# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 288

April 13, 1966

A meeting of the Campus Planning Committee was held at 10 a.m. on April 13, 1966, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky and Chairman M. L. Pennington. Others present were Miss Evelyn Clewell, Miss Jerry Kirkwood, Mr. O. R. Downing, Mr. John G. Taylor and Mr. Howard Schmidt. Mr. Barrick was out of town.

There have been a number of telephone conversations, discussions and studies of various items since the last meeting and there has been no opportunity to formally record the results. Consequently, each topic will be summarized as it was reviewed at the CPC meeting.

### 3252. Behavorial Sciences Center

A great deal of study has been devoted to the project and the results are quite exciting.

In the past decade, Texas Tech has developed a comprehensive and multi-disciplinary training program in the behavorial sciences. The composite program cuts across the offerings of three schools: Arts and Sciences, Home Economics and Engineering. Established graduate programs are in operation in Special Education, Sociology, Psychology, Speech and Hearing, Industrial Bio-Engineering, Applied Arts, Home Management, Clothing and Textiles, and Food and Nutrition.

Much interest has been expressed by local, state and Federal agencies and funds are available from many sources. It is believed that 75 percent of the funds for a \$2 million building and the equipment are available from the Federal sources. The other \$500,000 would have to come from nonfederal sources but it looks as if all or a good portion could come from various foundations and gifts and grants. Any remainder would come from Constitutional Building Amendment Funds.

The idea is favored by Drs. Goodwin, Murray and Pearce and representatives of the schools and departments. There is no similar facility anywhere near Lubbock and it could be of much aid to the academic program, the multi-handicapped and a medical school.

The Hogg Foundation has provided funds for study.

Dr. Beatrix Cobb of the Psychology Department is serving as the overall Coordinator.

Before proceeding further, the members of the Building Committee were asked for their blessings. Mr. Hinn, on Apirl 11, 1966, and Mr. Allen and Mr. Cash, on April 12, 1966, endorsed the continuation of the study with the cost and all other aspects to be explored.

# 3253. <u>Campus Planning Committee Coordinator</u>

It has become increasingly difficult to provide all that needs to be done in connection with the building program through the Campus Planning Committee.

Miss Jerry Kirkwood, who has been a member of the staff of the Supervising Architect, has agreed to serve as Coordinator to expedite the building program which is scheduled to assume very large portions in short order.

The new office is to be implemented as soon as possible from appropriated funds for planning.

# 3254. Classrooms and Office Buildings (Temporary)

Further study has indicated that buildings are available at Sheppard Air Force Base and at no closer location.

The cost for moving is estimated by Mr. O. R. Downing and his staff at \$5,200 each plus acquisition costs. Mr. Sam G. Wynn, Regional Property Coordinator for the Department of Health, Education, and Welfare, said that the buildings are available to Texas Tech at 5 percent of fair value, which is set at \$1.00 per square foot, or a cost of 5¢ per square foot.

An inspection party visited the site the day after the Building Committee meeting (March 31, 1966), and reported that only one one-story building is available but there are nine two-story buildings, all complete with plumbing, heating and wiring. There are many other two-story buildings available without plumbing, heating, and wiring. All are in reasonably good condition and the lumber is reported to be better than new material. Pictures were taken of the buildings.

The two-story buildings can be cut in half and only the upper story used. The first story is on a concrete slab and the remainder of the lower portion will be disposed of by the General Services Administration.

A copy of Mr. Taylor's reports of April 1 and 5, 1966, are attached to and made a part of the Minutes. (Attachment No. 630, page 1947)

Miss Clewell had mentioned that additional buildings could be needed but her study was not quite complete.

The Building Committee was polled and the acquisition of Building No. 739 and Buildings Nos. 620 through 627 and 637 and possibly two more, if Miss Clewell's study indicated the necessity.

Mr. Hinn approved on April 11, 1966, and Mr. Allen and Mr. Cash approved on April 12, 1966, with the stipulation that the acquisition is a matter of economics and not beauty, and if the buildings are in such condition that they can't be moved in the future it would be better to build new ones.

On April 12, 1966, Miss Clewell reported that her space study for the fall has just been completed and two additional buildings will be necessary, one probably for the Law School.

Mr. Taylor estimated the cost as follows on April 13, 1966:

1 only - Building No. 739, 1,828 sq. ft. @ 5¢ \$ 91.40

11 only - Buildings Nos. 620-627, inclusive, Nos. 637, 720 and 721 @ 2,360 sq. ft. each at  $5\phi = $118 \times 11$ 

1,298.00

Total Acquisition Cost

\$1,389.40

Moving and Rehabilitation 12 @ \$5,200 Estimated Total Cost

62,400.00 \$63,789.40

The CPC agged to request 12 buildings in keeping with Building Committee action and the need as expressed by Miss Clewell.

