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OFFICE OF THE PRESIDENT

Robert C. Dynes
President

1111 Franklin Street
Oakland, CA 94607-5200
Phone: (510) 987-9074
Fax: (510) 987-9086
http://www.ucop.edu

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ACTION UNDER PRESIDENT'S AUTHORITY - AMENDMENT OF THE BUDGET FOR CAPITAL IMPROVEMENTS AND THE CAPITAL IMPROVEMENT PROGRAM FOR UCSDMC HILLCREST SEISMIC IMPROVEMENTS, PHASE 1, SAN DIEGO CAMPUS

It is recommended that:

Pursuant to Standing Order 100.4(q)

(1) The President amend the 2007-08 Budget for Capital Improvements and the Capital Improvement Program to include the following project:

From: San Diego: UCSDMC Hillcrest Seismic Improvements, Phase 1 - preliminary plans, working drawings, construction, and equipment - $3,709,000 funded from State lease revenue bonds ($3,093,000) and Hospital Reserves ($616,000).

To: San Diego: UCSDC Hillcrest Seismic Improvements, Phase 1 - preliminary plans, working drawings, construction, and equipment - $8,637,000 to be funded from State lease revenue bonds ($3,093,000) and Hospital Reserves ($5,544,000).

A key to the abbreviations and the project description are attached.

(Attachments)

KEY
Capital Improvement Program Abbreviations

S	Studies
P	Preliminary Plans
W	Working Drawings
C	Construction
E	Equipment
-	State Funds (no abbreviation)
F	Federal Funds
G	Gifts
HR	Hospital Reserve Funds
I	California Institutes for Science and Innovation
LB	Bank Loans or Bonds (External Financing includes Garamendi, Bonds, Stand-By, Interim and Bank Loans)
LR	Regents' Loans (Internal Loans)
N	Reserves other than University Registration Fee (Housing and Parking Reserves)
R	University Registration Fee Reserves
U	Regents' Appropriations (President's Funds, Educational Fund)
X	Campus Funds
CCCI	California Construction Cost Index
EPI	Equipment Price Index

2007-08 Budget for Capital Improvements and
Capital Improvement Program
Scheduled for
Regents' Allocation, Loans, Income Reserves, University Registration Fee Reserves,
Gift Funds and Miscellaneous Funds

Campus and Project Title (Total Cost)		Prior Approval			Proposed 2007-08	
San Diego						
UCSDMC Hillcrest Seismic Improvements, Phase 1	P	$ 243,000	HR	P	$ 472,000	HR
	W	$ 373,000	HR	W	$ 856,000	HR
	C	$3,093,000		C	$3,600,000	HR
($8,637,000)						

DESCRIPTION

This action requests approval of a $4,928,000 budget augmentation for the UCSDMC Hillcrest Seismic Improvements, Phase 1 project. After receiving bids significantly over the pre-bid estimate and information from contractors about the difficulties of constructing the alterations as designed, the campus determined that the most appropriate solution to addressing the seismic deficiency was to replace the existing utility bridge structure and install new utility lines.

Background

In November 2000, The Regents were provided summary information regarding capital improvements required at each of the five University of California Medical Centers to satisfy seismic safety mandates established by the Legislature in Senate Bill 1953 (SB1953). The 2000 State Budget Act included $600 million of lease revenue bonds to be issued by the State Public Works Board to provide the medical centers of the University of California with funding for the reconstruction projects that would be required to comply with SB 1953. The UCSD Medical Center was allocated $40 million for two projects: (1) UCSDMC Hillcrest Seismic Improvements Phase 1 and (2) UCSDC Hillcrest Seismic Improvements Phase 2, which would correct seismic deficiencies in the remainder of the Hillcrest facilities.

The UCSDMC Hillcrest Seismic Improvements Phase 1 project involves the structurally deficient pedestrian/utility bridge (Utility Bridge) carrying major utility lines along a steep slope between the Central Plant and the UCSD Medical Center Hillcrest campus. These lines are attached directly to the underside of the structure and on separate at-risk footings located beneath. Built in the early 1960s prior to the creation of the Office of Statewide Health Planning and Development (OSHPD), the Utility Bridge was not reviewed under OSHPD guidelines. The Utility Bridge received a Structural Performance Category 1 (SPC-1) rating due to its pre-

OSHPD date and its type of construction. In February 1998, UCSD conducted a preliminary analysis of all buildings for SB 1953. Upon completion of this analysis, two additional structural engineers conducted a peer review confirming the findings. Requirements for 2008 compliance included structural upgrades to the Utility Bridge to meet Structural Performance Category 2 (SPC-2) requirements. Without this upgrade, the Utility Bridge was deemed to be a substantial collapse risk during a major seismic event. Furthermore, such a collapse would sever the vital utilities needed to keep the acute care services of the Medical Center in operation during such an emergency.

Prior Approvals

In May 2002, the President approved the UCSDMC Hillcrest Seismic Improvements Phase 1 project to seismically upgrade the Utility Bridge to a SPC-2 rating. The total project cost was $3,709,000, funded from a combination of State lease revenue bonds and hospital reserves. Subsequently, the State determined that State lease revenue bonds could not be used for design but were available only for construction of both the UCSDMC Hillcrest Seismic Improvements Phase 1 and Phase 2 projects. In August 2002, the Office of the President administratively approved the shift of Hospital Reserves from the Phase 2 project to Phase 1 to fund preliminary plans and working drawings, balanced by a corresponding shift of State lease revenue bonds from Phase 1 to Phase 2 to comply with the requirement.

