consider the methods and processes of the total management of the project, whether it is internal or outsourced. This will assist in mitigating issues associated with cross-project coordination, such as those associated with infrastructure packages and construction projects. In some instances, the University may desire to package multiple components of the work under a single contract.



During the initial visit to the campus, the planning team toured the existing facilities. The purpose of this section of the report is to document the observations and to make any recommendations based on the walkthrough and any empirical data that was collected in the course of the study effort.

The Canyon Crest family housing, and Bannockburn and Falkirk student apartments are recommended for replacement in the Strategic Plan for Student Housing. Excluding Bannockburn and Falkirk, the existing campus apartments (Plaza and the third party developed land-lease apartment communities of Stonehaven and International Village), appear to meet the needs of the student desiring independent living. These neighborhoods will sustain themselves for the foreseeable future with routine maintenance and aesthetic refreshing.

The undergraduate housing facilities are in good condition relative to their age and in benchmarking against facilities of similar age and design nationally. UCR is fortunate to have undergraduate facilities that were designed intentionally around fostering student communities. Most student housing facilities at other institutions that were built in the time frame of Aberdeen-Inverness (A-I) to the first phase of Lothian were focused on “warehousing” students and are absent many of the amenities found in the UCR facilities.

The community bathrooms are the primary drawback of the existing undergraduate facilities, as they are not the first choice of most students, and they are limiting regarding summer conference use. The student rooms are generally adequate in size; however, the University may consider increasing the percent of rooms offered as single occupancy rooms over time, as there is a consistent trend in pressures for single occupancy rooms for health, personal, or study reasons. Student feedback in the course of the study suggests that the double occupancy/community model is accepted and positive for the first-year experience, which is the current use of these facilities. In particular, it was noted that A-I builds an exceptionally tight student community, and is valued for that outcome.

The ratio of common space to total area is adequate to provide current and future flexibility for the University. Both A-I and Lothian provide diversity in size, type, and distribution of community space.

The Strategic Plan for Student Housing provides new dining venues, however, the existing dining halls in A-I and Lothian will continue to be the primary dining areas for those residents. The existing dining and kitchen areas at A-I will need to be renovated to be kept up to date and accommodate student preferences. It is also anticipated that both A-I and Lothian’s dining facilities will provide the meal plan needs for students in the first phase of residence hall construction at Dundee. It is also anticipated that the new retail emporium at A-I will augment food options for students in the east campus residence halls. Other opportunities include:

- Kitchen facilities renovated, to function as a centralized processing for specific food service products. The A-I kitchen offers excellent opportunity to create a centralized bakery. The Lothian kitchen provides an opportunity to create a centralized “cold prep” facility.
- Late-night food/retail option potentially at the proposed A-I emporium to provide light meals, general convenience items, and opportunities for evening socialization.
- Dining rooms as lecture/ program space and breakout rooms
- Veitch to be reconstructed to provide residence life program space replacing dining rooms which are currently heavily used for this purpose.

Additional opportunities for improvement can be found, but are relatively minor steps and do not impact capacity, general configuration, or use. In general, observations and recommendations established in this report are focused on opportunities to enhance amenities for students, create spaces of identity within the community, or to take advantage of existing spaces through new uses.

The following information documents the observations and preliminary thoughts of the planning team for the existing residence halls. Action on these recommendations should be balanced with the impact on the total system.

lothian

The West Wing of Lothian was built in 1963 and the East Wing in 1990. The two phases of Lothian consist of five wings or halls connected by a central lobby area. The design occupancy is 996, with an overflow occupancy of 1,012. There is a dining facility in Lothian that was recently renovated and provides 432 seats.

Community Strengths

Close-knit community; Wireless access.

Common Areas and Facilities

Dining; Computer room; Laundry rooms; Piano and other instrument practice rooms; Mailboxes; Game room and vending machines; Weight/exercise room.

Corridors and Support Space

Bike storage area.