The Chairman is to officially request the 12 buildings from DHEW, including the duct work, heating fixtures and equipment in the lower floors of nine of the buildings, including the water heaters, 500-gallon storage tanks, bathroom fixtures, etc. Mr. Taylor is to request the detailed plans and specifications. Mr. Downing and his staff will take the steps to get the buildings removed and installed

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# 3254. Classrooms and Office Buildings (Temporary) (continued)

on campus. Mr. Urbanovsky, Dr. Kitchen, Miss Clewell and anyone else needed will make a site study and recommendation as soon as possible. Mr. Downing will prepare the time schedule. The adaptation of the buildings must be prepared.

# 3255. Consulting Architect

At the meeting with the Building Committee on March 31, 1966, the CPC reported that only the major item of exterior design development and a few minor items remained to be clarified.

Since then, several additional drafts of the division of responsibility between the Consulting Architect and the project architects, the contract and the flow chart have been studied and refined.

There are three distinct areas or phases of work for the Consulting Architect:

# A. New Projects

This is the most important area at the present time and the easiest in which to arrive at an equitable remuneration. The remuneration would be 1 percent of the project cost (which will be defined) and will come from the 6 percent fee for architectural services. The Project Architect will receive the remaining 5 percent for his work.

The Consulting Architect will receive 90 percent of the 1 percent at the completion of the programming and schematic planning phase and the remaining 10 percent of the 1 percent when the project is accepted.

The contract will be prepared and presented for approval as soon as possible. It will contain both a termination clause and a term, probably two years. It could contain a renewal clause. A copy probably should be filed with the Department of Housing and Urban Development (DHUD, formerly HHFA). A copy of the last draft of the Division of Responsibility is attached to and made a part of the Minutes. (Attachment No. 631, page 1948)

The programming of needs will be a most vital function as maximum efficiency and economies must be obtained in order to stretch the funds available as far as possible. The tentative needs for the projects listed could require just about all funds in sight. The Consulting Architect will be required to justify all of his recommendations to the CPC and it will be especially important as the first procedures are established. Not only must maximum utilization be made of each square foot of floor space but flexibility, future growth, overall college needs and all other aspects of good programming must be observed.

The programming and planning phase will include the application for matching funds and information needed for financing.

It is the plan to file as many applications for matching funds as possible by the July 1, 1966, closing date.

The plans call for the project architects to enter the picture fairly early and some thought must be given to the selection of project architects very soon.

Specific action will be required to assign a project to the Consulting Architect as it will entail expenditure of funds and no project should be programmed unless there is an intent to build it.

# 3255. Consulting Architect (continued)

#### B. Coordination

There is a need for coordination of the projects now under way and each is at a different stage of development.

For example, the completion of the basement and third floor of the Library is probably half finished, the Foreign Languages-Mathematics Building is coming out of the ground, the Business Administration Building is in final working drawings, the Biology Building is in preliminary plans, the Museum is in final working drawings and the final working drawings for the residence halls will be completed within a week or so.

Compensation can be established by several means but each is a bit difficult without further study. The Consulting Architect could keep a record of his time, set a cost figure and use the accepted means of application to arrive at a charge. The method would cause much record-keeping and he will be required to almost flit from one phase to the other. He could be paid a retainer and charge for work over and above that amount or it could all be done on a retainer.

Due to the nebulous nature of this phase at the moment, and the need to study it further, it seemed best to pass it until a solution can be reached, but it must be reconsidered as soon as feasible.

#### C. Long-Range Planning

This phase is in the same situation as the coordnation work.

After a very great deal of checking and discussion, the above recommendations were made to the Building Committee by phone. Mr. Hinn approved on April 11, 1966, and Mr. Allen and Mr. Cash on April 12, 1966.

In order to move as rapidly as possible, in keeping with Building Committee action as authorized by the Board, Mr. Howard Schmidt was notified of the approval.

There should be specific action to place a project in line for programming by the Consulting Architect, and Mr. Schmidt was asked to program the Home Economics project as his first assignment. He was introduced to Dean Tinsley the same day and began work.

Dean Willa Vaughn Tinsley had been asked for a faculty committee and her recommendations, in addition to herself, were Dr. Mina Lamb, Dr. Bill Lockhart and Mrs. Jean Davidson.

Remodeling will be necessary in the old portion and it should be a part of the overall project. Some study should be given to the request for funds from the Legislature at the next session for Major Improvements and Repairs if the time schedule will permit.

# 3256. <u>Museum</u>

The project is in the working drawings stage, as authorized, and moving very well. The final plans are to be presented to the Board at the meeting on May 28, 1966.

# 3256. Museum (continued)

There is some question of the accuracy of the 36,000 sq. ft. which are to be supplied by the College and the architects are to make a detailed analysis.

A contract with the architects is to be presented in time for approval at the next meeting of the Board of Directors.

M. L. Pennington Chairman

The meeting adjourned at 12:40 p.m.

Campus Planning Committee April 13, 1966 Attachment 630 Item No. 3254

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

Office of the Business Manager

April 1, 1966

#### Temporary Buildings

Mr. Ray Downing, Mr. Pat Munn, Mr. Bill Felty and Mr. John Taylor made a trip to Sheppard Air Force Base, Wichita Falls, Texas, Friday, April 1, 1966, to inspect some surplus buildings which the College might be able to use.

