CAPITAL OUTLAY

Summary

It would be appropriate this year, due to a prospective change in capital outlay fiscal policies, to review the recent history of the capital outlay expenditures and procedures of the state.

The Budget Act of 1964 appropriated a new high of over $177,350,000 from the General Fund and bond funds. The bond funds approached $160 million and the General Fund share was over $17,360,000. The higher education portion, at this time, represented 69 percent. The bond fund appropriations of the 1964 Budget Act represented very close to one-half of the total bond funds available both from the 1964 issue and prior balances and reversions.

The Budget Act of 1965, insofar as its general and bond fund capital outlay was concerned, represented a recession from the high point established by the Budget Act of 1964 for the appropriation of the combined funds. It appropriated a total of over $158 million, of which nearly $20 million was from the General Fund and over $138 million from bond funds. The portion for the University and the state colleges was added to by anticipated receipt of federal assistance of approximately $37 million for the University and nearly $48,500,000 for the state colleges. Capital investments for higher education purposes from all sources remained at a high level. It should also be noted that the appropriations from the bond funds did not entirely exhaust that source of revenue. With the passage of the Budget Act approximately $48 million remained for carryover to the 1966 Budget Session.

The Budget Act of 1965 was notable for two other reasons, as well. It contained for the first time in the Budget Act itself, an appropriation for junior college construction assistance of $25,122,000, largely from the $50 million reserved in the Bond Act of 1964. Prior assistance had already been distributed to the junior colleges by other appropriations and from the $20 million reservation in the bond issue of 1962. This meant that there was somewhat more than half of the 1964 Bond Act reservation for junior colleges still available for appropriation. The appropriation for the junior colleges was made on a lump-sum basis without a schedule of individual projects or individual colleges but was to be based, in accordance with the language of the item, on the formulas established in the "Junior College Construction Act," Chapter 1272 of 1965.

The second significant event in the Budget Act of 1965, was the first appropriation of money from the "Cameron-Unruh Beach, Park, Recreational and Historical Facilities Bond Act of 1964," which was Chapter 1690 of the Statutes of 1963. This was a bond proposal approved by the electorate at the general election in 1964 for $150 million. The same proposal had failed in the general election of 1962. The act provided $85 million for land acquisition, $20 million for minimum initial development, $5 million for wildlife restoration purposes and $40 million for grants to local governments for the development of recreational and park facilities. With the exception of minor sums for project planning, reimbursement of General Fund loans, etc., the Budget Act provided over $32,200,000 for land acquisition restricted to a specified list of named projects and over $7,750,000 for grants to cities and counties

Summary—Continued

for park and recreational development purposes supported by a specific schedule indicating exact projects and amounts. In addition there was $623,000 provided for the Wildlife Conservation Board for a specified list of projects.

The Budget Bill for 1966–67 was not passed until the very end of the then current fiscal year in a second extraordinary session. The act set a record with respect to capital outlay appropriations based on the General Fund and bond funds. It appropriated a total of $215,689,434 consisting of $33,197,945 from the General Fund and $182,491,489 from the State Construction Program Fund. This total was exclusive of appropriations for the junior colleges and for state parks and recreation facilities from the special bond fund for that purpose. The total for higher education alone, as direct appropriations independent of any federal grants and exclusive of the junior colleges, was over $132 million.

Since there was only approximately $48 million remaining available for appropriation in the State Construction Program Fund, the administration proposed that the budget be funded by the use of the remaining balance exclusively for nonhigher education purposes and that a new $230 million bond issue be proposed at the November General Election which would be exclusively for higher education and which would be named the "State Higher Education Construction Program Bond Act." In addition to the amount mentioned as direct appropriations for higher education, it was hoped that there would be available as grants from the federal government over $76 million for University health sciences and general academic facilities and over $64,500,000 for the state colleges for science and general academic facilities. It is evident that the combination of the two sources of funding would provide a very large program indeed, if the federal funds materialized in the amounts anticipated.

From the special reserve for the junior colleges, there was appropriated nearly $8 million for a specific schedule of institutions and projects with specific amounts for each.

With reference to the park acquisition and development program it should be pointed out that the relatively large total of General Fund appropriations included over $14,700,000 for regular development and equipment of a substantial number of the units in the state park system. Beyond this the special bond act program provided $36,160,000 for acquisition of additional state park and beach lands, over $4 million for initial development at new areas to be acquired from prior appropriations, about $12,800,000 for grants to counties and cities for park and recreational development and over $1,610,000 for Wildlife Conservation Board projects.

The appropriations made from the State Construction Program Fund, particularly the new source, the "State Higher Education Construction Program Bond Act," left barely $115 million available for appropriation by the current Legislature. In addition, there was approximately $3,279,000 remaining in the State Construction Program

Summary—Continued

Fund from the 1964 bond issue. At this juncture the state is faced with some hard problems. The proposals of the several state agencies far exceed the available bond funds. The General Fund has a substantial current deficit. To date the electorate has approved bond issues for general construction purposes in excess of $1\frac{1}{4}$ billions. This is inclusive of the $70 million which was specifically reserved for the junior colleges but is exclusive of the $150 million beach and park acquisition and development bond issue. In the period of time spanned by these bond issues, the General Fund additions to the total bring capital expenditures to about $2 billion from an effective starting date of 1956 through 1967 or about 11 years. It should also be noted that the interest cost of the bond issues, during their anticipated life, will probably add about $500 million to the total cost.

Capital Outlay Problems for 1967–68 and the Future

The foregoing has indicated that the 1967 Legislature will have at its disposal approximately $115 million in bond funds that can be devoted to higher education capital outlay purposes. In fact, most of the bond funds cannot be used for any other purpose. The total of original proposals made by the two higher education segments amounts to somewhat over $200 million based on currently accepted enrollment growth rates, mixes of upper, lower and graduate division student enrollments, curriculum offerings and space utilization standards. Obviously there are individual projects in these total proposals which can be challenged as to need at this time, but the general, overall proposals are supportable under the current criteria. This means that if the program is limited to the available funds there must be some adjustments made in the criteria which would produce the least dislocation in the long-range plans for higher education. Irrespective of relatively short-term variations, up or down, the basic trend line in any graphic representation of the criteria indicates a steady upward rise. From time to time the rate of rise may be adjusted, but for the foreseeable future it will always be upward. The import of this is that for a great many years the need for capital investment funds for the higher education activities of the state alone will remain at a significant and substantial level.

One of the major factors in higher education capital outlay needs, that of population growth, also applies to the Youth Authority and Department of Corrections. While there may be variations in need due to the inception of new programs and new approaches, the trend line in these areas is also steadily upward, and state-operated facilities will be needed in steadily increasing amounts.

The population growth also is a significant factor in the problems handled by the State Division of Forestry, since increased population, mobility, and affluence lead to greater use of the wildlands which in turn compound the hazards already existing, particularly that of fire. Consequently, it may be anticipated that the trend line of needs in this segment of the state's activities will also continue upward. Beach, park and recreational facilities reflect heavily increased use and the expenditure for acquisition of some major areas which has already

Capital Outlay Problems for 1967–68 and the Future—Continued

been approved by the Legislature from the special bond funds for that purpose will require significant sums for development and access.

Still another area that might be mentioned, although it is one whose capital growth is probably more controllable or avoidable than that of any of the others, is the need for general state office space in which there has been, in the past, a tendency to develop a substantial portion of such space on a state-owned basis. Heretofore it has been possible to provide for the capital investment in such buildings by borrowing from certain state funds which now appear to have become unavailable for the purpose. In the 1966 Budget Act the State Construction Program bond funds were used for this purpose for the first time, and, if there are to be no further bond issues and if such building space is to be provided on a rational basis in the future, it appears that the General Fund will be relied on. The population growth of the state, of course, has some relationship to the total state employee growth and on this basis it may be postulated that the need for general state office space will represent a rising trend line.

From the foregoing it may be seen that the nonspecial fund capital outlay needs of the state will aggregate a very substantial and significant sum which, to the best of our knowledge, does not appear to have been taken directly into consideration in the calculations of the estimated gap between General Fund revenues and expenditures. If there is to be no additional bond fund availability, then some amount will have to be added into the deficit for capital outlay purposes. We have previously estimated that the annual needs for that group of agencies which we have been discussing, will probably exceed $150 million and will more likely be on the order of $185 million, the latter based on current programs and current accepted space utilization standards. To the extent that programs can be modified, deemphasized or eliminated or that space can be more intensively utilized, there would be varying degrees of shrinkage in the annual requirements.

Conservation of Available Funds

It has already been clearly shown that at this moment we have no clear understanding of how the capital plant expansion of the state can or will be financed in the following fiscal year of 1968–69. Consequently, it would appear to be prudent to attempt to conserve, and to hold to a minimum the demands that might otherwise be made on the General Fund. Since it is also clear that the major demand for plant expansion arises from higher education, it would appear that this is the area in which the greatest efforts would need to be made in the direction of reducing demand. The development of a reduction in demand can follow one of two courses or possibly a combination of both. On the one hand demand can be reduced, at least for a time, by intensifying the utilization of space already existing, under construction or funded. Obviously some factors of plant expansion are not involved in the utilization of space, as such. For example, projects for the extension of essential utilities cannot be obviated by the intensification of the

Conservation of Available Funds—Continued

utilization of existing space if these projects are related to capacity projects which are under construction or funded.

The other course would reduce the demand for dollars without necessarily reducing demand for space, based on existing utilization standards, simply by the reduction in long accepted and established policies relating to "quality" of construction. Aside from the considerations of aesthetics that may be imputed to quality, a reduction in basic quality ultimately is self-defeating in that it increases maintenance cost with the passage of time and significantly reduces the life expectancy of the project. As a general premise sound quality results in the lowest costs when computed over a reasonable period of life expectancy. It also provides intangible but nevertheless very important dividends in the form of greater flexibility for future changes and a more satisfactory general environment for functional and operational purposes. Prudence would therefore suggest the first course since it is amenable to change in the future whereas compromise with quality does not lend itself to future correction but becomes a built-in factor which must be coped with for the life of the project. With the first course in mind we suggest a group of defined priorities which while aimed principally at higher education facilities can also be applied, in varying degrees, to the facilities of other agencies.

Priorities

The priorities proposed deal essentially only with the basic purposes of the projects as they relate to one another. However, some consideration must be given to quality or amenity features which are deferrable. For example, while there exists a standard with respect to providing summer comfort air conditioning in certain parts of the state, the air-handling systems of the projects can be designed so that the air-conditioning portion can be added later, basically at only a slight increase in cost, usually attributable to the rising construction index. Many individual situations will need to be decided on their own merits. For example, the question of the placement of certain utility lines in concrete "walk-through" tunnels versus the direct burial of such lines or the placement of them in small concrete conduits usually must be decided by local ground conditions. The tunnel system is almost an imperative where high ground water conditions exist since the maintenance of utility lines placed by other techniques becomes an increasingly higher cost under these conditions. Another physical characteristic question is that of central heating and cooling supply systems versus individual building systems. The former provides long-range savings which ultimately repay the greater initial investment, and it thereafter continues to achieve savings. Moreover, a careful evaluation must be made of the benefits versus the level of investment. The following is a list of priorities which appear to be the most imperative either to keep existing plants functioning or to permit only the most essential expansion. In addition, the list also includes a proposal for more intensive utilization of space.

31—87224

Priorities—Continued

1. Equipment (nonexpendable) required to put into operation a project which is financed and under construction and which would otherwise be ready for use upon completion within the budget year. (The term "nonexpendable" is emphasized since it will be recalled that in a number of budgets, bond funds were used to procure initial complements of expendable items which really should have been part of support operations.)

Depending upon expected date of completion versus complexity and sophistication of equipment, the items needed for each project may have to be phased in two or more segments to allow advance ordering of the more complex, sophisticated and difficult to procure items. In any case the total of initial equipment should be held to the minimum necessary to activate the project.

2. On-site utilities of the most essential nature, such as electric power, heating supplies, water, sewer, drainage, and gas lines, essential signal, control or communication systems, required to activate projects financed and under construction. These should be kept to those minimum runs necessary for a given project except that they may be sized for planned projects which will attach on in the vicinity either before or beyond the immediate project for which they are intended.

3. Off-site utilities such as sewage plants or sewer system tie-ins, water supplies, etc., specifically required to meet needs generated by increased site utilization, especially by projects funded and under construction.

4. Utilities replacement where there is imminent danger of major failure due to overloads or deterioration. Such replacements are to be kept to the minimum necessary to circumvent the impending failure, except that in special cases replacement may be sized for future planned load expansions.

5. Site development, limited to the minimum most essential access walks and service roads needed to make accessible a project funded and under construction, upon completion, by all pedestrians and service vehicles including limited exterior lighting, landscaping and other amenities.

6. Academic and faculty space needed to meet calculated capacity based on the assumption that there will be increased intensity of utilization of space (existing, funded and under construction) at least 15 percent greater than the current space utilization standards. The exceptions would be for highly specialized space which does not now exist on campus and for which no reasonable and workable substitute of other available space can be postulated, and the need for which, on a given campus, can be clearly demonstrated by anticipated enrollments in particular curriculums and/or by the lack of capacity in similar facilities at the nearest other state college.

7. Academic and faculty space alteration projects aimed solely at increased and more efficient utilization of existing facilities and where the cost of the additional spaces resulting will not exceed 60 percent of the cost of new facilities, based on the same utilization criteria

Priorities—Continued

mentioned in No. 6 above. Modernization for its own sake would not qualify.

8. Physical education facilities both indoor and outdoor based on the most intense possible utilization of existing facilities and limiting both existing and proposed new to those minimum physical education activities required by present law and not including, from state funds, any facilities specifically for intercollegiate sports purposes.

9. Site acquisition which is required to implement utility expansions otherwise justified by the criteria above. For example, where an additional sewage plant might be required or where an off-site tie-in between the campus and a local sewage plant might require the acquisition of some land or possibly right-of-way over private land which would require some form of payment to the private land owner.

10. Site acquisition for campus expansion which is based on an approved master plan and where the property in question is either an unusually compelling bargain or there is imminent danger of losing the property to some other form of development. A case in point was the piece of property in San Francisco owned by the school district, immediately adjacent to the campus which might otherwise have been sold for high-rise apartment development thereby permanently taking it out of future consideration.

It is intended that the foregoing priorities be considered only as general guidelines, recognizing that there may be projects which might not fit any of the categories precisely and which might merit separate and individual consideration.

Institutions—Correctional and Mental Hygiene

With respect to capital outlay for the Department of Mental Hygiene, the Department of Corrections and the Youth Authority, the first five priority categories mentioned above would apply equally. Beyond these the question of physical capacity to domicile patients or inmates becomes the controlling factor.

In the case of the Department of Mental Hygiene there has been a gradual decline in the need for bed space for which there has been substituted an upgrading of existing facilities to meet modern or improved standards. It is doubtful that such upgrading can be demonstrated as being implicitly imperative and that therefore it seems reasonable to suggest that no new capacity in this department be considered at this time.

In the Department of Corrections, the state, in effect, is under the compulsion of accepting all court commitments. However, existing capacity can probably be stretched in the sense that new programs, such as the "halfway house" and other types of parole programs can reduce the average length of stay within institutional confines and thereby create a greater functional capacity.

With respect to the Youth Authority, while that agency is required to accept commitments only to the extent of its existing capacity, at any given time, improvements in local programs, some of which involve state aid, are reducing demand for state facilities. This would suggest

Institutions—Correctional and Mental Hygiene—Continued

that hard-core considerations would indicate no need to include new capacity facilities in the budget year.

Forestry and Beaches and Parks

The same criteria numbered one through five would also apply to both these areas of state activity. In the case of the Division of Forestry, in the last few years most of the major capital outlay endeavors have been in the direction of replacing outmoded, aged or otherwise obsolete facilities. In a relatively few instances there have been requirements for the construction of facilities in areas where none had previously existed due to changes in population concentrations in wildland areas with resultant shifts in the hazard potentials. The replacement of existing facilities is obviously not an imperative one. For the construction of totally new facilities there would have to be clear showings that the hazards to be guarded against are sufficiently serious to outweigh priorities in other areas to justify a shift in very limited funds.

The capital outlay activities of the Department of Parks and Recreation have expanded enormously in the past few years. The Legislature in 1963 appropriated about $19.3 million for acquisition of lands for the park system. The General Fund appropriation for development of the state park system was $6,111,500 in 1964–65, $7,569,674 in 1965–66 and $14,839,512 in 1966–67. Simultaneously with the increased General Fund appropriations for development came the funds from the 1964 Recreation Bond Act which provided $85 million for acquisition of state park lands and $20 million for minimum development of the lands purchased with bond funds. In the last two years money has been appropriated for a much greater program than the department has been able to perform.

Most of the land acquisition with appropriations from the bond proceeds remains to be carried out. Bond funds may be used in addition to acquisition only for minimum development on land acquired with bond funds. The General Fund, at the present time, finances almost all the remainder of state park development. In the immediate future, the most pressing need of the state park system will be to provide funds for access and minimum development to enable the public to use lands now owned or currently being acquired. The existing state park system has a potential for development of about four times that of existing facilities.

DEPARTMENT OF GENERAL SERVICES

ITEM 299 of the Budget Bill Capital Outlay Budget page 3

FOR MAJOR CONSTRUCTION AND EQUIPMENT, DEPARTMENT OF GENERAL SERVICES, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$1,150,506
Recommended for approval	250,506
Recommended for special review	900,000
TOTAL RECOMMENDED REDUCTION	None

Department of General Services—Continued

ANALYSIS

(a) Equip—central heating and cooling plant ---------- *$50,506*

The Budget Acts of 1963 and 1965 appropriated a total of $11,163,-625 for the design, preparation of working drawings and construction of a central heating and cooling plant which included all of the immediately peripheral distribution tunnels through which the steam and chilled water piping as well as other utilities could be run to the various buildings to be served. This system is now under construction and should be ready in time to serve the two new office buildings, No. 8 and No. 9, when they are completed and ready for occupancy since they will have no other source of heating or cooling supply.

A complex facility of this type will require a number of specialized tools and testing equipment as well as general furnishings for the offices which will be part of the plant and some expendable equipment which will be used in the start-up of the plant. The total amount appears to be entirely reasonable for the size, complexity and sophistication of the complex. *We recommend approval.*

(b) Partitions—office buildings No. 8 and No. 9 ---------- *$900,000*

The Budget Acts of 1963 and 1965 appropriated a total of $17,317,-500 for the design, preparation of working drawings and construction of two new office buildings in Sacramento to be designated as Nos. 8 and 9. They were contemplated as 17-story steel frame buildings each with about 330,000 gross square feet of area. The funding was deliberately predicated on the premise that the original construction would cover only the basic building shell with all of the utilities, toilet spaces, etc., and that the ultimate partitioning for specific agency use would be funded in a subsequent budget so that the Legislature would have an opportunity to clearly review the space proposals and the needs of the agencies which were to occupy the buildings. As of this writing, a plan has not been completed to delineate the exact space allocations to be provided for the various agencies. *Consequently, we would recommend that this proposal be place in the category of special review.*

(c) Alterations—various locations ---------- *$200,000*

This proposal is basically an upset figure, without detailed backup, to provide for alterations as they become necessary during the three-year availability period of the funds.

We recognize the fact that in the course of a year, as changes take place in agencies, certain shifts in space use must occur and these usually require some alterations. It is not possible to detail in advance all of these things that may take place, but in any case whatever expenditures are proposed would have to be approved by the Public Works Board. The nature of the proposal leads us to suggest that there is no rational reason for providing funds for this type of open-ended purpose on a three-year basis. In other words, a one-year basis should be adequate and whatever funds are expended or committed in that one year can be deducted from the appropriation and the balance can be allowed to revert and in the following budget a similar

Department of General Services—Continued

proposal can be made. In this way the Legislature would have an opportunity to annually review the details of the expenditure of these funds. *We recommend approval of the amount but that its availability be reduced to one year, the same as the minor projects.*

DEPARTMENT OF GENERAL SERVICES

ITEM 300 of the Budget Bill Budget page 5

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, DEPARTMENT OF GENERAL SERVICES FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$150,000
Recommended for approval	128,030
TOTAL RECOMMENDED REDUCTION	$21,970

The budget proposal understates the cost of the seven projects specified by $93,155 based upon construction cost estimates prepared by the Office of Architecture and Construction. The following table identifies each of the seven projects, the budgeted and estimated costs and an abbreviated representation of the justification.

	Proposed in budget	*OAC cost estimate*	*Justification*
1. Archives Building to Franchise Tax Board Bldg., 2nd floor ramp	$22,500	$25,700	Worker efficiency
2. Printing plant flammable storage bldg.	10,000	28,775	Safety and plant protection
3. Resources Building communications equipment fire protection system	16,500	16,500	Equipment protection
4. O.B. 1 plumbing replacement	50,000	84,325	Maintenance
5. Library and Courts grounds sprinkler replacement	18,662	30,800	Maintenance
6. Junipero Serra Bldg. basement ventilation	13,000	12,500	Worker efficiency
7. Los Angeles Bldg. No. 1, water chiller replacement	19,338	44,555	Maintenance
	$150,000	$243,155	

ANALYSIS

The $150,000 proposed in the budget represents a budget allocation which makes it incumbent upon the department to defer enough of the projects to reduce the actual $243,155 cost as estimated by the Office of Architecture and Construction to the $150,000 proposed. *We recommend deferral of the office building No. 1 plumbing replacement project fully estimated at $84,325 and the Library and Courts grounds sprinkler replacement project fully estimated to cost $30,800. The five remaining projects, which we believe should be completely accomplished, are estimated to cost $128,030 resulting in our recommended reduction of $21,970.*

There is a cost associated with the deferral of the two projects recommended for deletion above but we are not certain that the level of extra maintenance involved which generates the cost of deferral is

Department of General Services—Continued

sufficient to merit our recommending a budget augmentation. We have recommended deletion of these two projects because we believe that the cost of deferring them will be less than the cost of deferring three of the five remaining projects. There may not be a cost associated with deferring construction of the other two remaining projects, that is the printing plant flammable storage building or the resources building communications equipment fire protection system, but in the first instance there is a risk of both extensive property damage and of employee safety in the printing plant and in the second instance there is risk of damaging a very expensive equipment installation. We do not think these risk avoidance projects should be deferred.

MUSEUM OF SCIENCE AND INDUSTRY

ITEM 301 of the Budget Bill Capital Outlay Budget page 11

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, MUSEUM OF SCIENCE AND INDUSTRY, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$35,810
Recommended for approval	35,810
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The item proposes six projects ranging from a $1,000 for sidewalk construction to $15,000 required to replace the hardwood and fiberglass enclosed egg incubator with one constructed of metal which is more resistive to the high humidity and temperature that is required for the egg hatching environment. Three other projects are essentially of maintenance character. They are telephone conduit replacement at $3,000, asbestos floor tile installation in the science wing auditorium for $2,000 and the replacement and widening of six entrance doors to the main museum for $3,810. An $11,000 project is proposed to construct three display signs which will be used to advertise the exhibits and events that are scheduled in the park and coliseum. The signs will be leased to exhibitors and the revenue from such leases is anticipated to be sufficient to amortize investment in the signs.

We recommend approval of the total amount requested.

Department of Corrections

CALIFORNIA STATE PRISON AT SAN QUENTIN

ITEM 302 of the Budget Bill Capital Outlay Budget page 32

FOR MAJOR CONSTRUCTION, DEPARTMENT OF CORRECTIONS, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$200,000
Recommended for approval	200,000
TOTAL RECOMMENDED REDUCTION	None

California State Prison at San Quentin—Continued

ANALYSIS

We recommend that the unencumbered balances of the $1,118,850 proposed for the construction of a laundry at San Quentin by Item 401(g) of the Budget Act of 1966 be reverted to the State Construction Program Fund. This recommendation is based upon our conclusion that there should not be any avoidable investments made in the plant at San Quentin until the department is willing to face the question of what the ultimate fate of the prison should be. The Budget Act of 1965 included $10,000 to finance the preparation of a report relative to the economic feasibility of replacing the prison. The Department of Finance forwarded to our office on January 13, 1967 a memorandum prepared by the Office of Architecture and Construction which suggested the cost of constructing new facilities in lieu of those currently housing inmates at San Quentin and a memorandum prepared by the Department of Corrections which discussed several alternate ways of handling such inmates. The cover letter prepared by the Department of Finance stated "Based upon these reports, it would appear that it is not economically feasible to replace this institution for a good many years." The information provided in the memorandums prepared by the Department of Corrections and the Office of Architecture and Construction, however, did not contain sufficient information to substantiate such a conclusion. As a matter of fact, the Department of Corrections memorandum concluded by recommending alternate means of handling the number of inmates currently housed at San Quentin and did not suggest it to be economically unfeasible to abandon the San Quentin facility.

The Office of Architecture and Construction is currently preparing a revised master plan for the needs of the San Quentin facility. Based upon master plans prepared for that institution in the past, an investment of from $15 million to $20 million will ultimately be required to correct, replace or modernize substandard facilities. Even an expenditure of that magnitude will not be sufficient to eliminate critical deficiencies in the overall layout of the prison that have been eliminated in the construction of new correctional facilities by the Department of Corrections in the last 10 years. The most obvious deficiency is the inability at San Quentin to separate the daytime activities of the inmates in such a way that the maximum number of inmates in any one place can be kept within a manageable limit.

Item 401(h) of the Budget Act of 1966 appropriated $650,000 for working drawings for a special security facility. The most important purpose of constructing that facility is to reduce the overcrowding at San Quentin and Folsom. The recent disturbance at San Quentin should certainly dramatize the advisability of proceeding with the development of new correctional facilities unless an alternate means of reducing the population of our medium and maximum security facilities can be devised. The need to determine the ultimate fate of San Quentin and examine the significance of delaying construction of the special security facility are illustrative of an overall need to prepare a master

California State Prison at San Quentin—Continued

plan of correctional facility development based upon clearly defined goals. We believe as a minimum, that the pressure should be relieved at San Quentin and Folsom.

(a) Modify sewage plant *$200,000*

The San Francisco Bay Regional Water Quality Control Board has been compelled to modify its water pollution standards to require the upgrading of the quality of sewage effluent dumped into the San Francisco Bay because of the water pollution problem caused by the grossly increasing number of users that are dumping sewage into the bay. The San Quentin sewage treatment plant was constructed in 1950 and is capable of treating sewage so that it meets the standards promulgated at that time, but it is not capable of treating sewage to meet the more rigid standards now enforced. The budget proposes $200,000 for either of two purposes. The first would be to add a digester and secondary clarifier, and to modify the primary clarifier and chlorine contact tank in order to improve the existing sewage plant as required. The alternate would be to join a sewage district that might be formed if consultant engineers hired by the County of Marin determine that there is advantage in the several Marin County users pooling their resources to support a solution that would be more economical to them all. The report of the Marin County consultants has not been developed to an extent that would facilitate judgment as to the better of the two alternatives at this time. It is therefore necessary to authorize appropriation of the funds so that either option can be adopted.

We recommend approval.

DEPARTMENT OF CORRECTIONS

ITEM 303 of the Budget Bill **Capital Outlay Budget page 13**

FOR MINOR CONSTRUCTION, IMPROVEMENTS AND EQUIPMENT, DEPARTMENT OF CORRECTIONS, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$475,191
Recommended for approval	475,191
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The budget proposes 43 minor improvement projects for a total cost of $475,191 which is $67,863 less than allocated in the current year and $17,300 less than appropriated by the Budget Act of 1965.

The projects proposed include such significant improvements as the construction of a $65,000 visitor room and the installation of hot water service for $37,657 as the second of four increments to provide such service to all cells in the State Prison at Folsom. At the other extreme are such projects as the $750 catwalk installation on a guard tower at Chino and $1,000 to construct a new office in the Deuel Vocational Institution segregation unit. The total cost of providing new X-ray units

Department of Corrections—Continued

for the California Institution for Men Reception Guidance Center and the California Medical Facility is $39,985.

The slaughterhouses at the Deuel Vocational Institute and the California Institute for Men will be remodeled for a total of $11,000 to comply with the Department of Agriculture standards in accordance with the suggestions of the Senate Fact Finding Committee on Agriculture.

The remaining projects include additions and modifications to existing facilities to accommodate changing conditions, the purchase of equipment, the avoidance of safety hazards and extensive maintenance improvements.

We recommend approval of the total amount requested.

DEPARTMENT OF THE YOUTH AUTHORITY

ITEM 304 of the Budget Bill Capital Outlay Budget pages 43 and 44

FOR MAJOR CONSTRUCTION AND SITE ACQUISITION, DEPARTMENT OF THE YOUTH AUTHORITY FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$102,000
Recommended for approval	102,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

(a) Fricot Ranch School for Boys, site acquisition for pumphouse and waterline *$2,000*

A pumping facility that is crucial to the water supply of the institution occupies a site that is in private ownership. The site is directly across the road from the institution and the owner does not object to its use by the state. However, to preclude possible problems that could arise as a result of a change in ownership, the budget proposes that a nominal amount be appropriated for purchase of the site. It is estimated that the site can be purchased for less than the $2,000 proposed, but that amount was designated to be certain of having adequate funds.

We recommend approval.

(b) Fred C. Nelles School for Boys, replace boiler *$100,000*

Item 371(b) of the Budget Act of 1966 appropriated $95,900 for the replacement of one of two boilers used to supply steam to the institution. This item proposes replacement of the second to fully implement a report prepared by the Office of Architecture and Construction recommending such action. The projected peak demand of the institution is 20,000 pounds of steam per hour. The normal practice in institutions is to provide sufficient boiler capacity to insure peak demand capability even if one boiler must be off the line for repair. The proposal to purchase and install a second 20,000-pound-per-hour package boiler is designed to satisfy that requirement.

We recommend approval.

DEPARTMENT OF THE YOUTH AUTHORITY

ITEM 305 of the Budget Bill Capital Outlay Budget page 35

FOR MINOR CONSTRUCTION, IMPROVEMENTS AND EQUIPMENT, DEPARTMENT OF THE YOUTH AUTHORITY, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$471,215
Recommended for approval	471,215
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The amount proposed for the completion of 23 projects by the budget is almost identical to the $471,235 included in the 1966–67 budget for the minor capital outlay improvement program.

Eight of the projects ranging in cost from $4,000 to $61,600 and totaling $176,540 are included in the minor capital outlay budget to accomplish major maintenance improvements that are apparently considered to be too large to be absorbed within the department's support budget. Automatic lawn irrigation systems are proposed for the Los Guilucos School for Girls at a cost of $28,775 for the final phase of such improvements at that institution and for the Fred C. Nelles School for Boys for $40,400 as the fourth and final phase for that institution. The Los Guilucos project is justified based on the savings associated with the reduced groundsman effort required for lawn maintenance and at Nelles the shortage of water mandates such water conservation measures. Two other projects at the Los Guilucos School for Girls include living unit modifications for $49,900 and the provision of an intercommunications system in the academic school for $11,900, both requested to assist the group supervisors and teachers in the handling of the girls and to minimize the exposure of such employees to potential abuse by the girls. The most significant remaining project is the $65,000 proposed addition to the administration building at the Preston School of Industry designed to provide an institution training complex and to relocate the business manager's office. The remaining projects are justified on the basis of improving the environment for the wards of the department and for the purpose of improving facilities to minimize the need for staff effort related to activities other than for the treatment of wards.

We recommend approval of the total amount requested.

