ACTION UNDER PRESIDENTIAL AUTHORITY – AMENDMENT OF THE BUDGET,
ANNA HEAD WEST STUDENT HOUSING, BERKELEY CAMPUS

EXECUTIVE SUMMARY

The Anna Head West Student Housing project provides 416 beds for undergraduate student housing of approximately 147,500 GSF on a 1.5 acre University-owned surface parking lot three blocks south of the central campus. At its July 2009 meeting, The Regents approved the project budget at $69,870,000 and authorized external financing in the amount of $63,470,000. Significant failures of the Executive Architect have since resulted in redesign efforts, delays and bid over-runs for which an augmentation to the project is now necessary. To mitigate the impact of the delays and to ensure an opening of the facility for the fall 2012 academic year, the augmentation request includes a schedule recovery program. The total project cost is now $79,670,000 or $9,800,000 over the approved project budget to cover the increased costs, and represents a 14 percent increase in the original project budget. The entire cost of the augmentation will be funded from Residential and Student Service Programs Net Revenue Reserves.

Previous Actions
In July 2009, The Regents approved the project budget at $69,870,000 and authorized external financing at $63,470,000. In November 2009, The Regents adopted the environmental findings and approved the design.

Proposed Actions
This item requests Presidential approval for:
- Budget augmentation for Anna Head West Student Housing project in the amount of $9,800,000 to be funded by Residential and Student Service Programs (RSSP) Net Revenue Fund Reserves.

Total Revised Project Budget: $79,670,000

Funding Plan: $63,470,000 funded by external financing and the Residential and Student Service Programs (RSSP) Net Revenue Fund Reserves ($16,200,000).
RECOMMENDATION

1. The President amend the 2011-12 Budget for Capital Improvements and the Capital Improvement Program as follows:

   From: Berkeley: Anna Head West Student Housing-preliminary plans, working drawings, construction and equipment- $69,870,000 to be funded from external financing ($63,470,000) and Berkeley’s Residential and Student Services Program Net Revenue Fund Reserves ($6,400,000).

   To: Berkeley: Anna Head West Student Housing-preliminary plans, working drawings, construction and equipment- $79,670,000 to be funded from external financing ($63,470,000) and Berkeley’s Residential and Student Services Program Net Revenue Fund Reserves ($16,200,000).

Approved:

[Signature]

Mark G. Yudof
President of the University

Date: 2/22/12

ATTACHMENTS:
Attachment 1: Background
Attachment 2: Augmentation Request
Attachment 3: Project Budget
Attachment 4: Funding Plan
Attachment 5: Financial Feasibility
ATTACHMENT 1: BACKGROUND

The Anna Head West Student Housing project constructs a new mid-rise residence complex on a 1.5 acre University-owned site between Channing Way and Haste Street, adjacent to the former Anna Head School for Girls, a City of Berkeley Landmark that currently houses campus research units. The project will supply a total of 416 new student beds and result in approximately 147,500 gsf of new construction, including recreation, computer center, study, advising, meeting, and fitness spaces, and space for other housing support functions. The complex is slated to open in fall 2012.

The project’s budget was approved by the Regents in July 2009 at $69,870,000. CEQA findings were certified and the project design approved by the Regents in November 2009. The Office of the President approved the Executive Architect (EA) on September 29, 2009. The project awarded early bid packages for excavation and foundation in September 2010 based upon complete drawings from the structural and civil engineers. In the following months, the EA’s poor performance resulted in incomplete and delayed drawings for all remaining trades which have led to poor bidding performance and cost overruns. The EA was terminated for cause in August 2011 and a new Executive Architect was appointed in September 2011. The EA’s poor performance and subsequent replacement has necessitated an augmentation request of $9,800,000 to cover the following:

- cost of delays due to a change in EA project management;
- bids in excess of budget; and
- a schedule recovery program that promotes a parallel stream of construction activities ensuring an opening of fall 2012, which will preserve approximately $4 million in gross revenue per semester.

