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Office of the President

TO MEMBERS OF THE FINANCE AND CAPITAL STRATEGIES COMMITTEE:

ACTION ITEM

For Meeting of January 25, 2017

APPROVAL OF BUDGET, EXTERNAL FINANCING, AND DESIGN FOLLOWING ACTION PURSUANT TO CALIFORNIA ENVIRONMENTAL QUALITY ACT, MIDDLE EARTH EXPANSION, IRVINE CAMPUS

EXECUTIVE SUMMARY

The proposed Middle Earth Expansion project would provide approximately 494 new residence hall beds for freshmen. In addition, the proposed project would include new dining facilities and community space supporting the entire Middle Earth complex. New office space for the Housing Administrative Services would free up space in the Student Center to allow for current and future student resource growth needs. Finally, the project would renovate the existing dining facility (Pippin) to repurpose that space for a fitness center and other support uses.

The Irvine campus's 2007 Long Range Development Plan established a goal to provide on-campus housing for 50 percent of total student enrollment. Existing housing falls short of this goal by approximately 2,000 beds. This demand is substantiated by a current housing waiting list of approximately 2,200 students, including 1,300 undergraduates. The campus's goal is to house freshmen in the residence hall complexes located within the academic core of the campus, providing proximity to the programs and services that support the students in their transition to university life. This fall, several hundred freshmen could not be accommodated in the residence halls and had to be redirected to complexes intended for continuing students. The proposed Middle Earth Expansion project would address the need for additional freshman housing.

The Regents are being asked to: (1) approve the project budget of $132,123,000 to be funded from external financing ($98.1 million) and housing reserves ($34,023,000); (2) approve the project scope; (3) approve external financing of $98.1 million; (4) adopt the Initial Study/Mitigated Negative Declaration and Findings in accordance with the California Environmental Quality Act; (5) approve the project design, and (6) authorize the President of the University to execute all documents necessary in connection with the project.

RECOMMENDATION

A. The President of the University recommends that the Finance and Capital Strategies Committee recommend to the Regents that:

(1) The 2016-17 Budget for Capital Improvements and the Capital Improvement Program be amended as follows:

Irvine: Middle Earth Expansion – preliminary plans, working drawings, construction, and equipment – $132,123,000 to be funded from external financing ($98.1 million) and housing reserves ($34,023,000).

(2) The scope of the Middle Earth Expansion project shall include the construction of a residence hall facility with approximately 494 beds; replacement and expansion of the dining commons, Housing Administrative Services space, and building support space; and renovation of the existing Pippin Dining Commons to provide a fitness facility and other support functions, totaling approximately 230,000 gross square feet.

(3) The President be authorized to obtain external financing not to exceed $98.1 million plus additional related financing costs. The President shall require that:

a. Interest only, based on the amount drawn down, shall be paid on the outstanding balance during the construction period.

b. As long as the debt is outstanding, general revenues of the Irvine campus shall be maintained in amounts sufficient to pay the debt service and to meet the related requirements of the authorized financing.

c. The general credit of the Regents shall not be pledged.

B. The President recommends that following a review and consideration of the environmental consequences of the proposed Middle Earth Expansion project, as required by the California Environmental Quality Act (CEQA), including any written information addressing this item received by the Office of the Secretary and Chief of Staff no less than 24 hours in advance of the beginning of this Regents meeting, testimony or written materials presented to the Regents during the scheduled public comment period, and the item presentation, the Finance and Capital Strategies Committee:

(1) Adopt the Initial Study/Mitigated Negative Declaration for the Middle Earth Expansion project in accordance with CEQA.

(2) Adopt the CEQA Findings for the Middle Earth Expansion project.

(3) Approve the design of the Middle Earth Expansion project.

C. The President recommends that, in consultation with the General Counsel, she be authorized to execute all documents necessary in connection with the above.

BACKGROUND

At the November 2016 meeting of the Regents' Finance and Capital Strategies Committee, a discussion item was presented: *Update on Student Housing and Plans for Middle Earth Expansion and East Campus Student Apartments Phase 4, Irvine Campus*. That item provided an overview of current housing needs, projected demand, and housing goals outlined in the Long Range Development Plan (LRDP) and the 2016 Strategic Plan, as well as the campus's enrollment plans. The discussion item also provided context for a proposed Middle Earth Expansion project that the campus anticipated bringing to the Regents for action at this meeting. The discussion item described the proposed project as providing 495 residence hall beds in triple-occupancy rooms. Since that time, further analysis has resulted in a total of 494 beds. In addition, the project would include construction of an expanded dining facility, support spaces, and offices for Housing Administrative Services. Renovation of Pippin, the existing dining facility, would provide a fitness center and other support functions.