Department of Education

SCHOOL FOR THE BLIND, BERKELEY

ITEM 306 of the Budget Bill **Capital Outlay Budget page 55**

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, SCHOOL FOR THE BLIND, BERKELEY, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$3,000
Recommended for approval	3,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

A small patio encircled by a concrete wall will be enlarged by demolition of the wall and construction of an enlarged play surface to more adequately satisfy the play area needs of the residents of Monroe Cottage. *We recommend approval.*

Department of Education

SCHOOL FOR THE CEREBRAL PALSIED CHILDREN, NORTHERN CALIFORNIA

ITEM 307 of the Budget Bill **Capital Outlay Budget page 55**

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, SCHOOL FOR CEREBRAL PALSIED CHILDREN, NORTHERN CALIFORNIA, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$28,300
Recommended for approval	28,300
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

A single project is proposed to enlarge a playground area and to remove hazardous objects from the playground area for an estimated cost of $28,300. There are several three- to four-inch posts projecting from the ground that the children stumble over that must be removed and there are playhouses and a greenhouse that must be relocated in order to expand the size of the play area. The project also includes the provision of adequate lighting for evening play. *We recommend approval.*

Department of Education

SCHOOL FOR THE DEAF, BERKELEY

ITEM 308 of the Budget Bill **Capital Outlay Budget page 56**

FOR MAJOR CONSTRUCTION AND IMPROVEMENTS, SCHOOL FOR THE DEAF, BERKELEY, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$48,600
Recommended for approval	48,600
TOTAL RECOMMENDED REDUCTION	None

School for the Deaf, Berkeley—Continued

ANALYSIS

An automobile body shop with capacity for three automobiles and an automobile paint spray booth will be constructed for the purpose of vocational training. The total cost of the project is $97,200, one-half of which will be financed by the federal government. We understand that the school needs additional vocational education teaching space and that the possibility of placing students in automobile body shops, in industry, upon completion of the training is very good. *We recommend approval of the project.*

Department of Education

SCHOOL FOR THE DEAF, BERKELEY

ITEM 309 of the Budget Bill Capital Outlay Budget page 56

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, SCHOOL FOR THE DEAF, BERKELEY, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$6,500
Recommended for approval	6,500
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The $6,500 proposed in the budget is required to replace plumbing and shower cubicles in 2 shower rooms because the existing 34 year old metal cubicles have deteriorated to the point that they are both unsightly and hazardous. The partitions have rusted to the point that continued maintenance is costly and impractical. *We recommend approval of the project.*

Department of Education

SCHOOL FOR THE DEAF, RIVERSIDE

ITEM 310 of the Budget Bill Capital Outlay Budget page 57

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, SCHOOL FOR THE DEAF, RIVERSIDE, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$12,500
Recommended for approval	12,500
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The $12,500 proposed will be used to air-condition the academic portion of the high school facilities only. The request for air-conditioning was motivated by the desire to extend training at Riverside to the summer months. An original request of approximately $90,000 was proposed to air-condition all buildings of the institution. The Office of Architecture and Construction made a preliminary evaluation of that

School for the Deaf, Riverside—Continued

proposal and determined that it would cost on the order of $250,000 to fully air-condition the entire institution. The initial project proposed, therefore, was selected as a first increment both because it is the least expensive of the air-conditioning projects that might be completed and because of the belief that air-conditioning the academic facilities represents the most productive investment. We understand that air-conditioning additional facilities might be considered in the future but the budget five-year plan does not so indicate. *We recommend approval of the project proposed.*

UNIVERSITY OF CALIFORNIA

ITEM 311 of the Budget Bill Capital Outlay Budget page 60

FOR MINOR CONSTRUCTION, IMPROVEMENTS AND EQUIPMENT, UNIVERSITY OF CALIFORNIA, FROM THE CAPITAL OUTLAY FUND FOR PUBLIC HIGHER EDUCATION

RECOMMENDATIONS

Amount budgeted	$1,794,738
Recommended for approval	1,794,738
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The total amount proposed for minor construction represents the sum of 3 subtotals, $1,505,250 in support of 47 projects required for the improvement of 8 general campuses, 3 medical campuses and 2 field stations as summarized in the table below, the reappropriation of $136,904 for minor capital outlay projects approved in the current year budget but not expected to be expended within the current year, and $152,584 for expendable equipment related to major capital outlay projects. Major construction projects funded by bond financing have included provision for expendable equipment in the past. The proposal to finance such equipment from current revenues as proposed by this item is based upon the belief, for which we have always argued, that expendable equipment should not be financed with bond funds. The 47 new minor capital improvement projects are subdivided into 4 distinct kinds of improvement as delineated in the following table:

Campus	Total projects	1 Develop existing or new space	2 Convert or remodel space	3 Provide service and utilities	4 Maintenance and safety	Amount
Berkeley	8	0	2	3	3	$256,500
Davis	4	0	2	1	1	182,500
Irvine	3	0	0	3	0	56,300
Los Angeles	8	1	3	2	2	305,200
Riverside	4	3	0	1	0	128,000
San Diego	4	2	1	1	0	78,900
San Francisco	3	1	1	1	0	110,700
Santa Barbara	4	1	2	1	0	97,500
Santa Cruz	3	0	2	1	0	141,000
California College of Medicine	4	1	2	1	0	75,150

University of California—Continued

Campus	Total projects	1 Develop existing or new space	2 Convert or remodel space	3 Provide service and utilities	4 Maintenance and safety	Amount
Tulelake Field Station	1	1	0	0	0	28,500
Imperial Valley Field Station	1	1	0	0	0	45,000
	47	11	15	15	6	$1,505,250
Reappropriation of 1966–67 minor capital outlay balance						136,904
Expendable equipment related to major capital outlay projects						152,584
TOTAL						$1,794,738

A brief description of projects proposed for the Los Angeles campus follows as an illustration of each of the kinds of improvements specified in the table above.

Unfinished basement areas currently used for bulk storage will be developed to provide design studios for classes in architecture and urban planning in the Dickson Art Center for $56,700 representative of the development of existing space for a new purpose. Conversion and remodeling as suggested in column 2 above is accomplished by a $21,700 project proposal for the alteration of MacGowan Hall where mezzanines are added in two rooms to develop more usable space for the department of theater arts and sunscreens are provided for the purpose of light and glare control. Laboratory service facilities such as fume hoods, benches, counters, sinks and utility lines are to be added for $35,400 in the Geology Building as an example of the provision of service and utilities to typify the column 3 category above. A $30,000 steam line replacement project is illustrative of the column 4 category of maintenance and safety.

The total minor capital outlay authorization proposed is equal to that requested and approved in the 1966–67 budget. It is less than the $2 million per year level that prevailed prior to that despite the addition of new campuses and the California College of Medicine.

We have examined many of the projects proposed in campus visits and consider all 47 projects proposed justified. *We recommend approval.*

CALIFORNIA STATE COLLEGES

ITEM 312 of the Budget Bill Budget page 102

FOR MINOR CONSTRUCTION, IMPROVEMENTS AND EQUIPMENT, TRUSTEES OF THE CALIFORNIA STATE COLLEGES, FROM THE CAPITAL OUTLAY FUND FOR PUBLIC HIGHER EDUCATION

RECOMMENDATIONS

Amount budgeted	$1,385,566
Recommended for approval	363,736
TOTAL RECOMMENDED REDUCTION	$1,021,830

California State Colleges—Continued

ANALYSIS

The budget request of $1,385,566 can be considered as four distinguishable requests, two of which must be deducted in order to compare the level of expenditures proposed to that of past budgets. The $222,200 cost of expendable equipment required to make recently funded major capital outlay projects operational is proposed to be funded in the minor capital outlay budget for the first time in order to implement the conclusion that expendables should not be financed from bond issues. Minor capital outlay appropriations made in the current year but not expected to be encumbered within the current year will be reappropriated by this item for $141,536. The amount remaining is $1,021,830 and can be compared to prior year levels which varied from as low as $943,450 for 1964–65 to $1,100,614 for 1963–64 and ranged closely around the $1,021,830 proposed for similar purposes as funded by this item.

The remaining $1,021,830 is parceled out to 16 of the 18 state college campuses based on endless priority determinations and redeterminations. The purchase of equipment needed to facilitate teaching of a new curriculum, to make a new facility operational, to update teaching of a science to the methodology used in other institutions and in industry, and to accommodate expanding enrollment, is proposed for a total cost of $356,630 as specified in Table No. 1 below. By comparison, the University minor capital outlay request does not include such equipment purchase items indicating the University finds other means for financing such needs. Deduction of the $356,630 for equipment reduces the amount proposed for other minor improvements to $665,200, the level that might reasonably be compared to that allocated to the University for minor capital improvements (that is, to $1,505,250).

Table 1

Requests for Equipment

(1)	(2)	(3)	(4)	(5)	(6)
		Amount			
Campus	Curriculum	To teach a new curriculum or offer a new degree	To equip a new facility	To teach per advanced state of the science	To accommodate expanding enrollment
Fresno	Physics	$24,060	--	--	--
	Engineering	--	--	$49,960	--
Hayward	Biology	36,930	--	--	--
Long Beach	Molecular biology	--	--	49,930	--
San Bernardino	Music, drama	--	$24,050	--	--
San Diego	Biology	--	--	--	$57,550
San Francisco	Geology	22,360	--	--	--
San Jose	Meteorology	26,220	--	--	--
	Chemical engineering	20,500	--	--	--
	Material science	29,970	--	--	--
	Industrial engineering	15,100	--	--	--
	Subtotal	$175,140	$24,050	$99,890	$57,550
TOTAL					$356,630

The $665,200 remaining finances 56 projects for 16 campuses as delineated in Table No. 2 below. Here again the state college program differs from that of the University in that the average state college project cost is $11,879 compared to $32,027 for the University. The

California State Colleges—Continued

University evidently finds other ways to finance such projects as the $4,170 chalk board replacement and $2,500 audiovisual blind purchase projects proposed for San Diego State College, for example.

Table 2
Summary of Typical Projects by Category

Campus	*Total projects*	*Develop existing or new space*	*Convert or remodel space*	*Provide service and utilities*	*Maintenance and safety*	*Amount*
Chico	5	1	4	0	0	$34,100
Fresno	6	1	2	0	3	25,950
Fullerton	1	1	0	0	0	35,000
Hayward	4	1	0	0	3	42,600
Humboldt	9	1	3	2	3	74,370
Cal-Poly, Kellogg-Voorhis	3	2	1	0	0	55,000
Long Beach	2	0	1	1	0	7,000
Los Angeles	4	1	2	1	0	16,920
Sacramento	3	0	1	1	1	43,000
San Diego	5	0	3	2	0	13,260
San Fernando	4	0	1	3	0	99,270
San Francisco	3	0	1	1	1	66,000
San Jose	3	0	3	0	0	85,510
Cal-Poly, San Luis Obispo	3	2	0	1	0	59,660
Sonoma	1	1	0	0	0	7,560
Total	56	11	22	12	11	$665,200

It appears that the state colleges are proposing projects in this item that are financed from support funds by the University. The equipment proposed by columns 5 and 6 in Table No. 1 and such items as the chalkboard replacement and blinds purchase cited above probably should have been included in the support budget. The significance of diverting to the minor capital outlay budget item requests that should be funded elsewhere is that of compounding the already unlimited demand on the limited funds available. This in turn leads to endless hours of relatively unproductive effort on the part of those responsible for juggling priorities in an effort to compete favorably with other campuses and in order to placate individuals on campus who may naively look hopefully to the minor capital improvement item to remedy outmoded teaching tools.

We objected in our 1966 Analysis of the Budget Bill to the trustees staff's practice of maneuvering the carefully determined campus priorities. The trustees' staff assuerd one legislative budget subcommittee that it would reexamine its procedures for evaluating minor capital outlay needs as a result of our criticism. We are unaware of such reevaluation and the evidence of priority juggling suggests no improvement. The campuses are told by the trustees' staff, for example, to give first priority to safety projects. Nine campuses identified 29 safety projects whereas the remaining campuses ignored the suggestion, but as can be seen in Table No. 2 above, only 5 campuses had a total of 11 safety projects approved. Such projects were bypassed in order to fund projects further down the list. Without the direction to denote first priority for the safety projects, the campuses, of their own voli-

California State Colleges—Continued

tion, may have given first priority to the same projects elevated by the trustees' staff. The point is, of course, that there is no value in establishing arbitrary criteria only to violate them when the illogic becomes apparent.

We believe that the individual campuses are capable and responsible enough to adequately and sensibly allocate funds for the purposes delineated in Table No. 2. *We recommend, therefore, that lump sum allocations be made to the campuses instead of to the trustees in order to eliminate needless effort associated with priority juggling. We recommend further that the support budget be relied upon for the purchase of equipment required for new, expanding, or developing curriculums.* Implementation of our recommendation would result in support budget augmentations, as well as in the minor capital outlay budget being converted to an emergency allocation to each campus to fund the most urgent needs that cannot be funded by other means. It is being used that way now, so adoption of our recommendation would eliminate red tape.

We recommend that the total of $1,021,830 delineated in Tables No. 1 and 2 be deleted and that the Board of Trustees of the California State Colleges be directed to resubmit its request in conformance with the suggestions recommended above.

CALIFORNIA MARITIME ACADEMY

ITEM 313 of the Budget Bill Capital Outlay Budget page 167

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, CALIFORNIA MARITIME ACADEMY, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$7,500
Recommended for approval	7,500
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The amount requested is needed to replace the unit heater in a large general training space adjacent to the dock and to move the welding training equipment from the engineering building to an industrial type building.

We recommend approval.

DEPARTMENT OF MENTAL HYGIENE

ITEM 314 of the Budget Bill Capital Outlay Budget pages 182 and 186

FOR MAJOR CONSTRUCTION AND EQUIPMENT, DEPARTMENT OF MENTAL HYGIENE, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$184,600
Recommended for approval	184,600
TOTAL RECOMMENDED REDUCTION	None

Department of Mental Hygiene—Continued

ANALYSIS

(a) Neuropsychiatric Institute at Los Angeles, equip mental retardation addition ---------- *$117,000*

The Budget Acts of 1965 and 1966 appropriated approximately $2.6 million for working drawings and construction as the state contribution to the total cost of approximately $6,280,000 required for the mental retardation addition to the Neuropsychiatric Institute at the University of California at Los Angeles. The federal government is expected to contribute approximately $3.7 million. The state, however, is responsible for funding the total amount of the equipment required for the facility. The estimated cost of all the equipment that will be required for the addition is $750,000 and the $117,000 proposed by this item represents the first increment. The building addition is composed of two parts, a four-story addition to the top of the existing three-story facility and a one-story lateral addition. The lateral addition is for an outpatient clinic and will be completed prior to the vertical addition. Construction of the outpatient clinic space must precede the vertical addition in order to accommodate existing staff that must be displaced during construction of the vertical addition. The funds requested for equipment by this sub item are required to furnish the outpatient clinic portion of the total project. *We recommend approval.*

(b) Napa State Hospital, improvements to storm and sanitary sewer systems ---------- *$67,600*

The project proposed is designed to eliminate two problems. The hospital does not have sufficient pumping capacity to pump the full amount of sewage from the hospital to the City of Napa's treatment plant under certain conditions. This failure results in the release of untreated sewage into the Napa River. The Regional Water Pollution Control Board has issued an ultimatum that the state must discontinue such practice. The sewage pumps will be modified to increase their capacity as a partial solution. The second part of the problem results from the fact that downspouts on several of the buildings discharge storm water directly into the sanitary sewer line. These discharge points will be disconnected and the storm water will be handled otherwise. Thus the peak sanitary sewer flow will be diminished, and to that extent demand upon the sanitary sewer pumps and the amount of sanitary sewage that must be treated in the City of Napa's treatment plant will be diminished. *We recommend approval of the project.*

DEPARTMENT OF MENTAL HYGIENE

ITEM 315 of the Budget Bill Capital Outlay Budget page 179

FOR MINOR CONSTRUCTION, IMPROVEMENTS AND EQUIPMENT, DEPARTMENT OF MENTAL HYGIENE, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$1,497,595
Recommended for approval	1,497,595
TOTAL RECOMMENDED REDUCTION	None

Department of Mental Hygiene—Continued

ANALYSIS

The amount proposed to finance 158 minor capital improvement projects for 15 institutions is $2,852 higher than appropriated by the Budget Act of 1966. A summary of the purposes of the projects is shown below by hospital.

Hospital	Number of projects	Purpose: Improve patient environment	Purpose: Health or safety improvement	Purpose: Facilitate employee efficiency	Purpose: Maintenance	Purpose: Utilities	Amount
Agnews	9	3	1 *	4	1	0	$135,030
Atascadero	6	0	2	1	2	1	75,000
Camarillo	15	6	2	2	5	0	171,600
DeWitt	9	3	2	2	1	1	136,500
Fairview	11	5	2	3	1	0	48,500
Mendocino	19	7	2	5	3	2	66,115
Metropolitan	6	4	0	1	1	0	98,900
Modesto	4	1	0	1	2	0	31,300
Napa	14	4	1	1	8	0	189,000
Pacific	9	3	1	1	4	0	170,500
Patton	14	5	2 *	5	0	2	95,050
Porterville	5	2	0	3	0	0	12,900
Sonoma	20	9	2 *	5	3	1	146,500
Stockton	16	6	2	3	1	4	116,100
U.C.L.A.	1	1	0	0	0	0	4,000
Total	158	59	19	37	32	11	$1,497,595

* See text.

The asterisk opposite Agnews, Patton and Sonoma State Hospitals is there to call attention to projects proposed for a total cost of $16,000 for the purpose of improving institution slaughterhouses to conform with the Agriculture Code in compliance with the desire of the Senate Fact Finding Committee on Agriculture that such improvements be made.

Although we have not had an opportunity to investigate a significant number of the proposed projects on site, most are similar in character to those examined closely in past years and we consider them justified. The department carefully screens its minor capital outlay program.

We recommend approval of the total amount requested.

MILITARY DEPARTMENT

ITEM 316 of the Budget Bill Capital Outlay Budget page 200

FOR MINOR CONSTRUCTION, MAINTENANCE AND IMPROVEMENTS, MILITARY DEPARTMENT, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$192,230
Recommended for approval	110,680
TOTAL RECOMMENDED REDUCTION	$81,550

ANALYSIS

There are four maintenance projects proposed for a total of $52,530 that would be more properly included in Item 144 of the Budget Bill for the support of the Military Department. These projects include a $37,000 roof repair proposal for the improvement of several armories, a sidewalk and stair repair project adjacent to a Los Angeles armory for $3,500, a sidewalk replacement at Yuba City for $4,000 and repair of the Los Angeles Hope Street armory elevator for $8,030. The department proposes to pave previously unpaved vehicle storage compounds and parking facilities at Glendale, Oroville, Monterey, El Centro, Modesto, Richmond, Susanville, Brawley and Coronado in order to improve some of the older armories that were constructed prior to the time when the National Guard Bureau would authorize the installation of asphaltic concrete surfacing. Property protection is cited as justification for fencing projects at the East Spring Street and Seventh Street armories in Long Beach and the Gardena armory. The Long Beach fencing projects cost a total of $6,500 and we estimate that $4,750 may be required for the Gardena fencing project. *The total amount of the minor projects described above is $110,680 and we recommend approval of that total.*

We recommend deletion of the three remaining projects proposed and the part of the Gardena Armory project for offstreet parking. Offstreet parking projects are proposed for Roseville, San Lorenzo and Gardena. We believe that state investment in parking facilities with rare exceptions should be amortized by the fees from those who use the parking facilities whether it be persons employed by the state or any persons who benefit from the use privilege. Probably the largest volume users are nonmilitary, arising from the use of the armories for community or organizational affairs since the National Guardsmen use them only one weekend per month and occasionally two. *The Military Department does not levy such fees and therefore we recommend rejection of proposals to provide any more paved parking facilities.* The Roseville project is is estimated to cost $21,200; the San Lorenzo project, $6,750; and we estimate that one-half of the Gardena project is for parking, that is $4,750.

The remaining project is estimated to cost $48,850 and entails providing paving, walks, fencing, a sprinkler system, exterior lighting and landscaping for an armory in Stockton constructed in 1964. That armory was constructed with approximately 75 percent federal funding, but the failure of the federal government and the state government to provide sufficient funds prevented construction of the items that are requested in this budget. We believe that the level of federal obligation acknowledged in the three-quarters contribution at the time of the original construction should also be acknowledged in terms of items that are required to complete the construction. *We therefore recommend rejection of the $48,850 proposal to complete the facility with state funds. The total of our recommended reductions is $81,550.*

Department of Conservation
DIVISION OF FORESTRY

ITEM 317 of the Budget Bill C.O. Budget page 210

FOR MINOR CONSTRUCTION, IMPROVEMENTS AND EQUIPMENT, DEPARTMENT OF CONSERVATION, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$400,000
Recommended for approval	400,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The Division of Forestry separates its minor construction program into three categories. The first is for the construction of improvements with the assistance of construction tradesmen hired from the local areas. There are 21 such projects ranging in cost from $1,250 to $50,700 and totaling $242,300. Several of them involve enlarging existing facilities to accommodate the increased numbers of men that operate from these facilities for the purpose of fire suppression. Several others are required to enlarge the size of equipment buildings necessary because the vehicles purchased to replace fire suppression equipment are much larger than they were in the past. Most of the remaining are pavement maintenance projects either for improving conservation camps or air attack bases.

The second category of minor construction improvement projects is distinct in that inmate labor is used and the cost of the project is almost totally for the purchase of the materials that are required for the project improvement. There are 21 such projects for a total cost of $117,711, three of which are related to implementation of a recommendation of the presuppression plan of 1956 prepared by the Division of Forestry. The first involves the purchase of metal forms for $6,000 to be used for the construction of several 10,000-gallon concrete water storage tanks to be constructed by inmate labor at various sites in the state. The other two presuppression plan projects totalling $11,000 involve construction of 11 of the storage tanks. Most of the remaining projects are similar to those funded in the first category, that is the extension of utility lines, the installation of paving for maintenance purposes and the enlargement or modification of specified forestry facilities. The cost of the facilities improved by use of inmate labor, however, is considerably less than the cost of those in the first category where prevailing labor rates must be paid for the craftsmen employed.

The department's request of $262,244 for projects in this second category was reduced to the $117,711 proposed in the budget. The inmates who preform the labor, however, cannot be dismissed because of lack of work and will be employed instead primarily in the cutting of fire breaks.

The remaining three projects total $39,985 and are included in the third category, that of improving or extending the Division of Forestry communications network.

Division of Forestry—Continued

The total $400,000 requested is $15,198 less than that approved in the Budget Act of 1959 and is $575,000 less than approved in the Budget Act of 1966. However, Section 11.1 of the Budget Act proposes the reversion of a significant portion of the funds appropriated by the Budget Acts of 1965 and 1966 for minor construction improvements. We have not been supplied with a detailed listing of those projects that will be deleted as a result of the proposed reversion. *Thus we recommend approval of the $400,000 requested by this budget item, but we reserve judgment on the advisability of the reversion proposed by Section 11.1 until we have an opportunity to examine the significance of deferring or deleting the specific projects affected.*

DEPARTMENT OF WATER RESOURCES

ITEM 318 of the Budget Bill Capital Outlay Budget page 213

FOR MINOR CONSTRUCTION, DEPARTMENT OF WATER RESOURCES, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$6,800
Recommended for approval	6,800
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The amount requested is required for the purpose of paving the Sutter maintenance yard, a facility constructed to headquarter the staff and equipment required for the Sacramento River flood control maintenance activity and basic data collection service. Item 329 of the Budget Act of 1964 and Item 340 of the Budget Act of 1965 appropriated a total of $45,000 for the construction of the maintenance yard. The amount requested by this item will hopefully finally complete the project. *We recommend approval.*

CALIFORNIA HIGHWAY PATROL

ITEM 319 of the Budget Bill C.O. Budget page 214

FOR MAJOR CONSTRUCTION AND IMPROVEMENTS, CALIFORNIA HIGHWAY PATROL, FROM THE MOTOR VEHICLE FUND

RECOMMENDATIONS

Amount budgeted	$3,842,900
Recommended for approval	3,747,900
Recommended for special review	95,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

(a) Construct—headquarters office building annex—Sacramento *$3,370,300*

A new three-story concrete frame headquarters building for the California Highway Patrol is complete except for interior partition work

California Highway Patrol—Continued

and should be occupied in the fall of 1967. The legislative mandate to double the strength of the California Highway Patrol pursuant to Chapter 2031 of the Statutes of 1965 made it apparent that additional headquarters staff would be added rapidly and thus generate the need for added headquarters space. Item 388(j) of the Budget Act of 1966 appropriated $1,000,700 for working drawings, and construction of the foundation and structural steel for an annex to the headquarters building, the latter to expedite completion of the proposed annex. The structure envisioned is a nine-story steel frame building which will have an exterior finish similar to that of the three-story structure adjacent and will cost an estimated $4,371,000. The $3,370,300 proposed in this budget item represents the balance of funds required. *We recommend approval of that amount.*

The budget proposal to construct the headquarters annex is a contradiction when compared with the failure of the budget to propose the implementation of Chapter 2031 which would generate the staff that will occupy the annex. We would have to recommend deletion of the $3,370,300 proposed and reversion of the unencumbered balance of the $1,000,700 appropriated in 1966 if the Legislature approves the budget proposal to curtail implementation of Chapter 2031. The contract for construction of the foundations and structural steel has not been awarded so the project can be deferred until justified if the proposed staff growth delay prevails.

We recommend, however, in our analysis of Item 228, for the support of the California Highway Patrol, the need for personnel from the Department of General Services and the California Highway Patrol to identify those areas where it would be in the state's interest to construct state-owned field offices. We support both the construction of the headquarters annex and field offices where it is in the state's interest to do so, but if there must be a trade off because of a reluctance to appropriate enough funds to construct both the headquarters annex and field offices, it is more critical that the state-owned field offices be constructed than the headquarters annex because the lease alternate possibilities in Sacramento are better than in some of the field locations. *With that qualification, we recommend approval of the headquarters annex facility proposed by this item.*

(b) Construct—office building—Yreka *$337,600*

Item 388(b) of the Budget Act of 1966 appropriated $20,000 for the purpose of purchasing excess land from the Division of Highways to construct a combined Department of Motor Vehicles and California Highway Patrol office building. Funds for the construction of that facility are proposed by this subitem. The building is a combination of wood and steel frame with exterior redwood siding and a heavy butt cedar shake roof. There are 10,500 gross square feet of building area at an average building cost of $19.72 per square foot. *We recommend approval of the project.*

Funds were also included by the Budget Act of 1966 for site acquisition in Taft and in Tracy in anticipation of constructing substation

California Highway Patrol—Continued

office buildings in those locations related to the need for patrolling the new Westside Freeway. Section 11.3 of the Budget Bill proposes reversion of those funds despite the fact the department represented it to be in the best interest of the state from an economic viewpoint to construct such facilities when the site acquisition funds were requested in 1966. The department is now hesitant to specify the exact location of patrol offices along the new freeway because of the budget reversal of the expressed intent to the Legislature to double the patrol size and because of the department's inability to anticipate with confidence the volume of traffic on the new freeway.

(c) Working drawings—shops and stores building—Los Angeles *$40,000*

(d) Working drawings—motor transport shop—Sacramento *$45,000*

The need to construct a motor transport shop in Sacramento and the shops and stores building in Los Angeles are both related to the Chapter 2031-stimulated increased size of the department, and the Los Angeles facility is also justified on the basis of potential savings associated with equipping patrol cars in Los Angeles in lieu of Sacramento.

Both the potential growth of the department and the potential savings associated with equipping patrol cars in Los Angeles need to be determined before a meaningful description of the shops and stores facilities required can be formulated. The budget proposes to delay the growth of the patrol and thus tends to undermine the justification for both enlarging the Sacramento facility and constructing a separate Los Angeles facility whereas we recommend full implementation of the patrol augmentation which might justify both projects.

Patrol cars can be delivered to Sacramento or Los Angeles for the same price by the automobile supplier, so the cost of shipping patrol cars from Sacramento to Los Angeles of about $50 per car after it has been equipped in the department's shop in Sacramento might be saved by operating a shop in Los Angeles. There may be marginal costs associated with operating two department shops, however, that should be identified and compared to the Sacramento-Los Angeles shipping costs in order to determine the benefit of constructing a Los Angeles shop prior to proceeding with the proposed project.

The Department of Finance requested on April 14, 1966 that a program description of the shops be prepared before development of preliminary plans. That description has not been transmitted to date.

In general, the Los Angeles facility will be used for the equipping, stripping, and temporary storage of automobiles in relation to supplying vehicles for traffic officer use and to disposing of such vehicles when they are no longer serviceable to the department. It will also be used as a central shop and office for the communications services personnel associated with the department. The Sacramento motor transport shop will be used for those vehicle-related functions identified above in replacement of an existing shop that occupies space in a building that is also used to warehouse supplies for deployment to field offices. The new

California Highway Patrol—Continued

shop will free space in the existing building for expansion of the warehousing function in addition to providing a more efficient production line operation of equipping and stripping.

We recognize that improvement must be made to support our recommended augmentation of the support of the department in Budget Item 228. Identification of the appropriate improvements must be made by the department. *We recommend that the department be instructed to:*

1. Quantify the current and projected activity related to the proposed shops in Sacramento and Los Angeles.

2. Determine the benefits and costs associated with operating shops in Los Angeles and Sacramento in lieu of one shop in Sacramento.

3. Specify the time when each facility required will be needed.

4. Propose budgeting of the funds required based upon the findings of No. 1 through No. 3 above.

Our recommendation is pending the development of the information required as delineated above.

(e) Preliminary planning *$50,000*

This item finances the cost of preparing the preliminary plans, specifications and estimates for projects to be requested in the 1968–69 budget. *We recommend approval.*

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

ITEM 320 of the Budget Bill **Capital Outlay Budget page 214**

FOR MINOR CONSTRUCTION AND IMPROVEMENT, CALIFORNIA HIGHWAY PATROL, FROM THE MOTOR VEHICLE FUND

RECOMMENDATIONS

Amount budgeted	$93,820
Recommended for approval	15,000
TOTAL RECOMMENDED REDUCTION	$78,820

ANALYSIS

Item 388(k) of the Budget Act of 1966 provided $50,000 for the purpose of developing a master plan for the California Highway Patrol training academy site. This amount was proposed because of the belief that expanding needs of the academy might be so great as to render inadequate the existing site for the ultimate purposes of the academy. This budget item, however, proposes the construction of a running track for $16,500, repair of the emergency operations driving course for $29,200, and construction of walks and covering between the academy classrooms and living buildings for $13,920. If it is determined that the academy will permanently remain at the existing location, it might be advisable to authorize each of these projects. The department should take advantage of the information prepared as the result of the $50,000 appropriation for master planning, however, before making such improvements. *We recommend deferral of the*

Department of California Highway Patrol—Continued

$59,620 proposed for training academy improvements until the department is in a position to recommend the ultimate location and capacity of a permanent academy.

This item also proposes construction of a $19,200 carwash building adjacent to the motor transport shop. Item 319(d) above proposes $45,000 for working drawings for a Sacramento motor transport shop. The total transport shop needs of the department should be considered as one project in order to get the most efficient use of the funds that will be required to develop the shop. *Therefore, we recommend that the carwash facility be included as part of the project proposed by Item 319(d) and that the $19,200 proposed in this item be deleted.*

The remaining $15,000 is required to provide for unforeseen alterations for leased and state-owned facilities throughout the state in accordance with past practice. We consider the provision of such a fund advisable. *We recommend approval of the $15,000 requested for that purpose.*

DEPARTMENT OF MOTOR VEHICLES

ITEM 321 of the Budget Bill Capital Outlay Budget page 217

FOR LAND ACQUISITION, PRELIMINARY PLANNING, DEPARTMENT OF MOTOR VEHICLES, FROM THE MOTOR VEHICLE FUND

RECOMMENDATIONS

Amount budgeted	$773,500
Recommended for approval	773,500
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

Item 389(j) of the Budget Act of 1966 appropriated $546,000 to remodel the office building currently being occupied by the California Highway Patrol for ultimate use as a Department of Motor Vehicles public office building. The department has reevaluated its needs and is currently considering the construction of a new facility in the vicinity of the W-X Freeway currently under construction in lieu of remodeling the highway patrol building. A definite proposal has not been made but it is our belief that the existing highway patrol office building might best be used as a facility to temporarily house employees during construction of other facilities, and that as such does not merit the investment of a significant amount of funds for substantial improvement. In any case, the department has raised questions which are well founded and are significant enough to justify a second look by the Legislature. *We recommend that the $546,000 appropriated by Item 389(j) of the 1966 Budget Act be reverted and that the department seek legislative approval of any new alternate plan that it may propose.*

(a) Land acquisition—office building and parking facilities —Winnetka *$361,500*

Department of Motor Vehicles—Continued

The Department of Motor Vehicles currently operates 27 owned and 125 leased facilities. The preponderance of leased facilities is the result of the department practice of initially leasing a facility in a community which may be in a stage of rapid growth. After the department has served a community in a leased facility it may determine that the cost of continuing to lease is higher than that of owning and that the community has stabilized in terms of relative growth and character. In such cases the department requests the appropriation of funds for the purchase of a site for a state-owned building in anticipation of the lease expiration.

The department's original capital outlay budget request for 1967–68 specified the advisability of purchasing sites for ultimate construction of state-owned office facilities in the communities of Bellflower, Daly City, Los Gatos, Oceanside, Oxnard, San Leandro, Whittier and Winnetka. Of the eight sites specified, only Winnetka has been proposed in the budget. The lease expiration date of the existing Winnetka office building is April 30, 1969, and is later than the lease expiration of any of the other community facilities identified above. We are unaware of the rationale that might support construction of a state-owned office facility in Winnetka in preference to any of the other areas specified by the department.