Student Room, Mix, Size, Condition

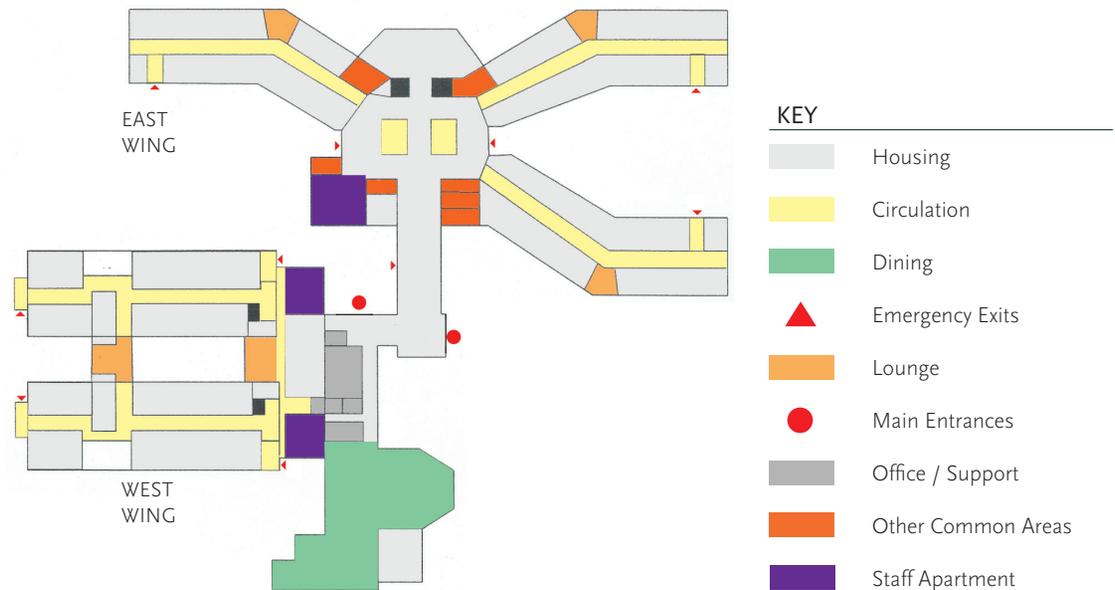
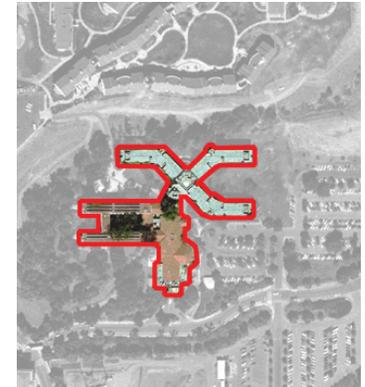
Lothian is configured as a traditional residence hall with students primarily in double bedrooms with community hall bathrooms.

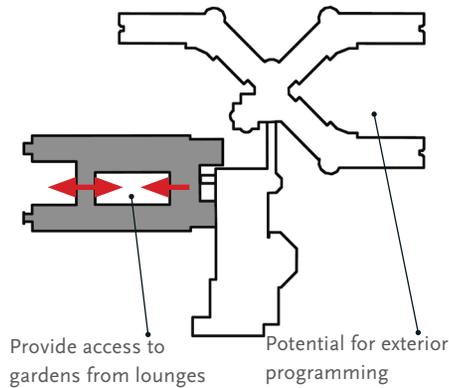
Location and Site Issues

Located close to the Veitch Student Services Building and easily accessible to the core campus.

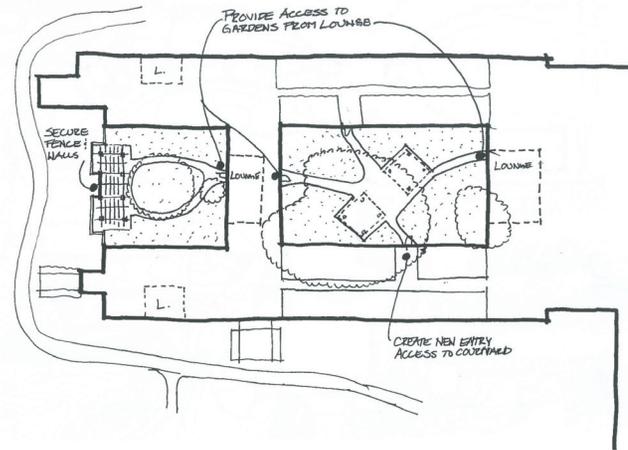
Existing Challenges

Enclosed courtyard is underutilized. The “caves” in West Lothian derived their name because they are not well connected.