Need for Student Housing

In response to the shortage of housing available to students within the city of Berkeley, the UC Berkeley 2020 Long Range Development Plan (LRDP), approved by the Regents in May 2005, established a policy to increase the inventory of undergraduate beds to equal 100 percent of entering freshman and 50 percent of entering transfer students and continuing sophomores. The estimated increase in undergraduate beds necessary to meet the LRDP levels in 2020 is still well in excess of 1,600 beds. Currently, applications for undergraduate beds exceed inventory by 700 to 800. Many new undergraduate beds can be accommodated on sites already owned by the Berkeley campus, such as the Anna Head West parking lot site. This site is consistent with the LRDP housing zone which requires that all new lower division undergraduate housing be located within a mile of the center of the campus (Doe Library). Residential and Student Services Program (RSSP) completed a capacity study and master planning to determine the feasibility of developing student housing on the Anna Head West parking lot site.

The proposed Anna Head West Student Housing project will help meet the undergraduate student housing goals as described in the Berkeley campus’s LRDP. The objectives are to meet student
housing demand and to provide the opportunity for students to have continuity in housing throughout their university careers.

**Project Description**
The Anna Head West Student Housing project as described in the July 2009 Regents action is unchanged with the following exception: the number of beds is reduced from 424 to 416. Schematic plans developed by the EA accommodated the project’s original target of 424 beds. However, during Division of the State Architect (DSA) review of the initial plans, it was noted that the design did not meet the legal accessibility requirements. Thus, midway through the design documents, the building plans were modified to allow greater accessibility, resulting in a less efficient layout and a net loss of beds. The revised bed count is now 416. The eight-bed loss results in an estimated annual net revenue reduction of about $42,000, or less than 1% of the revenue expectations for the facility.

Similarly, the project gross square footage has also been updated to reflect more equal building access requirements. In general, more space was required throughout the building to comply, and a number of the two-story apartments were modified to single-level, which changed the layout of several adjoining spaces, thus increasing the total GSF.
Sequence of Events
An original qualification-based selection process resulted in the selection of the EA in fall 2008, and work commenced with a program confirmation phase. Schematic Design began in April 2009. At their July 2009 meeting, the Regents approved the budget as part of the Capital Improvement Program with a total budget of $69,870,000. In November 2009, Capital Projects awarded a Construction Manager/General Contractor (CM at Risk) contract to Vance Brown Builders (VBB) to furnish preconstruction services and to act as General Contractor for the bidding and construction phases. CEQA findings were certified and the project design approved by the Regents at its meeting of November 2009.

Also in November 2009, the Division of the State Architect (DSA), during an initial review of preliminary drawings, noted accessibility problems that, because their solutions would likely have a major impact on the design, had to be resolved before the design could proceed to the next phase. Over the next few months the EA and the campus refined the design to bring it into compliance. In March 2010, the accessibility matters were resolved by changing the design, but the delay put the August 2012 building occupancy at risk.

With the project schedule already at risk due to the redesign work, the project team developed a phased bid strategy to help make up some of the lost time. Releasing bids in phases allowed the project to begin its construction phase while the design team finalized the architecture. Thus, early packages for the excavation, site utilities and foundation were put out to bid in September 2010 with the expectation that the balance of the packages would be let once building design was complete. Early heavy rains in fall 2010 required extensive site dewatering, impeded the progress of the early packages and offset some of the time gained through the early release strategy.

The remaining 100% construction documents were submitted by the EA in December 2010. UCB immediately notified the EA that the drawings were incomplete and not biddable. The EA responded by issuing 35 extensive bulletin corrections throughout the extended bidding process from January 2011 through July 2011. The remaining bid packages were released over 6 months after the information had been clarified by the extensive bulletins.

However, because the EA’s poor performance had already resulted in major project delays and numerous bidding errors, the major subcontractors lacked confidence in the project documents and bid results exceeded estimates as a result. The continued delays impacted the project’s schedule, construction costs and RSSP’s anticipated revenue stream.