In the past we have requested that the department examine the economic consequences of the "lease versus own" decision. The department prepared such analyses to support requests for the purchase of five sites authorized in the Budget Act of 1966. While we supported the request for funds to purchase the five sites authorized in 1966, we were aware that the economic evaluations made by the department, based upon the assumptions included in those evaluations, were not conclusive. On the other hand, the hard fact of escalation occurring in land values in urban communities is sufficient to make it advisable for the state to construct state-owned facilities in such communities as opposed to leasing. This fact is not recognized in the department calculations and that is the reason the calculations do not conclusively show it to be to the state's economic advantage to own facilities as opposed to leasing them in such communities. The practical consequence of such land value escalation is realized by the department whenever it has to renegotiate a lease in an urban community. At such time the department almost inevitably has to request a substantial budget increase to cover the increased lease cost which results.

We are confident that it is in the state's economic interest to purchase land for a state-owned office building in Winnetka. *On that basis, we recommend approval of the $361,500 proposed by this subitem.* However we must emphasize the probable economic consequences to the state associated with the budget failure to propose acquisition of the other sites identified by the department. The budget also fails to propose construction funds for public office buildings in Inglewood, San Mateo, Hayward and western Los Angeles although site acquisition funds were approved by the Budget Act of 1966 for those communities.

Department of Motor Vehicles—Continued

The Department of General Services placed on the January 1967 Public Works Board agenda a request for authority to negotiate settlement of the San Mateo and western Los Angeles properties, but the requests were withdrawn on request of representatives of the Department of Finance because of the failure to include construction funds in the 1967–68 budget. Similar requests to the Public Works Board can be made in February and March respectively for the Inglewood and Hayward sites. The overall estimates of cost for these four acquisitions appears to be within the amounts appropriated in the Budget Act of 1966, but land values are rapidly escalating in each of these areas.

We recommend reaffirmation of the 1966 legislative approval of constructing state-owned buildings in these communities based on the attendant anticipated economic benefit to the state.

(b) Land acquisition—parking facilities—Sacramento headquarters *$382,000*

The highway transportation complex is located in the vicinity of 24th Street and Broadway in Sacramento and the Department of Motor Vehicles and California Highway Patrol headquarters are located there. A master plan has been developed for the area which indicates the ultimate provision of offices for the Division of Highways in the same complex. The 1961 and 1962 Budget Acts appropriated a total of $810,000 to purchase land for parking adjacent to the Department of Motor Vehicles headquarters then under construction. The 1964 and two subsequent budget acts appropriated a total of $1,292,000 for continued land acquisition on the basis of the master plan idea being developed at that time. The $380,000 proposed by this item is required to fill in the minimum contiguous complex envisioned by the master plan. An additional one-half million dollars will probably be required if it is determined to purchase all of the land ultimately required, pursuant to the master plan.

We recommend approval of the amount proposed.

(c) Preliminary planning *$30,000*

Each year the Legislature provides funds which may be used to prepare preliminary plans, specifications and cost estimates for items that will be proposed in the subsequent budget in order to give the Legislature sufficient information upon which to make adequate judgment on proposed capital outlay projects. *We recommend approval of the amount requested as a continuation of such planning.*

DEPARTMENT OF MOTOR VEHICLES

ITEM 322 of the Budget Bill Capital Outlay Budget page 218

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, DEPARTMENT OF MOTOR VEHICLES, FROM THE MOTOR VEHICLE FUND

RECOMMENDATIONS

Amount budgeted	$38,125
Recommended for approval	None
TOTAL RECOMMENDED REDUCTION	$38,125

Department of Motor Vehicles—Continued

ANALYSIS

The Department of Motor Vehicles field office on Fell Street in San Francisco was designed originally as a one-story structure with the provision for the addition of a second story as required. Item 333(i) of the 1965 Budget Act appropriated $430,000 for construction of the second story addition. The plan that was submitted to support the 1965 appropriation request indicated that minor modifications would be made on the first floor as required to satisfy all of the functional needs of the new building, as remodeled. The program and plan prepared to support the request in the current budget indicates that additional remodeling is required on the first floor. We do not understand why all the needs of the department that must be satisfied in this building were not anticipated at the time of the 1965 request and we believe that the opportunity to modify the building for its most efficient use of space at minimum cost has been sacrificed because of the incremental approach of the department.

The remodeling requested by this budget item would result in conversion of space for expansion of the public area during peak business periods, enlargement of employee and conference rooms, and provision of a suite of offices for the director or other visiting staff in San Francisco. The visiting staff, employee room and conference room needs can be satisfied by this structure as it will exist upon completion of the 1965 authorized addition. The possibility of expanding the public service space for peak use is desirable but does not merit the expenditure of the amount of funds proposed as the marginal additional public space gained is quite limited. Furthermore, two-stage construction has already resulted in a rather chopped-up solution to the department's needs and this third increment proposed does not necessarily improve the situation.

We recommend disapproval of the amount requested.

Department of Veterans Affairs

VETERANS' HOME OF CALIFORNIA

ITEM 323 of the Budget Bill Capital Outlay Budget page 220

FOR MINOR CONSTRUCTION, MAINTENANCE AND IMPROVEMENTS, VETERANS' HOME OF CALIFORNIA, FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$58,920
Recommended for approval	58,920
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

There are six projects proposed for a total cost of $24,070 that are justified on the basis of facilities maintenance and would more properly have been included in the Veterans Home support Item 239 of the Budget Bill. The nine remaining projects vary in cost from $1,100

Veterans' Home of California—Continued

for a sun shelter, to $8,500 for a landscaping project and are justified on the basis of fire safety, patient comfort and improved working conditions.

We recommend approval of the total amount requested.

UNALLOCATED

ITEM 324 of the Budget Bill Capital Outlay Budget page 222

FOR PROJECT PLANNING TO BE ALLOCATED BY THE DIRECTOR OF FINANCE FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$300,000
Recommended for approval	None
Recommended for special review	300,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

This item is intended to continue the long-established policy of the Legislature by which advance funds are provided for the preparation of preliminary plans and outline specifications to be used as a basis for requests for construction or working drawings or both in a succeeding budget. In this particular item the preliminary plans and specifications that are intended are for agencies other than the University of California and the state colleges which otherwise normally depend on the General Fund for support and capital outlay. These would include Beaches and Parks, Forestry, Corrections, etc. In the immediate past these agencies have been receiving their capital outlay support, to a considerable extent, from the State Construction Program Fund which has its sources from bonds. In the immediate future the situation appears to be considerably changed in that all of these agencies will probably depend on the General Fund for capital outlay. We have received no clear program which would justify this amount; in fact, if most of the agencies are to rely on the General Fund this amount would be inadequate to do the job.

In the case the University and the state colleges the bill does contain amounts for preliminary plans and specifications for the next budget with the amounts payable from the bond funds. Consequently, irrespective of the ultimate source of funding of projects for these two agencies in the next budget, they would be adequately taken care of insofar as preliminary plans were concerned. *In view of the inadequacy of the information on which this proposal is based, we recommend that it be placed in the special review category.*

UNALLOCATED

ITEM 325 of the Budget Bill Capital Outlay Budget page 222

FOR AUGMENTATION OF FUNDED PROJECTS IN ACCORDANCE WITH SECTION 16409 GOVERNMENT CODE FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$1,000,000
Recommendation for approval	1,000,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The steadily rising construction cost index over the last two decades has previously led the Legislature to establish a policy of providing certain latitudes by way of augmentation funds which would permit projects to be awarded even though bids were higher than available funds, based on prevailing market conditions. This policy has worked well and has, in fact, acted as a revolving fund because despite the rising construction cost index there have been periods when there were favorable bids and there have been special situations where favorable bids have resulted in savings. These savings were returned to the Augmentation Fund and used for other projects that ran into financial difficulties. Heretofore, the augmentation provided in each budget act has been available for three years and in effect, became merged with succeeding augmentation funds and with the savings made in the Revolving Fund procedure. The Budget Act of 1966 provided $1 million for the same purpose but the present bill proposes that any unencumbered portion of this prior appropriation be reverted to the General Fund. This is contained in Section 11 of the Budget Bill, on page 113, line 40. As a consequence, any General Fund-financed construction projects from prior years which go to bid within the budget year and which run into financial shortages will need to rely solely on this proposed appropriation. *We recommend approval.*

UNALLOCATED

ITEM 326 of the Budget Bill Capital Outlay Budget page 222

FOR MISCELLANEOUS REPAIRS, IMPROVEMENTS AND EQUIPMENT TO BE ALLOCATED BY THE DIRECTOR OF FINANCE FROM THE GENERAL FUND

RECOMMENDATIONS

Amount budgeted	$100,000
Recommended for approval	50,000
TOTAL RECOMMENDED REDUCTION	$50,000

ANALYSIS

For many years the budget and the budget acts included varying amounts for so-called miscellaneous improvements, etc., for which there were no advance details. Theoretically the amount was supposed to cover truly unexpected and more or less emergency conditions which could not wait for the next budget and for which there was no other

Unallocated—Continued

available source of funds. We called attention, on a number of occasions, to the fact that the funds were often being used in situations which could not be considered as imperative and which could have easily waited for the next budget. It is also true, however, that the funds were used for serious situations such as fire damage repair, boiler failures, etc.

A like amount was proposed in the Budget Bill of 1966 at which time we pointed out there was still an adequate amount of carry over funds from prior appropriations which should have been ample to cover unexpected situations during the 1966–67 fiscal year. The Legislature agreed with our recommendation and the amount was deleted from the Budget Act.

The Capital Outlay Budget, on page 223, line 39, indicates that the balance available for use in the current year was $66,265. This amount is the balance of a $100,000 appropriation made in 1964 which will expire June 30, 1967. Lines 61 and 62 of page 224 of the budget indicate a $5,000 repair to the trusses in the women's building at the State Fair and a $4,800 lighting system for the Broadway parking lot also at the State Fair for total current year expenditures to date of $9,800. Without knowing the details we would be willing to concede the possibility that the repair of the trusses may have resulted from an emergency situation. However, we doubt that the same is true of the lighting system in the Broadway parking lot.

A further examination on page 224 indicates that the total expenditure during the 1965–66 fiscal year was only $31,700 with most of it apparently for emergency situations. In recognition of the fact that there would be no balance available for this purpose on July 1, 1967 and the fact that it is not possible to predict emergencies in advance, we recommend that some funds be provided for the purpose. However, we do not believe that $100,000 is necessary. *We recommend instead that the amount be reduced to $50,000.*

DEPARTMENT OF FISH AND GAME

ITEM 327 of the Budget Bill Capital Outlay Budget page 305

FOR MAJOR CONSTRUCTION IMPROVEMENTS AND EQUIPMENT, DEPARTMENT OF FISH AND GAME FROM THE FISH AND GAME PRESERVATION FUND

RECOMMENDATIONS

Amount budgeted	$1,575,000
Recommended for approval	1,575,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The Budget Act of 1966 appropriated $35,000 for the design and preparation of working drawings for the construction of a vessel to replace the now obsolete *Scofield* to be used in continued and expanded research in ocean aquatic life and oceanographic related problems.

32—87224

Department of Fish and Game—Continued

As of this writing the design has been well finalized and working drawings have been started. The vessel contemplated will be of steel construction with an overall length of 125 feet 6 inches, an extreme beam measurement of 30 feet and maximum draft of 13 feet 6 inches while the basic hull and main decks will be steel the main deck houses will be of wood construction. The current estimated total displacement weight of the hull, ready for sea, including fuel oil, fresh water and stores is 556 tons with a resigned speed of better than 11½ knots. Her fuel oil capacity of 40,000 gallons will give her very extended ranges and freshwater conversion equipment will permit the vessel to stay at sea for long periods.

Propulsion will be by a single marine diesel, freshwater closed-circuit cooled, using a variable pitch, reversible propeller. An important innovation, as compared to the *Scofield,* is the use of a "bow thruster." This is a separately diesel engine driven device in the forward part of the vessel actually under the forefoot of the bow which is retractable into a well and which permits the bow of the vessel to be pushed by means of the thruster propeller either to the left or to the right and because the unit also has a 360-degree capability the unit can act as a secondary or standby safety propulsion device which is capable of driving the vessel at probably better than three knots, if needed. The combination of controllable pitch main propeller and bow thruster will permit the vessel to travel at extremely slow speeds forward, as low as one knot while at the same time maintaining the bow into the appropriate heading by means of the thruster. The scientific advantages as well as the operational advantages to be gained by this combination are too numerous to mention. However, we have examined them in detail with the naval architect, the port captain of the Fish and Game fleet and a number of the people concerned with the scientific purposes of the ship, and we are convinced that the proposals are sound. It is also interesting to report that the deck houses in addition to providing numerous laboratory facilities will provide living quarters for the scientists on a sufficiently divided basis to permit extensive use of women scientists who are becoming more and more prevalent in the field. The present layout of the *Scofield,* for example, makes this almost impossible.

The costs have been carefully reviewed with the naval architect and we, independently, have made some inquiries which lead us to believe that the proposal is realistic. However, we would recommend that prospective bidding be opened to builders in the states of Washington and Oregon because of the fact that the vessel is of such an in-between size as to be too small for the large steel construction shipyards in California and too big for most of the small ones which would tend to limit the competition. *We recommend approval of the amount proposed.*

DEPARTMENT OF FISH AND GAME

ITEM 328 of the Budget Bill Capital Outlay Budget page 306

FOR MINOR CONSTRUCTION AND IMPROVEMENTS, DEPARTMENT OF FISH AND GAME, FROM THE FISH AND GAME PRESERVATION FUND

RECOMMENDATIONS

Amount budgeted	$216,500
Recommended for approval	216,500
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

Salmon and steelhead are trapped at the Casper Creek fish-trapping facility in Mendocino County to gather eggs for perpetuation of the species. Flood damage in 1964 extensively damaged both the trapping facilities and related shop area. Approximately $30,000 is estimated to be the cost of replacement. The Department of Fish and Game contributes to stream pollution at the San Joaquin Hatchery near Fresno by discharging directly from fish rearing ponds in the San Joaquin River. The construction of two settling ponds which will be used to clean the water is estimated to cost $64,000. A prefabricated 4,000 square foot metal building will be constructed at the Hot Creek Hatchery near Bishop for the purpose of providing working space and equipment storage for $64,000. A small storage shed will be provided at the Redding Region No. 1 Headquarters for the purpose of protecting equipment at a cost of $6,000. The Mt. Shasta Hatchery fishponds will be lined with concrete for the purpose of more efficient hatchery operation for $20,000. A dam must be constructed to provide a limited water supply to assure continued operation of the Darrah Springs Hatchery in Region No. 1. The estimated cost is $10,000. An estimated $16,000 is sufficient to replace two fish screens that have worn out and to add a third fish screen for the purpose of preventing downstream migrant salmon and steelhead from being lost to diversion. The three remaining projects total $6,500 and involve extending gas service, electrical service, and construction of a paint and oil storage building for three separate field operation bases.

We recommend approval of the total amount of funds requested.

DEPARTMENT OF PARKS AND RECREATION

ITEM 329 of the Budget Bill Capital Outlay Budget page 322

RECOMMENDATIONS

Amount budgeted	$1,000,000
Unresolved	1,000,000

ANALYSIS AND RECOMMENDATIONS

Item 329 is the General Fund request for capital outlay for the Department of Parks and Recreation to be allocated by the Department of Finance. The amount requested is $1 million and compares with $7,569,674 appropriated in 1965–66 and $14,770,637 in 1966–67. This item for $1 million and Item 343 appropriating $137,541 for project planning from park bond funds are the only appropriation requests

Department of Parks and Recreation—Continued

for new money to finance acquisition and development of the state park system in the budget as presented to the Legislature. The Governor's Budget on page 311 merely states, "this budget proposes $1,137,541 for the purpose of providing for the essential planning, opportunity purchases, and development necessary to meet the minimal needs of the state park system for the 1967–68 fiscal year."

The Governor's Budget also proposes in section 11 and 11.1 to revert as of June 30, 1967, the unencumbered balance of $10,582,104 in appropriations now available to the department for capital outlay. Of the total amount to be reverted, $8,540,030 in projects have been, in effect, delayed and rescheduled to the 1968–69 column of the capital outlay budget. New appropriations will have to be included in the Budget Act for that year to provide financing for them. In addition to the projects included in the reversion of $10,582,104, there are other projects totaling approximately $3,000,000 that are to be cancelled even though the funds had been transferred to the Office of Architecture and Construction prior to June 30, 1966. Funds related to these cancelled projects are to be returned from the Architecture Revolving Fund and reverted to the General Fund, although already accounted as an expenditure by the Department of Parks and Recreation. There are no details available on the transactions involving the $3 million. In addition, there are $568,381 in automatic reversion of prior year appropriations whose period of availability has expired.

The capital outlay activities of the Department of Parks and Recreation have expanded enormously in the past few years. The Legislature in 1963 appropriated about $19.3 million for acquisition of lands for the state park system. The General Fund appropriation for development of the state park system was $6,111,500 in 1964–65, over $7 million in 1965–66 and almost $15 million in 1966–67. Simultaneously with the increased General Fund appropriations for development came the funds from the 1964 Recreation Bond Act which provided $85 million for acquisition of state park lands and $20 million for minimum development of the lands purchased with bond funds. In the last two years money has been appropriated for a much greater program than the department has been able to perform.

At the present time the Department of Parks and Recreation is analyzing the workload for planning and development of the state park system in relation to funds already budgeted and the ability of the present staff to accomplish the workload. Complete data should be available prior to the budget hearings.

Meanwhile the department has presented preliminary estimates of the amount of capital outlay expenditures for both acquisitions and construction, that will remain in the current year and the budget year. This remaining program includes funds from all sources as proposed to be available for expenditure in the Governor's Budget, consisting of carryover of unreverted prior year appropriations from the General Fund, prior year Park Bond Fund appropriations and the $1,137,541 requested for appropriation in 1967–68. Utilizing all these sources of

Department of Parks and Recreation—Continued

funds, the department estimates its expenditures for the current and budget years as follows:

	1966–67	*1967–68*
Acquisition	$31,740,913	$41,534,777
Development	8,517,636	8,780,817

The acquisition encumbrances shown would be either paid for or in the process of condemnation in each year. Some of the 1966–67 estimated expenditures are already involved in condemnation. The estimated amounts for development would be those expended under contract or transferred to General Services. The 1966–67 and 1967–68 development programs will be $1,500,000 less than actual expenditures in 1965–66. The result is a relatively stable development program even though large reversions are contemplated.

It appears that the planning and development staff for the department has a substantial backlog of projects for the budget year reasonably equivalent to present staffing levels. We should be able to evaluate this workload of the department when the complete development program data is available.

The Park Bond Fund will provide a source of funding for minimum development of future acquisitions with bond moneys. There are, however, four projects that may require expenditures in the near future above and beyond that provided with the minimum development portion of the bond moneys. According to the department, these projects are Bolsa Chica State Beach, Old San Diego, Topanga Canyon Beach and Topanga Canyon-Santa Monica Mountains. Expenditures may be required for development of these projects beyond the minimum development funds available under the Park Bond Fund. Acquisition of these projects must come first and it is not certain that this will be achieved in the budget year.

The administration has proposed 1966–67 as a year for reducing the backlog of capital outlay projects. In the immediate future, the most pressing need of the state park system will be to provide funds for access and minimum development to enable the public to use lands now owned or currently being acquired.

Until the workload data is available from the department as to the abilities of the current staff to provide a development program according to the needs of the state park system, we defer a recommendation on the adequacy of this appropriation. In addition, adjustments to the reversions and reappropriations may be recommended when the full impact of all the fiscal reversions can be analyzed in terms of the practical effect on the needed development at important units of the state park system.

DEPARTMENT OF CORRECTIONS

ITEM 330 of the Budget Bill Capital Outlay Budget pages 23 and 26

FOR EQUIPMENT, DEPARTMENT OF CORRECTIONS, FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$50,000
Recommended for approval	50,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

(a) Correctional Training Facility, equip new construction $30,000
(b) California Institution for Men, equip barracks $20,000

The Budget Act of 1966 appropriated $689,600 to replace Correctional Training Facility minimum security barracks in the south area and $519,600 to replace minimum security barracks at the California Institution for Men. This item proposes funds for the purpose of equiping the facilities to be construtced within the 1966 appropriations. *We recommend approval.*

DEPARTMENT OF THE YOUTH AUTHORITY

ITEM 331 of the Budget Bill Capital Outlay Budget page 35

FOR MAJOR CONSTRUCTION AND EQUIPMENT, DEPARTMENT OF THE YOUTH AUTHORITY FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$775,984
Recommended for approval	675,984
Recommended for special review	100,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The Budget Act of 1966 appropriated $521,800 for working drawings for a 400-bed older boys' institution at the Northern California Youth Center near Stockton, $7,187,200 for the construction of a 375-bed older boys' reception center, and $3,074,500 for expansion of the Youth Training School central service facilities as part of the initial development of the Southern California Youth Center near Chino. The 1966 Budget Act also appropriated $8,690,100 to be expended subsequent to July 1, 1967, for the construction of a 480-bed medical psychiatric institution also to be located at the Southern California Youth Center. We have been informed recently, however, that as a result of state sponsored community programs and of the increasing number of young men entering the armed forces and of other factors that the ward population of the Department of the Youth Authority has not increased according to projections. The Department of Finance is holding up the development of the plans for the institutions cited above because of the diminishing demand for space in youth authority institutions. *We recommend that the Department of the Youth Authority prepare, for the benefit of the Legislature, a report that will*

Department of the Youth Authority—Continued

clearly delineate the time when each of the above institutions will be required, and present such report to the Legislature at the time of the capital outlay budget hearings.

In addition to the confusion associated with varying projections of the population that must be cared for by the Department of the Youth Authority, there has been considerable controversy associated with the development of the plans for the medical psychiatric institution. Part of that controversy is related to language included in Item 348.1(c) of the 1965 Budget Act which appropriated $435,400 for working drawings for this facility. The language was included pursuant to our recommendation for the purpose of limiting the number of employees that could ultimately be used to staff the institution. We believe that 1965 limitation could reasonably be deleted if the department finds it unduly restrictive and is willing to specify clearly the level of staff envisioned for legislative consideration prior to the final development of plans that are dependent upon such staffing levels. *We recommend that the department prepare a brief report for the Legislature which would include a statement of the purpose of the medical psychiatric institution, the anticipated level of staffing in each of the principal categories, a comparison of the proposed staffing level to that normally employed by the department, a comparison of the kind of program that will be offered in this institution to that in the other institutions and a comparison of marginal additional cost of conducting such a program to the benefits anticipated.*

We have been able to work out understandings with the Department of the Youth Authority relative to this project so we are recommending preparation of such a report not because we lack understanding of the departments stated goals. We recommend preparation of such a report because we consider the construction of such a facility of extreme importance and because we think it important that the Legislature be advised as to the significance of the project by the department. We do not think the department has adequately described this project to the Legislature in the past.

(a) Southern California Youth Center, equip central administrative and service facilities *$100,000*

This project is shown erroneously in both the budget and budget bill for the Northern California Youth Center.

A complex of small institutions is contemplated at the Southern California Youth Center near Chino similar to the Northern California Youth Center complex near Stockton. Initially, however, Youth Training School service facilities are being expanded to serve the first institutions that will be constructed at Chino in lieu of providing separate administrative and service facilities. The Budget Act of 1966 provided $3,074,500 for modifications to the Youth Training School central facilities in order to provide these necessary services. The $100,000 requested by this sub item is required to equip those expanded and modified facilities.

Department of the Youth Authority—Continued

Working drawings for the central service facilities have been completed and the Office of Architecture and Construction is prepared to solicit bids for construction. However, as noted above, the Department of Finance is currently delaying the construction because of the question of population projections. *We recommend that consideration of this request for $100,000 be deferred pending the development of a position by the Department of Finance relative to the need for proceeding with construction of the facilities.*

Northern California Youth Center

(b) Equip surgery addition *$10,000*

(c) Equip, DeWitt Nelson Youth Conservation Training Center *$555,984*

The Northern California Youth Center may ultimately have a total of 12 small institutions encircling a central administrative services complex. The elements of that central administrative services complex are added as the demand of additional institutions require. The surgical facilities were funded as a second phase item by the Budget Act of 1965. The facilities are currently under construction and the $10,000 requested is required to make them operational upon completion.

The DeWitt Nelson Youth Conservation Training Center is the third institution authorized for the Northern California Youth Center. It is currently under construction and it will be used as a training center for youth authority wards prior to their being transferred to conservation camps for fire suppression activity. The department has not prepared a detailed list of the equipment required as proposed by the $555,984 request but the outline breakdown of the equipment proposal appears to be in line with similar proposals for past facilities. *We recommend approval.*

(d) Ventura School for Girls, construct additional water storage facilities *$110,000*

The Ventura School for Girls has a water storage capacity of 60,000 gallons. The current average daily use is 160,700 gallons per day and water can be pumped out of the storage tanks at a far more rapid pace than the existing wells can replace it. This situation places the institution in a precarious position in the event of a fire or break in the waterline. The budget proposes to construct a 100,000-gallon water storage tank in the vicinity of the existing tanks in order to insure adequate fire protection and water service to the institution. *We recommend approval.*

DEPARTMENT OF EDUCATION

ITEM 332 of the Budget Bill Capital Outlay Budget page 168

FOR CAPITAL OUTLAY ASSISTANCE TO JUNIOR COLLEGES, DEPARTMENT OF EDUCATION FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$19,617,030
Recommended for approval	19,617,030
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The bond proposals for general state construction program purposes of 1962 and 1964, which were approved by the voters, contained $20 million and $50 million respectively as specific reservations for the use of junior college construction assistance only.

The Supplementary Budget Act of 1963, in Item 56.5 appropriated the $20 million from the 1962 Bond Issue to be used by the junior colleges. The Budget Acts of 1965 and 1966 together appropriated a total of $33,077,973 which would have left an apparent balance in the $50 million reservation of the 1964 Bond Issue of $16,922,027.

However, it is anticipated that there will be an unexpended balance or savings from the 1965 appropriation of $2,695,003. This together with the apparent balance remaining from the $50 million would make a total of $19,017,030 available for appropriation in the current budget bill. This is precisely the amount that is now proposed.

The total expenditure program by the junior colleges specifically included by name in the proposal is estimated at $43,639,953. This would be composed of the state's share of $19,617,030, as already mentioned, $17,022,923 supplied by the specified junior colleges from their own district funds and $7 million anticipated to be available from federal funds. It will be readily seen that the state's share will be slightly less than 45 percent of the total anticipated expenditures. The actual percentage in any given project or district will vary widely; for example at Cabrillo Junior College District the state funds would represent 28 percent of the total cost of the project, at Compton Junior College District the state's share would represent 34 percent of the total cost of the project and the highest is 61 percent at Merced Junior College District. The actual state share in any given case is based on the formulas contained in Chapter 1272 of the Statutes of 1965 known as the "Junior College Construction Act of 1965" (SB 318). These were subsequently amended both during the 1965 session and the 1966 session.

Resolution Chapter 68 of the First Extraordinary Session of 1966, (SCR 14) directed the Coordinating Council for Higher Education to make extensive studies of the program of state aid for junior college construction assistance and to recommend changes and prepare statutory proposals with a report and recommendation returnable to the Legislature in January of 1967. We have not yet reviewed this report, and consequently cannot comment on its proposals and recommendations. In any case, the special bond funding will be exhausted with the

Department of Education—Continued

proposed appropriation, with one exception. The $20 million appropriation made by Item 56.5 of the Supplementary Budget Act of 1963 has a remaining balance of $5,897,993 as yet unexpended or uncommitted as of June 30, 1966. There appear to be some legal barriers to the use of this balance and probably during this session some legislative clarification will be required.

Current projections beyond the budget year indicate a total annual requirement of $25 million at least through the year 1971–72. In each case the district and anticipated federal funds would be able to take care of slightly less than three-fifths of this total, meaning that there would be an unfunded amount on the average of $10,500,000 each year for which the state would presumably be asked to make some provision.

The individual proposals contained in the schedule of the Budget Bill item are described on pages 152 through 154 of the Capital Outlay Budget. Since we have no details of the individual projects, it would be rather fruitless to comment on them on an individual basis as we have done with respect to the state college and university projects. The language of the proposed appropriation is such that the funds are under the control of the Director of Finance to be allocated by his executive order upon agreement between the Department of Finance and the Department of Education as to the proper scope and estimate of cost of each project to be financed by the state funds. The process would also include action by the State Public Works Board which presumably will give us an opportunity to review each project and make appropriate comments and recommendations to the board. *On the assumption that this procedure will give us an opportunity to properly review the projects and if necessary subsequently report back to the Legislature, we would recommend approval of the proposed appropriation and scheduled distribution of funds.*

DEPARTMENT OF VETERANS AFFAIRS

ITEM 333 of the Budget Bill Capital Outlay Budget page 220

FOR MAJOR CONSTRUCTION, VETERANS' HOME OF CALIFORNIA, FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$81,700
Recommended for approval	81,700
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

An 18-inch diameter clay sewage effluent line carries treated sewage from the institution treatment plant for slightly over one mile to the Napa River outfall. A significant portion of the existing line has collapsed, most of the remainder is filled with gravel and debris precluding the possibility of continuing to maintain the line on an economical basis. The Office of Architecture and Construction proposes that an 18-inch concrete line be used as a replacement. *We recommend approval.*

Department of Veterans Affairs—Continued
State Higher Education Construction Bond Act Program

The following items for higher education occur as part of a separate section in the Budget Bill designated Section 2.4 although the numbers of the items are sequential with those that have gone before. The requirement for such a separately designated section is in the basic bond act.

We would call particular attention to the language on the top of page 93 of the Budget Bill wherein the last sentence provides an authority to augment any of the projects listed in the items to the extent that bids received are in excess of estimates. The State Higher Education Construction Program Bond Act of 1966 made no provisions for augmentations, and funds from other sources could not be used in the event that any specific project ran into financial difficulties because of bidding. We have no basic difference of opinion with respect to the idea of providing some form of augmentation but we would call attention to the fact that the language is such that it becomes in effect a totally blank check. It is therefore suggested that language be added at the end of the sentence which will clearly repose authority for augmentations in the Public Works Board. For example, the following sentence might be appropriate: "Provided that no project may be put to bid wherein the final engineering estimate exceeds the available funds without first obtaining approval of the Public Works Board in recognition of the potential deficit. Furthermore, no bid which exceeds available funds shall be awarded without first obtaining approval of the Public Works Board for the allocation of the deficit amount."

UNIVERSITY OF CALIFORNIA

ITEM 334 of the Budget Bill Capital Outlay Budget page 59

FOR MAJOR CONSTRUCTION, IMPROVEMENTS AND EQUIPMENT, UNIVERSITY OF CALIFORNIA FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$42,835,101
Recommended for approval	24,942,101
Recommended for special review	14,718,000
TOTAL RECOMMENDED REDUCTION	$3,175,000

ANALYSIS

This item proposes a capital outlay program of major projects, excluding equipment, on eight of the campuses of the University plus certain allocations on a statewide basis, proposals for the medical campuses at Los Angeles and San Diego and proposals for the Hastings College of Law. It should be immediately noted that the format of the item, particularly its schedule, is different than has heretofore been used for the University in its main state-funded item. The total of the schedule is actually $57,954,865 from which has been deducted anticipated federal reimbursements of $15,119,764 leaving a net state appropriation of $42,835,101. The implication here is that to the extent fed-

University of California—Continued

eral reimbursements fail to materialize it would be entirely within the University's purview to determine which project should be either curtailed or left by the wayside, in order to use the released state funds for any specific project which failed to receive all or any part of the anticipated federal grant.

This places a great deal more responsibility in the hands of the University than has heretofore been the case, wherein the Legislature made specific state appropriations for a specific list of projects with subsequent language which said in effect that if any federal funds became available as grants towards any of the projects, the state funds so released could then be applied towards another list specified in the Budget Act which also contained certain controls assuring, through the Department of Finance, that projects to be undertaken by the released funds would meet all of its criteria in the same manner as those for which direct appropriation had been made. At this time, we would raise no objections to this new technique and the expansion of University responsibility. The results obtained should be carefully watched.

The list of 39 projects includes three which are for statewide planning purposes, preliminary planning, general planning studies and advance planning studies, six which are working drawings for future construction projects and 30 which are construction projects which either include working drawings or for which working drawings have previously been approved and are under development. It is difficult to make comparisons with prior budget allotments because of the new technique which shows all the projects as a total with a lump sum deduction for anticipated federal assistance. To make any comparisons would become extremely complex and involved. Suffice it to say that the proposal is significantly less than in the current fiscal year and fundamentally represents the University's proportionate exhaustion of the bond funds remaining from the issue approved by the voters in November of 1966. The latter statement applies to the combination of this item and Items 335 and 336 following.