Diagrams Showing an Overview of Ideas



Best Opportunities for Improvement

- Create visual and physical access from the interior lounge spaces to the courtyards.
- Use the interior courtyards to bring natural light into the long hallways; this may require reconfiguring or deleting a few bedrooms.
- Enhance the courtyards with landscape and site features that will generate activity, provide areas for quiet study, and possible outdoor program space.
- Provide a sense of privacy from the student rooms at the courtyard location, using overhead planes such as canopies, trellises, and awnings.
- Provide exterior landscape and task lighting for evening activities.
- Enclose garden space with natural or screen walls.
- Consider incorporation of a water feature for acoustic benefit and variety in the exterior space.
- Consider reconfiguration of the “caves” (jogged hall ends) into upperclassmen suites or special interest group housing, creating a unique opportunity that utilizes the ends of the building and the associated courtyard.
- The bathroom configuration was not objectionable to students, and is typically cost prohibitive to reconfigure. When bathrooms are due for an upgrade, consider transforming to community baths with a very high level of finish, aesthetic, and privacy.

aberdeen-inverness

Aberdeen-Inverness (A-I) was built in 1959. It is configured in eight wings or halls that are connected to a common circulation spine. The design occupancy is 792, with overflow occupancy of 892. The large dining hall located in the middle of the building also functions as a large programming space. On the ground floor, the circulation spine is flanked by student support spaces and offers a common, high visibility thoroughfare for the residents to interact. The amount of light and “see and be seen” spaces in this central space is very positive and valuable to the student community.

Community Strengths

Close knit community; Organization of the wings; many places to meet and study; Dining Hall; Programming; Large rooms; Large windows connect common spaces to exterior community; Central spine that is highly populated; Wireless access.

Common Areas and Facilities

Programming for group gatherings, study, activities are facilitated on the ground floor with a variety of spaces.

Corridors and Support Space

Bike storage area.

Student Room, Mix, Size, Condition

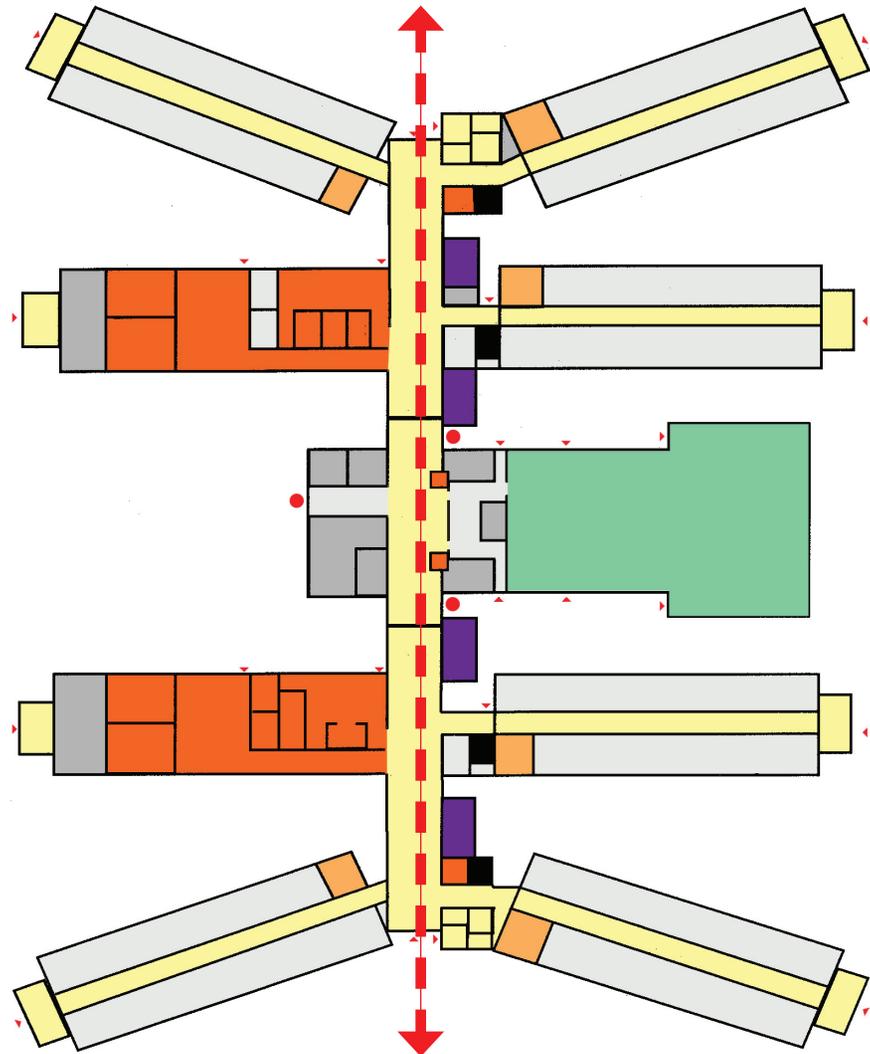
Units are configured primarily in double bedrooms, with shared group bathrooms.