The group met with Mr. Lawrence D. Wilkins, Civil Engineering Group, Building 1503, Sheppard Air Force Base, and made an inspection tour.

Mr. Wilkins' telephone number is Area Code 817 815-2025.

Following is a description of the buildings the College can purchase:

- 15 Two-story frame barricks, 29' 6" x 80' 2" inside, all plumbing and most of wiring removed, no insulation, exposed studs but all walls and ceilings painted, sheetrock ceiling, asphalt tile floor in real good condition, practically new roof, siding needs some painting. Building Numbers 720-728 and 730-737.
- 1 One-story frame building, 3 rooms 72' 6" x 25' plywood on inside walls, good to fair condition. Building No. 739.
- 9 Two-story frame barricks, 29' 6" x 80' 2" inside, all plumbing, wiring, fixtures, duct work still in place, utilities still connected, wood floors, real good shape, good roof. Plumbing includes hot air furnace and duct work, hot water heater, hot water storage tanks about 500 gallon capacity, and all bathroom fixtures. Buildings No. 620-627 and 637.

Mr. Felty took some good pictures which are attached.

Mr. Wilkins recommends that the lower floor be removed and only the upper portion of the building be moved. This makes an ideal one-story building. Mr. Downing and Mr. Munn think he is probably right. The height of the two-story buildings would be a problem in moving to Lubbock, though it could be done. Mr. Downing and Mr. Munn say there would not be much salvage from the lower floor.

The group was informed that DHEW has advertised these buildings twice without receiving any bids. The site is designated for future permanent-type barricks. The present war has delayed the new construction. Mr. Wilkins said the government has been getting 5 percent of the valuation but we might get these buildings for less since no one else wants them. He thinks we would not have to pay much more, and maybe no more, for the nine buildings with all the plumbing and fixtures.

Mr. Downing and Mr. Munn have made a rough estimate that we might be able to get these buildings to Lubbock and fix them up for \$5,000 each. If it works out this way, maybe we should purchase more than the 10 buildings.

A Mr. Don Purdy in Wichita Falls has bought some of the barricks and Mr. Wilkins suggested that we call him to see what he has been paying to get them removed, though Mr. Wilkins wasn't sure that Mr. Purdy had his buildings removed. He may have torn them down. I called Mr. Purdy but got no answer. His number is 767-0567. There is another Purdy in the telephone book. His number is 723-0194.

There is only one house mover listed in the Wichita Falls telephone directory. Mr. Wilkins didn't know of any. I called the number of J. M. (Red) Adkins, House Mover, and talked with his wife. She said he was out and gave me a number where I could reach him. Mr. Adkins was not at that number so, before the group left town, I called again and no answer.

Returned to Lubbock.

Mr. Downing and Mr. Munn will check with movers in this area and get an estimate on moving costs.

It is recommended that Mr. Adkins be contacted by telephone to see if he can handle the barricks and see if he would like to bid the job, should we decide to take the buildings.

The group feels that the buildings are in good shape and if we can get them at a reasonable price and there are no other surplus buildings as good and closer to Lubbock, we should purchase some of the buildings at Sheppard Air Force Base.

> John G. Taylor Business Manager

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

Office of the Business Manager

April 5, 1966

# Temporary Buildings

Mr. Downing and I recommend that DHEW be contacted and told that the College is interested in the following buildings at Sheppard Air Force Base, Wichita Falls, Texas, if there are none as good closer to Lubbock:

- 1 One-story frame building, approximately 72' 6" x 25'. Building Number 739.
- 9 Two-story frame barricks, 29' 6" x 80' 2" inside, with all plumbing, heating and wiring included. Buildings Number 620 through 627 and 637.

If the price is right, we recommend that we acquire one or two of the 2-story barricks, same size, but without any plumbing, heating or wiring. These buildings are numbers 720 through 728 and 730 through 737.

The DHEW probably has an established valuation on the buildings, but should they ask the College to give them a bid--We recommend that it be \$100 or less per building. We know the government will eventually have to tear them down and salvage the material, or something, as they have not been able to secure any bids on two different occasions.

Mr. Downing says that the local movers say they think they can move the buildings after they are reduced to one-story buildings for approximately \$1,200 each. They will have to survey the route, get the weight of the buildings, and some other information before making us a firm bid. The movers say the biggest problem they will have is getting the necessary moving permit. Ray suggested that I talk with Mr. Oscar Crane. I did, and Mr. Crane said that the Highway Department would have to issue the permit to the mover and not to the College, but he sounded like he would cooperate. He mentioned that a permit would be needed for the Wichita Falls area, but maybe he could get them to let him issue one permit here for the entire haul.