The San Francisco firm EHDD replaced the EA in September 2011. EHDD is a local firm with a long and favorable track record with UCB. Since EHDD assumed the EA role, the project schedule has been improved, and they have identified and corrected persistent design problems, thereby avoiding costly field changes. The project team has committed to have the facility open in Aug 2012.
Alternatives Considered
The campus considered delaying construction to rebid corrected construction documents, but rejected the idea because the early bid packages of site utilities, excavation and concrete foundation were under construction. Any further delay would have had the very likely result of driving project costs even higher. Redrawing, rebidding and remobilization were estimated to take 6 additional months. It is well-documented that major construction delays create serious budgetary issues, including ongoing compensable delays, discontinuity for the entire team, disruption of the construction submittals and materials supply chain, and remobilization time when the project is reinstated. Further, the Bay Area construction climate continues to yield higher than expected bid results. Thus, there is no guarantee that delaying bids for better drawings would result in lower bids. Savings achieved through more accurate drawings would likely be offset by cost escalation. Lastly, the per-semester loss in gross revenue to RSSP for a delayed opening is about $4 million. Housing contracts are typically annual in nature and are usually finalized in the spring of each preceding academic year. RSSP’s history indicates that the facility’s opening, if not coinciding with the start of the fall 2012 academic term, would mean close to an entire year’s loss in revenue, approximately $6.7 million. Such a loss would have a material impact on RSSP financial plan and was determined to be significant enough to invest resources from its reserves to fund an augmentation of the project to avert the possibility of a delayed opening.

The project team went through an extensive process aimed at offsetting the cost increases described below. During the final working drawings phase, several major building systems were redesigned to save costs. The original five story atrium was modified to a two story roof with a skylight, while the original, higher cost building skin was changed to metal panels. The exterior window shades and trombe wall heating system were replaced with lower cost conventional systems. Finally, a rooftop solar hot water heating system was deferred, but the project continues to include the necessary infrastructure so that a future installation will have minimal disruption and cost.

The deductive alternate process included the skylight option and the deleted green roof. It also included fewer and standard sized windows, lower-cost finishes for the interior and exterior, reduced landscape, fencing, and standard benches in lieu of custom ones. As a final measure, the group 2 & 3 equipment budget for fixtures and furnishings was reduced by $500,000, with no impact in our ability to fully occupy the facility. While we do not anticipate any further budgetary actions for this project, should additional needs arise during the final stages of the project, those needs will be met by the RSSP reserves.

Augmentation as Solution
Several factors are contributing to the augmentation need:
- Projected construction costs estimate exceeds budget: additional cost to the project $8,000,000:
  - EA’s design assumptions for disabled access were questioned by the Division of the State Architect (DSA). The proposed design failed to protect the campus
from lawsuits for limited accessibility, requiring redesign work that delayed the project start.

- In December 2010 and continuing over the next 6 months, VBB bid the CM at Risk packages in phases as clarification bulletins were developed by the EA. The bid period lasted several months longer than anticipated because of the lack of responsiveness of the EA to adequately correct incomplete drawings despite repeated communications from UCB and VBB. Bid results thus far are some $8 million above the estimate. Many of the bids were much higher than forecast because of a small bidding pool (some bidders declined to bid after they studied the confusing drawings), and those who did bid included high than normal contingencies to cover the deficient drawings. During the 6 month bid period in 2011, Bay Area construction costs increased.
- The campus anticipates an extraordinarily high change order rate for the project, based on design and field coordination problems identified thus far.

- To help offset the increase in construction costs, the FFE budget is being reduced by $500,000 without any material impact to the project.
- Because the schedule end date is absolute, being determined by the start of the academic year, the project engaged in a schedule recovery program. Several early subcontractors, including concrete and mechanical, electrical, and plumbing switched to 6 day workweeks, which was funded from the project contingency. Many later bids also included 6-day workweeks as well as longer day shifts, but they are less efficient. This overtime did allow the project to be protected in time for the rainy season. Now, however, the exterior waterproofing, the building “skin” and interior drywall are all proceeding out of sequence. This expedited work has allowed the Aug 2012 occupancy to be a viable goal. The construction contingency was used during the bidding to cover work that exceeded the original estimates. Some of the new funding will replenish the construction contingency for ongoing corrections during construction. The requested amount will be adequate to complete the project. Additional Cost to the project: $1,200,000.
- The change in the EA midway through construction is resulting in increased A&E fees necessary to bring the new team up to speed and then to correct the many design coordination and code errors. Additional cost to the project: $650,000.
- The significant correction of errors resulted in an increase in administrative costs to document bids and inspection requiring an increase in the campus administration budget. Additional cost to the project: $450,000
Analysis of cost over-run:

