

Office of the President

TO MEMBERS OF THE FINANCE AND CAPITAL STRATEGIES COMMITTEE:

ACTION ITEM – CONSENT

For Meeting of November 15, 2017

APPROVAL OF PRELIMINARY PLANS FUNDING, EMERSON HALL HOUSING REPLACEMENT, DAVIS CAMPUS

EXECUTIVE SUMMARY

The Davis campus is requesting preliminary plans funding to study the Emerson Hall Replacement project, which would replace the aging 118,000-gross-square-foot (gsf) Emerson Hall with a new 180,000-gsf residence hall of approximately 350 rooms capable of housing 700-800 freshmen students and associated support spaces. Upon opening, the replacement building would configure approximately 20 percent of the rooms for triples, but all rooms would be sized for tripling so additional rooms could be converted in the future to increase capacity and maintain affordability. The new residence hall would allow the campus to offer the same high level of academic support, counseling, student activities, and other amenities at Emerson that are available at its other freshman residential facilities.

Emerson Hall is located in the Cuarto neighborhood. Increasing density in this Neighborhood is part of the campus's strategy to provide adequate housing to maintain its first-year housing guarantee. The campus investigated several density options for the 1.8-acre site, ranging from wood-framed construction in three to five stories to concrete and steel construction at ten plus stories. The Emerson Hall Replacement project would complete the redevelopment of the Cuarto neighborhood, increase site density from approximately 280 beds/acre to nearly 400 beds/acre, and maximize the beds per acre while keeping the construction cost, and subsequently, the student rental rates as low as possible. Additionally, UC Davis leverages its existing inventory of on-campus housing facilities that are financially stable to minimize the impact of new construction costs on student rental rates. With costs continuing to increase dramatically in the California construction market, the campus is committed to evaluating the Emerson Hall Redevelopment project through the preliminary planning phase to develop a program that provides adequate space and amenities to freshmen students while minimizing the impact to student rental rates. The campus also applies a universal price structure for all residence hall spaces based on occupancy and estimates the cost of the new project is financially feasible with reasonable rental rate increases of less than five percent annually. The project delivers rooms that can be tripled, providing another price point for students seeking an even more affordable housing option.

The campus presented an overview of the Emerson Hall Replacement project to the Regents' Finance and Capital Strategies Committee at the September 13, 2017 meeting. In that presentation, the campus shared its intent to demolish and densify the Emerson Hall first-year residential building. The requested preliminary plans funding would allow the campus to further assess the viability of the project and confirm the redevelopment and densification of the Emerson Hall site to construct approximately 700-800 first-year residence hall beds by fall 2022. The funding also would allow the campus to refine and confirm the scope and budget, evaluate the possibility of a blended building height approach to further increase density, prepare a bid package for a design-build competition, complete site surveys and testing, and prepare California Environmental Quality Act documentation prior to submitting the project to the Regents for full budget and design approval in early 2018.

RECOMMENDATION

The President of the University recommends that the Finance and Capital Strategies Committee recommend to the Regents that the 2017-18 Budget for Capital Improvements and the Capital Improvement Program be amended to include the following project:

Davis: Emerson Hall Housing Replacement – preliminary plans – \$3,396,000 to be funded from housing reserves

BACKGROUND

UC Davis Housing Overview

UC Davis Student Housing and Dining Services program (Program) strives to deliver an excellent living experience by providing a safe and comfortable environment that will foster community interaction and educational development. The Program serves undergraduate and graduate students including students with children and those that are married or have domestic partners.

The Program guarantees one-year on-campus housing to all incoming freshmen and transfer students. The campus's historical take rate with this guarantee is 95 percent of first-year freshmen.

As illustrated in Attachment 2, housing on the Davis campus is organized in several neighborhoods. Traditional residence halls are located in the Tercero, Segundo, and Cuarto neighborhoods and primarily serve freshmen and sophomores, while on-campus apartment-style housing, located in the Cuarto, Solano, Segundo, and West Village neighborhoods, provide housing to upper division undergraduate and graduate students.

