

Section Four: Program Analysis



Program Analysis

Initial Program Assumptions

In developing the goals for the East Campus Entrance Area Study, UC Riverside identified the following programs to be accommodated within the study area:

- Alumni and Visitors Center
- Campus Museum and Art Gallery
- Recital Hall (350-400 seats)
- Performing Arts Center (1,000 plus seats, changed to 2,000 during the course of the study)
- Parking Structures (2)
- Student Academic Support Services Building (SASS)
- Bourns College of Engineering Expansion (BCOE)
- College of Humanities Arts and Social Sciences Instruction and Research Facility (CHASS I&R)
- CHASS I&R Expansion Opportunities
- Materials Science and Engineering Building (MS&E–relocated during the course of this study)

Beyond accommodating these specific programs, it was a primary goal of the study to identify additional future buildings sites that would ensure that the campus developed at an appropriate density given the long-term need for growth of the campus and the desire to maintain and enhance elements unique to the character of the campus.

Programming Process

The process of understanding the future needs and potential uses for new buildings within the study area included the review of previous plans and documents; the use of questionnaires and personal interviews with individual users; extensive follow-up discussions via phone and e-mail with users and the project planning team; review at committee meetings and multiple reviews by all parties of the draft program.

These discussions considered the size of the existing programs and the projected growth with an understanding of the potential schedule for the project. In addition, spaces required with general adjacency and access requirements, and other special characteristics of each building were considered.

Program Adjacency

Within the context of the overall site plan, which governed general building locations and density, individual program assumptions were sited following a program adjacency determination process. The criteria for these program locations included the following:

- Need and desire for public access
- Proximity to related programs
- Required footprint size, based on the need for ground floor access to specific elements of the program
- Total capacity of the proposed site, assuming a maximum four-story structure
- Need for future expansion
- Service access requirements
- Phasing that presumed buildings would be added in a way that would incrementally expand the East Campus academic core to the north

The criteria for each program came out of the programming process described above. Specific locations were then reviewed with individual users, the Project Planning Committee, the Design Review Board (DRB) and the Capital Programs Advisory Committee (CPAC).

Some programs, particularly those which have a defined schedule, were the subject of detailed study. For these programs multiple sites were considered, with alternative diagrams and a considered list of positive and negative attributes of each option. Final decisions were made at CPAC based on recommendations by the Project Planning Committee and the Design Review Board.