After doing some more checking on costs and including the estimated cost of \$1,200 for moving each building, Ray said he would like to change his estimate for fixing up each building, ready for use, to \$5,200 plus what we have to pay for the building. He said his rough estimate of \$5,000 he made in Wichita Falls did not include the amount we would pay the government for the buildings.

John G. Taylor Business Manager

Campus Planning Committee April 13, 1966 Attachment No. 631 Item No. 3255A

# CONSULTING ARCHITECT - PROJECT ARCHITECT DIVISION OF RESPONSIBILITY FOR WORK TO BE PERFORMED

# RESPONSIBILITY

	CONSULTING ARCHITECT	PROJECT ARCHITECT
PROGRAMMING AND SCHEMATIC PLANNING		
Conferences with Department Heads and Faculty These conferences with the "Campus Building Committee" lay the ground work for the programming. Quite a number of conferences are contemplated throughout the entire programming phase	Major Responsibility	No Responsibility
Analysis of Project Requirements Consulting Architect's analysis to determine if the needs requested by the Building Committee actually exist and are justifiable requests to supplement the existing facilities during the specified expansion periods as authorized by the administration of the college	Major Responsibility	No Responsibility
Building Code Information Consulting Architect after reviewing the project requirements must investigate what elements of the Lubbock Building Code should be used in determining the number of exits, corridor widths, stairs, etc. based on the volume of square footage being planned either new or in an addition to a facility. (Although the College is not required to meet the local building code, the Department of Housing and Urban Development and other Federal Agencies always require that the local codes be met.)	Major Responsibility	No Responsibility
Diagramatic Studies of Space Requirements Consulting Architect begins his program on paper by "single-line" layouts showing the relationship of one area to another. Example: Offices near or separated from laboratories, auditorium positioning in the total complex, egress and ingress to other facilities on the campus, etc.	Major Responsibility	Minor Responsibility
Assembling of Utility and Service Data A study should be made by the Consulting Architect at this point to determine the available utility tunnel, electrical and sewage locations and begin to tie them into the project. Also at this point, Consulting Architect should be giving seri- ous consideration to such things as trash disposal and service drives.	Major Responsibility	No Responsibility

CONSULTING ARCHITECT

PROJECT ARCHITECT

Schematic Studies and a Recommended Solution Major Consulting Architect refines in more detail Responsibility Responsibility the earlier diagramatic studies and offers a recommended suggestion(s). At this point the Project Architect sits in on the studies periodically to offer advice and to begin getting the "feel" of the intended facility.

Minor

General Project Description and Suggested

Finish Schedule

At this point the Consulting Architect presents to the Owner a design analysis as was prepared on the recent dormitory project which also includes a suggested finish schedule. This document would accompany the schematic plan studies.

Minor Major

Responsibility Responsibility

Statement of Probable Construction Cost Based on Area or Volume

This construction cost estimate could be included in the design analysis mentioned above, and the Project Architect should contribute his thinking in establishing the estimate.

Major

Minor

Responsibility Responsibility

Reviews with Campus Planning Committee Formal presentation of the completed programming to the Campus Planning Committee.

Major Responsibility Responsibility

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Presentation to Board of Directors Formal presentation of the programming as approved and recommended by the Campus Planning Committee to the Board of Directors of the College.

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Minor

Responsibility Responsibility

Application for Matching Funds if Desired Consulting Architect will prepare the necessary schematics to accompany the application to the Federal Agency.

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No

Responsibility Responsibility

DESIGN DEVELOPMENT AND CONTRACT DOCUMENTS (EXTERIOR DESIGN, WORKING DRAWINGS & SPECIFICATIONS)

Conferences with Owner These are the necessary conferences needed for detailed information required to prepare the working drawings. Conferences with any administrator or faculty member at Texas Tech should be called for by the Consulting Architect and the Project Architect will be in attendence.

Minor

Responsibility Responsibility

Refinement of Project Requirements and Exterior Design Studies

Project Architect at this point develops the schematic drawings into more detail studies in preparation for the working drawings along with exterior design studies to be presented to the Consulting Architect and the Campus Planning Committee.

Major

Responsibility Responsibility

	CONSULTING ARCHITECT	PROJECT ARCHITECT
Formulation of Structural System  Project Architect determines the structural system to be used and how it relates to the architectural and mechanical systems of the building.	Minor Responsibility	Major Responsibility
Formulation of Mechanical and Electrical Systems  The Project Architect determines the mechanical and electrical systems desired in order to incorporate them in the working drawings and specifications.	Minor Responsibility	Major Responsibility
Selection of Major Building Materials and Equipment The Project Architect determines what will be used for the exterior walls and interior partitions as well as floor, and wall and ceiling materials to incorporate into his working drawings and specifications.	Minor Responsibility	Major Responsibility
Further Statement of Probable Construction Cost Since materials and systems have been selected at this point, it is possible to make a more detailed cost estimate.	Minor Responsibility	Major Responsibility
Presentation to Campus Planning Committee A review at this point of the exterior design, systems and materials recommended prior to Board review.	Minor Responsibility	Major Responsibility
Presentation to the Board of Directors Presentation of the exterior design, systems and materials recommended to secure approval to begin working drawings.	Minor Responsibility	Major Responsibility
Preparation of Design Development Documents A. Working Drawing Floor Plans	No Samuraibility	Major
B. Working Drawing Elevations	Responsibility No Responsibility	Responsibility Major Responsibility
C. Working Drawing Wall Sections	No Responsibility	Major Responsibility
D. Specifications for Bidding Purposes	Minor Responsibility	Major Responsibility
E. Working Drawings of Electrical Layouts, Mechanical Layouts, & Structural Systems	Minor Responsibility	Major Responsibility
The completed working drawings are reviewed by the Campus Building Committee to see that their needs have been provided. These meetings are called for by the Consulting Architect. The presentation	Minor Responsibility	Major Responsibility
will be made by the Project Architect. Review of Check Sets	Major	Minor
	Responsibility	Responsibility