The Cuarto Neighborhood

The Cuarto Neighborhood primarily serves first-year students and in fall 2016 housed approximately 950 students. The neighborhood has a dining facility and three student residence

halls (Webster, Emerson, and Thoreau Halls) and is organized around Oxford Circle on University-owned property within the City of Davis. Surrounding properties are characterized by predominately two-story, small multi-family apartment complexes and single-family homes. The Cuarto Neighborhood also houses some single graduate students and the neighborhood includes the 8th and Wake apartment community, located approximately a quarter of a mile from this cluster of residence halls.

PROJECT DRIVERS

Need for Building Renewal and Program Deficiencies

Emerson Hall is a three-story, wood-frame building that currently houses approximately 500 students in a suite-style configuration in which two or three double occupancy bedrooms share a living room and either one or two full bathrooms. Emerson Hall and its building systems are at the end of their useful lives. Deficient and/or outdated building systems include: mechanical, plumbing, lighting, cabling, and telecommunications, and internet access. In addition, upgrades to the fire suppression system and abatement of hazardous materials are needed. Aging building systems require constant maintenance and could fail.

Emerson Hall's design also results in programmatic deficiencies as it lacks office and meeting space for academic support. In addition, the units are configured as suites, which minimize the social interaction among residents, compromising the student experience, and the rooms are not configured such that they could support tripling to respond to surges in demand.

Need for Additional Housing

Student Housing and Dining Services has committed to guaranteeing housing to incoming first-year students in residence halls. The campus's longstanding goal is to house freshmen in residence hall complexes with programs and services that are geared toward supporting the academic success and individual development as students transition to university life. Despite recent expansions in the Tercero neighborhood and a project underway to increase the number of residence hall beds in the Cuarto neighborhood via the Webster Hall redevelopment, additional residence hall beds are necessary to keep pace with anticipated demand over the next decade.

Student Housing and Dining Services' strategy to provide modern housing and meet demand involves building new residence halls, configuring new facilities with 20 percent triple occupancy in order to provide a more affordable option, along with replacing aging facilities and renovating existing facilities. Table 1 illustrates the supply of current and projected campus residence hall housing by year. To accommodate the fluctuations in first-year residence hall demand and supply, Student Housing and Dining Services will adjust the amount of triples offered as needed. This allows the campus the operational flexibility to meet realized demand while projects are brought into and out of use.

Table 1: On-Campus Residence Hall Supply and Demand Projections

	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Residence Hall Beds ¹	5,700	5,600 ²	5,600	5,600	6,300	6,300	6,300
Enrollment Projections for First-Year Freshmen	5,800	5,550	5,525	5,775	6,000	6,200	6,325
Projected First-Year Freshmen Demand (95% of enrollment)	5,510	5,275	5,250	5,485	5,700	5,890	6,010
Projected Second-Year Demand (5%)	270	275	265	265	275	285	295
Residence Hall Capacity Excess (Shortfall)	(80)	50	85	(150)	325	125	(5)
Approved Residence Hall Projects		Webster Opens					
Emerson Hall		Emerson Closes			Emerson Opens		

Alternatives Considered

Though a significant investment to replace the Emerson Hall beds has long been part of the Cuarto neighborhood options and the overall Davis campus housing forecast, the campus reevaluated available options in terms of the existing building conditions, current construction market conditions, and demand. Options analyzed included: extending the life of the building with minimal investments to prolong the date by which the facility must ultimately be decommissioned; renovating the existing building; demolishing and replacing the existing building at a higher density; and delivering a new building with a public-private partnership. Attachment 4 provides a summary of the findings of this analysis. The proposed approach allows the campus to maximize the bed count within budget, site, dining, and neighborhood contextual constraints, and to provide appropriate program space to serve the students.

Project Description

The proposed approximately 180,000-gross-square-foot (gsf) project would include approximately 700-800 residence hall beds, Cuarto neighborhood program space, and shared community support space (e.g. community kitchen, large lounge, and Resident Assistant work room/meeting space). An academic advising center with professional staff serving the students would also be included in the project. This model is in line with the other residential neighborhoods. The project would be served by the existing recently renovated Cuarto dining hall and will leverage the full capacity of the dining hall.

¹ Baseline housing capacity which includes converting 20 percent of the rooms in new residence hall to triples.