Program Analysis

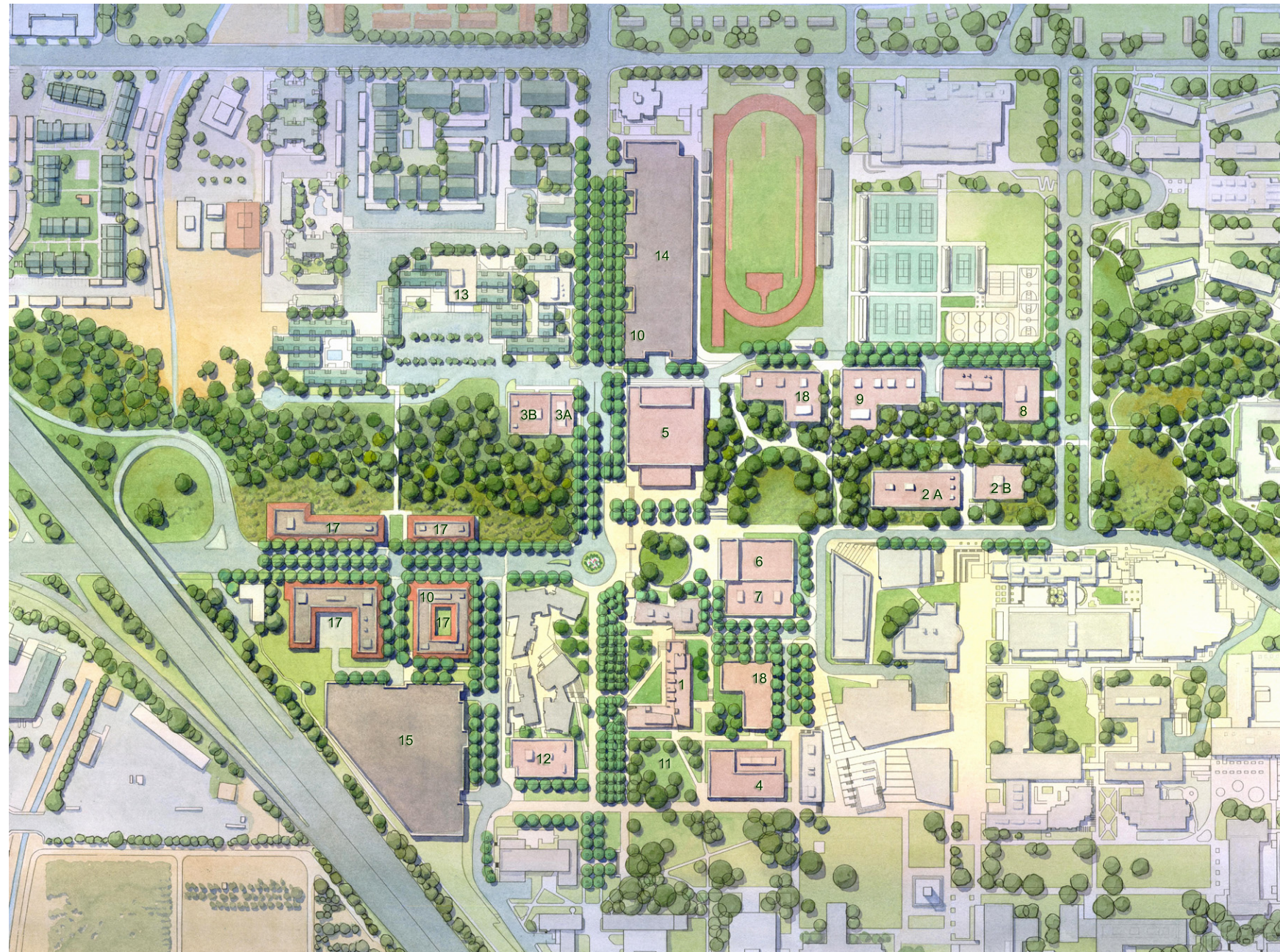
Program Assumptions

A summary of the proposed building programs, including program assumptions, adjacency criteria proposed, and approximate schedule, foot print size, net program area, gross building area, “order of magnitude” construction cost and total project cost is shown in the Table 4.1.

A general description of the final program and building locations is below (*see Appendix B for additional program details and assumptions*):

Project Number	Project	Program Assumptions	Adjacency Requirements	Schedule	Footprint Size (Sq. Ft.)	Net Area (Sq. Ft.)	Gross Area (Sq. Ft.)	Const. Cost	Total Project Cost	Comments
1	CHASS I & R	Interdisciplinary academic program offices, classrooms	Near other CHASS facilities	03-05	10,000	64,397	102,217	\$23M	\$34M	DPP, dated 1/30/03. * Based on early design by PCF
2	Material Science and Engineering	Classrooms, Offices, Research Labs and Clean Room	East end of existing athletic field.	03-06	36,226	76,940	134,000	42.5M	\$51.7M	DPP, draft dated 4/16/03
3	Alumni and Visitors Center	Administrative space, meeting rooms, executive dining, library, boardroom, banquet hall	Near campus "front door"	03-07	19,663	21,960	31,403	\$7.8M	\$9.4M	Could be combined with the SASS Building.
3 Alt		Same as above except without Banquet Hall and University Club	Near campus "front door"	03-07	7,279		12,870	\$3.2M	\$3.8M	Phase one of above project
4	Student Academic Support Services	Financial Aid, Registrar, Student Business, Admissions, Outreach VC for Enrollment Services, International Student Services	Near Commons, and campus front door	03-07	26,294	39,800	61,200	\$14.8M	\$19.38M	Could be combined with Alumni and Visitors Center
5	Performing Arts Center	2000 seat Hall for Theater, Performance, Orchestra	Near campus "front door"	?	61,763	76,140	123,347	\$67.8M	\$81.4M	Would require a donor gift
5 Alt		1200 seat Performance Hall	Near campus "front door"	?	51,103	31,545	94,235	\$51.8M	\$62.2M	Would require a donor gift
6	Recital Hall	350 seats	Near Arts Building, and campus "front door"	07-09	22,761	15,550	25,191	\$10M	\$12M	Could be combined with Museum
7	Campus Museum/Art Gallery	Sweeney Art Gallery(s) for temporary exhibits plus permanent collection	Near campus "front door"	05-07	15,076	11,335	15,076	\$4M	\$5M	Could be combined with Recital Hall
8	Engineering III	Bioengineering and Material Science Departments	Near other engineering facilities	?	34,048	65,165	113,492	\$36M	\$43.2M	Assume Footprint 30% Gross Floor Area (GFA)
9	Engineering IV	Undergraduate Engineering Instruction/ Computer Science and Engineering	Near other engineering facilities	?	33,956	64,990	113,188	\$35.9M	\$43M	Assume Footprint 30% GFA
10	VCSA Growth	Campus Health, Counseling Center, Student Special Services	Could be off campus	?	NA	21,860	33,664	\$8.9M	10.7M	Consider part of mixed-use location, or "retail" space in Parking Structure Lot 24
11	CHASS Expansion	Additional expansion of CHASS I & R	Other CHASS Facilities	?	12,346	26,722	41,152	\$10.9M	\$13.1M	Replacement of space in Hinderacker. Assume Footprint 30% GFA
12	Art Building Expansion	Digital Studios Faculty Offices, Teaching Labs and Performance Space	South of existing Art Building	?	20,500	36,900	61,500	\$5.4M	\$6.5M	Sized according to the site available.
13	Bannockburn	Student Housing for Upper-class and Graduate Students; 500 beds, offices, retail, 250 residence parking spaces, 40 retail parking spaces.	Redevelopment of the existing site	2010	*		220,000	\$38.8M	\$50.5M	* Based on Strategic Plan for Housing, dated 1/31/03
14	Parking Structure (Lot 24)	1,250 parking Spaces (at four floors). Potential for 280 spaces for each additional floor.	Existing site	05-07	99,000	NA	423,000	\$21.2M	\$25.4M	Revised program based on shorter footprint. Original program called for 1400 spaces. See attachment for options of an additional floor to achieve original program goal.
15	Parking Structure (Lot 1)	1,200 parking spaces	Existing Site	?						Location & size based on DRAFT 2003 LRDP update
16	Watkins House	Program to be determined					14,000			Suggested that Watkins House be demolished to make way for SASS or the Alumni and Visitors Center. Deed restrictions on property resolved - must remain for students/University use.