Location and Site Issues

Located along a potential major circulation route to campus from Dundee.

Existing Challenges

Bathroom configurations; basement laundry; additional student storage in basement; exterior spaces; poor lighting in common areas; lack of natural light in residential wings.





KEY

	Housing
	Circulation
	Dining
	Emergency Exits
	Lounge
	Main Entrances
	Office / Support
	Other Common Areas
	Staff Apartment

Space #	Space / Description	Quantity	ASF	Total ASF	Comments
Residential Spaces				5,712	
982	2-Bedroom Townhouse. (1/200)	4	1,050	4,200	Resident Director
982	2-Bedroom Apt. (1/Hall)	2	756	1,512	Head Resident
Community Space				5,860	
335	Entry vestibule	1	100	100	
130	Large Meeting Rooms	3	500	1,500	
130	Small Meeting Rooms	6	150	900	
260/110	Computer Lab/Classroom	1	360	360	
630	Gaming Lounge	1	800	800	
630	Fitness Room	1	1,000	1,000	
630	Living Room	1	1,200	1,200	
Resident Services Office				3,067	
335	Lobby/Reception/Waiting	1	537	537	
320	Resident Director Office	1	120	120	
320	Head Resident Office	1	100	100	
320	RSO Manager Office	1	160	160	
320	Staff Offices	5	120	600	
335	Staff Workroom	1	225	225	
335	Staff Work Stations	3	120	360	
335	Staff Restroom	1	60	60	
630/920	Staff Lounge/Kitchenette	1	120	120	
340	Conference Room	1	325	325	
410	Poster Room	1	160	160	
335	Storage	1	300	300	
615	Mail	1	350	350	
Support Spaces				0	
335	Public Restrooms	2	250	0	Note 1
510	Mechanical Space	1	120	0	Note 1
920	Custodial Services	1	120	0	Note 1
920	Housekeeping Closets	1	80	0	Note 1
510	Telecommunications	1	100	0	Note 1
Total ASF				14,639	
Add Emporium				4,191	
Internal Net to Gross Factor (70%)				25,104	

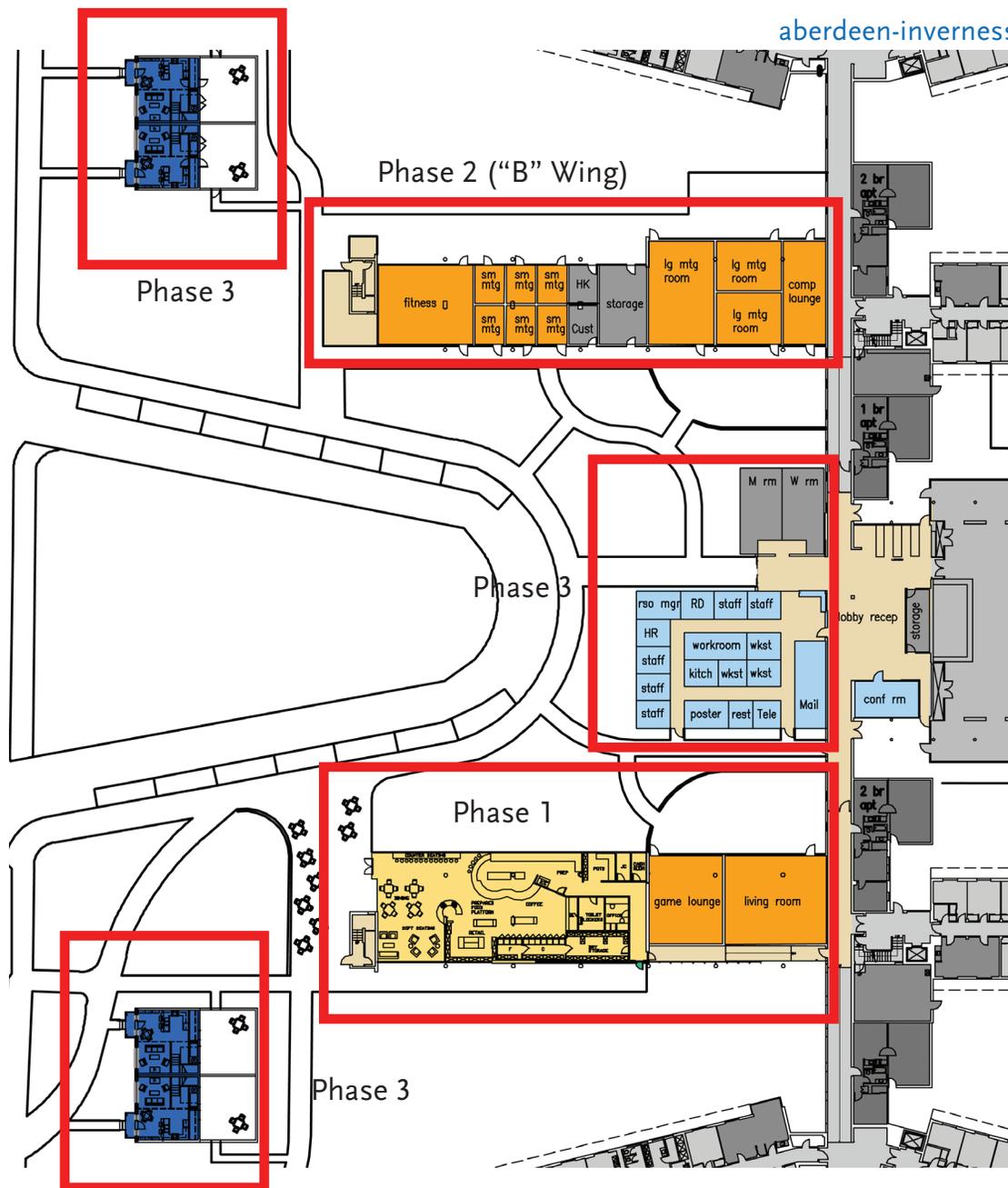
Note 1 Non assignable area per U.C. program standards