To the extent that the schedule makes a reduction from the original proposals, and in many cases a conversion from working drawings and construction to working drawings only, and to the extent that anticipated enrollments, as set forth on page 64 of the Capital Outlay Budget, are actually realized, the net result would be an automatic reduction in available space per capita which would tend to force a higher intensity of space utilization than had heretofore occurred. Should there be any significant reduction in the enrollments, then the net result of the proposals contained in this item would be to continue, more or less, the same utilization intensity that has heretofore occurred, based on the currently accepted standards. The projected enrollments are presumably based on the same criteria which have been developed over a period of years and any significant reduction in these enrollments would inevitably, in our estimation, be the work of artificially changed factors, assuming that the current factors represent some kind of "norm." These changes could be such things as increased admission

University of California—Continued

standards, positive enrollment limitations, increased costs to the students and many others, or a combination of these forces. In other words we have every reason to assume that the projected enrollments will be realized, based on past experience, unless changed forces are brought to bear.

We have repeatedly called attention to what we believe to be an inadequate utilization of space generally in both the University and the state colleges. We recognize that the move toward a full-year operation will use space more intensively on an annual basis but our major criticism deals with the use of space on a daily and weekly basis wherein it is our contention that the intensity is too low. We do not have figures for particular buildings and for the specific departments and activities to be housed. However, we would call attention to the "Historical Summary of Utilization Rates and Unit Areas", on page 63 wherein it is indicated that on a systemwide basis, for the fall of 1965, the weekly class hours per laboratory room was 16.9 and the station occupancy was 68 percent. For lecture rooms it was 28 hours and 56 percent station occupancy. We submit that these can be raised, thereby increasing the efficiency and effectiveness of the utilization of the state's plant investment and reducing the need for additional capital outlay.

Universitywide

(a) Preliminary planning *$1,000,000*

The Budget Act of 1966 appropriated $1,151,500 for the continuation of the Legislature's policy to provide funds for the preparation of preliminary plans, outline specifications and reasonably accurate cost estimated for projects to be included in the succeeding budget in order that the Legislature might have an adequate basis for making its decisions with respect to these projects. At that time, we questioned the validity of the amount on the basis that we did not feel that the program for the following year would be large enough to justify that much preliminary planning. Nevertheless, the appropriation was made and preliminary plans were prepared for a program substantially larger than is being funded at this time. This preparation was on the assumption that the program would not be limited to just the available balance in the 1966 bond issue but would receive additional funding from other sources.

At this time, while we have no knowledge as to the specific method of financing projects in the 1968–69 budget we must assume that such financing will be found and that adequate preliminary planning must be undertaken in order to continue to provide the Legislature with appropriate information. *Consequently, we recommend approval of the proposal.*

(b) General planning studies *$100,000*

The Legislature in 1964 established a broad policy whereby it would provide to the two major higher education segments funds for planning and study work which would not necessarily lead to individual specific projects. This includes such things as traffic studies, community

University of California—Continued

involvement problem studies, ongoing redevelopment of the long-range master plans for each campus, and numerous related activities. In the Budget Act of 1966, the Legislature provided $250,000 for this purpose. The present proposal falls considerably short of the University's original proposal that the amount be $300,000. The reduction is largely based on the simple lack of sufficient funds to go around. We do not believe that at this time the resultant cutback will be harmful. *Consequently, we recommend approval of the proposal.*

(c) Advance planning studies *$300,000*

This is a special category to provide funds which would permit long-range master plan development for the medical school at Davis and redevelopment at the California College of Medicine in Los Angeles. Medical schools are extremely complex and sophisticated physical organizations and careful advance planning is imperative not only to assure that the resultant facility will function properly and be appropriate for the purpose but to avoid the unnecessary expenditure of capital outlay funds. *We recommend approval of the proposal.*

Berkeley

(d) Construct utilities *$520,000*

The northwest area of this campus is served by a radial electrical feeder system whose main input has now reached a point where it is operating beyond its normal capacity. The addition of buildings and the normal growth of electrical loads within buildings because of increased use of all types of equipment make it essential that a new main power drop be installed through the construction of a substation which will be able to take over some of the existing load and reduce the overload on the balance of the system. To some extent, the proposed development will have capacity for future expansion which is an appropriate concept, particularly where electrical power utlities are concerned. *The cost appears to be in line with the details of the proposal and we recommend approval.*

Davis

(e) Construct—utilities and site development *$1,375,000*

This project consists of a collection of utility items with the addition of several road construction and reconstruction items.

The utilities consist of extensions of the domestic and utility water systems (the utility water system is nonpotable water used for irrigation and other purposes), steam, gas, sewer, chilled water and electrical systems needed to supply buildings now under construction and to generally take care of the expanded and expanding campus. Each phase has been carefully reviewed and we have accepted the necessity for its inclusion in order to make the campus fully operable. The road work consists of the improvement of Hutchison Drive from California Avenue to the West Perimeter Road which is a key central road serving the veterinary medical facilities and new biological science facilities as well as tying in with the West Perimeter Road which brings traffic onto the campus from Russell Boulevard. The second road project in-

University of California—Continued

volves the actual construction of the West Perimeter Road from Hutchison Drive to Russell Boulevard which is the north boundary of the campus and from which comes a substantial portion of the traffic. Both of these elements appear to be crucial to proper access and traffic control. *We believe the costs are in line with the several elements of the total proposal and recommend approval.*

(f) Construct—irrigation water system on campus_____ $229,000

The Budget Act of 1965 provided over $1 million for the construction of a supplemental irrigation water supply system, representing the first phase which was to cover the transmission facilities to carry water from the purchase point provided by the Solano County Flood Control and Water Conservation District to the edge of the campus, a distance of about nine miles. The second phase for which the Budget Act of 1966 provided over $736,000 was for the construction of a 60-acre-foot oncampus reservoir with pumping facilities and the third and final phase is to provide for the major oncampus distribution which will consist of over 9,000 feet of 24-inch and 18-inch concrete pipe and two small 5-acre-foot balancing reservoirs. The total project is essential to provide adequate agricultural irrigation water supplies as well as nonpotable water for other uses, such as lawn irrigation, etc. The prior two expenditures would be virtually useless without this third phase. *The costs appear to be in line with the elements of the proposals and we recommend approval.*

(g) Construct—biological sciences unit_____ $5,184,000

The Budget Act of 1966 provided $158,000 for working drawings development of a multistory complex and sophisticated laboratory building to house many branches of related biological sciences. The gross area of the building as it is ultimately envisioned is over 205,000 square feet. However, this particular increment will have 131,500 gross square feet which will represent the state's portion. It is anticipated that federal assistance may make it possible to construct the building to the full size previously mentioned. For a laboratory-science building it has a relatively good efficiency ratio of 62 percent with a basic building construction cost of $33.89 per gross square foot which includes over $4.56 per gross square foot for fixed, group I equipment. In the aggregate this represents average current costs for a complex building of this type which is fully air-conditioned with heavy utilities supplies, specialized supplies of compressed air, gas, vacuum, distilled water, etc., which make a building of this type extremely complex from the mechanical and electrical standpoint. At total project level including all external utilities, fees supervision, contingencies, etc., it will run close to $41 per gross square foot. It should also be mentioned that ultimately it is anticipated that there will be a need for over $1 million in movable furnishings and equipment for which funding will be proposed in subsequent budgets.

The departments to be housed in this building currently represent 253 FTE students which by 1971 will rise to 510 FTE. Presently the

University of California—Continued

departments are occupying space in other buildings which when released will permit expansion of other departments also requiring space. *We recommend approval.*

(h) Construct—physics unit 1 ..... *$4,805,000*

The Budget Act of 1966 provided $136,500 for working drawings for a multistoried two-wing laboratory structure for the departments of physics and geology which would provide both instructional and research space. The building would have a gross area of 128,300 square feet with a net assignable area of 77,000 square feet giving an efficiency ratio of about 60 percent which is average for complex physical science buildings. At the time the working drawings were proposed, the estimated project cost was about $4,300,000. The current estimate exceeds $5 million. While a part of the difference is ascribable to the sharp construction cost index rise in 1966, a substantial part of the difference is due to the fact that there was an inadequate original estimate and preliminary plan. The current estimate is $32.82 per gross square foot for the basic building alone which includes over $3.80 per square foot for fixed, group I equipment. The building will be fully air conditioned and will have particularly complex and sophisticated mechanical and electrical systems. The total project including all external utilities, site development fees, etc., will be slightly over $39 per gross square foot. We have raised some objections to certain features of the building which we consider, excessive, monumental and unjustifiable. For example the main lobby, in our estimation, is much too large for a building which has a relatively low density of occupancy since it is principally laboratory space with much less frequent class changes than occur in a typical lecture classroom building. In addition, there are features in the lobby such as a "Foucalt pendulum," a display device which demonstrates the rotation of the earth. This device is usually found in large public natural science museums or observatory buildings.

It is anticipated that the building will provide space for 761 FTE students in 1971 when it will be ready for occupancy. *For the reasons indicated, we recommend that the project be placed in the special review category.*

Irvine

(i) Sewage disposal contract *$504,000*

Sewage disposal from the campus is presently handled through County Sanitation District No. 7. However, it is our understanding that this system does not have adequate capacity and in any case the rate charged to the campus is scheduled to go up very sharply within the next couple of years. In anticipation of this, the University negotiated a contract with the Irvine Ranch Water District by which the University would pay a share of the necessary treatment plant and the cost of the force main from the campus to the plant. Ultimately, the campus share of maintenance and operation will be such that, as compared with the higher anticipated rate from the county sanitation district, it will return the cost over a period of years. The University has already signed the agreement and the amount proposed represents

University of California—Continued

the total University share. It is anticipated that the project will be complete in time for the campus to hook in before the higher county rate goes into effect. *It appears to us that this is a sound business proposition and we recommend approval.*

(j) Construct utilities and site development ---------- *$3,125,000*

The Budget Act of 1966 provided working drawing funds for three major new units on the campus, Fine Arts Unit 1, Engineering Unit 1 and Library Unit 2, for which the proposed budget includes construction funds. In addition, the Budget Act of 1966 also included working drawings for an Academic and Administrative Office Unit No. 1, for which, construction funds are not being proposed in the new budget. In order that the three new buildings be supplied with basic utilities and services, it is now proposed that the necessary funds be provided to construct the tunnels, their internal lines and some external facilities as well as construction of the main road extension and some service roads, drainage and minimal grounds improvement.

We would call attention to the fact that the working drawings funds for the three projects just mentioned were not released to the University until the meeting of the Public Works Board on January 30, 1967. This poses a substantial delay in the completion of the working drawings and raises a question as to whether these utilities extensions actually need to be funded at this time. Unless there are unusual circumstances, utilities extensions, including the construction of tunnels, can progress much more swiftly than the construction of relatively complex buildings. *Under the circumstances we suggest that this proposal is premature and that it should be deferred. We recommend accordingly.*

(k) Construct—central plant unit 2 ---------- *$908,000*

The existing central plant which supplies both high temperature hot water and chilled water to all of the campus buildings for heating and air conditioning, does not have the capacity to supply the proposed additional buildings particularly Fine Arts Unit 1, Engineering Unit 1 and Library Unit 2. However, the building itself does have the space in which to install additional equipment. While we have previously made the argument against the construction of the distribution system as being premature because of the delay in the start of working drawings for the buildings mentioned, the equipment in the central plant is not quite in the same category because of its complexity which will require much longer lead time, even to be able to obtain the equipment, under present market conditions. The proposal includes an additional 70,000-pound-per-hour steam boiler and a 1,750-ton steam turbine driven centrifugal chiller with all of the auxiliary devices necessary such as cooling tower, pumps, controls, etc. The cost is closely allied to the actual experience in the construction of the first unit and we believe it is in line. *We recommend approval.*

University of California—Continued

(l) Fine arts unit 1 ..... *$4,000,000*

The Budget Act of 1966 provided $140,000 for working drawings for a fine arts unit designated as No. 1. At that time the plans contemplated a complex of separated but interrelated elements having a gross area of about 100,000 square feet with a probable total project cost of between $3,500,000 and $4 million. It was contemplated that the basic building construction cost would be in the vicinity of $25 to $26 a square foot which we had more or less accepted as an average for the buildings of this type which included a little theater, music teaching and rehearsing facilities, and fine arts facilities with a total FTE capacity of only 452. As the project is now presented for construction funds, even though as of this writing working drawings have not yet been started, the proposed $4 million cost, which is a compromise figure, still represents something substantially over $31 per gross square foot for the basic building and over $40 per gross square foot at total project level. Assuming, for a moment, last year's $26 per square foot maximum figure and the maximum interim increase in construction cost index of about 8 percent, the cost should have risen to no more than about $28 per square foot. The fact that it is proposed at significantly more than $31 per square foot is, in our estimation, a result of the excessively complex and spreadout design. Therefore, while we recognize that as a new campus there is a need for a facility of this type, since there are very few other existing spaces that can provide reasonable substitute space for the purpose, *we would recommend that this proposal be placed in the special review category.*

(m) Construct—engineering unit 1 ..... *$5,600,000*

The Budget Act of 1966 provided $187,000 for the preparation of working drawings for the first engineering unit on this campus. No facilities now exist in which engineering could be properly taught. This campus is surrounded by many commercial scientific and engineering organizations and there will undoubtedly be a strong demand in the area for curriculums of this type. For this reason we believe that a specialized facility is thoroughly justified.

When this project was first presented its cost was based on the construction cost index of October of 1965, and the estimate for about 161,600 gross square feet of area was approximately $28 a gross square foot at basic building level and somewhat over $35 at total project level. It is interesting to note that as the project is now presented, with the substantial construction cost index rise which took place in the interim, the cost for about the same number of square feet is only a little over $29 per gross square foot for the basic building. However, there is a somewhat offsetting factor which makes the unit cost less commendable than it might otherwise be. The original presentation proposed an efficiency ratio of about 63 percent meaning that the unusable space such as corridors, stairwells, toilet areas, mechanical areas, etc., represented only 37 percent. Even this ratio was relatively poor for engineering buildings which normally run 65 percent or better. The proposal as it is now presented has an efficiency ratio of only 60 percent

University of California—Continued

which to some extent mitigates the apparently favorable cost per square foot since the higher amount of unusable space represents much less costly space than the usable or assignable space. *Consequently we recommend that the project be placed in the special review category in the hope that the efficiency can be improved before the Legislature takes final action on the Budget Bill.*

*(n) Construct—library unit 2*_____ *$1,914,000*

The Budget Act of 1966 provided $75,000 for the preparation of working drawings for a second increment to the initial library structure which would just about double its size. The augmented building would provide capacity in reading space, library staff space and book shelf space plus certain audio-visual, television and photographic service activities to accommodate a student enrollment of about 6,500 which was anticipated in 1971–72. The current enrollment projections for that year, as indicated on page 64 of the Capital Outlay Document, are now slightly over 6,000 with over 6,800 in the year following. The planned assignable space is based on accepted formulas which provide floor space for book storage racks, reading space for about 25 percent of the actual enrollment and the work spaces for the requisite staff which is anticipated to number the equivalent of 160 people. There will be an interim period when not all of the space will be required for library purposes during which it is proposed to provide classroom capacity initially for about 244 FTE students which will gradually be phased out as the library expands.

When the working drawings were proposed, it was estimated that the cost of the addition would be about $22.21 per gross square foot for the basic building which included fixed equipment which was about average for this type of building taking into account the problems that are incident to tacking on an increment to an existing building. Parenthetically it might be noted that the University has been in the habit of considering its book shelving as group I equipment even though it is free standing and can be moved and the cost included this equipment. The current estimate is based on a gross area of over 60,500 square feet with an assignable area of nearly 53,000 square feet giving an efficiency ratio of better than 87 percent which is excellent, at a basic building cost of $24.94 per gross square foot which represents quite closely the construction cost index increase since the original presentation. *We recommend approval of the project.*

*(o) Working drawings—social sciences unit 1*_____ *$125,000*

This project is essentially a lecture classroom type of environment although many of the spaces are often referred to as class laboratories, but they are not laboratories in the physical sciences sense. The proposal is for a gross area of over 128,000 feet with an assignable area of something over 75,000 square feet contained in two six-story towers with a two-story connecting base. The efficiency ratio, in our estimation is relatively low at 58½ percent since lecture classroom buildings should generally exceed 61 percent. The nature of the design probably has

University of California—Continued

some bearing on this. In any case, it is estimated that, on the basis of the construction cost index of October of 1966, the basic building would cost $25.35 per gross square foot with a total project level of over $30.80.

This will fundamentally be a high capacity project since it is anticipated that it will provide space for 1,155 FTE students which when related to the assignable area, mentioned above, rather clearly indicates our description as a lecture classroom type of environment. Since this is a new campus with a rapidly growing enrollment without the established base of usable space in which more intensive utilization could offset some capital outlay, we believe that the project is fundamentally justified. *On the assumption that in the interim the University will find design techniques which will permit a better efficiency in the building, we would recommend approval of the working drawings.*

Los Angeles

(p) Construct—Dickson art center alterations *$522,000*

The remodeling of the Dickson Art Center for use by a new school of architecture was originally proposed in the 1966 Budget Bill for both working drawings and construction. This was based on the removal from the building of certain elements of the art department which were to move into the new Art Unit 2. The timing apparently did not work out as anticipated and during the session it was agreed by the University that the project would be downgraded to merely working drawings for which $34,400 was provided.

The vacated space which totals approximately 16,000 assignable square feet needs to be altered for use by the new school of architecture both by the addition of air conditioning, which the existing building does not have, and substantial improvements in lighting for the new use. In addition, there would be certain partition and other similar changes. The space seems ideally suited for the school of architecture and the conversion represents a cost of nearly $25 per gross square foot based on the assumption that the 16,000 assignable square feet represent a 60-percent efficiency. To provide such space, including air-conditioning, in a totally new structure would at project level probably approach $40 per gross square foot. This would mean that the proposed cost represents about 60 percent of the cost of a new facility which we consider to be the maximum point for conversion value. Beyond this figure it would probably be more justifiable to build a new structure. Since air-conditioning is now a standard practice for this campus and since the new school of architecture requires space particularly designed for its purposes the justification for the project appears reasonable and the cost would be acceptable. *Consequently, we recommend approval.*

(q) Working drawings—Old Public Health Building alterations, step 2 ..... *$20,000*

This project proposes the design of alterations in approximately 23,700 assignable square feet of space in what is referred to as the

University of California—Continued

"Old Public Health Building." With the removal of the public health activities from this to new quarters in the health sciences complex, the vacated space will become quite useful for a number of the language departments of the humanities division. On the assumption that the lecture-type or language laboratory-type facilities usually constructed result in about a 65 percent efficiency, it may be calculated that the gross area to be effected would be about 36,500 square feet. The current total building project estimate is $539,000, including the working drawings, which would mean an average cost per gross square foot of less than $15 which would include air conditioning and the removal of much of the laboratory environment, piping, etc., that now exists in the building. The cost appears to be most reasonable for the purpose and in fact appears to be much more favorable than for the item immediately preceding. It may be that when the working drawings are developed the cost might rise substantially. The altered space will provide a capacity for 817 FTE students and 80 FTE faculty which now occupy temporary spaces. *Nevertheless, on the basis of the current proposal we would recommend approval of the working drawings.*

Los Angeles Medical

(r) Construct—hospital and clinics unit 1 alterations, step 2 ..... *$2,767,000*

The increase in entering class size in the medical school, from the earlier 72 to the goal of 128, required a series of extremely complex expansions and alterations to permit the hospital beds to be increased from 493 to 1,008 and to permit the tremendous increase in outpatient clinics, and the numerous complex ancillary support facilities. The alterations, proposed in total, for the Clinics Unit 1 are the final step necessary to make the total academic plan fully operable. The present incremental proposal is referred to as step 2 and in the following year there will be a necessary and hopefully final step 3. The current proposal represents a combination of fundings with $2,767,000 from the state, $1,475,800 from federal sources and $375,200 from other non-state sources.

Actually the estimate and package, as we have received it, includes both step 2 and step 3 at a total cost of $5,860,000. In the following year there will probably be proposed a state funding of $1,211,000 and federal funding of a like amount, based on current construction cost indices.

There is no practical way to attempt to relate the work to be done on any cost-per-square-foot basis since it is a conglomeration of alterations of existing spaces plus completion of previously unused and incompleted space. It will include such things as the construction of additional operating rooms with their suites and recovery areas, the conversion of existing food service and kitchen areas to a less costly and more efficient reconstitution concept using frozen food pre-preparation and serving, the addition of air conditioning on the second, third and fourth floors of the existing building which did not have it to start with, the conversion of the present four-inch round pneumatic

University of California—Continued

tube system for file and chart transmission to make it compatible with the four-by-seven inch rectangular system presently installed in the hospital and Clinics Unit 2b and with the adjoining systems in the basic sciences, Jules Stein Eye Institute and School of Dentistry, and numerous other changes to provide locker rooms, lounges, classrooms, laboratories, etc. The estimated cost is based on the experience the university had with the earlier alteration jobs. *We have reviewed the preliminary plans, which are very complex and in view of the need to provide the final facilities for the class expansion, we recommend approval.*

(s) Construct—basic sciences unit 1 alterations_____ $746,365

The completion of basic sciences unit 2a was anticipated by the middle of 1966 and in recognition of the fact that this completion would require rather extensive remodeling in the existing basic sciences unit 1, there was proposed in the Budget Bill of 1966, $1,893,311 which together with anticipated federal funds would have provided sufficient funds to do the complex alteration job. As of this writing, it is our understanding that the federal approval has not yet been forthcoming and in effect the $746,365 proposed in project (s) of this schedule is still being based more or less on the anticipation of the federal funds. It will be recalled that we made note of the fact at the beginning of the University's items that they were being appropriated on a net basis by deducting from the gross amount the anticipated federal funds. It will further be noted that on page 81 of the Capital Outlay Budget document, line 50, the $746,365 is footnoted with the letter (f) indicating that it is still anticipated as federal financing. However, in the event that it fails to materialize the University will have the responsibility of shifting funds within the total line item in any direction in which it feels the best interests of the University will be served. *On this basis, we recommend approval of the proposal.*

Riverside

(t) Construct—physical education building alterations___ $182,000

When this campus was first developed the physical education building included a space for temporary use as a bookstore and for temporary use for certain academic nonphysical education purposes. The bookstore has used about 3,000 assignable square feet and the psychology department about 5,000 square feet. Both these functions are scheduled to move into their own buildings late in 1966 or in 1967. This project proposes to convert the vacated spaces into additional locker area principally with some auxiliary supply and toilet facilities. No new shower facilities are contemplated as part of the job. The space and the alterations generally will provide for an increase in lockers totaling about 2,000 in both men's and women's facilities.

While physical education is not compulsory on this campus, the growing enrollment plus the growing residence population has necessitated this expansion to permit more of the students to make intra-

University of California—Continued

mural use of the gymnasium facilities as well as the swimming pool. *The cost appears to be in line with the details and we recommend approval.*

(u) Construct—life sciences unit 1 alterations *$172,000*

Life sciences unit 1 on this campus was designed in 1956 principally for undergraduate instruction with very limited space for faculty and graduate research facilities. With the construction of life sciences unit 2 which was funded in the Budget Act of 1965, and is anticipated for completion in the current fiscal year, it will be necessary to make certain alterations in the older building so that the two buildings can function efficiently as a single unit. These alterations will enable certain departments to function in integrated areas rather than being scattered through the two buildings. The alterations are a conglomeration of partition changes, heating and ventilating duct changes, plumbing changes, electrical and other minor alterations. This will result in additional teaching laboratory space, additional office space and some additional research space as well as providing a distilled water supply system for the old building. The proposals appear to be reasonable and the cost is in line with the details. *We recommend approval.*

San Diego

(v) Construct—central emergency power generation equipment and central control system *$474,000*

It has become a fairly well accepted standard that all public buildings that are or may be used at night or that have interior windowless areas should have some form of exit lighting and minimum corridor lighting which will function in the event of major power failures. This is for obvious personal safety and prevention of panic. In addition, in the case of the San Diego campus, many of the buildings are heavily science oriented with constant temperature rooms or with highly sophisticated and specialized equipment which must continue to function through experimental cycles despite major power failures in order to either avoid the loss of an important experiment or research or actual damage to the equipment. In order to provide a reliable substitute source for these minimum purposes there are a number of options available. For example, each building could be supplied with a fairly heavy bank of batteries with charging equipment and change over switches which assure immediate availability of power in the event of a major outage. However, these involve costly initial expenditures plus high maintenance and replacement costs as well as being quite space consuming. Another option is the installation of a natural gas-fired internal combustion engine-driven generator or diesel engine-driven generator which would start automatically upon failure of the main power supply. An installation of this type in each building leads to extremely high maintenance costs plus uncertain reliability because unless the engines are started regularly there is no assurance that they will be able to start when an actual power outage occurs. Consequently for a large complex of buildings, particularly one sup-

University of California—Continued

plied with heating energy from a central plant, the most rational and in the long run the most economical approach is by means of a steam turbine-driven generator in the central location with power supplies distributed from it to each of the buildings through the normal existing conduits and in quantities only sufficient to provide the kind of minimum emergency capacity mentioned above. This system requires only one or two central pieces of equipment which are under the constant surveillance of the central plant crew and which actually can be kept spinning with a minimum heat energy cost so that the moment a demand for power was placed on the system they could be brought up to full capacity in a matter of seconds or minutes at the most. On this campus there have been as yet no secondary or backup supplies installed in any of the buildings and as a consequence it is proposed to provide such a supply in the central plant. The first increment includes a 1,000 kw steam-turbo generator plus all of the switchover equipment required to change from the utility company supply to local supply when the demand occurs. This equipment is relatively complex and expensive. We have reviewed this phase of the proposal at considerable length and we believe that beyond any doubt it is in the long run the least costly and the most advantageous to the state.

A second part of the total proposal involves the installation of a central supervisory and monitoring system by which, from the central steam generating plant, equipment in all of the buildings can be turned on or off by remote control, can be monitored as to effectiveness and adequacy of operation and can be monitored when impending failures occur which would permit immediate shutdown and prevention of serious damage. The Irvine campus now has such a system which we believe has resulted in a very substantial reduction in the amount of manpower otherwise required to move from building to building to turn valves and blowers on and off as load demands change. A further savings occurs in the actual use of steam and power since by the central plant monitoring the valves or blowers or other equipment can be turned on or off promptly instead of the time lag that occurs when individuals are required to move from one point to another to do the work manually. It is difficult to quantify the actual savings in energy that might result but prior experience across the country in similar installations have resulted in remarkable savings in fuel and energy costs through the use of these central controls systems. We believe this type of system to be a sound dividend producing investment. *In view of the foregoing we recommend both phases of this project.*

*(w) Construct—utilities and site development*_____ *$450,000*

This project is comprised of a conglomeration of site development and utilities items needed to make certain existing developed areas or areas in process of development properly usable and safe from storm damage. It includes service roads into the Revelle College area, landscaping in that same area which is basically erosion control, extension of the main arterial road, storm drain extensions, erosion control in areas other than Revelle College, extension of the main water system,

University of California—Continued

local extensions of gas and electrical supplies and some rather extensive erosion control and a water supply system for it in the new alignment of La Jolla Shores Drive which involved some very steep cuts which must be protected to avoid damage to the road and possible injury to users of the road. *Collectively we believe all of the items are justified and the costs are in line. However, we think that the proposed amount of $450,000 is in error and according to our calculations it should be $400,000. Unless we can be shown figures to the contrary we would recommend a reduction to that amount.*

(x) Construct—on-site utilities and site improvements for second college *$430,000*

The construction of the first major unit of the second college which has been designated as building 2a, and incidentally the college has been named John Muir College, was funded in the 1966 Budget Act. The area in which the college will develop is presently devoid of all of the major utility systems that would be required for the buildings. Succeeding projects in this schedule provide construction funds for more of the buildings in this second college complex.

The proposal is to provide extensions of the water system, sanitary sewers, storm drains, the necessary roads and lighting and minimal landscaping for erosion control purposes principally. The major cost is the extension of the utility tunnels through which will be brought the high-temperature water and return lines for heating purposes, high-pressure steam for process purposes, chilled water for refrigeration and air conditioning purposes, signal lines, communications lines, etc. The elements are all essential to the development of this second college site and the costs appear to be in line with the scope of these elements. *We recommend approval.*

(y) Construct—second college building 2b *$3,045,000*

The Budget Act of 1966 provided $119,000 for working drawings for building 2b of the second college which was proposed as a six-story structure with a gross area of about 72,000 square feet and a net assignable area of 44,000 square feet giving an efficiency ratio of something over 61 percent, which was to be used as a science building since it would contain predominantly laboratory space for both teaching and research in biology and related sciences.

At this time, the building has developed into a somewhat larger gross area although the net assignable has remained about the same so that the efficiency ratio has dropped to less than 58 percent which is below the average of 60 percent usually found in laboratory science buildings. The cost remains in line with the original proposal since at that time it was anticipated that it would be about $3,100,000 at total project level including all fees. This has gone up only slightly to $3,199,000. The amount being proposed represents the net for construction after giving effect to the prior appropriations for working drawings and preliminary plans. The current estimate is about $34.15 per gross square foot for the basic building which includes about $5

University of California—Continued

a square foot for fixed, group I equipment and appears to be reasonable for the purpose. *We recommend approval.*

(z) Construct—second college building 2c *$2,852,000*

The Budget Act of 1966 provided $109,000 for the preparation of working drawings for a proposed five-story and basement structure to house the departments of psychology and linguistics in a gross area of approximately 72,700 square feet with an assignable area of over 45,000 square feet giving an efficiency ratio of about 62 percent which is about average for psychology buildings since generally they include a great deal of area that is cut up into small rooms requiring an unusual amount of corridor space. At that time it was estimated that the ultimate cost of the building would be about $2,900,000 including all fees. The current cost is just short of $3 million which falls well within the construction cost index increase since the original working drawings appropriation.

The current estimate is for $33.38 per gross square foot at basic building project level which includes $4.38 per foot for fixed, group I equipment. *Since psychology buildings are very nearly as costly as physical science laboratory buildings, the present estimate appears to be in line and we recommend approval.*

(aa) Construct—second college academic areas for building 2e *$200,000*

This proposal represents only a small state share for academic space in what is otherwise a very large project to be funded from non-state sources. Basically, this is a 600-student residence hall facility with food service areas, student service areas, guest areas and certain instructional space which would otherwise be provided in the fine arts building cluster and in building 2c. This amounts to about 4,500 assignable square feet which equates to nearly 7,000 gross square feet on the basis of the average 65 percent efficiency which is estimated for the building. This would result in a state cost of about $28.60 at total project level for the gross area which is quite reasonable and readily supportable since some of the spaces are music listening areas which require special acoustical treatments, ventilation, sound deadening, etc. *We recommend approval of the state's portion.*

(bb) Construct—central university library building, step 1 ..... *$4,716,000*

The Budget Act of 1966 provided $146,200 for the preparation of working drawings and design of a university library building which was contemplated as having seven stories plus a basement and penthouse constructed of steel frame and concrete facing. The building as the first step has often been referred to as the central campus library. In the sense of the conventional campus, with which most of us are familiar, this ultimate structure will not be the main central library, it will in fact be central only for the graduate humanities and social sciences but will meet only about 30 percent of the total campus under-

University of California—Continued

graduate library requirements. The rest of the undergraduate requirements will be served by three other library buildings each of which will serve four colleges. It is therefore essential to understand the difference in approach between what is proposed for this campus and what has been done on the conventional campus.