CONSULTING ARCHITECT

PROJECT ARCHITECT

Presentation to Campus Planning Committee Project Architect presents the detailed plans and specifications to the Campus Planning Committee for approval.

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Presentation to Board of Directors Project Architect presents the final working drawings and specifications to the Board of Directors for approval prior to issuing the plans for bidding.

Minor Major Responsibility

Responsibility

Presentation of Design Development Documents (Working Drawings and Specifications) to the Responsibility Responsibility Owner

Official sets of plans and specifications are placed on file on campus at the designated locations.

Minor Major

# BIDDING AND CONSTRUCTION PERIOD

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Receipt of Bids Project Architect will issue all addenda during bidding period as has been true in the past and will prepare the bid tabulations for the selected bid opening date. The Consulting Architect will be present

Major Responsibility Responsibility

for the bid opening and for an analysis of the contract amounts, alternates, etc. Review of Bids by the Campus Planning

Committee Project Architect and Consulting Architect will jointly make recommendations to the Campus Planning Committee for their approval.

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Responsibility Responsibility

Approval by the Board of Directors Campus Planning Committee's recommendation Responsibility Responsibility is approved by the Board of Directors in meeting or by the telephone prior to awarding of the contracts.

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Awarding Contracts Project Architect will prepare the contracts with the assistance, if requested, of the Consulting Architect on forms previously approved by the Owner.

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Responsibility Responsibility

On-Site Supervision Periodic observation of the construction by the Project Architect's representative and Clerk-of-the-Works if determined necessary for the project.

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Major Responsibility Responsibility

Reviews with Clerk-of-the-Works From time to time the Project Architect should have a review on the job with the Clerk-of-the-Works to check the progress, time schedule, faulty work, etc. The Consulting Architect should be included in these conferences.

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Responsibility Responsibility

CONSULTING ARCHITECT

PROJECT ARCHITECT

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Change Orders

It should be the duty of the Project Architect to handle all change orders that might develop during the construction period. These should be presented to the Consulting Architect for his review and if all is found to be in order, the Consulting Architect should recommend action to the Campus Planning Committee.

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Responsibility Responsibility

Shop Drawings

Throughout the construction period the different manufacturers of material and equipment that go into the project provide (as specified) their own detailed shop drawings for approval before the item is manufactured or delivered. These will be approved by the Project Architect. The Consulting Architect will from time to time in his reviews with the Clerk-ofthe-Works keep vigilence on the time schedule of the shop drawings, and if Project Architect is not correcting and approving shop drawings on a reasonable schedule, he should be informed to make corrections and keep the project on schedule for the best interests of the Owner.

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Major Responsibility Responsibility

Substitutions

From time to time a contractor will desire to offer a substitution for a particular item that is going to be used in the building. It is the Project Architect's responsibility to review substitutions to see whether they are equal to that specified. The Consulting Architect should review the Project Architect's analysis, and when appropriate and in order, he should so advise the Campus Planning Committee.

Responsibility Responsibility

Monthly Certificates of Payment Each month the contractor will submit to the Project Architect his monthly certificate in order to receive payment. It is the Project Architect's responsibility to check it for accuracy. It should then be sent to the Consulting Architect for processing with the Owner. The

Consulting Architect should also check it prior to the transmittal to the proper administrative official.

Final Inspection

It is the Project Architect's responsibility to make numerous pre-final inspections to inform the contractor what areas of the work are not yet acceptable. When it appears ready for final inspection by the Owner, the Consulting Architect should make an inspection to check it against the requirements of the program and the quality of the work. After the Consulting Architect's inspection if he feels it is ready for the Owner's acceptance he will.

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Responsibility Responsibility

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Responsibility Responsibility

CONSULTING ARCHITECT PROJECT ARCHITECT

so inform the Campus Planning Committee who is turn will tour the building if it is desired. It should be the Consulting Architect's responsibility also to advise the Owner when personnel of the Building Maintenance and Grounds Maintenance Departments should also visit the site.