aberdeen-inverness

Proposed Improvements

- Wings A and D will be renovated in three phases and reconfigured to provide community space that is entered from the outside making the space more accessible to students.
- Wing D will maintain a large living room and game room but also provide a retail emporium with outdoor seating. (Phase 1)
- The resident services office will be expanded to provide more staff workspace and offices with a reconfigured mail area. (Phase 1)
- The restrooms will be expanded to accommodate the enhanced community space and dining area capacity. (Phase 1)
- Wing A will include meeting rooms, a computer lab, fitness center and storage. A new outdoor courtyard will be created on the southside for another function. (Phase 2)
- Four townhouses will be developed on the east side of Aberdeen Drive to provide a more spacious accommodation for residence life staff. (Phase 3)





LEGEND

- Office/RSO
- Community Space
- Staff/Faculty Townhouses
- Dining
- Service

pentland hills

Phase I of Pentland Hills was built in 2000 and Phase II in 2002. The maximum total occupancy is 1,132.

Community Strengths

Extensive classroom and community space on the ground level; vertical organization provides opportunity for specific community identity.

Common Areas and Facilities

Game rooms; Piano practice rooms; Weight rooms; Computer lab; Cable and internet access; Storage.

Student Room, Mix, Size, Condition

Vertical suite organization on second and third floors; horizontal suite organization on the first floor.

Location and Site Issues

Located between Aberdeen-Inverness and Glen Mor, and adjacent to Veitch and Lothian, on a path that connects the three facilities.

Opportunities / Challenges

Vertical organization makes it difficult for larger-scale community building; and organization makes it inefficient for the custodial staff to clean.



KEY

- Housing
- Circulation
- Lounge
- Main Entrances
- Office / Support
- Other Common Areas
- Staff Apartment



Best Opportunities for Improvement

- As new housing is brought online elsewhere on campus, consider using a portion of Pentland Hills as additional Special Purpose Housing.



The University of California, Riverside desires to maximize environmentally responsible opportunities of the Strategic Plan for Student Housing. This plan offers multiple project events that may be viewed as an opportunity, within each individual project's respective budget, to test and implement those strategies that yield the greatest performance for the University over time.