When the project was proposed for working drawings it was to have slightly over 157,000 gross square feet of area with over 109,600 square feet of assignable area giving an efficiency ratio of 70 percent which is reasonable for libraries. At that time it was anticipated that the ultimate total cost would be about $4,587,000 including all fees. Currently, the estimate is $4,932,700 including all fees which falls just within the construction cost index rise that has occurred since the original proposal. The current estimate calculates at $25.11 per gross square foot for the basic building which includes about $1.55 per square foot for fixed, group I equipment. This first increment will have a capacity of 802 reader stations, a book storage area for 525,000 volumes and facilities to take care of all the peripheral services required in a library. In addition, on a temporary basis the building will provide about 25,000 assignable square feet for academic use which will result in a capacity of about 270 FTE students. *The cost appears to be in line for the purpose and since an initial library facility is essential for a growing campus we recommend approval.*

*(cc) Construct—alterations in Revelle College, building b, step 3*_____ *$133,000*

Building b at Revelle College was the first of the permanent academic buildings constructed and as such it served as a sort of staging area to start the departments which subsequently moved into other new permanent buildings as they became available. Each such move has required conversion of the vacated space. The present project is concerned with the conversion of nearly 7,200 assignable square feet to permit the expansion of chemistry, physiology and electrophysics. This "musical chairs" activity was understood from the beginning and the same technique has been used on a number of other campuses. *We have reviewed the project in detail, the cost appears to be in line and we recommend approval.*

*(dd) Working drawings—second college building 2d*_____ *$100,000*

Building 2d is intended to be principally for humanities and its design is envisioned as a seven-story tower surrounded by a broad one-story base which at the south side, because of terrain situations, becomes two stories. It is estimated to have a gross area in excess of 96,300 square feet with an assignable area of nearly 51,500 square feet giving an exceedingly low efficiency ratio of slightly over 53 percent. Since this is fundamentally a lecture classrom type of environment the efficiency ration should be well above 60 percent and probably at least 65 percent. The estimated cost of construction, at the October 1966 construction cost index level, is $23.65 per gross square foot which includes nearly $1 per foot of installed group 1 equipment. The total

University of California—Continued

project cost is something over $29 per gross square foot which includes all fees, external utilities, site development, etc. The cost appears to be reasonable, but we consider it highly deceptive because of the fact that the low efficiency ratio means that the building has an unusually high proporation of low-cost space; that is to say, corridor, duct shaft, mechanical room, etc., space which usually is the least costly in the total complex. Consequently, the greater proportion of this nonassignable space that can be designed into a building usually the lower the overall cost per square foot that can be achieved. If we assume that the assignable footage is the fixed element based on academic requirements, then a reduction in overall gross square footage might raise the unit cost somewhat but would in total reduce the gross cost of the building. For these reasons we would withhold any recommendations until we have had more opportunity to discuss the project with the University in an attempt to resolve these differences. Furthermore, we would also raise questions as to the absolute necessity for the building on the basis of the possibility that those already funded might, by more intensive utilization, possibly obviate the need of this building, at least for a few years. We recognize that its capacity is relatively high at 927 FTE students. *We recommend that the project be placed in the special review category.*

San Diego Medical

(ee) Construct—addition to central utilities building, step 1 ---------- *$2,586,000*

The Budget Act of 1966 provided $96,000 for working drawings and design of an addition to the existing central utilities building which supplies both heat and chilled water for air conditioning to all of the major buildings on this campus. When the project was originally proposed, for working drawings, it was contemplated to provide expansion not only for the needs of the growing campus itself but also to provide for the needs of the anticipated 1,000-bed Veterans Administration hospital which was to be erected very close to the campus. The idea was that the federal government would contribute a proportionate share and the resultant costs to the federal government and the University would be less than if each were to go their several ways with respect to individual systems. We supported the proposal at the time as being sound from both an engineering and an economic standpoint.

However, since that time the relationships with the Veterans Administration have failed to solidify as anticipated. The V.A. problems are still fluid, and include the possibility that the V.A. may decide to go its own way on heating and cooling supplies; therefore it is now proposed to provide for only the expansion necessary to handle the growth on campus. This still includes the possibility that if the V.A. ultimately decides to join the University, a second increment, which is planned anyway, can be built which will provide capacity for that organization. However, as a result of going ahead on a University-only basis the anticipated joint benefits are lost in the construction costs of this particular step, and whereas it was previously anticipated that the state's

University of California—Continued

share of the joint venture would be around $1,800,000, the project as now proposed requires $2,586,000 for construction. The larger state cost results from a number of factors. First, there is the problem of the construction cost index which has risen since the time the estimate was made for working drawing purposes and in the case of central heating plants with their complex mechanical equipment the index has risen out of proportion to that for ordinary construction. Secondly, the cost of boilers, using either the unit measures of 1,000-pounds-per-hour of steam generated or 1,000,000 BTU of heat energy, decreases per unit rather significantly as the boilers grow larger. The elimination of the Veterans Administration portion means that the smaller boilers required for the campus purpose will cost more per unit of capacity than the larger ones. Third, instead of cutting the size of the additional building that was proposed, it will be built as originally planned which will provide space for the next step which may or may not include the V.A., about 25 percent of the piping costs will provide capacity for future expansion and 60 percent of the chemical treatment capacity will provide for the next two steps since this type of equipment is complex and much easier to install at one time.

We have reviewed this project with the University engineers at considerable length to determine the minimum requirements, for campus purposes, and the minimum economical installation which is a very important factor. About the only portion which could be reduced would be the excess building space which would be a negligible amount. *The balance we believe to be completely justified and consequently recommend approval of the entire expansion as proposed.*

Santa Barbara

*(ff) Construct—utilities and site development*_____ *$1,750,000*

This project is an extensive collection of utility and site development items including walks, road extensions, main sewer extensions, storm drains, water supplies, powerline extensions, natural gasline extensions and the filling of a low portion of property now owned by the campus.

Some of the major elements of cost, include the construction of a water pressure booster station which is needed to provide higher pressures for the high-rise buildings than can be supplied by the Goleta Water District after December of 1967 when the district's new reservoir system goes into operation. Also, there is extensive lighting for walkways and bicycle paths in an area of the campus which now is inadequately and unsafely lighted. Some of the other major elements include extensive road developments and extensions.

One of the largest single portions is for filling a part of the northwest campus area on what was formerly the Storke property. It may be recalled that this was proposed at the last session at which time we raised objections to what we considered to be the inadequacy of the overall study of how the Storke property was to be ultimately handled and as to whether a maximum consideration had been given to reducing fill to only the most essential needs. This study has now

University of California—Continued

been completed and it appears to be a competent report. The present proposal represents some of the highest costs of the total ultimate development on this property because it is in an area which requires the greatest amount of fill and compaction. The area is most contiguous to the existing campus and is the logical place for the next increment of development particularly for a corporation yard, etc. *We recommend approval of the total proposal.*

(gg) Working drawings—South Hall addition *$133,000*

This project proposes the design and working drawings for a multi-element, multistory structure, probably six stories, having a gross area of over 138,300 square feet and an assignable area of about 77,000 square feet giving an efficiency ratio of 56 percent which we consider to be far too low for a building to be principally used for the humanities and social sciences which generally require lecture classroom types of environment rather than the laboratory situations found in other fields. The building would house departmental administrative staff and would provide graduate student research and study space for a total capacity of 2,733 FTE students. This capacity when related to the assignable space clearly demonstrates the lecture classroom nature of the building. The current cost estimate is $24.76 per gross square foot for the basic building alone which includes about $1.25 per square foot for fixed, group I equipment. This would appear to indicate a relatively average cost. However, as was explained in another working drawings project the cost is deceiving because of the poor efficiency ratio which should be something well in excess of 60 percent and which if achieved, while still maintaining the required assignable square footage would reduce the overall cost of the project even though the unit cost might rise somewhat. *For this reason we recommend that this project be placed in the category of special review in order to provide additional time during which we may have an opportunity ot resolve the basic questions that have been posed.*

Santa Cruz

(hh) Construct—utilities and site development *$1,175,000*

This proposal is also a large and extensive collection of utility road and walk developments of which a substantial part is occasioned by the proposal to move ahead with college No. 5 and the balance is for general utility upgrading and site and landscape development, particularly erosion control on other parts of the campus.

The target date for college No. 5 is the fall of 1969 and ordinarily it would not be necessary to provide major utilities to these buildings until the next budget. However, because of the spread-out nature of this campus and the fact that college No. 5 will occupy an otherwise completely undeveloped area to which there are no access roads, it becomes necessary to provide these roads and in the process, since utilities are usually laid in the roadway, it also becomes necessary to install water mains, gas mains, electrical lines, etc., simultaneously to avoid tearing up the roads at a later date. The only thing which can

University of California—Continued

be deferred and is being deferred is the construction of sewer mains which do not run under the road and which can wait until the next budget.

We have examined the details of the project at some length and with the exception of some deferments to which all have already agreed, we would recommend approval of the amount proposed.

(ii) Construct—engineering unit 1 ..... *$3,981,000*

The Budget Act of 1966 appropriated $133,300 for design and preparation of working drawings for a three-story reinforced concrete structure having a total gross area of about 119,000 square feet with a net assignable area of nearly 76,000 square feet giving an efficiency ratio of 64 percent which we would consider average for the purpose. At that time the estimate anticipated a cost of construction, exclusive of the working drawings, of $3,743,200. The current estimate of $3,981,000 falls well within the Engineering News Record construction cost index rise since the time of the original proposal. It would calculate at $29.30 per gross square foot for the basic building which include about $1.25 for fixed, group I equipment and about $35 at total project level. Engineering buildings because of their requirements for long clear-span areas and great ceiling heights, for the specialized laboratories usually run in cost somewhere between lecture classroom buildings and sophisticated scientific laboratory buildings. *Therefore the cost appears to be in line and we recommend approval of the construction.*

(jj) Working drawings—performing arts building *$80,000*

This project proposes the design and preparation of working drawings for a performing arts complex which would contain areas for work and instruction in music, areas for the visual arts and areas related to drama. In addition, a substantial part of the building will consist of a fully equipped little theater which, by current standards cannot exceed 500 seats, but which is being proposed at 600 seats as a minimum. The gross area of the project will be about 61,500 square feet with a net assignable, including the little theater of 41,710 square feet giving an efficiency ratio of about 68 percent which is average for complexes of this type which include extensive divisions of space due to the need for music practice rooms, etc. The cost is estimated at about $30.27 per gross square foot for the basic building alone and nearly $38.60 at total project level. Prior experience has indicated that little theaters have been running at about $26 per gross square foot for the basic building which when brought up to current index level would be about $28 per gross square foot. *Consequently, we feel that the design is too costly. This together with the unresolved question of the number of seats leads us to the recommendation that the project be placed in the category for special review so that the problems can be resolved before the Legislature takes final action.*

University of California—Continued

(kk) Construct—alterations to existing facilities *$113,500*

The completion of college No. 3, named Crown College, which is science oriented, will enable certain nonlaboratory functions to move out of the central natural sciences unit 1 building into the new college. The space thus vacated will then be given over to additional research laboratories as well as some intensification in the use of existing laboratories requiring additional utilities and equipment. As we have mentioned in connection with other items this "musical chairs" arrangement has become quite commonplace particularly for science buildings and has always been taken into consideration in the original planning. We believe the proposal is reasonable and the cost is in line. *We recommend approval.*

(ll) Working drawings—college No. 5 ..... *$26,000*

College No. 5, as have all the other individual colleges, will be largely funded from nonstate sources. It will accommodate a total of 800 undergraduates of whom 550 will live in the residence facilities which will be part of the complex and 250 will be commuting students. This particular college will emphasize the fine arts in which probably two-thirds of the classwork will be taken within the environs of the college itself with the balance outside in either other colleges of the complex or in some of the central facilities. The total building project including all fees, utilities, site development, etc., will probably exceed $5,120,000 of which it is estimated, at the present time, about $785,000 will be the state portion representing the academic areas within the college complex. In addition, there will ultimately be substantial quantities of movable furnishings and equipment. The working drawings proposal covers merely the state's share of the project with respect to the academic spaces mentioned.

It is interesting to note that the gross project will be about 182,000 square feet with 111,000 square feet of assignable space giving an efficiency ratio of about 61 percent which is relatively good when taking into account the large amount of subdivision that occurs in a project of this type with all of the residence rooms and the necessary corridor and nonassignable space that results. The estimate of construction cost is $22.06 per gross square foot for the basic building and over $28 for the total project. The state's share portion is estimated at $27.16 per gross square foot with over $34 at total project level. The overall unit cost is lower simply because it contains a great deal of relatively inexpensive nonstate funded space which tends to reduce the average of the gross project. The space to be provided for academic purposes by the state would roughly equal the value of similar space in a conventional combination classroom and laboratory building. *We recommend approval of the working drawings.*

Hastings

(mm) Construct—addition *$1,600,000*

The Budget Act of 1966 appropriated $95,000 for the design and development of working drawings for an addition to the existing Hastings

University of California—Continued

College of the Law which was to have a gross area of about 56,000 square feet and a net assignable area of over 38,400 square feet giving a very good efficiency ratio of 69 percent. The appropriation also contained a sufficient amount to do some preliminary work, particularly the demolition of the old hotel, adjacent to the school for the purchase of which the Budget Act of 1965 appropriated $300,000.

It was contemplated that the total cost of the project would be partially financed by a federal grant which at this time is anticipated to be $645,700. The current estimate of construction costs is $34.34 per gross square foot for the basic building including fixed, group I equipment of which there is a relatively small amount, and $41.52 per gross square foot for the total project.

The relatively high cost for what is basically a classroom building, which of course includes offices, can be explained by two factors. One is the fact that the high efficiency ratio means that the total building has a higher proportion of the more costly usable space than would otherwise be the case and the other is the fact of its location which greatly hinders construction and inevitably results in premium costs. For example, the contractor will have no convenient construction or corporation yard in which to store materials and equipment and he will also be required to work in such a way as to minimize the disturbance to the on-going curriculum in the existing building.

Present enrollment is slightly over 1,000 under extremely crowded conditions with inadequate facilities for certain phases of the curriculum. The addition will permit a maximum 1,200 enrollment on a basis which will provide adequate facilities for all phases of the curriculum including such things as the moot court, a lounge and eating facility, etc. *In view of the federal contribution we believe the state cost is a reasonable one for the purpose and we recommend approval.*

(nn) Working drawings—alterations ---------- *$12,000*

Upon completion of the addition to the existing building there will be required a number of "checkerboard" moves to permit proper integration of various functions so that they are not spread throughout the building. In addition there are straightforward physical problems involved in making the two buildings function together such as adequate stairwell connections, etc. The current estimate of the work to be done ultimately in altering the existing building is about $238,000 towards which there is estimated to be a federal grant of $80,000. The proposal for the working drawings is essential to properly integrate the two buildings. *We recommend approval.*

UNIVERSITY OF CALIFORNIA

ITEM 335 of the Budget Bill Capital Outlay Budget page 59

FOR MAJOR CONSTRUCTION AND WORKING DRAWINGS, UNIVERSITY OF CALIFORNIA FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$7,395,000
Recommended for approval	None
Recommended for special review	7,395,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

This item covers just two projects, one at San Francisco Medical and the other at Santa Barbara, in which there were a considerable number of unresolved problems so that the decision was made to put them in a special item with language giving the Director of Finance the power to make the allocation at the appropriate time when he is satisfied that all problems have been resolved as to scope, architectural and engineering design and cost estimates. Our problems with these two projects have paralleled those of the Department of Finance and we are in complete accord that these two projects should be held in a special item and be given this precautionary treatment.

San Francisco Medical

(a) Construct—clinics expansion *$6,279,000*

The Budget Act of 1962 appropriated $1,255,000 to construct and equip an expansion of the clinics facility at the San Francisco Medical Center. At that time it was literally envisioned as an attachment to the existing building. Subsequently, changes in maximum class size and radical changes in trends in medical education have led to a decision to make an entirely different approach in which a completely separate and new building would be constructed on the north side of Parnassus Avenue which would provide a total clinics facility to meet the class size of 128 entering medical students plus all of the postdoctoral fellow and research-related needs. The current proposal contemplates that a very substantial portion of the total amount will be available from federal sources, something in excess of $5,200,000. The plan and program are not yet entirely clear and the cost figures have not yet been sufficiently refined to make them worth repeating at this point. *Consequently we recommend that the project be placed in a special review category.*

Santa Barbara

(b) Construct—speech and drama addition *$1,116,000*

This project proposes the design, working drawings and construction of an addition to the existing speech and dramatic arts building which would add over 22,560 gross square feet of area and over 15,720 square feet of assignable area giving an efficiency ratio of about 70 percent, which is relatively good for a project of this type. More than half of the assignable area is attributable to a so-called laboratory theater with 182 seats together with administrative offices, certain academic facilities

University of California—Continued

and expansion of the costume and scenery construction facilities. The balance will be used for dance studio, dressing rooms, work rooms, and office and storage space for the dance facility and a small part will be available for academic and administrative office space for the department of speech. It is anticipated that the addition will have a capacity of about 213 FTE students. Furthermore, it is hoped that nearly half of the proposed funds will be available from federal sources.

However, we should call attention to the fact that the projected cost is extremely high for a facility of this type when compared with other recent construction of a similar nature. The estimate is $40.59 per gross square foot for the basic building alone, which includes less than $1 per square foot for fixed, group I equipment, and $50.37 per gross square foot at total project level including all fees and site development. Normally, we would anticipate that a project of this type should come in at around $30 at construction level, possibly a little more because of the premium paid for construction in the Santa Barbara area and taking into account that this is a relatively small addition rather than a large initial building. *Until the design elements leading to the high cost can be resolved or properly explained, we believe the project should be held in a special review category so that the matter can be brought to the Legislature's consideration before it completes its work on the Budget Bill.*

UNIVERSITY OF CALIFORNIA

ITEM 336 of the Budget Bill Capital Outlay Budget page 59

FOR MAJOR EQUIPMENT, UNIVERSITY OF CALIFORNIA FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$5,016,500
Recommended for approval	5,016,500
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

It will be noted that the two prior items for the University were proposed for appropriation for the usual three-year period and that they included no equipment proposals. All equipment proposals have been sequestered in the one item which is made available for only the budget year. This approach stems from the fact that, over the years, providing equipment funds on a three-year basis has led to a great deal of changes of mind about what equipment should be included and has resulted in an unnecessary sequestering of funds that remain unspent for several years. By this approach the actual equipment lists have been greatly refined to those things that can be expected to be purchased within the budget year and which will be needed to make operable the new buildings for which they are intended. *We are in full accord with this new approach.*

University of California—Continued

Davis

(a) Equip—engineering building *$820,000*

The Budget Acts of 1963 and 1964 provided almost $3 million of state funds for the design, preparation of working drawings and construction of an engineering building complex having about 112,200 square feet of assignable space. The federal government contributed towards the cost of construction almost $650,000. The Budget Act of 1966 appropriated $838,000 for the first increment of equipping this facility. The present proposal will provide the balance to make the building fully operable. Since the total building cost including preliminary plans and federal funds plus other nonstate funds comes to about $4 million, the total equipment represents something over 40 percent of the project cost of the facility. Historically, engineering buildings have required equipment costs running from 30 to 50 percent, depending on whether they were undergraduate or graduate and research oriented. *In this case the building will serve a broad spectrum of undergraduate, graduate and research purposes and the amount, therefore, on a historical basis appears to be reasonable. We recommend approval.*

(b) Equip—biological sciences unit 3 ..... *$450,000*

The Budget Acts of 1964 and 1965 provided almost $3,450,000 for working drawings and construction of a new biological sciences building having an assignable area of about 50,775 square feet largely in laboratory spaces. Subsequently, a federal grant relieved the state appropriation to the extent of $1 million which permitted that much of the state money to be used on another project which was contingent upon such released funds. The presently proposed equipment represents what is probably a first increment only, since it is about 13 percent of the cost of the building which historically would be relatively low for laboratory buildings requiring large amounts of complex and sophisticated scientific equipment. *For the purpose we believe the amount is entirely in line and we recommend approval.*

Los Angeles

(c) Equip—theater arts unit 2 ..... *$390,000*

The Budget Acts of 1964 and 1965 appropriated about $2,650,000 for the design, preparation of working drawings and construction of a theater arts facility having about 40,400 assignable square feet of area of which the major portion was for motion picture and radio-television activities, including such things as large studios, sound control facilities, etc. In addition, there were recording and audience research laboratories, projection classrooms, film vaults, cutting rooms, etc. The facility, in fact, in many ways parallels the facilities of the commercial motion picture and radio television studios to be found in the Los Angeles area. The movable furnishings and equipment for a facility of this type are relatively numerous and expensive and include such things as sound cameras, TV cameras, monitoring equipment, etc. Since this facility is relatively unique, it is not possible to make any historical

University of California—Continued

comparisons as to the appropriate level of equipment in relation to the size of the facility. However, we have reviewed the equipment list and we believe it is reasonable for the complex and specialized activities that will take place in this unit. *We recommend approval.*

*(d) Equip—Franz Hall addition, step 2*_____ *$324,000*

The Budget Acts of 1964 and 1965 appropriated $4,240,000 for the design and preparation of working drawings and construction of an addition to Franz Hall which would add about 63,000 assignable square feet most of which would be used in the department of psychology as laboratory space. In addition to the state funds there was $1,100,000 of federal funds which together with the state funds gives some indication of the high cost and complexity of a building of this type. The Budget Act of 1966 provided $270,000 as the first increment of movable furnishings and equipment. It is now proposed to add $324,000 as the second and final increment making a total of nearly $600,000. While psychology buildings in themselves are relatively complex because they are cut up into small special interview areas, special experiment areas, etc., they do not use large pieces of expensive scientific equipment although they do use a large volume of small pieces of scientific equipment. *Consequently, the total amount proposed appears to be in line with the size and cost of the facility and we recommend approval.*

*(e) Equip—mathematical sciences addition*_____ *$436,000*

The Budget Acts of 1964 and 1965 provided almost $4,300,000 for the design, preparation of working drawings and construction of a building which would have about 80,000 assignable square feet to be used for the mathematical sciences including astronomy and meteorology as well as the major computing facility for the campus. Subsequently, federal funds to the extent of $1 million were received which reduced the state's portion of the building and relieved a like amount of funds to go to other approved projects. The movable furnishings and equipment proposed appear to be reasonable for the size and type of building involved. It should be borne in mind that a substantial part of the building, more than half of the assignable area, will be office spaces which in effect, in the mathematical sciences, are also research laboratories for their occupants. Consequently, much of the equipment is basically office type of equipment, desks, bookcases, etc. *We believe the amount proposed is in line and recommend approval.*

Los Angeles Medical

*(f) Equip—School of Public Health Building*_____ *$245,000*

The Budget Acts of 1964 and 1965 appropriated over $1,820,000 for the design, preparation of working drawings and construction of a public health facility that was complex not only physically but in that there were a number of outside fund contributions mostly from the federal government which resulted in a total structure cost in excess of $5 million. Also federal funds provided substantial amounts for equipment. The present proposal of $245,000 represents the state's share

University of California—Continued

of equipping the building which is really quite reasonable in view of its laboratory nature. The building will have about 70,000 assignable square feet of area in a total of nine stories and will provide facilities for about 547 FTE students, 50 faculty and 90 postdoctoral students in the School of Public Health. *We recommend approval of the equipment proposal.*

Riverside

(g) Equip—physical education building alterations *$15,000*

In Item 334(t) of the Budget Bill we discussed the necessity for the alterations to the physical education building on this campus and recommended approval. The equipment needed to make this alteration operable is included in this proposal. Largely it consists of lockers, first-aid equipment, athletic equipment, etc., needed for the additional space. *We think the amount is in order and we recommend approval.*

(h) Equip—life sciences unit 1, alterations *$21,000*

In Item 334(u) of this Budget Bill we discussed the need for the alterations in the existing life sciences unit 1 and we recommended approval of them. The changes that will take place in the use of the space will require certain items of scientific equipment and general furnishings. *The amount proposed appears to be entirely reasonable and we recommend approval.*

San Diego

(i) Equip—education building and playing fields for cluster 1 ..... *$64,000*

It will be recalled that the master plan for the San Diego campus calls for several so-called clusters of physical education facilities to accommodate the spread-out individual college concept. The Budget Acts of 1965 and 1966 appropriated almost $1,700,000 for the construction of a physical education building with about 39,000 assignable square feet. In addition, nonstate funds provided for the construction of a natatorium as part of the total complex. The state appropriation also included the preparation of about five acres of athletic fields adjacent to the building so that there would be both indoor and outdoor facilities. The equipment now proposed consists of the various pieces of movable athletic equipment and basic furnishings necessary for a facility of this type. *The amount appears to be in line and we recommend approval.*

San Diego Medical

(j) Equip—basic science building *$643,000*

The Budget Acts of 1964 and 1965 appropriated nearly $7 million for the design, preparation of working drawings and construction of a basic sciences building which would be the core element of the San Diego Medical School as well as providing certain basic science facilities for the campus generally. It was always contemplated that the building would be considerably larger than the state funds could provide by reason of federal fund expectations. In fact, the state share was re-

University of California—Continued

duced to about $5 million and the federal contribution was almost $9,500,000 for a building which would have over 190,000 of assignable square feet containing the most complex teaching laboratories, research laboratories, animal facilities, technical shops, offices, etc. In short these facilities would parallel largely the kind of basic science facilities found at the U.C.L.A. Health Center. It is currently proposed to provide funds for a first increment of movable furnishings and equipment which represents little more than half the ultimate total of over $1,200,000. *On a historical basis when compared with the two existing medical schools the amount appears to be entirely in line and we recommend approval of the first increment.*

Santa Barbara

(k) Equip—biological sciences unit 2 ..... *$900,000*

The Budget Acts of 1965 and 1966 appropriated over $5 million for the design, preparation of working drawings and construction of a biological sciences building with over 72,500 square feet of assignable space. Subsequently, the state appropriation was relieved to the extent of $1 million by a federal contribution and the released state money was moved to another approved project. Science buildings of this character, which contain a great deal of laboratory space, usually require movable furnishings and scientific equipment to a value of 20 percent to as much as 30 percent of the construction cost of the total project. In this instance the proposal is for a large first increment and an ultimate second and final increment of about $200,000 which will bring the percentage relationship to a little over 20 percent. *On a historical basis we believe this is entirely reasonable and we recommend approval.*

(l) Equip—music unit 2 ..... *$147,000*

The Budget Acts of 1965 and 1966 appropriated almost $2,100,000 for the design, preparation of working drawings and construction of a music facility with about 37,300 assignable square feet of space. It is anticipated that a federal grant may relieve the state appropriation to the extent of over $700,000 which will permit the transfer of the released state funds to other state-sanctioned projects. Normally, structures devoted exclusively to music will require movable furnishings and equipment including musical instruments to a value of approximately 15 percent of the total cost of the project. However, in this instance the building will house some general service areas and a branch library for the arts so that only about half of the usuable space will be actually directly devoted to the music department. Consequently, the equipment including the second increment which will probably be proposed next year comes to about 10 percent. *We recommend approval of the first increment.*

(m) Equip—classroom and office building unit 4 ..... *$262,000*

The Budget Acts of 1965 and 1966 appropriated nearly $4 million for the design, preparation of working drawings and construction of

University of California—Continued

a classroom and office building having about 77,000 square feet of assignable area, largely in general lecture-type classrooms, seminar rooms, conference and office spaces, etc., which would house the social science departments and related institutes. It is anticipated that federal funds to the extent of $1 million may relieve the state appropriation and to that extent the state funds so released will be moved to other state sanctioned projects. Simple lecture classroom types of environments require, as a rule, the lowest investment in movable furnishings and equipment in relation to the total cost of the building. In this case the proposal as a first increment plus a second and final increment in the following budget year represent well under 10 percent of the cost of the structure. *On a historical basis this appears to be entirely reasonable and we recommend approval.*

Santa Cruz

(n) Equip—fine arts and communications building *$295,000*

The Budget Acts of 1965 and 1966 provided almost $1,400,000 for what appears to be, from its title a relatively simple building. However, the structure and its interior is anything but simple and in its 22,500 assignable square feet of area it will house a central facility for television, audiovisual and teaching aids, the central computer and and data processing center, campus telephone facilities, music practice rooms and some drama space. This juxtaposition of relatively noise-sensitive activities makes for a complex building requiring a considerable amount of costly and sophisticated equipment. The proposal for movable furnishings and equipment represents about 21 percent of the total cost of the project which is difficult to rationalize on a straight historical basis because seldom in the past have we had a single structure in which so many of these kinds of activities have taken place simultaneously. *Nevertheless, taking the area units by themselves and the kinds of equipment involved the total cost appears to be entirely justifiable and we recommend approval.*

CALIFORNIA STATE COLLEGES

ITEM 337 of the Budget Bill Capital Outlay Budget page 102

FOR PROJECT PLANNING AND STUDIES, TRUSTEES OF THE CALIFORNIA STATE COLLEGES, FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$1,200,000
Recommended for approval	1,000,000
TOTAL RECOMMENDED REDUCTION	$200,000

ANALYSIS

This item proposes a schedule of two planning authorizations as follows:

(a) Project planning for the 1968–69 fiscal year *$1,000,000*

The Budget Act of 1966, in addition to providing funds for preliminary planning for the budget to be proposed for the 1967–68 fiscal year

California State Colleges—Continued

also provided $200,000 for advance project planning for the 1968–69 fiscal year. This together with the present proposal would make a total of $1,200,000 for preliminary planning. We are unable to find a basis that would justify such an ambitious construction program to be presented to the Legislature in 1968. Consequently, we suggest the reduction to $800,000 which together with the available $200,000 will make a total of $1 million. This, in terms of a potential of one and one-half percent for well developed preliminary plans, would provide for a potential working drawing and construction value of $75 million, which is the highest realistic figure that we can visualize.

(b) General studies *$200,000*

This category is intended to make possible studies of various kinds which individually cannot be tied to ultimate specific individual projects. With the advent of several new campuses extensive master planning studies, community relationship and traffic studies and other types of studies will be needed to permit a proper long-range approach to these new facilities. In addition, existing campuses as they grow run into many traffic and community problems which require solutions which can be furnished only by specially skilled people who are not normally on the staff of the Trustees. We believe that the funds for this purpose are excellent investments for assuring future, well developed and economically conceived new campuses and solutions to problems on existing campuses. *We recommend approval.*

CALIFORNIA STATE COLLEGES

ITEM 338 of the Budget Bill Capital Outlay Budget page 110

FOR PROPERTY ACQUISITION, TRUSTEES OF THE CALIFORNIA STATE COLLEGES, FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$250,000
Recommended for approval	250,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

The concept of providing an emergency or opportunity fund for relatively small land purchases was first implemented in the Budget Act of 1965 at the same level as is now being proposed. This concept has been employed in the University for many years based on funding by the Legislature.

The language attached to the item in the Budget Bill clearly delineates the conditions under which the funds may be expended so that purchases can be only of an emergency or opportunity nature and only when the lands involved are within the boundaries of master plans that have been approved by the Trustees of the State Colleges. In view of past experiences in which lands scheduled for inclusion in campuses have been sold for other developmental purposes with ultimate develop-

California State Colleges—Continued

ments of such costly nature as to more-or-less permanently eliminate them from any master plan, we believe the proposal is sound and the concept should be continued. *We recommend approval.*

CALIFORNIA STATE COLLEGES

ITEM 339 of the Budget Bill Capital Outlay Budget page 110

FOR SITE ACQUISITION, MAJOR CONSTRUCTION, AND IMPROVEMENTS, TRUSTEES OF THE CALIFORNIA STATE COLLEGES, FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$55,005,163
Recommended for approval	30,347,663
Recommended for special review	20,836,500
TOTAL RECOMMENDED REDUCTION	$3,821,000

ANALYSIS

This item includes a schedule covering 18 of the state colleges, inclusive of two totally new ones at Dominguez Hills and in Kern County, and provides for 49 major construction projects from buildings to site development and utilities, 31 proposals for preparation of working drawings for future construction projects, 4 proposals for additional land acquisition at existing campuses and 1 proposal for an initial complement of library books at a new campus. The total of the schedule is $71,302,500 from which is deducted anticipated federal reimbursements of $16,297,337 leaving a net appropriation in the amount proposed. This gives the state college system the same kind of flexibility and latitude as is provided in Item 334 for the University. *We recommend approval of this approach with the same "wait and see" attitude which we suggested with respect to the University.* It will also be noted that there are no equipment proposals, as such, in this item as they are covered in the item immediately following.

The total proposals are substantially less than those originally made by the trustees and merely represent, as in the case of the University, the exhaustion of the remaining bond funds on a basis proportional to the needs of the two higher education systems. To the extent that the schedule makes a reduction from the original proposals, and in many cases a conversion from working drawings and construction to working drawings only, and to the extent that anticipated enrollments are actually realized the net result would be an automatic compression which would tend to force a higher intensity of space utilization than had heretofore been the case. If there is any significant reduction in the enrollments, then the net result of these proposals would be to continue, more or less, the same utilization intensity that has heretofore been adopted and followed. The projected enrollments have been based on criteria which have been developed over a period of years and any significant reduction in these enrollments would inevitably indicate an artificial or changed situation with respect to admissions, irrespective

California State Colleges—Continued

of the factors to which any downward change in enrollment might be imputed.