<table>
<thead>
<tr>
<th>Direct Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected construction costs estimate exceeds</td>
<td>$8,000,000</td>
</tr>
<tr>
<td>budget</td>
<td></td>
</tr>
<tr>
<td>Equipment (deduct)</td>
<td>($500,000)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indirect Costs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Allowance for schedule recovery program</td>
<td>$1,200,000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A/E Fees</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Campus Administration and Inspections</td>
<td></td>
</tr>
<tr>
<td>$650,000</td>
<td></td>
</tr>
<tr>
<td>$450,000</td>
<td></td>
</tr>
</tbody>
</table>

| total                                           | $9,800,000     |

**Future Actions**
The project anticipates no further budgetary actions.
# ATTACHMENT 3: PROJECT BUDGET

## CCCI 5481

<table>
<thead>
<tr>
<th>Category</th>
<th>Approved Budget July 2009</th>
<th>Augment Request</th>
<th>Proposed Budget Jan 2012</th>
<th>% of Total</th>
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</thead>
<tbody>
<tr>
<td>Site Clearance</td>
<td>$300,000</td>
<td>$0</td>
<td>$300,000</td>
<td>0.4%</td>
</tr>
<tr>
<td>Building</td>
<td>$45,089,000</td>
<td>9,200,000</td>
<td>54,289,000</td>
<td>70.1%</td>
</tr>
<tr>
<td>Exterior Utilities</td>
<td>1,220,000</td>
<td>0</td>
<td>1,220,000</td>
<td>1.6%</td>
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<tr>
<td>Site Development</td>
<td>2,975,000</td>
<td>0</td>
<td>2,975,000</td>
<td>3.8%</td>
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<tr>
<td>A/E Fees</td>
<td>3,883,000</td>
<td>650,000</td>
<td>4,482,000</td>
<td>5.8%</td>
</tr>
<tr>
<td>Campus Administration</td>
<td>1,861,000</td>
<td>450,000</td>
<td>2,362,000</td>
<td>3.1%</td>
</tr>
<tr>
<td>Surveys, Tests, Plans</td>
<td>520,000</td>
<td>0</td>
<td>520,000</td>
<td>0.7%</td>
</tr>
<tr>
<td>Special Items (excluding financing)</td>
<td>2,947,000</td>
<td>0</td>
<td>2,947,000</td>
<td>3.8%</td>
</tr>
<tr>
<td>Financing Costs</td>
<td>3,700,000</td>
<td>0</td>
<td>3,700,000</td>
<td>4.8%</td>
</tr>
<tr>
<td>Contingency</td>
<td>4,600,000</td>
<td>0</td>
<td>4,600,000</td>
<td>5.9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$67,095,000</strong></td>
<td><strong>$10,300,000</strong></td>
<td><strong>$77,395,000</strong></td>
<td><strong>100.0%</strong></td>
</tr>
<tr>
<td>Group 2 &amp; 3 Equipment</td>
<td>2,775,000</td>
<td>(500,000)</td>
<td>2,275,000</td>
<td></td>
</tr>
<tr>
<td>Project Cost</td>
<td>69,870,000</td>
<td>9,800,000</td>
<td>79,670,000</td>
<td></td>
</tr>
</tbody>
</table>

## Project Statistics

<table>
<thead>
<tr>
<th></th>
<th>July 2009</th>
<th>January 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASF</td>
<td>86,670</td>
<td>96,200</td>
</tr>
<tr>
<td>GSF</td>
<td>135,000</td>
<td>147,500</td>
</tr>
<tr>
<td>Number of Beds</td>
<td>424</td>
<td>416</td>
</tr>
<tr>
<td>Efficiency Ratio: ASF/GSF</td>
<td>67.7%</td>
<td>65%</td>
</tr>
<tr>
<td>Building Cost/GSF</td>
<td>$334</td>
<td>$368</td>
</tr>
<tr>
<td>Project Cost/GSF</td>
<td>$497</td>
<td>$540</td>
</tr>
<tr>
<td>Building Cost/Bed</td>
<td>$106,342</td>
<td>$130,502</td>
</tr>
<tr>
<td>Project Cost/Bed</td>
<td>$158,243</td>
<td>$186,045</td>
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</table>