Project Drivers

Need for student housing to address current and projected demand. The Irvine campus has long recognized that providing on-campus housing for students is essential for the creation of a strong, vibrant university community. UCI's goal is to provide residential facilities, programs, and services that enhance student learning and support all facets of student success. The campus's 2007 LRDP identified a goal of providing on-campus housing for 50 percent of the total undergraduate and graduate student population. To ensure that new undergraduates have an opportunity to live on campus, UCI currently offers a two-year housing guarantee to freshmen and a one-year guarantee to transfer students. In addition, most graduate students are offered guaranteed housing based on their programs' normative time to degree.

On-campus housing is currently available for 14,000 undergraduate and graduate students in a combination of University-owned complexes (8,840 beds) and third-party developed apartments (5,160 beds). This total includes Mesa Court Expansion, which opened this fall, adding 932 residence-hall beds for freshmen. The current housing supply accommodates only 44 percent of the fall 2016 enrollment of 32,071. As shown in Table 1, Projected Student Housing Supply Compared to LRDP Goal, in fall 2016 the deficit is more than 2,000 beds based on the 50-percent housing target and is projected to climb to over 3,200 beds by fall 2019 without construction of additional housing. This demand is substantiated by a current housing waiting list that somewhat exceeds the LRDP shortfall. This wait list totals approximately 2,200 students, of which 1,300 are undergraduates. Despite the shortage of beds, the campus continues to meet all of its housing guarantees. Students on the wait lists are those who either were not eligible for guaranteed housing, missed the deadline for requesting guaranteed housing, or desired a different unit type from the one offered to them.

The campus currently anticipates growth to approximately 34,700 students by 2021-22 consistent with Strategic Plan goals, which call for continued growth, and with the University's agreement with the State to enroll 2,500 additional California residents across the UC system in each of the next two years. In addition to the proposed Middle Earth Expansion, the campus is planning to

proceed with the fourth phase of third-party developed apartments on the East Campus, which would provide approximately 1,400 beds for undergraduates. These apartments would be designed, constructed, owned, and managed by a third party under a ground lease. The campus is projecting completion of these apartments on the same schedule as the Middle Earth project in fall 2019. As shown in Table 1, together these two projects would significantly reduce the projected 2019 shortfall from more than 3,200 beds to 1,344.

TABLE 1. PROJECTED STUDENT HOUSING SUPPLY COMPARED TO LRDP GOAL

	Actual Fall	Projected Fall	Projected Fall	Projected Fall
	2016	**2017**	**2019**	**2021**
Total Student Enrollment (graduate and undergraduate)	32,071	33,042	34,484	34,655
LRDP Goal @ 50 percent	16,036	16,521	17,242	17,328
Current Housing Supply	14,004	14,004	14,004	14,004
Shortfall without proposed projects	*(2,032)*	*(2,517)*	*(3,238)*	*(3,324)*
Proposed Middle Earth Expansion			**494**	**494**
Planned East Campus Apartments Phase 4			1,400	1,400
Shortfall with Proposed & Planned Projects			*(1,344)*	*(1,430)*

Need for additional freshman housing in the academic core of the campus. The campus's longstanding goal, as stated in the LRDP, is to house freshmen in the residence hall complexes located within the academic core. The programs and services offered in these complexes are specifically geared to support the academic success and individual development of first-year students as they transition to university life. Location in the academic core maximizes opportunities for freshmen to become involved in the many programs and activities that contribute to a successful university experience.

UCI has two residence hall communities – Mesa Court and Middle Earth – which together house approximately 4,774 freshmen. An expansion of the Mesa Court complex was just completed this fall, adding 932 beds, mostly in rooms with quadruple occupancy. The project was originally planned to house 746 students in triple-occupancy rooms, but most of the rooms were converted to quadruples to accommodate this year's enrollment increases. Despite these additional beds, several hundred freshmen could not be accommodated in the residence halls this fall and were redirected to complexes intended for continuing students. The expansion of the Middle Earth complex would provide sufficient beds to accommodate projected freshman enrollment and to potentially decompress the new Mesa Court housing, should the campus decide to do so. A decision on whether to reduce room occupancy will be made after students have lived in the new Mesa Court residence halls for a period of time and can provide feedback on their experience. The new facilities have been well received so far; if student reaction remains positive, the

campus may maintain some or all of the higher-occupancy rooms to help address continuing housing demand and provide a lower-cost option for students.