Chico

(a) Construct—life science building *$4,800,000*

The Budget Act of 1966 appropriated $155,000 for working drawings and design of a multistory concrete and brick structure with a gross area of nearly 147,000 square feet and a net usable area of something more than 88,000 square feet giving an efficiency ratio of about 60 percent which, for science buildings is average. At that time the predictable cost was between $5 million and $5,500,000. The project as since developed has been somewhat scaled down so that it is now a little over 128,000 gross square feet and 75,000 net usable square feet, maintaining the 60 percent efficiency ratio. The basic building is estimated at $26.50 per gross square foot exclusive of fixed, group I equipment which would add about $6 per square foot. At total project level the cost is estimated at close to $40 per gross square foot. With the reduction in overall size, there has also been a reduction in estimated student capacity so that it is now 1,272 FTE plus offices for 97 faculty. More than half of the assignable area will be devoted to teaching laboratories which require extensive fume hood duct work, complex utilities including compressed air, vacuum, etc. In addition, the building will be fully air-conditioned and while the heating energy will be supplied from the central steam plant the air-conditioning chilling equipment will be localized in the building and is included as part of its cost since this campus does not yet have a central chilled-water distribution system. Furthermore, the building will also include, on its site and adjacent to it, a greenhouse complex which will provide both for instruction and production of plant materials for use in the laboratories. *For these complexities as a whole, the cost appears to be entirely reasonable at present construction cost index levels and we recommend approval.*

(b) Construct—physical science building *$2,286,000*

The Budget Act of 1966 appropriated $52,000 for the design and preparation of working drawings for a physical science building addition to an existing building which would add somewhat more than 41,600 square feet of gross area and a little more than 27,000 square feet of net usable area providing an efficiency ratio of nearly 65 percent which is relatively high for science buildings but because of the fact that the existing building provides some of the "tare" space the efficiency is artificially enhanced.

The project is actually a combination of the new addition plus remodeling work that must occur almost simultaneously in the existing building in order to accommodate the addition and also to permit certain exchange of spaces so that specific organizations will not be split up into several areas and separated by other organizational activities. The addition will provide about 184 student stations with a computed capacity of 70 FTE in eight laboratories with offices for 16 faculty. The current estimated cost is about $26.84 per gross square foot for the new construction alone, at building level, to which must be added about

California State Colleges—Continued

$6.75 per gross square foot for fixed, group I equipment. Physical science buildings are usually among the most costly both as to the basic construction as well as the group I equipment. *In this instance the cost appears to be in line with the current construction cost index and we recommend approval.*

(c) Construct—boiler plant *$1,219,000*

The Budget Act of 1966 appropriated $63,800 for the design and working drawing preparation of a new boiler plant which would permit the abandonment of the existing plant located in a very strategic area at the heart of the campus where the space is more essential for academic purposes. Furthermore, the existing plant cannot be expanded so that the growing campus would be inhibited by the lack of central steam supply. The building is designed to house four 22,000-pound-per-hour boilers of which two will be new, one will be moved from the existing plant and the fourth will be a future installation. In addition, the building will ultimately house central chilling equipment which, while probably not taking over all of the buildings in the campus, will at least provide a central supply for all of the future new developments. The building will house an emergency power generation system consisting of two 150-kw diesel generators which will feed power only for exit lights, minimum corridor lighting and essential constant temperature or other types of research and experimental facilities. Costs per square foot have little relevancy in a building of this type since the basic shell is relatively inexpensive with most of the money going into boilers, preheating and deaerating systems, pumps, control equipment, induced draft fans, etc. In consideration of the sizes and amounts of equipment to be installed and the excess space being provided for future expansion, the cost, at current construction cost index levels, is entirely commensurate with recent experience. *We recommend approval.*

(d) Working drawings—classroom office building *$100,000*

This project proposes the design and working drawing preparation for a multistory combination classroom building and administration office space as well as faculty office space. It would have a gross area in excess of 82,000 square feet with a net usable area of approximately 52,000 giving an efficiency ratio of about 62 percent which is slightly on the low side for a straight classroom building. It would provide capacity for about 1,100 FTE students and office space for 89 faculty as well as other administrative offices. This proposal is a part of a revision of the five-year plan and represents a relatively late change in that plan. Consequently, we have not had the opportunity to thoroughly review the program and the background material for the proposal. *While we recognize the ultimate need for the space, we would recommend that the project be placed in the special review category so that after we have had an opportunity to review we can report back to the Legislature before it completes its deliberations on the Budget Bill.*

California State Colleges—Continued

(e) Working drawings—library building addition *$206,000*

This proposal covers an addition to the existing library which would add 114,612 gross square feet of area with nearly 81,300 square feet of net usable area giving an efficiency ratio of about 71 percent which is average for library buildings. The addition will be four stories with a partial basement and a penthouse for mechanical equipment.

The usual approach to libraries or additions is to design and construct them on the basis of an anticipated enrollment to a period three years beyond completion of the building with some other use being made of the excess space during the interim. This has been reasonable and effective in the past. In this instance the expansion will provide for total enrollment of 7,300 FTE by the 1972–73 fiscal year with space for the necessary stacks and reader stations on the basis of 25 percent of the enrollment. In addition, the building will provide for audio-visual and instructional television facilities. The current cost estimate is $22.75 per gross square foot for the basic building plus about 50 cents per gross square foot for fixed, group I equipment and nearly $30 per foot at total project level. Ultimately, an alteration project in the existing building will be required so that the two segments can operate most efficiently together. *The proposed costs appear to be in line and we recommend approval of the working drawings.*

(f) Working drawings—applied arts addition *$160,000*

This project proposes the design and preparation of working drawings for an addition to the Applied Arts Building which would add 62,400 square feet of gross area and 42,000 of net usable space giving an efficiency ratio of only 57 percent which we consider inadequate for this type of environment. Actually while it is referred to as an addition it is a separate building which will house some agricultural classroom facilities and industrial arts facilities. The current estimate is $25.30 per gross square foot for the basic building plus about $2 per gross square foot for fixed, group I equipment and over $37.75 per gross square foot at total project level. *Considering the nature of the building we believe that the estimate is excessive and we would recommend that the proposal be placed in the special review category so that during the interim we will have an opportunity to further review and refine the space efficiency and costs and report back to the Legislature during its deliberations on the Budget Bill.*

(g) Construct—farm buildings, step 3 ..... *$594,000*

The Budget Act of 1964 provided $388,200 for the design and construction of phase II farm buildings on this campus. They have not yet been started although the Governor's printed Budget would appear to indicate that they would be committed within the current fiscal year. Furthermore, the present Budget Bill in Section 10 proposes to extend the availability of those funds by one year.

We have heretofore, on a number of occasions, recommended against any further expansion of the farm program at this college in view of the very substantial facilities available at Fresno, Cal-Poly at San Luis

California State Colleges—Continued

Obispo and Cal-Poly at Pomona. We do not feel that this third phase should be funded.

In any case what is proposed consists of a meat laboratory, which is basically an abattoir, a greenhouse and headhouse, a beef cattle fattening barn and various fencing and other site work. The gross area of the actual buildings would be something over 17,000 square feet. The cost estimate for the buildings alone exclusive of all of the exterior holding pens, alleys, etc., is $21.05 per gross square foot and $35.17 at total project level the latter of which is relatively meaningless because of the inclusion of all of the exterior work including fencing, road, walks and paving, etc. *We believe the cost for the buildings, even taking into account that one of them is a meat laboratory, is excessive and that they are too elaborate for the purpose. We recommend that the project be disapproved entirely.*

(h) Air condition—science-music-speech building *$262,000*

Present scheduling contemplates that the Chico campus will undertake year-around operation with the class of the fall of 1970. We believe that in this north central area it is almost imperative that all buildings be air conditioned for year-round operation. The proposal encompasses a rather complex series of changes within the existing building with modifications in the mechanical rooms, the air-handling systems and the addition of the necessary chilling equipment and chilled water circulation coils. *The cost appears to be in line for the purpose and we recommend approval.*

(i) Construct—utilities development *$14,000*

We believe that the description in the schedule is in error and that instead of reading "construction of utilities development" it should read "working drawings for utilities development" at $14,000. As a practical matter, $14,000 will not provide very much utilities development and we are quite certain that this is a typographical error.

The proposed utility extensions which inclde steam, electricity, communications, water, gas, etc., are largely intended for the new life sciences facility which because of the delay in its scheduling would really not need construction during the 1967–68 fiscal year. *Consequently, we believe that the working drawings alone are justified and we recommend approval accordingly.*

(j) Land acquisition *$800,000*

The master plan for this campus contemplates the purchase of a substantial amount of additional land to facilitate the ultimate enrollment goals. The present proposal is for two square blocks of land which have been estimated at about $400,000 each. If this campus is to continue to grow in enrollment, it will inevitably require additional land and just as inevitably the cost will continue to rise. Consequently, it appears to be a sound investment to acquire the two square blocks contemplated, as soon as possible. They will provide ground area for a considerable amount of future expansion. However it should be noted

California State Colleges—Continued

that the immediate expansion contemplated is that of additional residence halls which will be nonstate funded, a student union which will also be nonstate funded and some area required for the library expansion. *We recommend approval.*

(k) Working drawings—building modernization *$43,000*

Four of the oldest buildings on this campus, the so-called administration building, the auditorium, the student union building which used to be the library and the industrial arts building were constructed between 1928 and 1930. It has been known that all four of these buildings had elements that did not meet the lateral force resistance requirements required by the current codes and would be particularly vulnerable to earthquakes. A study conducted by the Office of Architecture and Construction in 1966 indicated the extent to which these elements might contribute to serious damage or total failure of the building in the event of a serious earthquake.

It is now proposed to undertake the development of working drawings for rehabilitation work that would reinforce the substandard elements of two of these buildings, administration, which has a large volume of classroom space, and the auditorium. There is a total of about 70,000 square feet of gross area in the two buildings and the current estimate for the work that will need to be done is about $665,000 including all fees. This is a reasonable approach since the development of the drawings will probably more clearly define the costs than can be done by the usual study, unless a great deal of preliminary expense is incurred. In order to develop the working drawings a considerable amount of review and on-site testing will take place to assure that everything necessary will be included. Ultimately, when the final estimate of construction cost is arrived at, it can be decided whether it is worth expending whatever sum is involved to do the necessary rehabilitation. *We recommend approval of the working drawings.*

Dominguez Hills

(l) Construct—social science building *$2,126,000*

The Budget Act of 1966 appropriated $100,000 for working drawings for a social science building in which the funds for the drawings were contingent upon the receipt of federal funds for other projects which would release state funds in an amount adequate to cover the working drawings item. There have as yet been no adequate preliminary plans developed although the general size of the building has been more-or-less set and a pro forma cost estimate has been prepared.

The gross area of the building will be 78,700 square feet with a net area of 51,110 square feet giving an efficiency ratio of 65 percent which is good for what is fundamentally a lecture classroom type structure. The lecture character is borne out by the fact that it will have 1,138 student stations with a total capacity of 1,212 FTE plus 124 faculty office stations and related service and storage areas. The current estimate is $22.30 per gross square foot for the basic building plus about $1.25 for fixed, group 1 equipment and $30.02 per foot at total project

California State Colleges—Continued

level. While these figures appear to be rather good we suspect that upon further development of the preliminary plans and the ultimate development of the working drawings these figures may change. *In view of the inadequacy of the information available at this time we recommend that the project be placed in the category of special review so that problems may be resolved and adequate information received and reported to the Legislature during its deliberations on the Budget Bill.*

(m) Construct—initial physical education facilities_____ $406,000

This project proposes the design, preparation of working drawings and construction of a small initial facility for physical education which would provide two 30-station activity rooms with locker, shower and drying facilities for men and women and some faculty office stations and related service areas. The building would have a gross area of 13,200 square feet with a net area of 9,900 square feet giving an efficiency ratio of 75 percent which is about average for physical education buildings. The current cost estimate is $17.05 per gross square foot for the basic building plus about $3.50 per gross square foot for fixed, group I equipment and a total project cost of over $32 per square foot which would include all fees and utilities, etc. *As in the previous project the information is inadequate and we make the same recommendation concerning special review.*

(n) Construct—outdoor physical education facilities_____ $338,000

This project proposes the design, preparation of working drawings and construction of outdoor areas consisting of six tennis courts, six multipurpose courts, five acres of general turfed area and some minor development over somewhat larger areas surrounding the facilities. Costs per square foot, in the conventional sense are not applicable to facilities of this type. Usually they are of such fixed and conventional nature that cost estimates can be arrived at rather easily when a given site is involved. In this instance the specific portion of the site has not been determined, but it is a very simple one on which to build and would require no unusual or special treatment and consequently even though we have seen only relatively sketchy information on the project, the cost appears to be in line on an experience and historical basis for facilities of this type. *Consequently, we recommend approval.*

(o) Utilities and site development 1967_____ $700,000

This project proposes the design, development of working drawings and construction of utility line connections, access roads, campus roads, walks, lighting, minimum landscaping, etc. Actually, it is possible to recognize from the size of the site and the amount proposed that this is only an increment of what will ultimately be necessary to fully develop the site. *Nevertheless, in view of the lack of adequate information as to just what is included and its location, we would recommend the project to be held in the category of special review as a number of those above.*

California State Colleges—Continued

(p) Construct corporation yard No. 1 ..... *$342,000*

This project proposes the design, preparation of working drawings and construction of a corporation yard facility in which the building area alone will be over 14,000 gross square feet in addition to which there would be a fenced outdoor area for storage of certain materials, vehicles, etc. The cost estimate for the building area alone is $14.32 per gross square foot which we consider excessive for corporation yard structures. Furthermore, we would point out that the corporation yard allowances on other recently new campuses have been considerably lower than this figure. In addition, we have not received adequate preliminary information on which to make recommendations. *Consequently, we would recommend that the project be held in the special review category.*

Fresno

(q) Construct—art building *$1,279,000*

The Budget Act of 1966 appropriated $40,000 for the design and preparation of working drawings for an art building of two-story reinforced concrete configuration with a gross area of over 38,000 square feet and a net usable area of nearly 23,000 square feet giving an efficiency ratio of 60 percent which is average for buildings of this type. The structure would provide a capacity of 216 FTE in six art activity classrooms, a graduate studio, a lecture classroom, a display gallery, office stations for 16 faculty and various auxiliary spaces. The building is to be located east of Maple Avenue in the newly developing area and to the north of the new administration building.

The development of the plans follows the same gross and net areas previously indicated and the current cost is estimated at $25.60 per gross square foot for the basic building plus about $2.50 per foot for fixed, group I equipment with a total project cost in excess of $34 per foot. *The costs appear to be in line with recent experience in buildings of this type and we recommend approval.*

(r) Working drawings—engineering addition *$58,000*

This project proposes the design and preparation of working drawings for an addition to an existing building which will add nearly 32,200 square feet of gross area and almost 21,000 square feet of net usable area giving an efficiency ratio of at least 65 percent which would be on the low side for the types of engineering facility which usually have the large long-span, high-ceiling laboratories. However this addition will provide small laboratories, more conventional in size rather like those in a science building and consequently the 65 percent appears reasonable for the purpose. The addition will just about double the existing capacity which now provides bachelor's degrees in agricultural, civil, electrical and electronics, industrial and mechanical engineering. Future plans include masters degrees in engineering and to some extent the additional facilities will provide for this.

The current cost estimate, which does not include remodeling in the existing building, is $26.50 per gross square foot at basic building level to which must be added about $4.50 per gross square foot of fixed,

California State Colleges—Continued

group I equipment with a total project cost of over $42.50. The proposal is relatively straightforward and the cost appears to be in line with recent experience for projects of this type. *We recommend approval.*

(s) Utilities and site development 1967 ..... *$513,000*

This project proposes the design, preparation of working drawings and construction of a conglomeration of utilities services, with only very minor and incidental landscaping almost all of which are occasioned by the expansion of the campus facilities on the east side of Maple Avenue into what heretofore had been agricultural land. The master plan calls for Maple Avenue to be completely closed through the campus with only some access for limited purposes, but no through access from Shaw to Barstow as is now the case. The developments on the east side will include substantial academic capacity plus the main new administration building. Included are water service extensions and improvements in reliability by tie-ins to the City of Fresno, steam services, fire alarm system, area lighting and the most expensive element that of the commencement of a new 12,000-volt feeder system which will handle all of the new expansion while leaving the 4,160-volt system intact on the existing campus. It may be recalled that this campus had several emergency failures when main feeder cables blew up requiring extensive replacements. The system on the main campus could not possibly sustain the loads required on the east side of Maple Avenue. *We have reviewed the project in detail and recommend approval.*

Fullerton

(t) Construct—art building *$2,363,000*

The Budget Act of 1966 appropriated $65,000 for the design and preparation of working drawings for an art building having a gross area in excess of 74,000 square feet with a net usable area of almost 47,000 square feet giving an efficiency ratio of nearly 63 percent which is above average. The building in fact is designed as a complex of four buildings, three of one story and one of two stories which collectively would contain 10 activity rooms with 240 student stations giving a capacity of 252 FTE plus 26 faculty office stations and related auxiliary spaces. The current cost estimate is $24.84 per gross square foot for the basic building plus about $2 a square foot for fixed, group I equipment and a total project cost of a little over $33 per square foot. These costs are relatively favorable in comparison with our recent experience in art buildings, particularly in the University of California. The campus currently has no area specifically devoted to these purposes but uses space in the original science building and in the music building for the purpose. The space is needed and cost appears to be in line. *We recommend approval.*

(u) Working drawings—engineering building *$226,000*

This project proposes the design and preparation of working drawings for a specialized building to house engineering in a gross area of about 75,000 square feet with a net usable area of nearly 49,000 square

feet giving an efficiency ratio of about 65 percent which we would consider on the low side for engineering buildings having large basic laboratories with relatively low proportions of corridor and other waste space. Furthermore, the design as now presented contemplates a one-story building which means a large consumption of ground area in a region where the costs of land are very high. It is our understanding, however, that the plan is to be or is being changed which will make better use of ground space. The current cost estimate is $26.57 per gross square foot for the basic building to which would be added over $5 per square foot for fixed, group I equipment with a total project cost of well over $42 per square foot. These costs appear to be average for facilities of this type and from this standpoint we have no objections.

While we recognize that there is a considerable need at this campus for engineering facilities, of which these would be the initial complement, because of the surrounding Orange County industrial complex, we do not feel that we can recommend the plan as it now stands officially, consequently we recommend that the project be placed in the category of special review until these differences of opinion can be resolved.

(v) Working drawings—administration-business building_ $143,000

This project proposes the design and preparation of working drawings for an eight-story concrete frame and wall building having a gross area of nearly 132,500 square feet with a net usable area of nearly 82,000 square feet giving an efficiency ratio of 62 percent which is barely average for a building of this type and size. The structure would house on the first two floors the general college administration which is most nearly oriented to the students, on the third through the seventh floors it would house the school of business administration and on the eighth floor it would house the college executive administration including the president, deans, etc. The combination of uses appears to be desirable and probably beneficial on an interrelationship basis.

The cost is currently estimated at $23.76 per gross square foot for the basic building plus a little over $1 per square foot for fixed, group I equipment with a total project cost of over $31.30 per square foot. These figures appear to be very much in line with current experience in multistory buildings, particularly those having heavy vertical traffic and requiring a considerable amount of elevator capacity. The administrative functions on this campus are being carried out in the large initial general science building which was planned to have various nonscience functions gradually phased out as other buildings were constructed. This building appears to be a logical move in that plan. *We recommend approval.*

(w) Construct—conversion of science building 3, phase III_ $93,000

This project proposes the redevelopment of spaces in the science building, as mentioned in the project immediately preceding, by which there would be produced one geobiology laboratory and two biology graduate laboratories with an instructional capacity of 119 FTE. *This*

California State Colleges—Continued

is in keeping with the long-range plan for the gradual conversion of this building and the costs appear to be historically in line with prior phases, taking into account the change in the construction cost index. We recommend approval.

Hayward

(x) Construct—speech-drama building ---------- *$2,164,000*

The Budget Act of 1966 appropriated $75,000 for the design and preparation of working drawings for a speech-drama building having a gross area of nearly 60,000 square feet with a net usable area of nearly 40,000 square feet giving an efficiency ratio approaching 67 percent which is close to the average for buildings which include little theaters. It is anticipated that the complex would have a capacity of about 320 FTE in the theatre arts, speech arts, radio and television and general creative arts. This campus does not now have permanent professional-type facilities for these purposes but uses temporary space in several areas including the music building.

The current cost estimate is $26.55 per gross square foot for the basic building plus a little more than $3 per square foot for fixed, group I equipment with a total project cost of little over $38 per square foot. These figures appear to be about average in the state's recent experience with facilities of this type, taking into account the rise in the construction cost index. *We recommend approval.*

(y) Working drawings—library building ---------- *$272,000*

This project proposes the design and preparation of working drawings for a three-story and basement reinforced concrete library structure having a gross area of about 260,000 square feet with a net usable area of about 180,000 square feet giving an efficiency ratio of 70 percent which is average for libraries. This size of the building is predicated on the total capacity needed for an enrollment of about 11,000 FTE. Probably the earliest time such a building could be ready for occupancy would be the fall of 1970 and since it has been a long-established policy to design library buildings with a three-year expansion factor this would bring us to the fall of 1973 at which time it has been projected that the enrollment would be over 10,650 FTE making it coincide quite nicely with the planned capacity. It might also be pointed out that this campus began year-around operation in 1965.

The current cost estimate is $23.08 per gross square foot for the building alone to which would probably be added between 50 cents and $1 per foot for fixed, group I equipment with a total project level cost approaching $29 per square foot. The cost appears to be in line with the state's recent experiences with projects of this type. *We recommend approval of the working drawings.*

(z) Working drawings—administration-classroom building ---------- *$149,000*

This project proposes the design and working drawings preparation for a multistory tower of a size sufficient to accommodate all of the administrative functions of the campus when it reaches an enrollment of

California State Colleges—Continued

15,000. However, upon completion a substantial part of the total area would be used for classroom purposes providing a capacity of about 1,000 FTE which over the succeeding years will gradually be phased out as administrative functions grow. This type of temporary use and "phasing out" works particularly well in administration or library buildings since changes can be accomplished at relatively low costs in buildings that are especially designed with high flexibility factors.

The gross area of the project is contemplated at 110,000 square feet with a net usable area of 70,000 square feet giving an efficiency ratio of 64 percent which is average for such a combination structure. The current cost estimate is $25.25 per gross square foot at basic building level which appears to include fixed, group I equipment. The total project level will approach $31 per gross square foot. *We recommend approval of the working drawings.*

(aa) Site development 1967 ---------- *$475,000*

This project proposes the design, preparation of working drawings and construction of site development which is almost entirely the construction of the completion of the loop road along the east boundary of the campus. Incidental to this construction would of course be problems of storm drainage, erosion control, road lighting, rearrangment of some underground utilities such as fire hydrant lines, etc.

This campus is growing quite rapidly and the present lack of access from the east boundary is causing some serious traffic problems which will only increase as the enrollment grows. We believe that the proposal is timely and sound and that the cost is in line with its scope. *We recommend approval.*

Humboldt

(bb) Construct—remodeling of Founders' Hall---------- *$631,000*

This project proposes the design, preparation of working drawings and construction of remodeling of Founders' Hall which is the original permanent building on this campus and which over the years has had a considerable amount of remodeling for various reasons. It was constructed long before the earthquake safety code was promulgated and currently, in many of its elements, it falls considerably short of the requirements of the 1964 Uniform Building Code. Since the building more or less symbolizes the campus and at the same time provides a substantial capacity it would appear to be reasonable to try to bring it up to code specification as long as the total cost does not become excessive. In the process it is anticipated that the building's academic capacity will be increased by 416 FTE with a large lecture demonstration facility and three lecture classrooms plus offices for 12 faculty. The remodeling will also include some modernization of lighting and ventilation which are not directly related to code requirements. Historically rehabilitations of this type have usually exceeded estimates.

We believe that the structural upgrading of this building is long overdue if the building is to be retained at all. *In the absence of any really rational argument for eliminating the building and in the belief that the cost appears to be in line with the scope of the work proposed, we recommend approval.*

California State Colleges—Continued

(cc) Working drawings—natural resources building_____ $64,000

This project proposes the design and preparation of working drawings for a two-story type V combination laboratory and lecture facility having a gross area of about 37,100 square feet with a net usable area of 23,700 square feet giving an efficiency ratio of 64 percent which is acceptable. The building would provide capacity for 242 FTE in eight laboratories, two graduate laboratories, two lecture rooms, offices for 18 faculty and various auxiliary areas.

While the scope of the project is within the total needs of the campus, we feel that the proposed design is far too costly, considering the type of construction. The current estimate is $30.50 per gross square foot for the basic building to which there would be added nearly $4 per foot for fixed, group I equipment with a total project cost of over $43 per square foot. We have raised several questions concerning the design which have not yet been resolved. *Consequently, even though only working drawings are involved, we recommend that the proposal be included in the special review category.*

(dd) Modernize—college elementary school_____ $194,000

This project proposes the design, preparation of working drawings and construction for the modernization of the college laboratory elementary school which was constructed prior to 1931. Practically all of the cost involved is related to the improvement in the building's seismic resistivity with very little included for modernization in any other sense. Some things will be changed simply because the work needed to improve the building structually will entail removal of certain amenities which will then be replaced with more modern ones, but the basic intent is merely the improvement of the structual stability of the building. *The cost appears to be in line for what is proposed and we recommend approval.*

(ee) Working drawings—physical education facilities_____ $71,000

This project proposes the design and preparation of working drawings for an additional physical education facility to increase the capacity to meet the needs of the growing enrollment. It was originally scheduled to be substantially separated from the existing gymnasium and located near the fieldhouse but it has now been decided that it is possible to fit it in adjacent to the existing gymnasium in what will be a far better configuration for convenience and efficient utilization. It is contemplated that the additional area will have a gross of 51,000 square feet and a net of something over 38,000 square feet giving an efficiency ratio of 75 percent which is average for gymnasium structures. It will provide five teaching stations and one laboratory plus two classrooms, offices for 10 faculty, locker facilities, equipment issue rooms, etc. The current estimate is $22.55 per gross square foot for the basic building plus about $1 per foot for fixed, group I equipment with a total project cost of something approaching $35 per square foot. *The working drawing proposal appears to be in order and we recommend approval.*

California State Colleges—Continued

(ff) Land acquisition ---------- *$655,000*

This campus, as it was originally sited, is in a relatively poor location because of the lack of good buildable area. A substantial portion of the total campus land ownership is in steep wooded hills which simply do not lend themselves to economical construction. Surrounding usable areas have been gradually deteriorating in terms of residential quality and there have been plans to redevelop the area into high value commercial facilities which would ultimately lose them for campus use. It becomes essential, therefore, that land be acquired now to permit the campus to grow to its planned enrollment goal. The current proposal involves a total of nine acres comprised of 39 parcels with about as many owners. The additional land will be used for the humanities building, parking facilities, physical education playfields, and for some time, some of the existing homes will be used for faculty offices.

This campus is now so far committed with recent investments in construction that there seems to be no other practical solution than that of buying additional land to permit it to expand to its planned enrollment goals. *We recommend approval.*

Kern County

(gg) Initial complement of library books---------- *$187,000*

The procurement of library books is a much slower process than would ordinarily seem to be the case and there is a long procedure for developing the list and placing orders. This proposal is part of a two-phase program for an ultimate complement of 50,000 volumes which would be available when the campus opens in September of 1969. *The procedure of providing an initial complement of library volumes early in the development of a new campus has been established by prior experience and on this basis we recommend approval.*

(hh) Working drawings—initial buildings---------- *$70,000*

This proposal covers design and preparation of working drawings for initial facilities the nature of which has not yet been clearly demonstrated although it is intended that they would provide the first complex for the first two years of operation. Included would be lecture classrooms and laboratories with a capacity of 620 FTE plus the faculty offices, administrative offices, library, etc. The gross area is currently estimated at 75,000 square feet. *In view of the lack of adequate information, as of this writing, we recommend that the proposal be placed in the special review category.*

(ii) Working drawings—utilities and site development 1967 ---------- *$25,000*

This proposal would cover the design and preparation of working drawings for utilities, roads, walks, etc., that would be necessary for the initial development of the campus. We recognize, of course, that this is only a relatively small beginning for a campus which will have in excess of 300 acres of land. There should be available reasonable data and preliminary plans or sketches on which to make some determina-

tion. *As of this writing, we have not had an opportunity to review these, if they are available, and consequently we recommend that the proposal be placed in the special review category.*

Long Beach

(jj) Construct—engineering building No. 2 ..... *$3,385,000*

The Budget Act of 1966 appropriated $77,000 for the design and preparation of working drawings for a second engineering building on this campus. In fact this appropriation was the second since the Budget Act of 1965 appropriated $50,000 as a partial cost so that the two together made an availability of $127,000. At the time of the second appropriation the proposal was for 91,000 gross square feet with 59,000 usable square feet giving an efficiency ratio of 59 percent which we considered much too low. The project has now developed to 83,900 gross square feet with a net area of 55,550 giving an efficiency ratio of 66 percent which is considerably better and is closer to what may usually be expected in buildings of this type. The addition will have the capacity of 460 FTE in 19 laboratories and 7 lecture rooms plus offices for 32 faculty members and auxiliary spaces. It is planned as a five-story building, of reinforced concrete which is estimated to cost $27.61 per gross square foot for the basic building plus about $4.50 per square foot for fixed, group I equipment with a total project cost of around $42.75 per foot. *The cost is closely related to recent experience in facilities of this type and since the engineering curriculum on this campus is extremely important due to the surrounding industrial area, we recommend approval of the construction.*

(kk) Construct—psychology building *$2,661,000*

The Budget Act of 1966 appropriated $96,700 for the design and preparation of working drawings for a four-story reinforced brick and concrete building with a gross area of nearly 82,000 square feet and a net usable area of something over 53,000 square feet, giving an efficiency ratio of about 65 percent. The design as it has been further evolved has resulted in a gross area of almost 85,000 square feet with very nearly the same net usable area and a consequent reduction in efficiency to 63 percent. For a psychology building the prior 65 percent would have been unusually good since most of them generally run in the area of 61 to 62 percent at best. Consequently, we believe the current proposed efficiency is entirely reasonable.

The cost is currently estimated at $25.28 per gross square foot for the basic building to which would be added about $1.75 per foot for fixed, group I equipment with a total project cost of over $32.80 per foot. The building would provide 842 student stations with a rated capacity of 943 FTE in 13 lecture rooms, 14 laboratory suites and stations for 100 faculty, plus related storage, service and experimental areas. This is a relatively high capacity building which is required for the growing enrollment of the campus. *The cost appears to be in line and we recommend approval.*

California State Colleges—Continued

(ll) Construct—library building, phase II *$5,158,000*

To begin with, the designation of the project in the schedule is in error since it should be called phase III as phase II was the designation of the working drawings appropriation of $184,000 which was made by the Budget Act of 1966. It is in fact the third phase of the library building.

The proposal was for a five-story addition to the existing building having in excess of 192,000 gross square feet of area with a net of over 137,000, giving an efficiency ratio of 71 percent which together with the existing facilities would provide for an enrollment of 15,500 FTE.

The design as it finally developed came to nearly 201,000 square feet of gross area with a net of nearly 141,000 and an efficiency ratio of 70 percent which is about average for libraries.

It is interesting to note that the 1966 proposal had an ultimate price tag of about $5,100,000 based on the then-prevailing construction cost index. With a somewhat larger gross area the current estimate indicates a need for $5,158,000 which at the higher index now prevailing means that the unit costs have dropped. The estimate is now $21 a gross square foot for the basic building with something under $1 per square foot added for group I fixed equipment with a total project cost of under $27 per foot. This is one of the few instances in which a design as it develops produces economies and in this case has produced what we consider to be an excellent cost. We hope the ultimate bidding bears this out.

Probably the earliest that the building would be ready for occupancy would be the fall of 1970 and with the usual three-year expansion included which would bring us to the fall of 1973, we find that the projected enrollment is over 16,000, indicating that the planning and projections are in good alignment. *We recommend approval.*

(mm) Working drawings—lecture classroom building *$18,000*

This project proposes the design and preparation of working drawings for a small building having a gross area of about 7,500 feet and a net area of 5,500 feet giving a relatively high efficiency of over 72 percent. It is intended to contain two lecture classrooms of 150 stations each and one classroom of 100 stations with a platform area capable of serving all three classrooms. The building would be located in the complex developed by the physical education facilities and the engineering facilities. It will be recalled that these facilities are down on the flat area fairly well removed from the main campus and for this reason it is desirable to have some general lecture classroom space located within this compound. The total of 400 stations will produce a rated capacity of 600 FTE.

The current cost estimate is $29.94 per gross square foot for the basic building and over $43 per foot at total project level. These figures appear to be excessive even when taking into account that a small building of this type will usually cost more per square foot than the same amount of space included in a larger building. We have raised a number of questions concerning these cost elements which have not yet

California State Colleges—Continued

been resolved. *While we recognize the need for additional lecture space on this growing campus, we would recommend that the project be placed in the category of special review.*

(nn) Working drawings—home economics building No. 2__ $34,000

This project proposes the design and preparation of working drawings for a second increment of the home economics building which would add almost 23,000 gross square feet of area with a net usable space of over 16,000 square feet giving an efficiency ratio of almost 71 percent which is relatively high. This addition would more than double the existing facilities. It would contain three classrooms, six laboratories, offices for 11 faculty members and various auxiliary spaces. As near as we can calculate, this would add a capacity for about 50 FTE. The current estimated cost is $24.70 per gross square foot for the basic building, plus about $3 per foot for fixed, group I equipment with a total project cost of over $35.30.