## Comparable Projects

<table>
<thead>
<tr>
<th>Project</th>
<th>CIB Date</th>
<th>Bldg Cost/gsf</th>
<th>Project Cost/gsf</th>
<th>Building Cost/Bed</th>
<th>Project Cost/Bed</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCSF-Mission Bay Block 20 Housing</td>
<td>11/01/02</td>
<td>$261</td>
<td>$351</td>
<td>$145,673</td>
<td>$195,718</td>
</tr>
</tbody>
</table>
ATTACHMENT 4: FUNDING PLAN

Funding Sources

Project Cost: $79,670,000

<table>
<thead>
<tr>
<th>PHASE</th>
<th>Approved Budget</th>
<th>Augmentation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary plans</td>
<td>$3,625,000</td>
<td>$0</td>
<td>$3,625,000</td>
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<tr>
<td>Working drawings</td>
<td>$2,050,000</td>
<td>$0</td>
<td>$2,050,000</td>
</tr>
<tr>
<td>Construction</td>
<td>$61,420,000</td>
<td>$10,300,000</td>
<td>$71,720,000</td>
</tr>
<tr>
<td>Equipment</td>
<td>$2,775,000</td>
<td>($500,000)</td>
<td>$2,275,000</td>
</tr>
<tr>
<td></td>
<td>$79,670,000</td>
<td>$9,800,000</td>
<td>$79,670,000</td>
</tr>
</tbody>
</table>

RSSP Net Revenue Fund Reserves $16,200,000
External financing: $63,470,000
ATTACHMENT 5: FINANCIAL FEASIBILITY

**Berkeley Campus**

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Anna Head West Student Housing</th>
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</thead>
<tbody>
<tr>
<td>Project ID</td>
<td>912323</td>
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<tr>
<td>Total Estimated Project Cost</td>
<td>$79,670,000</td>
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**Proposed Sources of Funding**

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>External Financing</td>
<td>$63,470,000</td>
</tr>
<tr>
<td>Cash</td>
<td>$16,200,000</td>
</tr>
<tr>
<td>Total</td>
<td>$79,670,000</td>
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**Financing Assumptions**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Details</th>
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</thead>
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<tr>
<td>Amount Financed</td>
<td>$63,470,000 (long term debt)</td>
</tr>
<tr>
<td>Anticipated Repayment Source</td>
<td>General Revenues of RSSP</td>
</tr>
<tr>
<td>Anticipated Fund Source</td>
<td>RSSP revenues</td>
</tr>
<tr>
<td>Financial Feasibility Rate</td>
<td>6.25% - 30 year amortized</td>
</tr>
<tr>
<td>First Full Year of Principal</td>
<td>Year 1 (debt model assumes FY 20)</td>
</tr>
<tr>
<td>Final Maturity</td>
<td>Year 30 (debt model assumes FY 20)</td>
</tr>
<tr>
<td>Estimated Annual Debt Service</td>
<td>$4,735,000</td>
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**Campus Financing Benchmarks**

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<thead>
<tr>
<th>Measure</th>
<th>10 Year Projections Max/Min Values</th>
<th>Approval Threshold</th>
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</thead>
<tbody>
<tr>
<td>Debt Service to Operations</td>
<td>5.6% (max: FY2016)</td>
<td>6.0%</td>
</tr>
<tr>
<td>Debt Service Coverage</td>
<td>2.35x (min: FY2016)</td>
<td>1.75x</td>
</tr>
<tr>
<td>Expendable Resources to Debt</td>
<td>n/a</td>
<td>1.0x</td>
</tr>
</tbody>
</table>

*Financing approval requires the campus to meet the debt service to operations benchmark and one of the two other benchmarks for approval.*