Project Description

Original Design Solution

As originally designed and approved by the State Public Works Board, the project would seismically upgrade the concrete moment frame of the Utility Bridge, which is located west of the North Annex Facility and north of Dickinson Street on the UCSD Medical Center Hillcrest campus. The project would increase the seismic resistance of the Utility Bridge to a SPC-2 rating and the utility line bracing and anchorages to Non-Structural Performance Category 3 (NPC-3) to meet the 2008 requirements of SB 1953. The existing utilities were expected to remain in place during the retrofit, thus requiring no relocation or parallel routing of the utilities. However, the existing utilities would require a significant amount of work to install required seismic joints or loops to align with the existing seismic expansion joints on the Utility Bridge.

Existing electrical switches located on the Utility Bridge and serving the Main Hospital would be relocated to a new switch yard. New electrical feeders in existing conduit would connect the new switches to the Main Hospital. Disturbed ground slopes in these locations would require repair and re-landscaping to control erosion. Non-code-compliant guardrails along the length of the Utility Bridge would be replaced with new compliant guardrails, and the southern pedestrian approach to the Utility Bridge would have a ramp installed to conform to accessibility codes. Hospital Reserves would fund work ineligible for State funding, including removal of asbestos impacting the immediate work area.

As the project site is near a canyon and some construction activities would occur in a sensitive view corridor, the campus would employ biological monitors and landscaping specialists to

ensure construction activities were contained within the designated construction area and the installation of erosion and storm water pollution prevention measures were implemented. Restoration of the construction area would include plant species biologically compatible with the canyon flora.

Revised Design Solution

During the bidding process, the receipt of exceptionally high bids was accompanied by serious concerns about the constructability of the proposed design solution. In addition, the retrofit as designed would result in a SPC-2 rating that would have met the requirements for 2008 (an extension to 2013 was granted), but would have required an additional upgrade to SPC-5 by 2030. To address these issues, the design solution to bring the Utility Bridge into compliance with SB 1953 was revised.

Instead of retrofitting the existing structure or replacing it with a new concrete bridge, the revised design solution replaced the existing bridge with a new steel structure solely to carry utility lines. Constructed parallel to the existing bridge, this steel "rack" would be supported by caissons spaced approximately thirty feet on center and stalled into the existing slope. New utility lines would be installed to replace the existing lines, which are between 20 and 40 years old and in poor condition. The new lines would be connected to the Central Plant and to Hospital systems at key points, and after the systems are operational, the Utility Bridge and old utility lines would be demolished. The revised design provides a new structure that not only conforms to the current seismic standards but will not require any future upgrades to meet 2030 requirements.

Utility systems impacted:

- Normal and emergency power: existing switches located on the concrete structure would be replaced with new switches on grade; existing electrical feeders would be replaced
- Chilled water supply and return: existing lines would be replaced with new lines containing proper anchorage, support, expansion joints, sensors, zone valves, and branch-off connections
- Steam system and heating hot water: existing system would be replaced with new lines
- Control and signal systems: aged systems would be replaced with new
- Additional data and telecommunications systems
- Various water supply and return pipes

Project components:

- Removal of undocumented unclassified fill on the canyon slope created 30-60 years ago
- Compaction of new fill material to return slope to natural conditions and ensure seismic stability
- Installation of monitoring wells to document migration of fuel plume created by underground tank (removed in the 1990s)
- Environmental mitigation to address storm water and erosion control, existing nearby sensitive vegetation, and visual impacts of the new structure as seen from adjacent properties
- Removal of hazardous materials during demolition of existing utilities

Construction would begin in February 2008 with completion in February 2009.

CEQA Classification

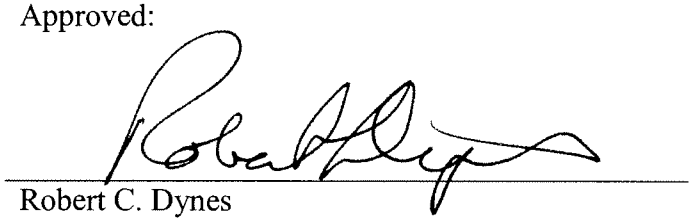
In accordance with University of California guidelines for the implementation of the California Environmental Quality Act (CEQA), the project is considered categorically exempt under Classes 1, 2, 3 and 4.

Financial Feasibility

The total project cost of $8,637,000 would be funded from State lease revenue bonds ($3,093,000) and Hospital Reserves ($5,544,000).

Additional information regarding the project budget is included in Attachment 1.

Approved:



Robert C. Dynes
President of the University

Attachment

ATTACHMENT 1

PROJECT STATISTICS
UCSDMC HILLCREST SEISMIC IMPROVEMENTS, PHASE 1
CAPITAL IMPROVEMENT BUDGET
SAN DIEGO CAMPUS
CCCI 4019

Cost Category	Amount	% of Total
Site Clearance	$670,000	7.8%
Building	21,000	0.2%
Exterior Utilities	4,122,000	47.7%
Site Development	819,000	9.5%
A/E Fees	1,467,000	17.0%
Campus Administration	367,000	4.2%
Surveys, Tests	258,000	3.0%
Special Items [a]	457,000	5.3%
Contingency	456,000	5.3%
Total	**$8,637,000**	**100.0%**
Group 2 & 3 Equipment	$0	0%
Total Project	**$8,637,000**	**100.0%**

Statistics

Gross Square Feet (GSF) [b]	n/a
Assignable Square Feet (ASF) [b]	n/a
Ratio ASF/GSF (%)	n/a
Building Cost/GSF [b]	n/a

(a) Special items include costs for CEQA compliance, constructability review and value engineering, OSHPD review and related consultant fees, hazardous materials consultant fees, destructive testing program, and environmental mitigation.

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