Need for expanded and modern dining facilities and support space. Dining and support space for the Middle Earth complex is currently provided in three commons buildings, Pippin Commons, constructed in 1988; and Brandywine Commons and Brandywine Student Center, both completed in 1974. The two older Brandywine buildings (9,200 assignable square feet or ASF) would be demolished to provide a site for the new residence halls, requiring that the project include replacement space for the activities housed in these facilities. The dining facility in the remaining commons building – Pippin Commons – is undersized even for the current community and was not designed for contemporary food service operations. In addition, the campus has a shortage of space in which to accommodate events and programs that serve all of the campus's undergraduate housing communities, such as student staff training, professional development, student performances, community student council meetings, speakers, banquets, and academic tutoring. The location of the Middle Earth Expansion project adjacent to the Ring Mall, which is the main pedestrian path in the academic core, makes this an ideal location for this type of community support space.

Need to relocate Housing's Administrative Services unit to provide additional space for student services and activities. Housing Administrative Services, which provides management and support for the campus's student housing operations, is currently located in 9,300 ASF in UCI's Student Center. Since the Student Center was last expanded almost ten years ago, campus enrollment has increased substantially and there is insufficient space to adequately accommodate all of the programs and activities currently located in Student Center, as well as to house the new student resource centers that the campus intends to establish.

Rental Rates

Debt service for the Middle Earth Expansion project is anticipated to begin in 2019-20, at which time the projected average residence hall rates for room and board will be $16,836 for triple occupancy. The current room and board income split is approximately 65 percent room, making the forecasted cost of the room $1,216 per month, or $10,944 per year, based on a nine-month contract. This cost includes internet, cable, utilities, custodial services, and other amenities such as fitness and recreation facilities and study rooms, and first-year student enrichment and support programs. In comparison, in the local community, where students are generally required to sign a 12-month lease, a three-bedroom apartment with three occupants would cost $1,278 per student per month, or $15,336 per year, including utilities, cable, and internet. Over the next ten years, housing rates for the campus's undergraduate complexes, including residence halls, are anticipated to increase up to 5.25 percent annually.

PROJECT DESCRIPTION

Program

The proposed Middle Earth Expansion would involve construction of approximately 139,000 ASF to provide residence hall beds and to replace and expand Middle Earth's Brandywine buildings (Commons and Student Center). The complex's existing dining facility, located in Pippin, would be renovated to provide a fitness center and other support space, for a total of approximately 146,100 ASF. The project would increase the capacity of the Middle Earth complex from 1,825 beds to 2,319 beds. The proposed residential space would be constructed above a new commons space that would provide facilities for the entire Middle Earth community. A site plan showing the locations of the new housing and Pippin Commons is included in Attachment 6, Project Graphics.

The project would also renovate the existing Pippin facility to provide approximately 7,100 ASF of community space, including a fitness center. The space program for the new residence halls and the renovated space is described in more detail below.

Residence Halls (approximately 81,300 ASF). The residence halls are planned to accommodate up to 494 beds, primarily in triple-occupancy rooms. Shared bathrooms would be provided for every two bedrooms. Other spaces to be provided include resident advisor bedrooms and bathrooms, informal interaction space, lounge and study areas, kitchenettes, laundry facilities, and other support space.

Commons Facility (approximately 57,700 ASF). The commons facility would provide expanded dining and support spaces to serve the entire Middle Earth community and would include the following areas:

- A dining facility of approximately 32,200 ASF that would serve as a central hub for the community and provide over 900 seats indoors and outdoors. In addition to the dining areas, the facility would include a servery, back-of-house food preparation areas, and support spaces. An outside food-service vendor will operate this facility.
- Middle Earth community space, totaling approximately 14,000 ASF, would include small classrooms for academic tutoring and programs and classes offered to the Middle Earth community; study rooms; a large multipurpose room to accommodate events and programs such as student staff training, student performances, community council meetings, speakers, and banquets; a student service suite to house Middle Earth staff, and work space for student staff.
- Housing Administrative Services office space, totaling approximately 9,400 ASF.
- Building support space, such as storage, vending areas, and custodial space, totaling approximately 2,100 ASF.