Table 4.1: Program Summary



- 1 CHASS I&R
- 2A MS&E Offices/Labs
- 2B MS&E Classrooms
- 3A Alumni & Visitor Center (A&VC)
- 3B A&VC Expansion
- 4 SASS
- 5 Performing Arts Center
- 6 Recital Hall
- 7 Campus Museum/Art Gallery
- 8 Engineering III
- 9 Engineering IV
- 10 VCSA Growth - Location Options
- 11 CHASS I&R or SASS Expansion
- 12 Arts Expansion
- 13 Bannockburn
- 14 Parking Garage (Lot 24)
- 15 Parking Garage (Lot 1)
- 17 Academic/Mixed Use (4)
- 18 Academic (2)

Figure 4.1: East Campus Entrance Area Plan Concept

Program Assumptions

Proposed Facilities:

CHASS Instruction & Research (I&R) Building

The Detailed Project Program (DPP) for the CHASS I&R was completed prior to the beginning of this study. However, at the onset of this work concern was expressed about the proposed location of the building, a prominent green space at the intersection of the Carillon Mall and the Fine Arts Mall. The ECEAS consultant team was asked to do a detailed study of alternative sites. Five alternative sites were reviewed relative to criteria based on planning considerations, program relationships, program fit and site configurations, environmental considerations and relative infrastructure cost. (See Appendix A, Meeting Minutes, April 15, 2003)

The selected site was north of the original site, parallel to the Arts Mall on the site of the existing tennis courts. This site has the following attributes:

- Preserves the existing open space at the intersection of the Carillon Mall and Arts Mall
- Complies with the draft 2003 Long Range Development Plan
- Creates a positive relationship opposite the Arts Building
- Within a 5 minute walk of the Carillon Tower (the heart of campus) and other CHASS facilities
- Has good service access
- Allows for future expansions
- Has a great views of the Arts Mall and to the Box Springs Mountains from the upper floors

Material Science and Engineering (MS&E)

The DPP for the MS&E was completed concurrent with the beginning of this study. The site proposed for the building was at the east end of the Athletic Fields, parallel to Aberdeen Drive. As the East Campus Entrance Area Study

evolved, a central organizational concept was developed with a continuous open space, reflecting the historic arroyo, connecting The Glade to the east (across Aberdeen) to the Gage Basin west of Canyon Crest Drive. The proposed location for the MS&E Building effectively blocked the open space at Aberdeen. The Project Planning Committee asked the design team to review alternative sites for the MS&E Building.