As-Built Reproducibles

As required by contract, the Project Architect is to furnish reproducibles (documents that can be printed time and again) of the working drawings which have been altered to bring up to date any change orders or other changes that occurred during the construction period. These reproducibles are then placed on file with the Owner and can be referred to from time to time if additional work is done at a later date within the new building, or if an addition is planned for the building. Building Maintenance makes good use of these reproducibles on through the years as they prepare damaged or obsolete equipment particularly with respect to mechanical equipment in the buildings. These reproducibles should be furnished to the Consulting Architect when ready, and if acceptable, he shall see that they are placed on file with the Owner.

Minor Major Responsibility Responsibility

Year-End Inspection

Project Architect and Consulting
Architect should make an inspection
approximately one year after the Owner
has occupied the building, and the Project
Architect should require the contractor to
repair or replace any item found to be unsatisfactory according to original
specifications. When these corrections
are made, the Consulting Architect should
so advise the Campus Planning Committee
and a tour of the building at that time
by designated personnel might be made at
the decision of the Campus Planning
Committee.

Minor Responsibilty Major Responsibility

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 289

April 20, 1966

A meeting of the Campus Planning Committee was held at 2 p.m. on April 20, 1966, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. Other members of the college staff present were Miss Evelyn Clewell, Miss Jerry Kirkwood, Mr. John G. Taylor, and Mr. O. R. Downing. In addition, Mr. Howard Schmidt, consulting architect, was present.

# 3257. Approval of Minutes

On motion by Mr. Barrick, seconded by Mr. Urbanovsky, the Minutes of Meetings Nos. 284, 285, 286 and 287 were approved.

# 3258. President's Approval of Minutes

President Goodwin approved the Minutes of Meetings Nos. 284 and 285 on April 5, 1966, and Nos. 286 and 287 on April 13, 1966.

# 3259. Agricultural Facilities (CPC No. 93-64)

# Horse Facilities (\$59,000)

The project is complete with the exception of the paving which will be finished next week.

# 3260. Athletics

It was the thought that the information is not yet available.

# 3261. Biology Building (CPC No. 99-65) (Pierce & Pierce)

# A. Preliminary Plans and Specifications

According to a letter from Mr. Felty, under the date of April 16, 1966, Pierce & Pierce want to present the preliminary plans and specifications to the Campus Planning Committee on May 16, 1966, and make the presentation to the Board of Directors at the meeting on May 28, 1966.

The CPC accepted the schedule.

In view of the available funds, some thought was expressed that it could be necessary to reduce the overall scope.

# B. Architect's Contract

The final contract has been prepared and will be submitted to the Chairman of the Board of Directors for signature at the meeting this weekend.

# C. Visit

Dr. Charles G. Bridges, Program Specialist, U. S. Office of Education, Washington, D. C., and Dr. Robert W. MacVicar, Academic Vice President of Southern Illinois University, Carbondale, Ill., and a consultant or a member of the Committee for the USOE, visited the campus on April 14, 1966, along with Dr. Q. S. Mathews, Regional Representative, Bureau of Higher Education, Department of Health, Education, and Welfare, Dallas, Texas.

All of the requested information was presented and the meeting was felt to be very helpful to Texas Tech.

# 3261. Biology Building (CPC No. 99-65) (Pierce & Pierce)

# D. Financing

Dr. MacVicar suggested that the better procedure for financing the project would be to seek aid for the undergraduate facilities from Title I, and for the graduate facilities from Title II. He felt that it would be to the advantage of the College to go the Title II route rather than the National Science Foundation.

He suggested that the equipment be requested from the National Science Foundation.

# 3262. Behavioral Sciences Training and Research Center

Dr. Beatrix Cobb is continuing with the development of the plans for the project.

# 3263. Business Administration Building

#### Matching Funds

Attached is a letter dated April 6, 1966, from Mr. Kenneth H. Ashworth, Chief of College Construction Grant Section, Department of Health, Education, and Welfare, in which he states that a tentative reservation of funds for the project has been made but the reservation is subject to review and revision at a later date. A copy of the letter is attached to and made a part of the Minutes. (Attachment No. 632, page 1955)

#### Plans and Specifications

The architects are on schedule and will have representatives on campus next Monday and Tuesday with the large scale equipment layouts for discussion with the Faculty Committee.

A feeler had been extended for rugs and drapes in some sections of the project, but the CPC was not entirely clear as to just where the rugs and drapes were requested. The consensus was that a very careful look would have to be taken for such installations in view of the overall advantages and costs of installation, maintenance, and replacement. More information will be obtained at the meeting on Monday.

# 3264. Chemistry Research Building (CPC No. 87-64) (Pitts, Mebane, Phelps & White)

# Architects

It was agreed that some indication of the amount of credit from the firm of Pitts, Mebane, Phelps & White should be received before the contract is extended for the expanded building.

At this point, the project has not been through the usual steps of programming and justification and it should be started as soon as possible.

The Chemistry project would be one of the coordinating items for the consulting architect.