Pippin Renovation (approximately 7,100 ASF). The renovation of the existing Pippin commons facility would replace and expand facilities currently located in Brandywine Student Center, which is being demolished as part of this project. These spaces include a fitness center,

recreation room, and music practice rooms. In addition, the Middle Earth mail room will be relocated to Pippin from the Middle Earth administration building in order to consolidate student spaces. Pippin is an ideal location for these activities – its central location makes it easily accessible to the entire complex and encourages chance interaction among community members. Moreover, the high ceilings and open configuration of the former dining commons can accommodate the fitness center with minimal renovation (refer to Attachment 6). Renovation of the Pippin facility would be scheduled to follow completion of the new buildings to allow for completion of the new dining facility before taking Pippin out of service.

Site Development

Because the Middle Earth complex is entirely built out, the project would include demolition of two existing commons buildings, Brandywine Commons and Brandywine Student Center, both constructed in 1974, in order to provide a site for the new facility. Replacement space for the activities housed in these buildings is included in the project as part of the proposed community space.

Site development would include connection to campus utility and drainage systems; construction of a loading dock and service yard, outdoor dining space and outdoor gathering spaces; vendor parking; pathways, ramps, and sidewalks; site lighting; landscape improvements; related signage; fire department access and fire hydrants; security enhancements; and wireless connectivity for all outdoor areas. Utility service is available from the central campus utility tunnel located under the Ring Mall.

APPROVAL OF DESIGN PARAMETERS

Approval of the conceptual design and site-planning parameters is being requested in order to include them in the bid documents of the design-build competition. The design parameters are consistent with the Irvine campus's January 2010 Physical Design Framework.

Long Range Development Plan

The use of the Middle Earth Expansion project will be consistent with the Student Housing land use designation in the Long Range Development Plan.

Site

The project site is located off the Ring Mall adjacent to Social Ecology 1 to the north, and the Middle Earth complex to the south and east. The Anteater Parking Structure is directly to the south of the complex. Primary pedestrian circulation and access points for the project are expected to be along the west where students head to, or return from, other areas of campus from the Ring Mall.

Physical Design Framework

In accordance with the architectural guidelines of the Physical Design Framework, the design of the building will be responsive to the context of Middle Earth and other surrounding structures, and will reinforce the campus architectural vocabulary, including a classical, tripartite expression of building elements of base, body, and top. Location and massing of the building will take into account solar exposure, light, wind direction, and surrounding microclimates. Buildings and landscaping should enhance or frame important view corridors; building heights will be variable but will not exceed five stories above the two-story podium.

Building Design

The Middle Earth Expansion project is intended to be a nucleus of student life and activity and enhance the existing Middle Earth community. The building is assumed to be a structure of up to seven stories – a two-story podium topped by residential towers – that will house a mix of residential, dining, and student life components (refer to Attachment 6). The design would foster a sense of community and provide options for student interaction.

The residential portion of the project would be based on a repeating 16-room module. The program is intended to combine the living functions of sleeping rooms with academic components, social interaction areas, and recreational spaces to promote a sense of community. All but four bedrooms would be designed to accommodate three occupants; the remainder would be doubles. Bathrooms would be designed to accommodate the maximum number of projected student occupants. Study rooms, lounges, and informal gathering spaces will be provided on the residential floors and elsewhere in the complex to provide a variety of venues for studying and to encourage social interaction (refer to Attachment 6). Acoustic separation of noisy spaces and functions from bedrooms will be provided. As much access to daylight and views as possible will be provided throughout the complex. Interior colors will provide a stimulus-rich environment, and interiors will be constructed of durable, low-maintenance materials.

The complex would have two main entrances, the primary on the east, facing the Middle Earth complex and the secondary on the southwest corner, facing the Ring Mall (refer to Attachment 6). The building will be built into a slope so that the east-facing main entry and lobby would be on the second floor. Its function would be to bring Middle Earth students to community spaces for use by the residents. The first-floor entry and lobby would be to the dining facility, which will be a key hub of student interaction, providing a “center of community” atmosphere for the entire Middle Earth complex. Both entries will express their unique purposes; the entry to the east will be inviting to the Middle Earth complex and encourage its residents to engage in the services the building will provide. The entry to the west will serve as the “front door” from the main campus to the Middle Earth complex, welcoming members of the campus community at large, as well as Middle Earth residents, into the dining facility. Both entries will express some degree of visual transparency to identify interior functions.