The design team considered two options for the location of the MS&E: on the north side of the proposed “arroyo” open space, parallel to a proposed east/west access drive; and on the south side of the proposed “arroyo” open space, parallel to North Campus Drive. (See Appendix A, Meeting Minutes, September 23, 2003)

The conclusion of CPAC, based on recommendations of the design team, Project Planning Committee, and Design Review Board was that the MS&E should be located on the south side of the proposed central openspace, parallel to North Campus Drive for the following reasons:

- Allows for the east end of the “arroyo” to be open to Aberdeen and The Glade beyond
- Adjacent to existing classroom and lab facilities
- Provides for service to the lowest level relatively close to grade (without extensive ramps and retaining walls)
- Maximizes density within the Athletic Fields
- Provides for an incremental expansion of the campus, moving north, that facilitates the phasing of site improvements for future facilities on the Athletic Fields

In approving the location of the MS&E it was recommended that the East Campus Entrance Area Study include a requirement that the service yard and loading dock on the west end of the building be incorporated in the building structure, and/or completely screened from view on the west and north with limited exposure on the south.

Alumni and Visitors Center, Student Academic Support Services Building (SASS)

Both the Alumni and Visitors Center and the SASS require easy access by the public because they both will serve as a first stop for visitors to the campus. Early studies suggested that the two programs could be co-located, and the existing site of the Watkins House was suggested. Upon further investigation it was apparent that this was not feasible because the sources of funds, private for the Alumni and Visitor’s Center, and public for the SASS could not be co-mingled in a shared structure. In addition, the SASS is slated to begin the DPP process this fall, while the Alumni and Visitors Center is awaiting secure funding. The Watkins House site is not large enough to accommodate two independent structures.

The design team was asked to review several alternative sites for both programs. The conclusions of that study were that the Alumni and Visitors Center should be at the Watkins House site, and the SASS should be located adjacent to the Carillon Mall, next to Costo Hall. These locations have the following advantages:



Program Assumptions

Alumni and Visitors Center at Watkins House Site

- Convenient public access
- Convenient to parking at Lot 24
- Takes advantage of the adjacent University Arroyo for views and outdoor programs
- Sufficient room for expansion

The major issue with this location is the potential need to demolish the existing Watkins House, relocate the existing programs it houses, and satisfy specific deed restrictions on the property. The Project Management Team concluded that these issues were surmountable.

SASS on Carillon Mall adjacent to Costo Hall

- On the Carillon Mall, providing excellent orientation for prospective students
- Adjacent to student activities and organizations in both Costo Hall and the Student Commons (Existing and Proposed Expansion)
- Visible from the campus entrance from parking at Lot 1
- Sufficient room for expansion
- Takes advantage of adjacent green space shared with the CHASS (I&R) Building

The major issue in the design of the SASS in this location will be providing adequate service access from the existing loading dock north of Costo Hall, or the future development of a shared service access point for the SASS, Costo Hall, and the Commons.

Future Development:

Given the prolonged timeframe for construction of the remaining program elements, these projects do not have a brief summary of the programs. Considerations in their site selections are as follows:

Performing Arts Center:

The initial program assumption for the Performing Arts Center was for a hall with a capacity of 1,200 seats. CPAC directed that this be increased to 2,000 seats in keeping with the vision that this will become a regional cultural venue accommodating traveling shows as well as campus events. The detailed program was developed with the assistance of Auerbach Pollack Friedlander based on similar facilities. It was essential that the site be located at the campus “front door.” The specific site, adjacent to Canyon Crest Drive was selected to define the northern edge of an Arts Plaza, terminating University Avenue, while allowing for a diagonal connection to the proposed “arroyo” open space to the east. The selected site is also convenient to the parking structure proposed for Lot 24 and allows for a direct connection between the two structures, such as a second-floor walkway, if so desired.

Recital Hall and Campus Art Museum/Gallery:

The need for a campus Recital Hall was anticipated initially in the planning for the Arts Building which was completed in 2001. At that time it was anticipated to be located immediately south of the Arts Building. This assumption was revisited in the Area Study, because that site would be more conducive for other needed expansion of arts facilities, and the Recital Hall was seen as a complement to the Performing Arts Center, sharing the proposed Arts Plaza. The program was developed with the assistance of theater consultant Auerbach Pollack Friedlander, based on similar facilities.