This plan reinforces several strategies, consistent with the University's LRDP, that contribute greatly toward achieving an environmentally responsible living environment. In general this plan reinforces, through layout and planning principles, the following actions that contribute to sustainable opportunities at UCR:

- Site selection and development that supports efficient land use, effective storm water management, and a pedestrian focused community with easy access to transit locations, bike paths, and campus connections.
- Preservation and re-establishment of natural land features and vegetation.
- Building masses that contribute to shading exterior spaces, opportunities for natural day lighting at interior spaces, and preservation of significant view corridors.
- Opportunities for establishment of a landscape composed of native species or low water requiring plant material.
- Dedicated program and site space that support the collection, storage and removal of recyclable materials.
- Project budgets that allow the University flexibility in material and building system choices on a per-project basis. This allows the University to evaluate the life-cycle costs, principles of sustainable development and the social impact of each option.

- UCR has adopted the 2005 Campus Green Building Baseline as a LEED-equivalent rating system. Based on LEED-NC 2.1 the Baseline is used to substantiate UCR's commitment to the wise use of natural resources. Each project event of the plan is unique in its location on campus and provides an opportunity to expand the baseline to achieve additional points within each category. The Baseline identifies the following areas of focus:

1. Sustainable Site Design
2. Water Efficiency
3. Energy and Atmosphere
4. Materials and Resources
5. Indoor Environmental Quality
6. Innovation in Design

In specific response to environmental opportunities for a student residential community, this plan recommends the following actions for consideration by the University:

1. Students desire to be environmentally conscious as a lifestyle not a special action therefore finishes materials should be used that provide visible and physical evidence of the University's commitment to the environment, and "pride of place" for the students. Examples of how this could be implemented include:
 - Finishes that promote the use of recycled materials, such as tiles made from recycled soda bottles.
 - Finishes that use rapidly renewable materials sources that are also highly durable in student environments, such as cork or bamboo flooring.

sustainable design

- Lighting that mitigates light pollution, in particular site lighting standards and exterior building lighting.
 - Natural outdoor environments that encourage habitats for birds, butterflies, and other visible evidence that the environment is desired by animals as well as people.
2. Develop visible icons that can become sources of community identity regarding commitment to the environment.

The natural features of the sites, as well as opportunities regarding the environment, can provide a significant source of community identity that is aligned with environmentally responsible actions. Examples of this include:

- The enhancement of natural features such as the arroyo.
 - The prominent placement and celebration of physical features that provide visible reminders of community commitment to the environment. Good examples of this include solar-powered lighting, translating the student's everyday familiarity of a solar powered calculator into the physical built environment. Other examples include use of photovoltaics and windmills for wind-driven energy sources.
3. Creating an environment of sites and buildings that educate students, staff, and the public.
- As an institution of higher education, UCR can use the development of any project as an opportunity to create a three-dimensional textbook out of the built and natural environment.
- Design features that can be visible to the residents and visitors and that communicate, sometimes through written explanation (signage, general literature, etc.), the intent and the commitment

of the University. Once communicated and established, these features will become known and appreciated by the broader community.

- The natural landscape as an educational tool through the identification and short narrative of the native plant species on site.
- Allow the project the opportunity to “test” products and processes. While there is always risk associated with using new materials and processes, there can also be rewards. The University is an environment of exploration and discovery, and projects of this magnitude allow the opportunity to test, even in a limited application, within the project.



Glen Mor Site



Aerial View of Campus

Scope	LEED 2.1 LEED Campus Only Labs21 EPC Only	Item	Prerequisite EAST CAMPUS WEST CAMPUS	Notes
Sustainable Sites	Y	SS Prerequisite 1 - Erosion & Sedimentation Control		
Sustainable Sites	Y	SS 1 - Site Selection	1 0	CPP Point
Sustainable Sites	Y	SS 2 - Development Density		
Sustainable Sites	Y	SS 3 - Brownfield Redevelopment		
Sustainable Sites	Y	SS 4.1 - Alternative Transportation- Public Transportation Access	1 1	CPP Point
Sustainable Sites	Y	SS 4.2 - Alternative Transportation - Bicycle Storage & Changing Rooms	1 1	CPP Point
Sustainable Sites	Y	SS 4.4 - Alternative Transportation- Parking Capacity		
Sustainable Sites	Y	SS 5.1 - Reduced Site Disturbance- Protect or Restore Open Space		
Sustainable Sites	Y	SS 5.2 - Reduced Site Disturbance- Development Footprint	1 1	CPP Point
Sustainable Sites	Y	SS 6.1 - Stormwater Management- Rate and Quantity		
Sustainable Sites	Y	SS 6.2 - Stormwater Management- Treatment		
Sustainable Sites	Y	SS 7.1 - Heat Island Effect - Non-Roof		
Sustainable Sites	Y	SS 7.2 - Heat Islands Effect - Roof		
Sustainable Sites	Y	SS 8.1 - Light Pollution Reduction - Exterior Lighting		
Sustainable Sites	Y	(Campus AG) SS 8.2 - Light Pollution Reduction - Exterior Lighting Master Plan		
Sustainable Sites	Y	(Campus AG) SS 9 - Mixed Use Development		
Sustainable Sites	Y	(Campus AG) SS 10 - Natural Resource Salvage and Rescue, and Green Landscaping		
Sustainable Sites		(Campus AG) SS 11 - Greenways and Wildlife Corridors		
Sustainable Sites	Y	Effluent		
Sustainable Sites	Y	Labs21 SS 12.2 - Safety & Risk Management - Water Effluent		