Materials

The building would utilize materials consistent with the UCI Physical Design Framework's campus design standards that would express a quality of permanence and durability. All materials used would support the campus requirement for buildings to last a minimum of 70 years, with no major maintenance required for 20 years. Responding to the surrounding built environment, exterior colors will be of a medium to strong earth tone palette with color accents, and durable, low-maintenance materials including stone, cement plaster, cast-in-place concrete, architectural metal, and glass (refer to Attachment 6).

Seismic Policy

This project will comply with the University of California Seismic Safety Policy including independent structural engineering peer review.

Sustainability

The Middle Earth Expansion project will comply with the University of California Sustainable Practices Policy. Project sustainability targets and goals include Leadership in Energy and Environmental Design (LEED™) minimum building certification level of Gold, with incentives for Platinum. The project will participate in the Southern California Edison Savings by Design energy conservation program and will outperform the California Energy Code by 20 percent as required by UC Policy.

The project will be connected to the efficient UCI Central Plant utilities, providing supply of both chilled water and high-temperature hot water to the building. The annual energy performance of the building will be enhanced by the Central Plant's use of the chilled water thermal energy storage tank, and heat recovery from the central cogeneration facility.
The project will incorporate mandatory sustainable features outlined in the Cal-Green Building Code. Sustainable features include:

- Natural ventilation for energy conservation
- Daylighting optimization for lighting reductions
- Smart controllers, sensors, and design schemes for lighting energy reductions
- Low-energy LED lighting design
- High-performance glazing
- High-performance envelope thermal insulation
- Light-reflecting materials/finishes to reduce heat island effect
- Energy-efficient building systems
- Storm-water management design
- High-efficiency HVAC equipment
- Low-flow plumbing fixtures and showers for domestic water reductions
- Solid waste disposal reduction by diversion of 75 percent of construction waste from landfills

- VOC emissions reduction by use of low-VOC products
- Drought-tolerant landscape materials
- Water reduction through smart reclaimed water irrigation controls and low-flow emitters
- Enhanced building commissioning for optimal energy performance
- Generous bicycle parking

Approval Request and Schedule

The requested approvals would enable the campus to move forward with bidding the project. Construction on the new residence halls is scheduled to begin in June 2017 with completion scheduled for August 2019 in time for fall 2019 student occupancy. Renovation of Pippin Commons will commence in August 2019 upon completion of the new building, with completion scheduled for February 2020.

Funding Plan

The project budget of $132,123,000 will be funded from a combination of external financing ($98.1 million) and housing reserves ($34,023,000).

Financial Feasibility

This action is proposing approval of $98.1 million in external financing. Based on long-term debt of $98.1 million with a 35-year term, first four years interest only, at six percent interest, the annual debt service is projected to be approximately $5.9 million in the first four years of interest only and $7 million in the last 31 years of principal and interest. Debt service will be funded from housing revenues; operations and maintenance for the building will be drawn from housing revenues as well. The Summary of Financial Feasibility is provided in Attachment 3.

Key to Acronyms

ASF	Assignable Square Feet
CEQA	California Environmental Quality Act
EIR	Environmental Impact Report
HVAC	Heating, ventilation, and air conditioning
LED	Light-emitting diode
LEED™	Leadership in Energy and Environmental Design
LRDP	Long Range Development Plan
UCI	University of California, Irvine
VOC	Volatile organic compound

ATTACHMENTS follow (unless otherwise stated)
Attachment 1: Project Budget
Attachment 2: Comparable Project Information
Attachment 3: Summary of Financial Feasibility

Attachment 4: Alternatives Considered
Attachment 5: Delivery Model
Attachment 6: Project Graphics
Attachment 7: Environmental Impact Summary
Attachment 8: Final Initial Study/Mitigated Negative Declaration (includes Mitigation Monitoring Program)
Attachment 9: 2007 Long Range Development Plan and 2007 Long Range Development Plan Final Environmental Impact Report
Attachment 10: California Environmental Quality Act Findings