² Loss of 100 beds is the net result of the closure of Emerson Hall in 2019, which is partially offset by the gain in beds from the redeveloped Webster Hall, which would come into use that same year. This net loss of 100 beds can be accommodated, if needed, through the additional tripling capacity beds in the new Webster Hall and through the additional capacity in the Tercero neighborhood.

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Emerson Hall's residential space would be constructed to align with the configuration and amenities provided in recent residence hall developments on the Davis campus. Design of the new Webster Hall will be used as the basis of design for the Emerson Replacement project, incorporating elements that appeal to both first- and second-year students. These design elements include increased bathroom privacy, small community gathering spaces, and flexible space for the educational programs. Bedrooms will be sized as double rooms with the ability to configure as triples, with minimal impact to the residents. The redeveloped Emerson would also include informal interaction space, lounge and study areas, a community kitchen, laundry facilities, and other support space.

Delivery Model

The proposed project is intended to be constructed using the design-build delivery method, with a Guaranteed Maximum Price which has been successfully employed by UC Davis on a number of recent housing projects. In this process, the University contracts with a single party for both design and construction. The campus prepares an extensive bid package outlining detailed project requirements, performance specifications, desired design character, and maximum acceptance cost. This package is competitively bid to prequalified contractor/architect teams who submit schematic design proposals. The contract is awarded to the team that provides the best value for the budget. The design-build process is highly efficient and allows the contractor's technical expertise and creativity to be incorporated into the design process from the beginning. In addition, this method permits project schedules to be fast-tracked because procurement, fabrication, and construction of utilities can begin while construction documents are still under way. The design-build process has proven so successful in controlling costs, managing schedule, and maximizing value for housing projects that the campus now delivers virtually all residence hall housing projects using this method.

Project Schedule and Approval Request

The requested preliminary plans funding would allow the campus to further assess the viability of the project and confirm the redevelopment and densification of the Emerson Hall site to construct approximately 700-800 first-year residence hall beds by fall 2022. The funding would allow the campus to refine and confirm the scope, budget, and schedule, prepare a bid package for a design-build competition, complete site surveys and testing, and prepare California Environmental Quality Act documentation.

Key to Acronyms

GSF	Gross-Square-Foot
P3	Public-Private Partnership
Program	UC Davis Student Housing and Dining Services program

ATTACHMENTS

Attachment 1: Preliminary Plans Budget
Attachment 2: Campus Housing Neighborhoods
Attachment 3: Emerson Hall Redevelopment Site
Attachment 4: Explorative Massing Diagrams
Attachment 5: Alternatives Considered