# 3265. Classrooms and Offices (Temporary) (CPC No. 102-65)

A request had been made to the Department of Health, Education, and Welfare for the 12 buildings indicated in Item 3254, Meeting No. 288, April 13, 1966.

During the meeting Sgt. C. A. Lewis of the base procurement office at Sheppard called and said that some of the buildings had been sold that morning and offered substitutes. Arrangements were made for an inspection party to go to Sheppard Air Force Base the next day to physically view the proposed substitutes.

1951

# 3266. Campus Planning Committee Coordinator

Miss Kirkwood is in the process of assuming the duties.

# 3267. Constitutional Building Amendment

The Coordinating Board has supplied the information on estimated enrollment and space utilization to the Comptroller, and the official request has been made of the Attorney General for clarification of the allocation of the ad valorem tax among the 17 schools. A copy of the information from the Coordinating Board is attached to and made a part of the Minutes. (Attachment No. 633, page 1956)

Bond Sale - The sale of the bonds is tentatively scheduled for June 7, 1966, in Austin at 10 a.m. in the House Chamber. It will be necessary for all of the Governing Boards to have a quorum present in order that the actual sale may be consummated. The State Comptroller will open the bids, and the Bond Counsel and the Financial Adviser will be present to help with the interpretation of bids and the award.

In view of the information approved by the Coordinating Board on the preceding Monday, Mr. Price had made a quick, tentative estimate of the amount of funds available to Texas Tech. The estimated amount of funds was disappointing.

Mr. Price is to made a revised estimate as soon as he can secure additional information from Austin.

# 3268. Consulting Architect

In keeping with past procedures, the Board will wish to ratify the action of the Building Committee in approving the Consulting Architect System for new construction.

It will be essential to draft a contract as soon as possible. The coordination and long-range planning phases will be implemented at the first opportunity.

# 3269. Engineering Survey

It seems to be progressing on schedule.

# 3270. Foreign Languages-Mathematics Building (CPC No. 87-64) (Pitts, Mebane, Phelps, & White)

#### Construction

The construction is proceeding satisfactorily.

# Utilities

The firm of Zumwalt & Vinther has been notified to proceed with the preparation of plans and specifications to get the utilities to the project and an amendment will be made to the contract.

# 3271. Housing

### A. On-Campus

#### 1. Constract Award

Final plans and specifications are scheduled to go out on April 28, 1966.

# 3271. Housing

# A. On-Campus (continued)

# 2. Financing

As shown in past Minutes, no financing is available at the moment, but attempts are being made by DHUD (formerly HHFA) to help with the financing and a meeting is scheduled in Fort Worth on Thursday, April 21, 1966, in an attempt to determine a feasible means of financing to follow. The situation has been mentioned in previous Minutes.

# 3. Decorator

It was agreed to make explorations for a suitable person.

#### 4. Clerk of the Works

The architects will recommend a clerk of the works to the College for acceptance.

# 5. Furniture and Equipment, Movable

Steps will be taken to make a recommendation on a feasible means of handling the equipment. The interior decorator could do it and he probably would be the most logical person. Mr. Dana usually handles the movable kitchen equipment.

# 6. Outside Lighting

The preparation of the plans is under way.

#### B. Off-Campus

# 1. O'Meara-Chandler Corporation, Houston

The project seems to be moving well with most of the masonry up. It looks as if the project may soon be closed in.

# 2. Frenchmen's Creek Corporation, Dallas

Nothing has been heard from the group lately.

# 3. University Dormitory Development, Inc., Chicago

The purchase option has been extended from April 6, 1966, to July 6, 1966, on the receipt of a \$25,000 deposit which is in escrow at the Lubbock National Bank.

# 4. University Housing Construction, Ltd., Omaha, Nebraska

There is a construcion shack on the site and one man on the job. There is no activity in evidence but it is reported that a number of contracts have been let.

# 5. Unapproved Off-Campus Housing

Probably some cognizance should be taken of the firms which pose as college approved, but the CPC did not know how to approach a solution.

### 3272. Law School Building

The information from Dean Amandes has been received and he is due in Lubbock this weekend. A copy of his letter dated April 11, 1966, and the attachment are attached to and made a part of the Minutes. (Attachment No. 634, page 1957)

Also, a copy of Dr. W. M. Pearce's letter to Mr. J. Edd McLaughlin, Chairman of the Academic Program Committee, is attached to and made a part of the Minutes. (Attachment No. 635, page 1958)

As pointed out in the letter, an attempt will be made to determine the size of the first-year class and the ultimate size of the School in order to help with the building design.

### 3273. Library

A. <u>Completion of South Basement and Third Floor (CPC No. 191-65)</u>
(Ed Lampe Building Contractor, Lubbock, \$155,205)

The project is about as far as it can go without the light fixtures which are expected in some two to three weeks. The project is about 50 percent complete.

B. <u>Elevator (Hunter Hayes Elevator Company</u>, Dallas, \$1,746)

Status

Satisfactory progress is being made.

# 3274. Matching Funds

Contingent on funds available, it was agreed to recommend that as many applications as possible should be filed for matching funds by the closing date on July 1, 1966. The projects will appear under priority list.