ATTACHMENT 1

PROJECT BUDGET

CCCI 6930

Cost Category	Residence Halls	Commons	Pippin	Total Project	% of Total
Site Clearance	$371,000	$257,000	$0	$628,000	0.5%
Building	$54,495,000	$37,732,000	$3,578,000	$95,805,000	74.5%
Exterior Utilities	$1,109,000	$768,000	$0	$1,877,000	1.5%
Site Development	$1,471,000	$1,019,000	$408,000	$2,898,000	2.3%
A/E Fees [1]	$4,905,000	$3,396,000	$302,000	$8,603,000	6.7%
Campus Administration [2]	$2,597,000	$1,797,000	$160,000	$4,554,000	3.5%
Surveys, Tests, Plans	$1,443,000	$998,000	$89,000	$2,530,000	2.0%
Special Items [3]	$1,223,000	$845,000	$76,000	$2,144,000	1.7%
Interest During Construction	$2,531,000	$1,754,000	$155,000	$4,440,000	3.5%
Contingency	$2,885,000	$1,997,000	$178,000	$5,060,000	3.9%
Total	$73,030,000	$50,563,000	$4,946,000	$128,539,000	100.0%
Group 2 & 3 Equipment	$2,043,000	$1,415,000	$126,000	$3,584,000	
Project Cost	**$75,073,000**	**$51,978,000**	**$5,072,000**	**$132,123,000**	
PROJECT STATISTICS					
Gross Square Feet (GSF) [4]	127,563	90,680	11,424	229,667	
Assignable Square Feet (ASF) [4]	81,250	57,758	7,140	146,148	
Efficiency Ratio ASF/GSF	64%	64%	63%	64%	
Building Cost/GSF	$427	$416	$313	$417	
Project Cost/GSF [5]	$573	$558	$433	$560	
Number of Beds	494	0	0	494	
GSF/Bed	258	N/A	N/A	N/A	
Building Cost/Bed	$110,314	N/A	N/A	N/A	
Project Cost/Bed [5]	$147,834	N/A	N/A	N/A	

[1] Fees include executive architect basic services which will be set during the design-build competition.

[2] Campus Administrative includes quality assurance, project management, and inspection.

[3] Special Items include agency review, AV/IT/lighting consultant, commission building systems, environmental monitoring during construction, Facilities Management utility coordination/shutdowns, Environmental Impact Report, food service facility coordination, independent seismic review, paleontologist, programming/DPP, security consultant, topographic/as-built survey/CAD base sheets, tribal monitor, value engineering/constructability review, and wind study.

[4] Gross square feet (GSF) is the total area, including usable area, stairways, and space occupied by the structure itself. Assignable square feet is the net usable area.

[5] Project cost excludes Group 2 & 3 equipment.

ATTACHMENT 2

COMPARABLE PROJECT INFORMATION
CCCI 6930

Location - Project Name	CIB Date	No. of Beds	Bldg. Cost/GSF	Project Cost/GSF	Bldg. Cost/Bed	Project Cost/Bed
Proposed Project - Middle Earth Expansion Resdience portion only	*Nov-16*	*494*	*$427*	*$573*	*$110,314*	*$147,834*
CSU Fullerton - Student Housing Phase 3 and 4	Dec-11	1064	$459	$552	$131,900	$158,788
UCM - Student Housing Phase 4 The Summits	Apr-13	350	$418	$631	$131,495	$182,027
UCB - Anna Head West Student Housing	Feb-12	416	$479	$736	$159,559	$227,469

ATTACHMENT 3

SUMMARY OF FINANCIAL FEASIBILITY

IRVINE CAMPUS	
Project Name	**Middle Earth Expansion**
Project ID	**996298**
Total Estimated Project Cost	$132,123,000
Anticipated Interest During Construction (included in total estimated project cost)	$4,440,000

PROPOSED SOURCES OF FUNDING[1]	
External Financing	$98,100,000
UCI Housing Reserves	$34,023,000
Total	$132,123,000

Externally Financed Projects

FINANCING ASSUMPTIONS	
External Financing Amount	$98,100,000
Anticipated Repayment Source	General Revenues of the Irvine campus
Anticipated Fund Source	Housing Revenues of the Irvine campus
Financial Feasibility Rate	6%
First Year of Repayment (e.g. FY 20XX)	2020
Term (e.g. 30 years; indicate if any years interest only)	35 years; interest only in years 1 through 4
Final Maturity (e.g. FY 20XX)	2054
Estimated Average Annual Debt Service	$5,886,000 in years 1 through 4[2] $7,043,000 in years 5 through 35

[1] Fund sources for external financing shall adhere to University policy on repayment for capital projects.

[2] Year 1 assumes one-fourth of interest payment will be capitalized and funded from $4.44 million anticipated interest during construction

Below are results of the financial feasibility analysis for the proposed project using the campus' Debt Affordability Model. The model includes projections of the campus' operations and planned financings. A new Debt Affordability Model with revised metrics was implemented August 1, 2015.