We have raised a number of questions about this project, not the least of which is the rather basic one of whether the state colleges should be in the field of home economics to the degree that they are and whether the subject should not be one of more intense attention by junior colleges rather than the state colleges even for teaching purposes. *For these and other reasons we would recommend that the proposal be placed in the category of special review.*

(oo) Working drawings—drama building_____ $83,000

This project proposes the design and preparation of working drawings for what might mistakenly be considered a little theater building. A little theater in combination with music facilities already exists. This proposal is to provide expansion of the existing facilities with such things as increase in scene shop and stockroom area, actors' practice rooms, a "green room" and many other auxiliary spaces plus a so-called "flexible theater" having almost 4,800 square feet of usable space. The latter is similar to what is sometimes referred to as a "theater in the round." The gross area of the addition would be almost 57,000 square feet with a net usable area of over 32,500 square feet providing an efficiency ratio of only 57 percent which we consider much too low for the purpose, even taking into account that there is a fairly large number of small rooms and spaces scattered throughout the project. Furthermore, we have some question as to the justification for the size of the "flexible theater." The current cost estimate is $26 per gross square foot to which would be added almost $5 per foot for fixed, group I equipment with a total project cost of about $37 per foot. We would also question the cost since the project does not include what is otherwise a costly element, namely the little theater with its high stage house and stage mechanical requirements. *For these and other reasons we recommend that the project be placed in the category of special review.*

(pp) Site development 1967_____ $589,000

This project proposes the design, preparation of working drawings and construction of a major campus entrance from Seventh Street with

California State Colleges—Continued

access to the major parking areas. The work consists of a number of elements including grading, paving, storm drainage, realignment of existing landscaping and irrigation and realignment of other utility lines which would be effected by the changes. Adequate lighting is also included.

The continuing growth of this campus has made the Seventh Street approach more and more hazardous and since the new administration building and the so-called theme building are oriented to the Seventh Street entrance, it is essential that the entire approach be improved. *We recommend approval of the proposal.*

Los Angeles

(qq) Construct—physical science building and garage__ $9,800,000

The Budget Act of 1966 appropriated $300,000 for the design and preparation of working drawings for a complex multistory, multi-element, structure in which the state's direct funds represented a major part of the structure with nonstate funds (parking funds) representing the balance of the structure, which in effect was a two-story parking garage under the building. The topography of this campus makes this approach particularly feasible and economical. The lack of total land base also makes this type of approach desirable.

At the time the project was proposed, the building proper was contemplated as having about 173,000 gross square feet of area with the net area not yet determined. As it has now developed, the building itself will have a gross area in excess of 206,000 square feet with a net usable area of over 121,600 square feet providing an efficiency of about 59 percent which is only a little lower than the average for science buildings and because of the particular problems incident to this structure would be acceptable. The capacity of the building will be 1,176 student stations producing 839 FTE in 11 lecture rooms and 58 laboratories plus stations for 65 faculty members and related auxiliary areas. The current cost estimate is $26.72 per gross square foot for the basic building plus nearly $10 per square foot for fixed, group I equipment with a total project level of over $47.50 per foot. On a historical basis we believe that the fixed, group I equipment is entirely out of proportion since in the past this has rarely exceeded $6 or $7 a foot.

The two-story garage structure underlying the building will have a greater gross area than the building itself, since it is anticipated at over 226,000 square feet. Net usable area does not usually apply to garage structures of this type. It is currently estimated that this portion will cost $1,288,700 including all fees and a proportionate share of site development, etc. This, as has been previously mentioned, will be funded from nonstate sources. Incidentally, the figure shown on page 134 of the Capital Outlay Budget, line 20 under the column Proposed 1967–68 at $1,288,700 with the letter "W" next to it is an error in that the "W" implies working drawings whereas in fact that sum of money represents construction. The capacity of the garage will probably be on the order of 700 vehicles. The sloping site makes possible the elimination of internal ramping since the second level can be

California State Colleges—Continued

reached from grade which produces a greater utilization of the total area. In view of the foregoing, while the cost of the basic building is close to the average, the total project level is too high. Furthermore, we have serious reservations concerning the division of costs between building and garage. Yet another reservation concerns the total of net usable area which appears to be excessive for the purpose. *We recommend that the proposal be placed in the special review category.*

(rr) Site development—utilities ---------- *$942,000*

This project proposes the design, preparation of working drawings and construction of extensions to basic utilities and increases in capacity with only incidental site development. The proposal was not in the original five-year plan but is based on a utility study which was carried out by a private engineering firm which developed the fact that the campus was clearly short in capacity in its sanitary sewer system, gas supply system, water supply and major electrical systems. To some extent this study arises from the fact that several years ago we raised the question with respect to all campuses and their continuing expansion without adequate attention being given to the basic utility plans which in their initial form had been based on much smaller enrollment goals. We have examined the proposal in detail and we believe it is necessary. *The cost is in line and we recommend approval.*

(ss) Working drawings—utilities and site development—Berridge ---------- *$66,000*

The Budget Act of 1966 appropriated $1 million for additional land acquisition on what is nominally the west side of the campus. The purpose of this was to provide principally for a new access to the campus which would eliminate the seriously overcrowded conditions that occur at the south end of the campus where access from the San Bernardino Freeway is usually had. In addition, the acquisition will provide, as part of the redevelopment of Berridge Road, a considerable land base for additional surface parking, the actual construction of which is not included in this proposal but will be provided out of nonstate funds. In the process approximately 9.7 acres of surface parking area, in a rough graded condition, will result. The ultimate cost of the total project including the working drawings will probably approach $1,500,000 which together with the cost of the land involved would probably bring the cost of the parking acreage to just about the breaking point at which normally serious consideration would be given to multistory parking structures rather than surface parking. However, in this instance the basic purpose is to provide an access road and the parking is purely incidental as part of the redevelopment project. *We recommend approval of the working drawings.*

(tt) Land acquisition 1967 ---------- *$1,650,000*

This proposal covers the acquisition of 8.1 acres of private and publicly owned property (Gravois Elementary School) which will result in the closing of certain public streets at a later date, thus produc-

California State Colleges—Continued

ing an additional 1.4 acres which will accrue to the benefit of the campus making a total of 9.5 acres.

The Gravois Elementary School is now a sort of enclave more or less totally surrounded by the school and it occupys what is rather valuable buildable land. The buildings are relatively old and the purchase price is probably based on the land value more than on the improvements. In any case, this campus, in relation to its enrollment goals, has one of the very lowest land bases, if not the lowest and additional land is well-nigh imperative if the college is to continue to serve the growing demands of the community. Its location in the heart of a heavily industrialized area makes it particularly in demand by students who work part time. *We recommend approval of the acquisition.*

Sacramento

*(uu) Construct—teacher education building*_____ *$1,860,000*

The Budget Act of 1966 appropriated $115,000 for the design and preparation of working drawings for a classroom building called the teacher education building, which was contemplated as having nearly 60,000 square feet of gross area. As the plan has now developed it has a little over 57,000 square feet of gross area with almost 39,000 square feet of net usable space giving a relatively high efficiency ratio of over 68 percent. This is a relatively high capacity project for the Division of Teacher Education and the Department of Foreign Languages which would take care of 1,109 FTE with 75 faculty stations.

The current cost estimate is $24.89 per gross square foot execlusive of group I fixed equipment which would add about another $1.50 per foot. This is significantly higher than the estimate at the time the working drawings were proposed and represents more than just the construction cost index increase. The total project cost would be around $33.10 per square foot. *We have had reservations about this relatively high cost for what should be a simple, straightforward classroom building and for this reason we recommend that it be placed in the special review category.*

*(vv) Working drawings—remodeling of speech-drama building, phase II*_____ *$20,000*

The Budget Act of 1965 appropriated $523,000 for phase I of the remodeling of the speech-drama building in which $23,000 was supposedly set aside for working drawings for phase II. The present proposal is to provide additional funds for the purpose which would remodel and convert existing music department facilities for speech and drama instructional areas giving a capacity for 226 FTE and 18 faculty office spaces. *We recommend approval.*

*(ww) Working drawings—psychology classroom building*__ *$78,000*

This project proposes the design and preparation of working drawings for a multistory classroom structure to house the psychology department. It would have a gross area of almost 66,000 square feet with a net area of something over 47,000 square feet giving it an efficiency

California State Colleges—Continued

ratio of 71 percent which is relatively high. The building would have 669 student stations with 1,232 FTE capacity plus 99 faculty stations. The current cost estimate is $23.86 per gross square foot to which would be added about $1 per foot for group I equipment with a total project cost of about $31 per foot. The cost appears to be quite reasonable for the purpose and the space is required for the growing enrollment generally and in this field in particular. *We recommend approval.*

(xx) Working drawings—library building ---------- *$198,000*

This project proposes the design and preparation of working drawings for a new central library building with a capacity to handle an enrollment of 10,320 FTE. The three-year expansion date past the date of possible first occupancy would be 1973 and present enrollment projections are for 9,900 FTE which is just a little short of this proposal. Nevertheless, it is close enough to warrant acecptance of the data.

The space to be vacated in the present library will be converted to college administration, instructional space and faculty offices. The new building would also provide a certain amount of academic capacity to the extent of 120 FTE in the honor study and library science program. It is contemplated as having a gross area of nearly 210,500 square feet with a net area of almost 155,000 square feet which would give an efficiency ratio of about 74 percent which is unusually high for libraries and about which we would have some reservations as to its actual accomplishment. The current cost estimate is $24.42 per gross square foot for the basic building to which would be added possibly another 50 cents per foot for fixed, group I equipment with a total project cost of about $30 per square foot. While the cost per square foot of the basic building is a little higher than experience would justify, the unusually higher efficiency ratio could justify such a cost if the efficiency ratio can be realized. The further development of the plan will demonstrate the actual facts. *We recommend approval.*

(yy) Construct—air conditioning, Douglas Hall and education building ---------- *$150,000*

Douglas Hall was one of the first permanent buildings on the campus and it was not desgned with air-handling equipment to which air conditioning could have been added. Consequently, this will require a considerable amount of revamping in the building. On the other hand, the education building does have duct work and air-handling equipment that can accommodate the air-conditioning phases. The two together include therefore, new duct work and exhaust systems and air-handling equipment as well as providing sources of chilled water for the cooling cycle. While we have no indication of when this campus plans to go to a year-around operation, there is an apparent target date of the 1974–75 fiscal year which would then make it imperative that all of the buildings be air conditioned for summertime use. Aside from that consideration the late spring and early fall in Sacramento can become extremely hot so that air conditioning would be justified

California State Colleges—Continued

in any case. *Since the costs appear to be in line for the purpose we recommend approval.*

(zz) Construct—boiler plant utilities *$300,000*

The existing boiler plant will have reached its full capacity with the addition of the science building and the music building which are due to come on the line during the budget year. This will leave no standby capacity in the event of an emergency or a boiler failure and it will mean that the plant will be steaming at top capacity constantly which would result in difficult maintenance problems. This project proposes the addition of a 50,000-pound-per-hour package boiler with all the necessary auxiliaries plus an extension of the building to house the boiler. Also included will be working drawing preparation for central chillers for the ultimate centralization of a chilled water supply for air conditioning on a major portion of the campus. *The cost appears to be in line for the purpose and we recommend approval.*

(aaa) Site development 1967 ..... *$351,000*

The major access to this campus has been from J Street with a relatively minor volume of traffic coming in through the Folsom Boulevard end of the campus. The volume of traffic is now such that Perimeter Road must be extended and improved in order to avoid pileups at the intersection of J Street with resultant traffic hazards. This project principally provides this Perimeter Road on the west side with only minor incidental landscaping to prevent erosion of the redeveloped area. However, a new element has entered the scene. It is our understanding that the City of Sacramento now contemplates the construction of an extension of Howe Avenue and a new bridge across the American River which would lead most student traffic, coming from the north, into the Folsom Boulevard side of the campus where most of the parking facilities will exist and where the new academic center of population will develop. This would very significantly reduce the college inbound traffic on the J Street side and might obviate the need for most if not all of the proposed project. *Consequently, we recommend that the proposal be placed in the special review category.*

San Bernardino

(bbb) Construct—library classroom building *$4,589,000*

The Budget Act of 1966 appropriated $158,900 for the design and preparation of working drawings for a combination library and classroom building with a gross area of a little over 162,000 square feet. This has now developed into a gross area of over 165,200 square feet with a net usable area of almost 110,000 square feet giving an efficiency ratio of nearly 67 percent. This would be relatively low for a straight library building but for a combination building it probably strikes a good average. The building as a whole is sized for a campus enrollment of 3,800 FTE which probably will not be reached until the 1974–75 fiscal year. In the interim a portion of the building will be used to accommodate 1,272 FTE in 35 lecture rooms, 9 activity rooms, 1 laboratory, 21 faculty office stations plus related auxiliary areas of var-

California State Colleges—Continued

ious kinds. These, of course, would gradually be phased out as new specialized buildings were constructed. This would make the third permanent full-scale academic building on the campus exclusive of the so-called initial facilities which are one-story buildings.

The current cost estimate for this multistory reinforced concrete building is $23.88 per gross square foot for the basic building to which would be added about 50 cents per foot for fixed, group I equipment with a total project cost of over $29.35 per square foot. *The costs appear to be in line for this type of facility and we recommend approval.*

(ccc) Utilities and site development 1967 ---------- *$585,000*

This project proposes the design, preparation of working drawings and construction of a series of elements of which almost half is in a storm drainage line. The balance represents roads and walks, some landscaping and turfing with the necessary irrigation, area lighting and electrical services. This campus is located in a relatively windy area with rather friable sandy soil which causes a considerable maintenance cost as well as discomfort unless it is properly prepared and landscaped to prevent wind erosion and provide some green relief from the otherwise semidesert type of area. *The cost appears to be in line with the scope of the proposed elements and we recommend approval.*

(ddd) Working drawings—cafeteria ---------- *$57,000*

This project proposes the design and preparation of working drawings for a two-story concrete dining commons having a gross area of over 31,200 square feet with a net usable area of over 21,000 square feet giving an efficiency ratio of 67 percent which appears to be relatively low for this kind of structure which has such a preponderance of large open areas in the dining room, kitchen and serving space. In fact, the efficiency ratio should probably at least equal that of a library. The current cost estimate is $25.32 per gross square foot for the basic building with nearly $6 per foot to be added for fixed, group I equipment which includes all of the major kitchen devices, and a total project cost of over $43.30.

Cafeteria services are presently being provided in the initial facilities on a more or less temporary basis and at a location which will make it rather far removed from the three new main permanent buildings when they are completed. Furthermore, it has been the state policy to provide on each new campus a so-called cadre cafeteria, which this represents, with all future cafeteria expansion requirements being financed from nonstate sources. The dining area will provide seating capacity for about 615 and will be adequate for an enrollment of at least 3,400 FTE. *While we recognize the need for the facility we feel that the efficiency ratio plus other factors justify a recommendation that it be put in the category of special review.*

San Diego

(eee) Construct—art classroom building ---------- *$2,574,000*

The Budget Act of 1966 appropriated $160,000 for the design and preparation of working drawings for an art classroom building of five

California State Colleges—Continued

stories which at the time was contemplated at having about 81,000 gross square feet of area. As it has now developed, the gross area is 85,500 with a net of 58,200 giving an efficiency ratio of 68 percent which is quite good for art buildings. The building would have 688 student stations with a calculated capacity of 364 FTE in 2 lecture rooms and 25 laboratories as well as faculty office stations for 27 plus many auxiliary spaces. Located on a steep slope on the north side of the campus, it would take advantage of the terrain which is one of the factors that leads to the relatively high efficiency ratio. The current cost estimate is $22.30 per gross square foot for the basic building to which would be added about $2 per square foot for fixed, group I equipment with a total project cost of over $32.35. The basic building cost is the most reasonable of the recent art buildings.

The relatively high total project cost is occasioned by the difficult terrain plus the fact that there are substantial utilities required to be brought to the building since the local supply in the immediate vicinity is inadequate. *We recommend approval.*

(fff) Construct—fire alarm system *$84,000*

The original fire alarm system on this campus was designed for the central cluster of buildings when the enrollment goal was about 5,000. Since that time many new buildings have been added to the campus without extending the fire alarm system to them. Title 19 of the Administrative Code requires adequate fire alarm systems in public buildings and the city fire marshal has made strong recommendations that the installation be modernized. It will be connected to the city system which will increase its utility and reliability factors. *The cost appears to be reasonable for the purpose and we recommend approval.*

(ggg) Working drawings—utilities and site development 1967 ..... *$17,000*

This project proposes the design, working drawings development and construction of utilities principally consisting of steam line extensions, electrical power extensions and modifications and water line extensions. These are required by the new music building and the library classroom building but also by the need to upgrade some of the existing utilities because of load increases from existing buildings. *The cost appears to be in line and we recommend approval.*

(hhh) Land acquisition *$590,000*

This project proposes the purchase of land immediately to the west of Campanile Road to be used as a site for the construction of a new general administrative office building for the college and also to provide parking space for this particular structure. The total acreage is approximately 2.3 which is comprised of 10 parcels, 8 of which are private homes and 2 of which are apartment houses, the latter constructed in 1948.

The land base for this campus is very restricted due to the fact that it is on a mesa hemmed in on the east and west by canyons and on the north by the Alvarado Freeway, U.S. 80. For practical purposes that

California State Colleges—Continued

leaves the only direction in which land can be bought, to the south which is fairly well developed although with relatively older homes. There seems to be little doubt that the ultimate enrollment growth of this campus will require additional land base and there is also little doubt that land values are continually rising in that vicinity. Consequently, it appears to be a prudent action to purchase the land as soon as possible. *We recommend approval.*

San Fernando

(iii) Working drawings—library building *$320,000*

This project proposes the design and preparation of working drawings for a new library building having a gross area of over 189,000 square feet with a net area of nearly 134,000 square feet giving an efficiency ratio of 70 percent which is average for libraries. The amount of space required could conceivably be attached to the existing library at the southern focus of the campus. However, the master plan now indicates that with the new enrollment goal of 20,000 the major student load will be well north of the existing library and the proposal is to start a new library on a new site so that for a period of time there would be two library buildings but that ultimately the new library would be expanded and the existing library would be converted to other uses. Current studies indicate that the center of student traffic and student load is at least 1,000 feet north of the existing library which would indicate a reasonable basis for the establishment of a new site. The old library together with the new one, upon completion, would have the capacity to handle a total campus enrollment of 14,020 FTE. The current standards are to provide three years of expansion space which would run to the 1973–74 fiscal year when the enrollment is anticipated, according to current figures, to be 13,640 which is quite close to the capacity of the two structures. Capacity of libraries is based on a standard formula which provides for reading space for 25 percent of the enrollment plus a formula relationship of the number of books and a formula relationship of the space required per 100 volumes. In addition, library structures also provide, as a rule, the total centralized audiovisual service and supply function for the campus.

The current cost estimate is $23.21 per gross square foot for the basic building which appears to include a small amount for fixed, group I equipment with a total project cost of about $30.80 per foot. The building cost appears to be just a little higher than we have been expecting and the total project cost includes the extension of utility lines to a new area where they do not now exist. The development of these working drawings will more clearly establish a proper cost. *We recommend approval.*

(jjj) Utilities and site development *$314,000*

This project proposes the design, preparation of working drawings and construction of road paving, walks and landscaping on the campus half of Lindley Avenue and on Lassen Street between the east and west boundaries of the campus. In addition since Lassen will be a relatively

California State Colleges—Continued

busy thoroughfare the proposal includes an overpass to permit safe travel of students and avoid interference with traffic as well as the hazards incident thereto. Utility lines will also have to be moved as part of the paving and street realignments. These proposals are in line with agreements that have been made with the city and the cost appears to be reasonable for the scope and purpose. *We recommend approval.*

San Francisco

(kkk) Construct—completion of music-speech building___ $371,000

This project proposes the preparation of working drawings and construction of completion work in space in the recently finished addition to the music-speech building. The basement and unfinished loft space were left because there were no clear programs available or approved at the time. This proposal would provide facilities for motion picture production and academic instruction in this field. A substantial portion of the cost is concerned with heavy electrical supplies and specialized electrical equipment such as arc lights, etc. The general finishing work and the mechanical work represents less than half the total. This is highly specialized and sophisticated space for which no practical substitutes are available. If the curriculum is to include the motion picture production field then there is no reasonable way that such a curriculum can be conducted in makeshift space. *Consequently, we feel the project is justified, the cost appears to be in line and we recommend approval.*

(lll) Working drawings—administration addition_____ $145,000

This project proposes the design and preparation of working drawings for an addition to the existing one- and three-story administration building which would add over 113,600 gross square feet of area with a net in excess of 69,200, giving an efficiency ratio of about 61 percent which we feel is a little low for what is essentially an office type of building. The building would provide one floor of garage space, under the structure, for about 70 cars and its construction is presently contemplated on the basis of demolishing a substantial part of the existing one-story building so that the net increase in space will of course not equal that of the new building. The current cost estimate is $25.15 per gross square foot for the basic building which would include the demolition of the existing area, plus a little over $1 per square foot for fixed, group I equipment with a total cost of over $33.80 per square foot for the entire project.

While we recognize that the growth of this campus has made the administrative space substantially more crowded than is justifiable and has resulted in some offices having to move into other buildings, we have not had a clear picture as to the amount of space to be lost by the demolition nor the clear establishment of how the parking portion is to be financed. Normally we would anticipate that the parking portion would be financed out of nonstate funds, but we have had no indication of that approach with respect to this project. *Consequently, we recommend that the proposal be placed in the category of special review.*

California State Colleges—Continued

*(mmm) Utilities and site development 1967*_____ *$150,000*

This project proposes the design, preparation of working drawings and construction of utilities with site development only incidental to disruptions caused by the utility work. The project as originally submitted was considerably larger and as of this writing we have no clear understanding of what is intended with the smaller amount of money that is in the budget. We know that the description in the Governor's printed Budget coincides largely with the description of the more costly project and consequently we believe it to be in error. Until this problem can be resolved, it is not possible to make a positive recommendation. The original proposal encompassed replacement of existing sewer pumps with new variable-speed combination electric motor and engine-driven pumps, new controls, sewer, water and gas piping and the first phase of a 12–KV underground distribution system. It will be recalled that there was an emergency situation on this campus with respect to a seriously overloaded main supply which was corrected but which for the long haul must be substantially augmented. *In view of the lack of adequate information, we recommend that the project be placed in the special review category.*

San Jose

*(nnn) Working drawings—central library building*_____ *$325,000*

This project proposes the design and preparation of working drawings for a new multistory central library building located quite near the central axis of the total campus on area that was vacated with the demolition of the old quad and Tower Hall. It would totally substitute for the existing library which would then be converted to general classroom use.

The new building is proposed with a gross area of over 365,500 square feet and a net area of over 254,300 square feet giving an efficiency ratio of 70 percent which is average for libraries. The building would provide the total library capacity for the maximum enrollment goal of 17,000 FTE including instructional space for the library science program. It would have space for 800,000 volumes with 4,250 reader stations. Current cost estimates indicate almost $23 per gross square foot for the basic building with about 75 cents per square foot in addition for fixed, group I equipment and a total project cost of $29.80 per square foot. These are fairly reasonable figures for a large building in an area which will require substantial pile foundations. The building will probably be the tallest single structure on the campus and can be considered the future focal point and perhaps the theme building. It would be well to bear in mind that the ultimate requirement for actual construction will probably exceed $10,500,000. Also please note our comment on (*ppp*). *We recommend approval.*

*(ooo) Working drawings—remodeling Centennial Hall*____ *$33,000*

This project proposes the design and preparation of working drawings for the remodeling of the third floor of Centennial Hall, particularly for the use of the psychology department and the moderniza-

tion of the building by adding air-conditioning throughout which entails a considerable amount of new duct work, cooling coils and new connections to the central steam system and the central chilled-water system.

This building was one of the first to be built on the campus, following World War II, and it was designed merely to provide convector heating and limited forced ventilation. It has been quite unsatisfactory during the hot months. We are not certain, at this time, of the date when this campus will go on the year-round operation but even without this goal the late spring and late summer periods are sufficiently hot to justify air-conditioning this campus generally. *We recommend approval of the proposal.*

(ppp) Construct—boiler air-conditioning plant *$3,065,000*

This project proposes the design, preparation of working drawings and construction of a new central-heating and air-conditioning plant and a distribution system including some tunnels. The gross area of the plant itself will be about 23,000 square feet.

The present central-heating plant, which really is no longer central to the actual load, is physically in the way of the proper siting of the central library and in addition is aesthetically an unsuitable neighbor for the new building. Furthermore, the plant is quite old.

The use of a central heating and chilled-water plant is particularly suitable on such a compact campus. It will result in ultimate savings that over a period of a relatively few years will easily offset the initial cost and will subsequently pay annual dividends. The current plan sites the building to the south side of the campus which in our estimation is really not central to the major load factors of the campus. Furthermore, it uses up valuable land space on a campus which already has one of the smallest land bases of any of the colleges. We have suggested the possibility that the plant might be incorporated under the new library and while this might cause some problems with respect to providing, at least, steam during the construction period, they do not appear to us to be insurmountable and the effort would be worthwhile in eliminating a building that is otherwise difficult to make particularly aesthetic and helping to conserve land space.

Furthermore, we would point out that normally for a project of this size only working drawings would be proposed in one year with construction in the year following. In this instance it is proposed to attempt something of a crash program in order to expedite the start of the library building. As a practical matter, we do not believe that it will quite work this way. *Consequently, we would like additional time to have the matter studied, while the Legislature is still in session and we recommend that the proposal be placed in the special review category.*

(qqq) Site development 1967 ..... *$134,000*

This project proposes the design, preparation of working drawings and construction of general site development around the new business classroom building and on San Antonio Street between Ninth and Tenth Street. Since this is an urban campus right in the heart of the City of

California State Colleges—Continued

San Jose it is essential that it be kept as sightly as possible. We have reviewed the details of the proposal and they appear to be reasonable and the cost is in line. *We recommend approval.*

Sonoma

(rrr) Working drawings—remodeling of classroom building No. 1 ..... *$14,000*

Classroom building No. 1, the first of the permanent academic buildings on this campus was designed to temporarily house a number of functions including the library. This function has now been scheduled for removal from the building by virtue of the 1966 Budget Act appropriation for the construction of a library building. It is proposed to convert the space, so vacated, for permanent facilities for use of the social science division.

The proposal for working drawings contemplates an ultimate remodeling cost of about $180,000. Most of the work is concerned with providing partitions, changes in the electrical and heating and air-conditioning systems and minor plumbing changes. It will be recognized that the original temporary library space was large, open loft area which now must be subdivided. *The proposal appears to be reasonable and we recommend approval of the working drawings.*

(sss) Working drawings—speech-drama building *$60,000*

This project proposes the design and preparation of working drawings for what is essentially a little theater building with all of the usual appurtenances such as a scene shop, a costume design room, makeup room, dressing rooms, drafting and design rooms, etc., plus the little theater itself which would have a seating capacity for 500. The FTE capacity of the building would be 156 by the use of 164 student stations in five activity and laboratory rooms, one lecture room, the theater, office stations for six faculty and many of the related auxiliary areas. Currently, the new music building is providing a certain amount of space for drama purposes.

The plan contemplates a building with a gross area of 38,500 square feet and a net usable area of almost 27,000 square feet giving an efficiency ratio of 70 percent which is about average for little theater complexes. The current estimated cost is almost $31 per gross square foot for the basic building plus $2 per square foot for fixed, group I equipment and a total project cost of over $43.75. We consider all of these costs to be excessive for the purpose, even taking into account the premium labor costs in the area and the soil condition problems. We would like to point out that this campus has a relatively slow rate of growth. For the fall of 1967 it is anticipated to be 1,410 FTE and three years later by 1970 it is projected at 2,261 and by 1973 it will have risen only to 3,113. We suggest that an extremely expensive building of this type with its low FTE capacity is premature at this time, particularly in view of more urgent capacity needs on other campuses. *We would recommend deferral of the project to a succeeding budget. In any case since we consider the cost too high we would at least recommend that it be put in the special review category.*

California State Colleges—Continued

*(ttt) Utilities and site development 1967*_____ *$1,000,000*

The Budget Act of 1965 in providing for phase IV of the site development included an amount for working drawings for the 1967 phase. It is now proposed to provide extensive roads, walks, curbs and other paving, landscaping and turfing together with sprinklers and irrigation, a general area drainage and some area lighting to finish off the central area created by the science building and the first parking lot. In addition, there would be a four-lane divided entrance road from the new county expressway which is intended to run parallel to the north boundary of the campus plus the completion of the Loop Road along the north edge of the campus. This would include some realignment of an existing creek to provide proper flood control. With the exception of the campus entrance road from the new expressway the work represents the amenities necessary to both make the buildings attractive and to reduce maintenance in the buildings by the elimination of dirt and debris that are otherwise tracked in from the unfinished area. *The cost appears to be in line with the scope of the proposal and we recommend approval.*

*(uuu) Construct—central control system*_____ *$85,000*

This project proposes the design, preparation of working drawings and construction of a supervisory and control system operated from the central boiler plant which would permit totally centralized operation of the various motorized valves, blowers, power-operated dampers and other elements of the heating and air-conditioning systems in the buildings. This type of central system provides savings both by the elimination of the manpower that would otherwise be necessary to turn these various units on and off as required and by the savings in fuel and energy that can result from the maximum efficiency attainable when all of these elements are under constant control at one point. *We recommend approval of the proposal.*

Stanislaus

*(vvv) Construct—performing arts complex*_____ *$2,144,000*

The Budget Act of 1966 appropriated $80,000 for the design and preparation of working drawings for a performing arts complex which would have a gross area in excess of 63,150 square feet with a net usable area of over 39,500 square feet giving an efficiency ratio of about 62½ percent which is a little on the low side for this purpose. The building would represent the first phase of permanent facilities for art, music and drama in the form of a little theater, recital hall, rehearsal rooms, an art gallery, practice rooms, offices for 27 faculty members and numerous auxiliary spaces. The FTE capacity of the building would be 374.

When the working drawings were proposed, we recommended approval on the premise that the campus did not now have a little theater although there were spaces in the new buildings that were used on a temporary basis for music and the performing arts. However, since that time we have had occasion to review the background of the project and the growth potential of the campus. For the fall of 1967 the projected

California State Colleges—Continued

FTE is 764, by 1970 it will have risen to only 1,455, and by 1973 only 2,137. In view of the more urgent needs for space with higher FTE capacities on other campuses, it appears to us to be imprudent at this time to devote $2,144,000 to this low-density project. Current cost estimates are $25.72 per gross square foot for the basic building plus about $3.75 a foot for fixed, group I equipment and a total project cost of about $35.65. *While these figures are reasonable for the purpose we would nevertheless, at this time, recommend deferral of the project.*

*(www) Site development 1967*_____ *$565,000*

This project proposes the design, development of working drawings and construction of utility extensions including the tunnel system through which would be run the heating and chilled water lines, electrical and signal system lines and outside the tunnel the installation of sanitary sewers, storm drain and domestic and irrigation water all for the purpose of accommodating the new performing arts complex. If the complex is to be constructed then we have no problem with the amount of the proposal. *However, in view of our recommendation to defer the performing arts complex we would also recommend that the utility extensions be deferred.*

*(xxx) Working drawings—administration building*_____ *$45,000*

This project proposes the design and preparation of working drawings for an administration building with a gross area of 32,150 square feet and a net usable area of over 21,360 square feet giving an efficiency ratio of 66 percent which is good for what is basically an office building. The building will be designed to allow for future expansion as the campus grows and requires additional administrative facilities. The current cost estimate is $25.50 per gross square foot for the basic building with about $2 per square foot for group I fixed equipment which appears to be relatively high for a building of this type. The total project cost is over $35.25 per square foot.

Currently the administrative functions of the campus are being handled in both the library and in the classroom building. The construction of an administration building will free space which would conceivably produce a relatively high FTE capacity. *With this expectation we would recommend approval of the working drawings.*

Cal-Poly San Luis Obispo

*(yyy) Working drawings—library addition*_____ *$120,000*

This project proposes the design and preparation of working drawings for a three-story addition to the existing two-story library which would add about 95,700 square feet of gross area with a net of 76,300 giving an efficiency ratio of over 79 percent which is unusually high for libraries but since this addition will merely add reading and stack space and will continue to make use of many of the corridors and stairways that now exist, this efficiency ratio is possible. The current cost estimate is $22.38 per gross square foot for the basic building which includes remodeling the existing building to accommodate the addition. The total project cost will be around $30.70 per square foot. These are

California State Colleges—Continued

relatively good figures and arise from the nature of the location and the relative simplicity of the proposal. However, because San Luis Obispo is a premium cost area we would have some reservations as to whether this cost could ultimately be obtained.