campus green build baseline checklist and evaluation matrix

Scope	LEED 2.1 LEED Campus Only	Labs21 EPC Only	Item	Prerequisite EAST CAMPUS WEST CAMPUS	Notes
Water Efficiency	Y		WE 1.1 - Water Efficient Landscaping- Reduce by 50%		
Water Efficiency	Y		WE 1.2 - Water Efficient Landscaping- No Potable Use or No Irrigation		
Water Efficiency	Y		WE 2 - Innovative Wastewater Technologies		
Water Efficiency	Y		WE 3.1 - Water Use Reduction - 20% Reduction	1 1	PP/ODC Point
Water Efficiency	Y		WE 3.2 - Water Use Reduction- 30% Reduction		
Water Efficiency		Y	Labs21 WE 4.1 - Process Water Efficiency		
Water Efficiency		Y	Labs21 WE 4.1 - Process Water Efficiency		
Energy & Atmosphere	Y		EA Prerequisite 1 - Fundamental Building Systems Commissioning		
Energy & Atmosphere	Y		EA Prerequisite 2 - Minimum Energy Performance		
Energy & Atmosphere	Y		EA Prerequisite 3 - CFC Reduction in HVAC&R Equipment		
Energy & Atmosphere		Y	Labs21 EA Prerequisite 2 - Assess Minimum Ventilation Requirements		
Energy & Atmosphere	Y		EA 1 - Optimize Energy Performance	4 4	PP/ODC Point
Energy & Atmosphere	Y		EA 2.1 - Renewable Energy- 5%		
Energy & Atmosphere	Y		EA 2.2 - Renewable Energy - 10%		
Energy & Atmosphere	Y		EA 2.3 - Renewable Energy- 20%		
Energy & Atmosphere	Y		EA 3 - Additional Commissioning		
Energy & Atmosphere	Y		EA 4 - Ozone Protection		
Energy & Atmosphere	Y		EA 5.1 - Measurement and Verification - Building Systems	1 1	PP Point
Energy & Atmosphere	Y		(Campus AG) EA 5.2 - Measurement and Verification – Central Monitoring and Control		
Energy & Atmosphere	Y		EA 6 - Green Power		
Energy & Atmosphere	Y		(Campus AG) EA 7 - Atmospheric Emissions		
Energy & Atmosphere	Y		(Campus AG) EA 8 - CO2 Reduction		
Energy & Atmosphere	Y		(Campus AG) EA 9.1 - Combined Heat and Power – 60% Efficiency		
Energy & Atmosphere	Y		(Campus AG) EA 9.2 - Combined Heat and Power – 75% Efficiency		
Energy & Atmosphere		Y	Labs21 EA 10 - Energy Supply Efficiency		
Energy & Atmosphere		Y	Labs21 EA 11 - Improve Laboratory Equipment Efficiency		
Energy & Atmosphere		Y	Labs21 EA 12.1 - Right-size Laboratory Equipment Load		
Energy & Atmosphere		Y	Labs21 EA 12.2 - Right-size Laboratory Equipment Load		
Energy & Atmosphere		Y	Metering		