	CAMPUS FINANCING BENCHMARKS		
Measure	**10 Year Projections**	**Approval Threshold**	**Requirement**
Modified Cash Flow Margin[3]	2.8% (min), 2024 (yr)	≥ 0.0%	Must Meet
Debt Service to Operations[2]	4.7% (max), 2020 (yr)	≤ 6.0%	Must Meet 1 of 2
Expendable Resources to Debt[2]	N/A	≥ 1.00x	
Auxiliary Project Debt Service Coverage[4]	1.10x (min), 2021 (yr)	≥ 1.10x	Must Meet for Auxiliary Projects
Auxiliary System Debt Service Coverage[5]	1.4x (min), 2021 (yr)	≥ 1.25x	Must Meet for Auxiliary Projects

[3] Modified Cash Flow Margin, Debt Service to Operations, and Expendable Resources to Debt are campus metrics.
[4] Auxiliary Project Debt Service Coverage is an individual project metric.
[5] Auxiliary Debt Service Coverage is a campus' auxiliary system metric.

ATTACHMENT 4

ALTERNATIVES CONSIDERED

In addition to the proposed project solution, three other alternatives were considered for delivery of new freshman housing at UC Irvine. Information regarding the alternatives that were considered is provided below.

Option 1 – Demolish and rebuild Pippin Commons at a higher density

Pippin Commons is a one-story, 8,400 ASF building constructed in 1988 that currently houses Middle Earth's main dining facility and other community spaces. Since a new dining facility will be provided in the Middle Earth Expansion project, the campus considered whether to renovate Pippin or demolish and redevelop at a higher density. In the redevelopment option, the campus looked at construction of a new two-story building to provide space for Housing's Administrative Services and for other needed community spaces. This option was rejected because the cost for rebuilding was significantly higher than the cost to renovate Pippin to accommodate other project requirements, including a fitness center, which could take advantage of the open floor plan and high ceilings of the existing building.

Option 2 – Demolish Hobbiton housing unit to create a less restrictive site footprint

This alternative involves demolition of a 50-bed housing unit in addition to the two small Brandywine commons buildings, and replacement of the beds in the proposed project (for 544 total beds – 494 new and 50 replacement beds). This alternative was considered to explore the design options afforded by a less restricted site footprint, but further study showed that the required program could be met without demolishing Hobbiton. This option was rejected because it would incur additional costs for the demolition and replacement of the Hobbiton beds, and would also result in the loss of housing revenues for those beds over the two-year project construction period.

Option 3 – Rather than expanding Middle Earth, increase the size of the East Campus Apartments Phase 4 project to include the additional beds needed for freshman enrollment

The third-party-developed student housing complexes on the East Campus offer independent, apartment-style living intended for continuing undergraduates and graduate students. While this housing has been extremely successful for its intended population, it would not provide the appropriate setting for freshmen, who require enhanced student life programs to help assure their academic and social success. This option was rejected in favor of building additional residence hall beds in the Middle Earth Student Housing complex, which is consistent with the LRDP goal of accommodating freshmen in the academic core to facilitate their integration into university life.

Option 4 – The currently proposed project

This alternative constructs residence halls with 494 beds, dining commons, and community support spaces on the site of Brandywine Commons and Brandywine Student Center, which

would be demolished. Pippin dining commons would be repurposed to provide a fitness center and expanded support spaces. The project would be phased so that Pippin would remain open through completion of the new construction, and would be renovated after the new dining facility was operational. This alternative was chosen because it had the lowest total project cost of the options considered, and fewer negative impacts.

ATTACHMENT 5

DELIVERY MODEL

The campus evaluates alternative delivery models for all new capital projects, including their potential as Public-Private Partnerships (P3). This section provides a discussion of P3 versus design-build, which is the chosen delivery method for this project.

Public-Private Partnerships

The Irvine campus has a strong commitment to third-party student housing and is currently planning Phase 4 of East Campus Apartments utilizing this model. The campus has determined, however, that third-party development is not appropriate for the Middle Earth Expansion project because:

- The Middle Earth expansion is adding to an existing residence hall complex and to construct it as a third-party project would mix private and UC ownership, which would fragment services and operations. The LRDP does not identify any additional land for student housing in the academic core because all remaining land in this area is required for academic and related purposes. Therefore, redevelopment of an existing complex is the only option that meets the campus's goal of housing freshmen in the central campus.

- The expansion project includes demolition of the existing food-service and commons buildings and repurposing a second food-service building for community spaces. To be affordable for students, the costs for these components must be spread over all existing and new housing inventory, which would not be possible in a P3 process. A P3 project would have to be entirely self-supporting based on the revenues generated by that project alone.