ATTACHMENT 1

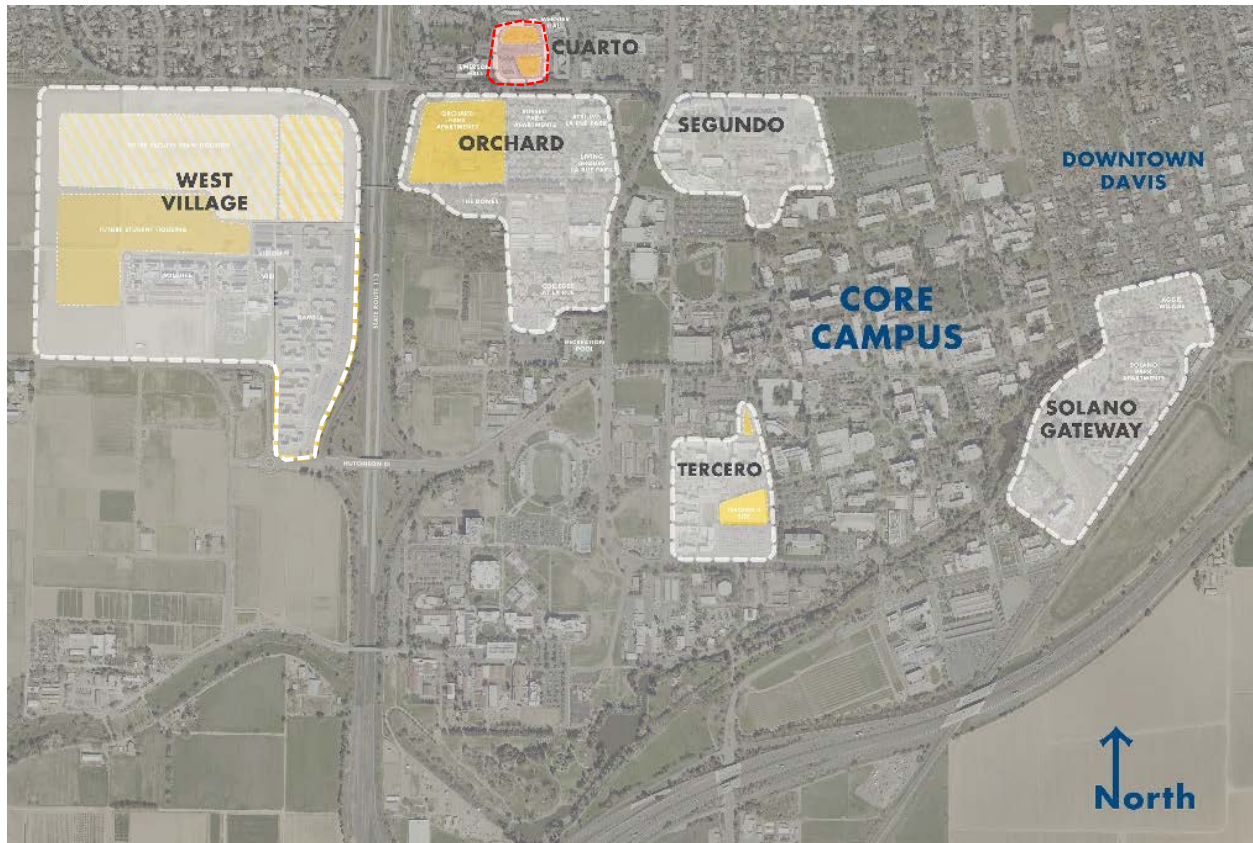
PRELIMINARY PLANS BUDGET

CATEGORY	AMOUNT	
A/E Fees ⁽¹⁾	\$1,825,000	54%
Campus Project Management ⁽²⁾	480,000	14%
Surveys, Test, and Plans ⁽³⁾	160,000	5%
Special Items ⁽⁴⁾	931,000	27%
TOTAL PRELIMINARY PLANS BUDGET	\$3,396,000	100%

- (1) A/E Fees include executive architect and other design professional consulting costs for preparing bridging documents for the design-build bidding, and to the design-build team for phase I – design development.
- (2) Campus Project Management includes project management, planning, engineering and design review, and contracts administration.
- (3) Surveys, Tests, and Plans include geotechnical, utility and site surveying and expenses for production of plans and bidding. Includes additional survey fees for the City of Davis.
- (4) Special Items include structural, design and cost peer reviews by consultants, environmental surveys and documentation, specialty consultants, and agency fees.

ATTACHMENT 2

CAMPUS HOUSING NEIGHBORHOODS



-  Cuarto Neighborhood
-  Current Student Housing Projects
-  Future Faculty and Staff Housing

EMERSON HALL REDEVELOPMENT SITE



EXPLORATIVE MASSING DIAGRAMS

Massing Diagram of a New Residence Hall at 4-Stories



Massing Diagram of a New Residence Hall at 6-Stories and 4-Stories



Massing Diagram of a New Residence Hall at 10-Stories and 4-Stories



ALTERNATIVES CONSIDERED

Information regarding the alternatives considered for the Emerson Hall Replacement project is provided below.

Alternative 1: Extend life of building with minimal investment

Approximately \$3 million would be required to complete basic improvements necessary to extend the use of Emerson Hall, as currently configured, through the 2023-24 academic year. If the campus were to continue to minimally invest in Emerson Hall, the cost of operations would continue to increase as the mechanical systems have already outlived their useful life. The risk of a catastrophic system failure increases every year. Emerson would have to be decommissioned in 2024, resulting in a loss of 500 beds to the campus inventory, and the campus would be in jeopardy of not being able to meet its housing guarantee for freshmen, forcing freshmen into the general Davis market.