The addition will nearly double the size of the building and the total complex will provide capacity for 12,000 FTE which is anticipated by 1975, according to the campus. However, we would point out that on page 106 of the Capital Outlay Budget the enrollment for the 1973–74 fiscal year is estimated at 9,555 and the average annual increment of the three or four years before that indicates less than 500 FTE anually. This would mean that the 12,000 enrollment might not be reached before 1979 or 1980. There are also some ambiguities in the figures presented by the trustees in that the supporting document dated October 1966 speaks of an ultimate of 12,000 FTE by 1975 whereas the five-year plan indicates 10,000 FTE by 1973 and that this lesser figure is supposed to be the capacity of the total complex. *Because of these ambiguities we would recommend that the project be placed in the special review category.*

(zzz) Working drawings—women's physical education facilities *$57,000*

It will be recalled that this campus was originally for men only and the original gymnasium which was constructed over 35 years ago was taken over as a women's facility in 1958 when the new men's facility was completed. The two facilities are widely separated which leads to some functional problems when women are required to use some of the playing facilities in the large men's gym but have to use the locker and shower rooms in the old building. In addition, the old building is proving to lack adequate capacity for a proper physical education program. The most important shortcoming is the age of the building and the deterioration which has occurred particularly in the locker, shower room and swimming facilities. The cost of rehabilitating the old building has been reviewed for at least the last three years and we in company with representatives of the Department of Finance have looked at the facility at least a half dozen times within that period in the hope of finding some solution which would permit the continued use of the building. It is now the consensus that the only practical solution is to abandon the old building and to build a proper facility for the women immediately adjacent to the new men's facility which would considerably improve the total physical education program.

The project proposes the design and preparation of working drawings for a structure which would have about 46,400 square feet of gross area and almost 35,400 square feet of net usable area giving an efficiency ratio of 75 percent which is good for gymnasiums. The current cost estimate is $22.59 per gross square foot for the basic building which includes a relatively small amount for fixed, group I equipment and a total project cost of over $31.20 per square foot. The figures appear to be quite reasonable when taking into account the premium construction costs in the San Luis Obispo area and we can only hope that ultimate

bidding will bear them out. *We recommend approval of the working drawings.*

(aaaa) Relocate track *$278,000*

The existing track facility was constructed about 20 years ago at the extreme northwest corner of the campus in proximity to what was then the major physical education center. Since that time the master plan has shifted the growth pattern and the physical education facilities are at a considerable distance along the southern edge of the campus which is approximately three-quarters of a mile from the present track. In anticipation of the relocation of this facility, the campus has foregone for a number of years the necessary major maintenance and upgrading which might have cost as much as $75,000. The master plan also contemplates that in the area where the present track is, there will be large parking spaces and there will be the development of the extension of California Boulevard and an additional entrance road from Santa Rosa Street which is State Highway No. 1. All of these factors would appear to converge on the conclusion that the relocation of the track is needed. *However, while we consider this relocation highly desirable, with the current critical lack of funds and with the relatively slow growth of this campus we feel that they should continue to make do and that this project should be deferred.*

(bbbb) Relocate baseball field *$180,000*

The baseball diamond is immediately adjacent to the track and the arguments that can be made for and against it are the same as those in the preceding project for the relocation of the track. *We recommend deferral.*

(cccc) Utilities and site development 1967 ..... *$748,000*

This project proposes the design, preparation of working drawings and construction of what are basically utilities with only incidental site development. The major problems concern the lack of adequate water-storage capacity and pressure which leads to the necessity for a new 500,000-gallon reservoir and a smaller storage system for buildings that are at a higher elevation plus new connections and a pumping facility from the city mains and the replacement of about 1,400 feet of 6-inch water main with new 12-inch line. The second major and equally important utility problem is concerned with electrical supply capacity. The present supply is almost on the verge of equaling the demand and any further development will overload it. Consequently, it would appear to be wise to anticipate the growth with the new substation, switch gear and feeder lines that are contemplated. The cost of the proposals appears to be in line with their scope and *we recommend approval.*

(dddd) Utilities and site development 1967—roads *$800,000*

This project proposes the design, preparation of working drawings and construction of several road improvements one of which was touched upon in our discussion of the relocation of the track and base-

California State Colleges—Continued

ball diamond. Included is a two-lane access roadway from State Highway No. 1 to the campus and the reconstruction of North Campus Way which is presently unimproved roadway leading to a number of agricultural elements such as the ornamental horticulture unit, the swine unit and the thoroughbred horse unit. In addition, there is included the conversion of an existing closed campus street into a pedestrian mall.

Our information on these projects is relatively incomplete and while we recognize the need for at least part of the proposal, it would appear that in line with our recommendation concerning the relocation of the track and baseball facility that part of the proposal could be deferred. *In view of our lack of adequate information, we would recommend that the project be placed in the special review category.*

Cal-Poly Kellogg-Voorhis

(eeee) Working drawings—agriculture classroom addition_ $72,000

This project proposes the design and preparation of working drawings for an addition to the agriculture classroom building which would add over 47,400 square feet of gross area and about 30,500 square feet of net usable area giving an efficiency ratio of 64 percent which is relatively good in view of the fact that in a sense the description is misleading since basically the addition will be largely laboratory space. It will provide 13 laboratories and a classroom for landscape architecture, soils and foods and nutrition which will have a capacity of 200 FTE. These are fairly rapidly growing programs on this campus and the additional space is necessary to permit them to expand. The current cost estimate is $24 per gross square foot for the basic building to which would be added about $3 per square foot for fixed, group I equipment with a total project cost of over $36.20 per square foot. Considering the laboratory sophistication aspects of the addition, the costs appear to be in line. *We recommend approval of the working drawings.*

(ffff) Construct—field laboratories _____ $134,500

The term "field laboratories" is simply another way of describing agricultural field facilities such as a fenced pasture area, land leveling of approximately 70 acres and other general development needed to put into agricultural use the 138 acres of walnut land which was recently acquired plus the 100 acres of land acquired from the Division of Highways as part of a freeway right-of-way exchange arrangement. Reclaimed water from an industrial system in Pomona is ready for delivery and will be used for irrigating these new areas. The procurement of this new water supply has been under negotiation for nearly 10 years. The agricultural development of this land has been in the long-range master plan approved by the trustees for quite a few years.

While we are in general accord with the project, we have raised a question concerning the immediate necessity to include a bridge at a cost of nearly $20,000. *Since this question has not yet been clarified we would recommend placing the project in the special review category.*

California State Colleges—Continued

(gggg) Construct—air conditioning in the aerospace-industrial engineering building *$152,000*

This project proposes the design, development of working drawings and construction of air conditioning for an existing two-story building having a gross area of approximately 32,000 square feet. The building was originally designed to have air conditioning added at some future date. This campus was scheduled to go into year-around operation in the fall of 1966 which would certainly justify extensive air conditioning throughout the campus if the facilities are to be used during the hot summer months in the Pomona Valley. *The cost appears to be in line with the scope of the proposal and we recommend approval.*

(hhhh) Site development 1967 ..... *$124,000*

This project proposes the design, preparation of working drawings and construction of a small part of a much larger site development plan. The construction concerns the necessity to improve the storm drainage facilities which incidentally was recently pointed up by the heavy rains in the area but the working drawings are not only for the storm drainage facilities but for an extensive list of road work, electrical and lighting work and some landscaping in the critical central area of the campus. *We recommend approval of the working drawings and the limited construction.*

CALIFORNIA STATE COLLEGES

ITEM 340 of the Budget Bill **Capital Outlay Budget page 110**

FOR MAJOR EQUIPMENT, TRUSTEES OF THE CALIFORNIA STATE COLLEGES, FROM THE STATE CONSTRUCTION PROGRAM FUND

RECOMMENDATIONS

Amount budgeted	$3,913,837
Recommended for approval	3,843,834
Recommended for special review	60,000
TOTAL RECOMMENDED REDUCTION	$10,000

ANALYSIS

We pointed out in Item 336 for the University of California that equipment was now being funded on a one-year only availability basis, instead of the previous three-year period for which all capital outlay projects are usually provided. This item proposes the same treatment for the state college system, with which we are in complete accord. The item proposes appropriations on 13 of the campuses for various types of funded projects running from science and engineering buildings to relatively small physical education projects.

Chico

(a) Equip—applied arts building *$91,000*

The Budget Act of 1966 appropriated $126,300 for the remodeling of the applied arts building which was occasioned by the fact that engineering activities were scheduled to be transferred to their own

California State Colleges—Continued

building and the vacated space would have been ideal expansion area for the industrial arts. The new space includes laboratories, workrooms, storage rooms, instrument rooms and offices for 10 faculty and because this is a remodeling of existing space the amount required to equip the space is completely out of proportion to the cost of the remodeling and parallels cannot be drawn as we usually do in connection with equipment for new buildings. *The nature of the curriculum and the types of activities require some fairly extensive equipment. The amount appears to be in line for the purpose and we recommend approval.*

(b) Equip—engineering building ---------- *$284,000*

The Budget Acts of 1961 and 1963 appropriated the total of nearly $2 million for the construction of an engineering building on this campus. The Budget Acts of 1965 and 1966 provided over $370,000 for the first two phases of equipping the building. The present proposal brings this to over $650,000 which represents about 35 percent of the total cost of constructing the building which is fairly average for engineering buildings. *We recommend approval.*

Dominguez Hills

(c) Equip—initial buildings ---------- *$34,000*

The Budget Act of 1964 appropriated over $1,338,000 for the construction of initial facilities plus $127,200 for the first phase of equipping these buildings. The Budget Act of 1966 appropriated $281,500 for the second phase of equipping the initial buildings. It is now proposed to add the third and final complement which should make the program fully operable. *We recommend approval.*

Fullerton

(d) Equip—converted science building, phase II ---------- *$89,000*

In Item 339(w) of this Budget Bill, there is an amount of $93,000 to convert space in the science building which had heretofore been used for nonscience purposes and which is now anticipated to be vacated and be made available for science purposes. The equipment which is almost as costly as the conversion work consists of the numerous items of scientific devices required for laboratory situations. *We recommend approval.*

(e) Equip—engineering ---------- *$187,000*

The development of a new campus almost always involves rotation in which certain activities temporarily occupy certain spaces and are then phased out into other permanent buildings, etc. Item 339(u) of this Budget Bill proposes to appropriate funds for working drawings for an engineering building which probably would not ultimately become available until 1970 at the earliest. In the meantime the campus proposes to move ahead with the beginning of an engineering program by the use of available space in the letters and science building. This will require specialized equipment which ultimately will be moved to the permanent building when it is ready for occupancy. *The amount appears to be reasonable for a beginning program and we recommend approval.*

California State Colleges—Continued

(f) Equip—cafeteria *$59,000*

The Budget Acts of 1964 and 1965 appropriated $1,479,873 for the preparation of working drawings and construction of a cafetria which was to represent the cadre unit for which any future expansion would be funded from nonstate sources. The building will be ready for occupancy soon and it is proposed to provide the movable furnishings and equipment needed to make it operable. This consists largely of chairs and tables, some serving equipment, dishes, etc. *We recommend approval.*

(g) Equip—library and audio-visual buildings *$324,000*

The Budget Acts of 1963 and 1964 appropriated over $4,825,000 for working drawings and construction of a library building which for a number of years would also provide substantial classroom space. The Budget Acts of 1965 and 1966 appropriated over $280,000 for equipping the building which was not anticipated to be fully occupied at once. The final phase of library and classroom equipment is now proposed which appears to be in line with the size and combined use character of the building. *We recommend aproval.*

(h) Equip—converted science building, phase I *$249,000*

The first phase of a major conversion of the science building from nonscience uses was funded by the Budget Act of 1965 which provided $580,000 for the purpose. The Budget Act of 1966 appropriated $234,800 for the first increment of equipment. It is now proposed to equip the spaces upon completion with the second and final increment of the necessary movable scientific equipment. *The amount appears to be in line and we recommend approval.*

(i) Equip—convert science building, phase III *$60,000*

Item 339 (w) of the Budget Bill includes $93,000 for a third phase of converting space from nonscience uses. However, the Budget Act of 1966 appropriated $129,315 for the second phase of conversion and we are not clear as to whether the equipment now proposed is for the second phase or the third one proposed for funding in this bill. *Consequently we recommend that the proposal be placed in the special review category.*

Hayward

(j) Equip—classroom building No. 1 ..... *$210,000*

The Budget Acts of 1964 and 1965 appropriated over $2,580,000 for the preparation of working drawings and construction of a major classroom building on this campus. The building is currently scheduled for completion in January of 1968 and equipment to make it operable would be needed. This proposal is the first of probably two to provide the movable furnishings and equipment which in a single lecture classroom environment are usually not costly in relation to the construction value of the building. *The amount appears to be in line and we recommend approval.*

California State Colleges—Continued

(k) Equip—science building *$88,000*

The science building on this campus was one of the first permanent buildings to be funded and constructed, in fact it was more or less a reproduction of a similar building at San Fernando. A relatively small portion of the building was left in an incomplete condition which was subsequently funded for development as a psychology laboratory area for graduate work. The alterations are scheduled for completion at the end of this calendar year and the equipment necessary to make it operable is required in this budget. *The amount appears to be in line and we recommend approval.*

Humboldt

(l) Equip—art-music building *$156,000*

The Budget Acts of 1964 and 1965 appropriated over $1,450,000 for the working drawings and construction of an art-music building addition on this campus. It is now proposed to provide the movable furnishings and equipment which includes musical instruments, in order to make the building operable. The amount proposed represents about 10 percent of the cost of constructing the project which is quite reasonable for the purpose and reflects the fact that some equipment was available from prior facilities. *We recommend approval.*

Long Beach

(m) Equip—nursing building *$7,000*

The Budget Act of 1966 appropriated $300,000 for working drawings and construction of a small building which was to house the curriculum in professional nursing. It is anticipated that the building will be completed by the end of the budget year at which time equipment would be required to make it operable. *The amount proposed appears to be reasonable and we recommend approval.*

(n) Equip—corporation yard *$12,000*

The Budget Act of 1966 appropriated $300,000 for the construction of the second phase of the corporation yard complex. However, the appropriation was on the basis of the receipt of federal funds for other projects which would release an amount sufficient to accomplish the corporation yard. As of this writing, the federal funds are still anticipated and it is entirely likely that the corporation yard construction will be completed within the budget year making necessary equipment to operate it. *The amount appears to be reasonable for the purpose and we recommend approval.*

Los Angeles

(o) Equip—engineering building *$400,000*

Prior appropriations in the Budget Acts of 1961 and 1963 plus augmentations have provided over $3,425,000 for the working drawings and construction of an engineering facility. Prior appropriations for equipment on two occasions have totaled something over $800,000 which together with this third and last proposal would make a total of $1,200,000, representing about 35 percent of the cost of constructing the facility. This is about average for engineering buildings which are among

California State Colleges—Continued

the most costly to equip. *The amount appears to be in line and we recommend approval.*

Sacramento

(p) Equip—remodeling of existing science buildings *$18,000*

The Budget Act of 1966 appropriated $212,000 for remodeling of the existing science buildings required by the impending completion of the new large science building which would lead to some radical use changes in the existing buildings. The equipment proposed represents a relatively minor cost for the changed uses of the spaces. *We recommend approval.*

(q) Equip—physical education classroom-locker facility *$19,000*

The Budget Act of 1966 appropriated $380,000 for the construction of an addition to the physical education facilities which would provide a single lecture room, eight faculty office stations and expansion of the student locker and shower facilities plus certain auxiliary spaces. The appropriation, however, was made contingent upon the receipt of federal funds for other projects which would release the amount necessary for this project. As of this moment we have no knowledge as to whether a sufficient amount of federal funds has been or will be available but it is our understanding that it is still anticipated. On this basis the proposal to provide for the equipment necessary to make the facility operable appears to be in line. *We recommend approval.*

(r) Equip—science building *$325,000*

The Budget Acts of 1962, 1963 and 1965 collectively appropriated a total of $5,880,000 for the preparation of working drawings and the construction of a five-story and basement science building which will become the largest single structure on the campus with over 194,000 gross square feet. The Budget Act of 1965 also appropriated $135,600 for movable furnishings and equipment requiring long lead times. The Budget Act of 1966 appropriated $949,700 for the second phase of equipping this large building and the current proposal represents the third phase with a final one to follow. The final phase is presently contemplated at about $350,000 which would make a grand total of $1,760,000 representing about 29 percent of the total cost of the building. Historically general science buildings, of which this is an example, have run between 25 and 30 percent for movable furnishings and scientific equipment. *It would appear therefore that the current proposal is in line and we recommend approval.*

San Bernardino

(s) Equip—corporation yard, phase I *$49,000*

The Budget Act of 1966 appropriated $150,000 for the preparation of working drawings and the construction of the first phase of a corporation yard complex which would provide some maintenance shop facilities and both indoor and outdoor storage areas. It is now proposed to provide the various kinds of equipment to make such a facility fully functional which includes hand tools, certain small machine tools, storage racks, etc. *The amount appears to be reasonable and we recommend approval.*

California State Colleges—Continued

(t) Equip—biological science building *$147,000*

The Budget Acts of 1964 and 1965 appropriated a total of $1,743,000 for the preparation of working drawings and construction of a three-story laboratory building. The Budget Act of 1966 appropriated $110,100 for the first phase of equipping this building, particularly for those items requiring long lead times. The present proposal represents a second phase with a third and last to follow probably in the 1969–70 fiscal year. The three phases, including the final one, collectively total about $382,000 which represents less than 22 percent of the construction cost of the building. Biological sciences as a rule do not require the large expensive types of equipment that are found in the physical sciences such as chemistry, physics, etc. And, historically the proposed percentage is close to the average. *Consequently, we recommend approval of the second phase.*

(u) Equip—physical science building *$112,000*

The Budget Acts of 1964 and 1965 appropriated a total of more than $1,798,000 for the preparation of working drawings and construction of a three-story and basement physical sciences facility. The Budget Act of 1966 appropriated $100,400 for the first phase of equipping this building. It is now proposed to provide a second phase with a third to come probably in the 1969–70 fiscal year. The total of these three phases would probably be in excess of $390,000 which collectively would represent less than 22 percent of the total cost of the building which on a historical basis is considerably lower than we have experienced for buildings of this type. This is explained by the fact that for a number of years some of the space will be devoted to purposes other than the physical sciences and ultimately as they are converted additional equipment will be required. *We recommend approval of the proposal.*

San Jose

(v) Equip—science building No. 2, phase I *$486,000*

The description of this proposal is in error in that it should be considered as phase II since a first phase has already been financed.

The Budget Acts of 1961 and 1964 appropriated a total of over $6,200,000 for the construction of a multistory, 300,000-gross-square-foot building for general science laboratory purposes. The Budget Act of 1966 appropriated $740,700 as the first phase of equipping the unit, representing principally those items requiring long lead times for procurement. The second and supposedly final phase is now being proposed which makes a total of over $1,226,000, representing less than 20 percent of the construction cost of the building which is unusually low for this type of structure. Part of the difference may be ascribed to the fact that some items of equipment were available to be moved from other facilities but we believe that the proposal which is described as being final will probably not turn out to be so. While the building is considered a science facility, it should be pointed out that a substantial portion of it is devoted to faculty offices and this may be one of the factors which has produced a low equipment percentage. *In any case the amount appears to be reasonable, and we recommend approval.*

California State Colleges—Continued

Sonoma

(w) Equip—science building *$243,337*

The Budget Acts of 1962 and 1963 appropriated over $3,082,000 for the preparation of working drawings and construction of a three-story science building with a gross area of nearly 100,000 square feet. The Budget Act of 1966 appropriated $508,400 as the first phase of equipping the building taking into account that some equipment would be moved from the temporary facilities. The present proposal is the second and supposedly final phase making a total of over $751,000. This represents almost 25 percent of the cost of constructing the building which is more nearly in line with historical experience in equipping buildings of this type. Actually, the building upon first being put to use will probably not be operated at full capacity and ultimately additional equipment will be required. *The amount appears to be reasonable and we recommend approval.*

(x) Equip—boiler plant *$13,000*

The Budget Acts of 1963 and 1964 together appropriated about $960,000 for the construction of a central boiler and chiller plant for this campus. The basic building was made larger than was initially necessary to permit ultimate expansion by the addition of boilers and chillers. In the interim the excess space was intended to be used for general shop purposes for campus maintenance for which the corporation yard facility will not be a substitute, initially, but an expansion in the variety of crafts required. The Budget Act of 1965 appropriated $7,500 to equip the shops in the boiler plant. It is now proposed to provide additional equipment for the shops and equipment for the boiler plant proper which requires certain kinds of specialized tools, water-testing equipment, etc. *The amount appears to be reasonable and we recommend approval.*

Cal-Poly, San Luis Obispo

(y) Equip—engineering-mathematics building *$228,000*

The Budget Acts of 1965 and 1966 appropriated a total of over $1,677,000 for the construction of a three-story building having about 50,000 square feet of gross area. The term engineering in this instance is somewhat misleading since the building includes none of the conventional engineering laboratories which are so costly to equip. Fundamentally, it provides mathematics classrooms and some drafting areas all of which are to be associated with the engineering curriculum. The proposed equipment is intended as an only phase and represents nearly 14 percent of the cost of the structure. For ordinary classroom purposes this would be high but it must be borne in mind that the classrooms in this case will include special computer equipment and other types of somewhat more costly furnishings than would be found in a conventional lecture classroom environment. *The cost appears to be in line and we recommend approval.*

(z) Equip—relocated track *$5,000*

Item 339(aaaa) of this Budget Bill proposes the relocation of the track and in connection with that item we have made recommendations

California State Colleges—Continued

that it be deferred. The equipment proposed represents relatively minor pieces of athletic field equipment which would be needed for a new facility. We have no dispute with the amount. *However, in view of the earlier recommendation we would recommend that this proposal be deferred.*

(aa) Equip—relocated baseball field *$5,000*

Item 339(bbbb) of this Budget Bill proposes the relocation of the baseball field and in that item we have made recommendations that it be deferred. As in the prior item we have no disagreements with the amount proposed but in connection with the recommendation that the relocation be deferred, *we would also recommend that the equipment be deferred.*

Cal-Poly, Kellogg-Voorhis

(bb) Equip—field laboratories *$13,500*

Item 339 (ffff) of this Budget Bill proposes the construction of certain agricultural and animal husbandry field facilities which we have recommended for approval. The equipment required to make these facilities operable consists of the various types of feeding devices, and small hand devices that would be used throughout the facility. *The amount appears to be reasonable for the purpose and we recommend approval.*

DEPARTMENT OF PARKS AND RECREATION

ITEM 341 of the Budget Bill Budget page 969

FOR GRANTS TO LOCAL AGENCIES FOR RECREATION FROM THE STATE BEACH, PARK, RECREATIONAL AND HISTORICAL FACILITIES FUND

Amount requested	$9,433,868
Estimated to be expended in 1966–67 fiscal year	12,162,465
Decrease (22 percent)	$2,728,597
TOTAL RECOMMENDED REDUCTION	$125,000

Summary of Recommended Reductions

	Amount	Budget Page	Budget Line
Delete Santa Cruz Small Craft Harbor Project. Fund project from Harbors and Watercraft Revolving Fund	$125,000	973	25

ANALYSIS AND RECOMMENDATIONS

The State Beach, Park, Recreational and Historical Facilities Bond Act of 1964 includes $40 million for grants to cities and counties for the acquisition and development of real property for beach and park purposes. The grants are allocated to the counties on the basis of Department of Finance projections of estimated population in 1975. This item requests the appropriation of $9,433,868 for grants for 55 different projects, and compares with $10,964,950 appropriated in 1966 and $7,650,809 in 1965.

Department of Parks and Recreation—Continued

The following table shows an appropriation summary to date for the $40 million available under the local grant program. As of June 30, 1968, there will be an estimated $12,242,158 remaining available for appropriation.

Summary of Local Grant Program

Total amount available for local grants		$40,000,000
Appropriations for grants	$28,149,627	
Appropriations for project review	138,882	
Total appropriations	$28,288,509	
Less estimated savings 1965 grants	—530,667	
Total estimated expenditures	$27,757,842	$27,757,842
Balance as of June 30, 1968 available for appropriation		$12,242,158

The estimated savings of $530,667 from the 1965 grants results almost entirely from a request by one county to withdraw one grant application in favor of another grant, which is included in the 1967–68 budget.

With three years of appropriation under the program, approximately 65 percent of the funds available have been appropriated. There still are 25 counties which have not applied for any of their apportionment of the funds. Most of these counties are in the process of developing a general plan, including a recreation element, which is a requirement of the Bond Act. Counties have until October 1, 1969 to apply for the grants, but as of this time, it is possible that a few counties will not qualify for funds.

Last year the budget included $1,815,000 in Federal Land and Water Conservation Fund grant money which was matched with grant money from the Park Bond Fund. The budget this year provides no Land and Water Conservation Fund money for the local grant projects.

The Governor's Budget proposes a grant of $125,000 to the Santa Cruz Port District to acquire six land acres and 27 water acres to expand the existing small craft harbor. The project also requires federal funds in the form of a Section 107 grant from the Corps of Engineers for dredging and maintenance and a $2 million loan from the Harbors and Watercraft Revolving Fund for development of the boating facilities. The state grant funds would be used primarily for boating development, a single purpose recreation use, and is contrary to the Recreation Bond Act of 1964. Section 5096.27 of the Public Resources Code states that state grant moneys to be used for park acquisition purposes shall " . . . be devoted to multiple recreation purposes, as opposed to restrictive, single interest usage."

The existing Santa Cruz small craft harbor, which is to be enlarged with the above loans and grants, was financed largely by the Department of Harbors and Watercraft and the Corps of Engineers, and has proved to be a popular project. There is a waiting list for berthing facilities. The existing small craft harbor at Santa Cruz was also assisted by a direct appropriation from the General Fund, Item 347 (a) Budget Act of 1960 in the amount of $326,400 for "the state's share of

Department of Parks and Recreation—Continued

a cooperative project for the construction of small craft harbor facilities by the Santa Cruz Port District and the Corps of Engineers." As long as the boaters have their own fund, the General Fund, which must pay for the redemption and interest on the park bonds, should not assist Santa Cruz further in its proposed harbor expansion through a grant of Recreation Bond Fund moneys. This money should go for multipurpose recreation elsewhere in Santa Cruz County.

The cost of the land acquisition should be financed from the Harbors and Watercraft Revolving Fund and we have recommended in the analysis of Item 287 that the Department of Harbors and Watercraft enter into a loan to the Santa Cruz Port District to buy the needed lands.

We recommend that $125,000 for the upper harbor expansion project at Santa Cruz be deleted from this item and that the Santa Cruz Port District fund its acquisition project from the Harbors and Watercraft Revolving Fund.

We recommend approval of the balance of the state grants totaling $9,308,868.

DEPARTMENT OF PARKS AND RECREATION

ITEM 342 of the Budget Bill Budget page 974

FOR REVIEW OF STATE GRANT PROJECTS FROM THE STATE BEACH, PARK, RECREATIONAL AND HISTORICAL FACILITIES FUND

Amount requested	$51,665
Estimated to be expended in 1966–67 fiscal year	50,450
Increase (2.4 percent)	$1,205
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS AND RECOMMENDATION

This item is to finance the project review of local grant projects under the State Beach, Park, Recreational and Historical Facilities Bond Act. The appropriation finances three positions and related expenses in the Division of Recreation, which reviews the local grant requests.

We recommend approval of this item as budgeted.

DEPARTMENT OF PARKS AND RECREATION

ITEM 343 of the Budget Bill C.O. Budget page 323

FOR PROJECT PLANNING, DEPARTMENT OF PARKS AND RECREATION, FROM THE STATE BEACH, PARK, RECREATIONAL AND HISTORICAL FACILITIES FUND

RECOMMENDATIONS

Amount budgeted	$137,541
Recommended for approval	137,541
TOTAL RECOMMENDED REDUCTION	None

Department of Parks and Recreation—Continued

ANALYSIS AND RECOMMENDATIONS

The State Beach, Park, Recreational and Historical Facilities Bond Act of 1964 includes $85 million for the acquisition of real property for the State Park System and $20 million for the minimum development of the real property acquired with the bond funds. This item finances about 10 planning positions in the Division of Beaches and Parks as a result of the added workload of the bond program. Most of the funds will be spent for minimum development project planning. The Governor's Budget as originally presented to the Legislature does not request any appropriations for acquisition or minimum development projects with bond funds for the state park system but preparations for future development projects should continue.

The following table shows an appropriation summary to date for the $105 million available to the Department of Parks and Recreation for acquisition and development projects under the bond program. As of June 30, 1968, there will be an estimated $8,937,601 remaining available for appropriation for acquisition and $15,694,032 remaining available for appropriation for minimum development.

Appropriation of Bond Funds for State Park System

Program	Allocated in Bond Act	Appropriated 1965–66	Appropriated 1966–67	Proposed appropriation 1967–68	Balance Remaining *
Acquisition	$85,000,000	$40,784,658	$35,243,356	$34,385	$8,937,601
Minimum development	20,000,000	30,700	4,172,112	103,156	15,694,032
	$105,000,000	$40,815,358	$39,415,468	$137,541	$24,631,633

* Estimated.

This request is in line with the workload involved on these bond projects and we recommend approval of the item as budgeted.

Department of Fish and Game
WILDLIFE CONSERVATION BOARD

ITEM 344 of the Budget Bill Capital Outlay Budget page 308

FOR PROJECT ASSISTANCE, WILDLIFE CONSERVATION BOARD, FROM STATE BEACH, PARK, RECREATIONAL AND HISTORICAL FACILITIES FUND

RECOMMENDATIONS

Amount budgeted	$6,258
Recommended for approval	6,258
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS AND RECOMMENDATIONS

The State Beach, Park, Recreational and Historical Facilities Bond Act of 1964 includes $5 million for the acquisition and development of real property for wildlife management by the Wildlife Conservation Board. This item finances a position on the board's staff as a result of the added workload of the bond program. The board is not requesting construction funds this year.

The following table gives an appropriation summary to date for the $5 million available under the bond program. As of June 30, 1968, there will be an estimated $2,397,711 remaining available for appropriation.

Department of Fish and Game—Continued

Summary of Wildlife Conservation Board Bond Program

Total amount available for the board			$5,000,000
Less Budget Act appropriations:			
	1965	$980,000	
	1966	1,616,031	
	1967	6,258	
		$2,602,289	2,602,289
Balance as of June 30, 1968 available for appropriation			$2,397,711

With prior year appropriations, the board has financed the construction of the Fillmore Fish Hatchery in Ventura County and the American River Hatchery at Nimbus Dam near Sacramento. These two hatcheries are scheduled to begin operations during the budget year. Also with bond funds, the board has constructed some artificial reefs on the southern California coast and has purchased some additional lands for wildlife management areas.

At the present time the board is studying the feasibility of a hatchery near Bishop and plans the construction of the Mad River Hatchery and the Warm Water Hatchery in Imperial County, utilizing the balance of bond funds available.

We recommend approval of this item as budgeted.

UNALLOCATED

ITEM 345 of the Budget Bill Capital Outlay Budget page 222

FOR PROJECT PLANNING TO BE ALLOCATED BY THE DEPARTMENT OF FINANCE FROM THE STATE BEACH, PARK, RECREATIONAL AND HISTORICAL FACILITIES FUND

RECOMMENDATIONS

Amount budgeted	$50,000
Recommended for approval	None
Recommended for special review	50,000
TOTAL RECOMMENDED REDUCTION	None

ANALYSIS

Section 5096.15 of the Public Resources Code, sets forth the division of the $150 million special bond issue which was approved by the voters in 1964, for park and recreational facilities. It will be recalled that the division was $85 million for the state park system for acquisition of real property, $20 million for minimum development for state park system acquisitions from the amount immediately preceding, $5 million for acquisition and development as part of the wildlife conservation effort and $40 million for grants to cities and counties for acquisition and development of beach and park facilities.

In order that the various proposals which are to be put before the Legislature in each succeeding budget from these funds be properly supported this item proposes project planning which in effect is preliminary planning in much the same way as preliminary plan funds are provided for most other state capital outlay projects.

Unallocated—Continued

The Budget Act of 1965 provided $100,000 for this purpose, the Budget Act of 1966 provided $150,000 and the current proposal of $50,000 would seem to be reasonable on the face of it. However, with no clear-cut program for incremental expenditure of the remaining funds it is difficult to find a rational basis for the proposed amount. At least, as of this writing, we have no material upon which an evaluation could be based. *Consequently, we recommend that the proposal be placed in the category of special review.*