Design-Build Project Delivery

The project is proposed to be constructed using the design-build method, which captures some of the advantages gained in the P3 process, and has been successfully employed at UCI for over two decades. 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 bid competitively 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, reduces the risk of claims, and allows the contractor's technical expertise and creativity to be incorporated into the design process from the beginning. This process also permits project schedules to be accelerated because procurement, fabrication, and construction of utilities can begin while construction documents are still underway. The design-build process has proven so successful in controlling costs, increasing speed, and maximizing value that the campus now delivers virtually all projects using this method.

Design approval for the Middle Earth Expansion project is being requested prior to initiating a design-build competition in order to seek acceptance of the conceptual design and site planning parameters that would be included in the bid documents.

ATTACHMENT 6

Graphics Package (attached as .pdf)

ATTACHMENT 7

ENVIRONMENTAL IMPACT SUMMARY

Environmental Review Process

In accordance with the California Environmental Quality Act ("CEQA"), the CEQA Guidelines, and the University of California Procedures for Implementation of CEQA, an Initial Study for the Middle Earth Expansion Project ("Project") has been prepared (SCH #2016121006) The Initial Study is tiered from the UCI 2007 LRDP EIR (SCH #2006071024).

A Notice of Intent to Adopt a Mitigated Negative Declaration based on the Draft Initial Study/Proposed Mitigated Negative Declaration (IS/MND) was submitted on December 2, 2016, to the Governor's Office of Planning and Research, State Clearinghouse, as well as 20 interested agencies, organizations, and individuals for a 30-day review period that concluded on January 1, 2017. The Draft IS/MND was made available at the UCI Office of Environmental Planning and Sustainability and digitally on its website.

Environmental Impacts

The IS/MND found that the Middle Earth Expansion Project would have less than significant impacts or no impacts on the environment in regard to aesthetics, biological resources, greenhouse gas emissions, hazards and hazardous materials, land use and planning, population and housing, public services, recreation, transportation and traffic, utilities, and service systems.

The IS/MND found that, with LRDP or Project-level mitigation measures incorporated, the Project's impacts would be reduced to a less than significant level in regard to air quality (specifically, impacts on potential violations of air quality standards); cultural resources (specifically, archeological and paleontological resources); geology and soils (specifically, fault rupture); hydrology and water quality (specifically, water quality, erosion, and drainage); and noise (specifically, ground borne vibration and temporary noise).

Public Comments

During the comment period, two comment letters were received from the Department of Toxic Substances Control (DTSC) and City of Irvine. The DTSC comment letter itemized standard steps every project should follow to determine if any hazardous materials are on the site, and what to do if any are discovered during construction. The City of Irvine letter asked a data clarification question. Responses are included as Appendix E in the Final IS/MND. The comment letters did not raise any new issues that were not adequately analyzed in the Draft IS/MND pursuant to CEQA. Therefore, no changes or amendments to the IS/MND were warranted based on public comments, and recirculation of the document was not required.

Findings

Based on the analysis in the linked Final IS/MND, it has been determined that the proposed Project will not result in significant new direct, indirect, or cumulative environmental impacts. All significant impacts related to air quality, cultural resources, geology and soils, hydrology and water quality, and noise would be reduced to a less than significant level with the incorporation of LRDP and Project-specific mitigation measures. The Initial Study/Mitigated Negative Declaration (refer to Attachment 8) discusses the Project's impacts, mitigation measures, and conclusions regarding adoption of the Mitigated Negative Declaration in conformance with CEQA. A link to the 2007 Long Range Development Plan Final Environmental Impact Report may be found in Attachment 9.

ATTACHMENT 8

FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
(including Mitigation Monitoring Program)

http://eps.uci.edu/EnvironmentalPlanning/17-01-04_Middle%20Earth%20Expansion_Final%20ISMND.pdf

ATTACHMENT 9

2007 LONG RANGE PLAN AND
2007 LONG RANGE DEVELOPMENT PLAN FINAL ENVIRONMENTAL IMPACT REPORT:

2007 Long Range Development Plan
http://www.ceplanning.uci.edu/PhysicalPlanning/2007LongRangeDevelopmentPlan.html

2007 Long Range Development Plan Final Environmental Impact Report
http://www.ceplanning.uci.edu/EnvironmentalPlanning/UCILongRangeDevelopmentPlanFEIR.html

ATTACHMENT 10

CALIFORNIA ENVIRONMENTAL QUALITY ACT FINDINGS