Alternative 2: Renovate Emerson Hall

Renovating Emerson Hall would improve some programmatic and life-safety deficiencies, but would also decrease the on-campus supply of freshman housing. The resulting renovation would result in a net loss of at least 50 beds to accommodate the needed programmatic space such as a student advising center, study rooms, and recreational rooms. A renovation to update the facility and provide adequate programmatic space would require an investment of approximately \$60 million and extend the life of the building by approximately 20 years. A new housing project would need to be considered to accommodate the loss in beds from Emerson being retired in 2039.

The campus anticipates an increase in first-year residence hall bed demand of over 800 beds in the next ten years. The President's Housing Initiative encourages campuses to continue to increase the number of beds offered on campus. Renovating Emerson to provide programmatic space equivalent to other first-year housing on campus would reduce the number of beds available on campus and limit the campus's ability to accommodate future demand or meet the goals of the systemwide Housing Initiative.

Alternative 3: Demolish and Develop a New Residence Hall

Increasing density in the Cuarto neighborhood is part of the campus's strategy to continue to provide adequate housing to maintain the first-year housing guarantee. Given the campus's need to continually increase its housing capacity, every new residential project must consider the maximum practical density to be built. The considerations must include the cost of construction, the cost per bed, the cost per square foot, social implications, daylighting, views, and the neighborhood scale. Several density options were considered under the option to demolish and rebuild, ranging from wood-framed construction in the three- to five-story range to type I construction high rise at ten plus stories. Preliminary analysis indicates that the option that best

maximizes the University's investment lies in the middle of that range, allowing for densification and economies of scale while maximizing the existing investment in the dining facility and keeping the cost per bed and the cost per square foot as low as possible to keep the rental rates as affordable as possible for students. To balance the cost and scale of the new buildings, preserve views, and enhance daylighting, a hybrid approach of building heights and construction types could be used. These options will be further test-fit during preliminary planning.

This analysis considered the challenges to building higher within the neighborhood context. The city's height limit in the surrounding neighborhood is nine stories, and while the University is not obligated to follow such restrictions, increased density of that magnitude would affect the neighborhood.

Alternative 4: Demolish and Rebuild Using a P3 Development Implementation Strategy

Housing projects are developed either through the use of internal campus management and resources, which is how all new construction of first-year student residence halls have been delivered to date on the Davis campus, or through a ground lease of the property to a third party, who would deliver the project and act as the students' landlord. Under the right circumstances, P3s have the potential to offer savings in time and reduce expenditure of capital reserves. Consideration of P3s by UC is based primarily on potential advantages in risk allocation and in management efficiencies offered by experienced developers who specialize in building types commonly developed by the private sector. The campus has determined that Emerson Hall is not a suitable candidate for a P3 because:

Revenue Streams and Financial Feasibility:

- While a P3 could minimize the campus' initial capital outlay, the loss in long-term net operating income is substantially greater than the ground rent that could be generated from the project. Housing reserves built up from the project would then be reinvested in future student housing and dining projects.
- The resulting revenue stream will be used to fund other aspects of the housing and dining program such as program enrichment and reserves for building upgrades or future projects. A percentage of this revenue stream will also go towards campus programs and infrastructure.
- A P3 provides little advantage to the campus in regards to "risk" allocation. "Risk" of vacancy and subsequent default is considered very low, due to the limited amounts of on-campus housing at UC Davis and adequate housing reserves.

Residential Life:

- A significant element of the project is the residential program experience, student services, and programs to support the successful transition of freshmen and transfer students into University life. The campus has significant expertise delivering student life programs that include advising, tutoring, counseling, recreation, and other support services. The campus has a successful first-year experience program in the residence halls. Delivering the same level of service with a P3 provider is more difficult to manage and coordinate and would require additional resources to ensure consistency.

Delivery and Operating Efficiencies:

- Campus staff has significant experience in developing student housing. In the past ten years the campus has delivered approximately 2,400 residence hall beds and has partnered with private developers to deliver approximately 2,100 apartment beds for students.
- Emerson Hall will have operating synergies with Webster, Thoreau, and the Cuarto Dining Commons, all of which are operated by Campus Housing.