Scope	LEED 2.1 LEED Campus Only	Labs21 EPC Only	Item	Prerequisite EAST CAMPUS WEST CAMPUS	Notes
Materials & Resources		Y	Labs21 MR Prerequisite 2 - Hazardous Material Handling		
Materials & Resources	Y		MR 1.1 - Building Reuse- Maintain 75% of Existing Walls, Floors and Roof		
Materials & Resources	Y		MR 1.2 - Building Reuse-Maintain 100% of Existing Walls, Floors and Roof		
Materials & Resources	Y		MR 1.3 - Building Reuse- Maintain 100% of Shell/Structure and 50% of Non-Shell/Non-Structure		
Materials & Resources	Y		MR 2.1 - Construction Waste Management- Divert 50% From Landfill	1 1	ODC Point
Materials & Resources	Y		MR 2.2 - Construction Waste Management- Divert 75% From Landfill		
Materials & Resources	Y		MR 3.1 - Resource Reuse: 5%		
Materials & Resources	Y		MR 3.2 - Resource Reuse- 10%		
Materials & Resources	Y		MR 4.1 - Recycled Content: Use 5% post-consumer or 10% postconsumer + post-industrial		
Materials & Resources	Y		MR 4.2 - Recycled Content: Use 10% post-consumer or 20% post-consumer + post-industrial		
Materials & Resources	Y		MR 5.1 - Regional Materials- 20% manufactured regionally	1 1	ODC Point
Materials & Resources	Y		MR 5.2 - Regional Materials- 50% extracted regionally		
Materials & Resources	Y		MR 6 - Rapidly Renewable Materials		
Materials & Resources	Y		MR 7 - Certified Wood		
Materials & Resources	Y	Y	(Campus AG) MR 8 - Site Recycling and Solid Waste Management Master Plan & Labs21 MR 8 - Chemical Resource Management		

Scope	LEED 2.1	LEED Campus Only	Labs21 EPC Only	Item	Prerequisite	EAST CAMPUS	WEST CAMPUS	Notes
Indoor Env't'l Quality	Y			IEQ Prerequisite 2 - Environmental Tobacco Smoke (ETS) Control				
Indoor Env't'l Quality		Y		Labs21 IEQ Prerequisite 3 - Laboratory Ventilation				
Indoor Env't'l Quality		Y		Labs21 IEQ Prerequisite 4 - Exterior Door Notification System				
Indoor Env't'l Quality	Y			IEQ 1 - Carbon Dioxide (CO2) Monitoring				
Indoor Env't'l Quality	Y			IEQ 2 - Ventilation Effectiveness				
Indoor Env't'l Quality	Y			IEQ 3.1 - Construction IAQ Management Plan- During Construction	1	1		ODC Point
Indoor Env't'l Quality	Y			IEQ 3.2 - Construction IAQ Management Plan- After Construction	1	1		ODC Point
Indoor Env't'l Quality	Y			IEQ 4.1 - Low-Emitting Materials- Adhesives & Sealants	1	1		ODC Point
Indoor Env't'l Quality	Y			IEQ 4.2 - Low-Emitting Materials- Paints and Coatings	1	1		ODC Point
Indoor Env't'l Quality	Y			IEQ 4.3 - Low-Emitting Materials- Carpet	1	1		ODC Point
Indoor Env't'l Quality	Y			IEQ 4.4 - Low-Emitting Materials- Composite Wood				
Indoor Env't'l Quality	Y			IEQ 5 - Indoor Chemical & Pollutant Source Control	1	1		ODC Point
Indoor Env't'l Quality	Y			IEQ 6.1 - Controllability of Systems- Perimeter Spaces				
Indoor Env't'l Quality	Y			IEQ 6.2 - Controllability of Systems- Non-Perimeter Spaces				
Indoor Env't'l Quality	Y			IEQ 7.1 - Thermal Comfort- Compliance with ASHRAE 55- 1992	1	1		ODC Point
Indoor Env't'l Quality	Y			IEQ 7.2 - Thermal Comfort- Permanent Monitoring System				
Indoor Env't'l Quality	Y			IEQ 8.1 - Daylight and Views- Daylight 75% of Spaces				
Indoor Env't'l Quality	Y			IEQ 8.2 - Daylight and Views- Views for 90% of Spaces				
Indoor Env't'l Quality		Y		(Campus AG) IEQ 9 - Lighting Quality				
Indoor Env't'l Quality		Y		(Campus AG) IEQ 10 - Acoustic Quality				
Indoor Env't'l Quality			Y	Labs21 IEQ 11 - Indoor Environmental Safety				
Innovation in Design	Y	Y	Y	ID 1 - Innovation in Design				
Innovation in Design	Y	Y	Y	ID 2 - LEED Accredited Professional	1	1		ODC Point
TOTAL BASELINE:					20	19		

LEED Certification Levels:
Certified 26 to 32 points
Silver 33 to 38 points
Gold 39 to 51 points
Platinum 52+ points