The Museum/Art Gallery is intended to replace the Sweeney Art Gallery currently located in the Watkins House. The Museum component has been a part of a long-term plan for the campus as reflected in the 5-year Non-State Capital Program.

The East Campus Entrance Area Study proposes that the Recital Hall and the Art Museum/Gallery be located in a shared structure located on the Arts Plaza and at the terminus of University Avenue. These programs are complementary to the Performing Arts Center and appropriate to present a welcoming face of the University to the public. Smaller facilities at the terminus of University Avenue also assure that views of the Box Springs Mountains will be preserved at that point.

Engineering III & IV

The east end of the “arroyo” open space is intended as expansion space for the science and engineering programs. Engineering III is proposed for further development of the Bioengineering and Material Science Departments. Engineering IV is proposed for Undergraduate Engineering Instruction and Computer Science. The sites proposed for these two buildings are on the north side of the “arroyo” opposite the MS&E Building.

Vice Chancellor of Student Affairs Growth

These programs were considered in the initial planning for the Student Academic Support Services program, and include Campus Health, Counseling Center and Student Special Services. The conclusion was that the first two functions could be better served off-campus to give them an independent identity from the institution. The proposal is that they should be located within the mixed-use structures proposed for University Avenue, within the ground floor “retail” space in the parking structure proposed for Lot 24, or incorporated into the redevelopment of Bannockburn Housing.

Program Assumptions

CHASS Expansion

The program needs for CHASS expansion are not known at this time. The area assumption is based on the existing size of Hinderacker Hall, with the assumption that CHASS will expand into Hinderacker's released space after the completion of SASS. Additional CHASS expansion could take place at the site of the existing Physical Education Building. It is understood that the Physical Education Building would no longer be utilized as it was intended as the athletic and recreation facilities have been or will be appropriately relocated further from the center of the campus. The site of the existing building could be developed in the future for academic uses at a higher density than the current facility.

Arts Building Expansion

The Arts Department anticipates the need for additional Digital Studios, Teaching Labs, Performance Spaces and Faculty Offices. The logical site for these elements is immediately adjacent to the south of the existing Arts Building. The size of this additional building is determined by the site available, assuming a height of four stories.

Bannockburn Housing

The program for the Bannockburn Housing (*Figure 4.2*), 500 beds for upper-class and Graduate Students, offices, retail and parking was based on the Strategic Plan for Housing, dated January 2003. The assumptions underlying this plan were not re-examined, however it was confirmed that they were generally valid.

Parking Structure, Lot 24

Previous plans for the campus had anticipated a parking structure on Lot 24; however there was great concern about the visual impact of the structure on Canyon Crest Drive. The East Campus Entrance Area Study proposes that the length of

the structure be reduced relative to the previous schemes. If the four story height is retained this will reduce the number of spaces to approximately 1,280 cars, from the earlier program of 1,400. An additional floor would add approximately 280 spaces. In addition, the following design guidelines should be addressed as a part of the final structure design:

- The structure should include ground floor retail space for a minimum of half the length of the structure.
- The parking structure's entrance at the southern end should be from the service drive developed at the existing traffic light at the southern end of Bannockburn.
- The massing should be broken up above the ground plane and particularly at the roof. The massing should be varied to emphasize vertical segmentation of the structure into separate parts and minimize the continuous horizontal nature of the building.
- A pedestrian bridge from the second floor of the parking structure, crossing the service drive, may provide a ceremonial connection from the parking to the Performing Arts Center and Arts Plaza beyond.



Figure 4.2: Existing Bannockburn

- The parking structure should be sheathed in materials that provide a variety of textures, degrees of transparency and colors.
- The interior design of the garage should be considered and enhanced through the use of materials, natural and electric light and an emphasis on views.

Parking Structure, Lot 1

The East Campus Entrance Area Study retains the recommendation of constructing a parking Structure on Lot 1, based on earlier planning efforts. The site location and the opportunity for the structure to block the noise of the adjacent freeway make this an attractive site (*Figure 4.3*). Access points may be established off of West Campus Drive and via a new entrance running west of the Church of Latter Day Saints facility along an available public easement. The trapezoidal geometry of this site makes it more expensive to develop than Lot 24, therefore it is likely to be developed further in the future, or possibly combined with other uses.



Figure 4.3: Looking West across Parking Lot 1