# 3275. Museum

#### A. Square Footage

The architects were requested to make a determination of the square footage to be exchanged for that in the existing building and the architects have prepared the analysis which is attached to and made a part of the Minutes. (Attachment No. 636, page 1959)

# B. Architects Contract

The proposed draft of the contract with the Associated Architects and Engineers of Lubbock has been presented and with a minor exception, it looks as if it will be in order. If so, it would be well to get it executed at the meeting of the Board of Directors on Saturday of this week.

Mr. Howard Schmidt has withdrawn his firm from the association.

# C. West Texas <u>Museum</u> <u>Association</u> <u>Portion</u>

The West Texas Museum Association has engaged the Community Facilities Bureau to raise funds for the part to be financed by the WTMA. A representative is making a feasibility analysis at the present time.

Some thought needs to be given to the inclusion of the construction to be financed by the West Texas Museum in the contractual documents. There should be an escape clause or some means of protection for all parties involved.

# 3276. Parking Lot

# Doak Hall (Bill Hood, \$4,865) (CPC No. 103-66)

Mr. Urbanovsky reported that the project is 88 to 90 percent complete and the contractor is on schedule.

#### 3277. Power Plant

The firm of Zumwalt & Vinther has been notified to proceed on the heating and cooling equipment as authorized and an amendment to the contract will be added in order to cover the specifications.

The engineers are at work at the moment preparing the specifications.

# 3278. Priority List

The Consulting Architect has been asked to begin the programming for the Home Economics Addition and has it under way.

Under consideration, at the moment, are facilities for Architecture, Agricultural Plant Sciences, Chemistry, Hydrology, Law School, Museum, Music, Physical Plant, Power Plant, Roads, Utilities, Walks, etc.

In view of the funds available it looks as if it will be necessary to take a look at the overall needs of the College once more. Perhaps it will be necessary for the Building Committee to be authorized to approve additional projects for programming by the Consulting Architect after additional study by the CPC.

M. L. Pennington Chairman

The meeting adjourned at 5:25 p.m.

Campus Planning Committee April 20, 1966 Attachment No. 632 Item No. 3263

# DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE Office of Education Washington, D. C. 20202

April 6, 1966

Project Number: Tex. 4-1708 Federal Share: \$1,500,000

Dr. R. C. Goodwin President Texas Technological College Lubbock, Texas

Dear Dr. Goodwin:

Your application for a grant under Title I of the Higher Education Facilities Act has been forwarded to us by your State commission, and based upon the commission's recommendation we are tentatively reserving funds for a Federal share for the amount indicated above.

This is not a final approval; such approval will be subject to a full review of the application, including a review of the architectural and engineering specifications and cost estimates for the facilities covered by the application. It should be understood that the amount reserved is subject to revision after all reviews are completed and before a grant offer is made to your institution.

We are currently proceeding with a preliminary review of your application, which has been assigned the project number indicated above.

Upon a satisfactory completion of our review, we shall send a grant offer, setting forth the necessary terms and conditions for the grant. In the meantime, if we may be of assistance to you, please contact the College Construction Grant Section (area code 202, WO 2-4457).

Sincerely,

/s/ Kenneth H. Ashworth

Kenneth H. Ashworth, Chief College Construction Grant Section

Campus Planning Committee April 20, 1966 Attachment No. 633 Item No. 3267

#### ENROLLMENT PROJECTIONS

(Passed by the Coordinating Board, Texas College and University System, Austin, Texas) April 18, 1966

In preparing enrollment projections to meet the responsibility of the Coordinating Board, Texas College and University System imposed Article 7, Section 17, of the Constitution of the State of Texas, the staff of the Coordinating Board attempted to answer the following questions:

- (1) What are the historic growth patterns of the public and private colleges, junior and senior, in the State?
- (2) What are the historic enrollment relationships among the various elements of higher education in Texas?
  - (a) What degree of stability exists among these elements?
  - (b) Is there a pattern of change or a trend in change?
- (3) What relationship exists between the college age group and actual college enrollments?
  - (a) What growth or decline pattern existed in this relationship in recent years?
  - (b) What is the probable size of the age group in 1978 and in intervening years?
- (4) What historic relationship exists between the rate of high school graduation and college entry?
  - (a) How does this relationship correspond with the enrollment age group relationship?
  - (b) What is the pattern of growth or decline in the relationship, if any?
- (5) What is the result of extending recent (5 year) growth rates to 1978?
  - (a) How do these extended rates compare with other measures of potential enrollment?
  - (b) How long can the present rate of growth continue?
- (6) What is the rate of flow of students to and from the various regions of the state?

The development of these data, together with a body of acceptable assumptions, has enabled the staff to prepare enrollment projections.

The assumptions which form the basis of the enrollment projections follow. It was assumed:

(1) That institutions of higher education in Texas will, through coordination, constitute a stabilized system by the year 1978, including stability in such features as growth rate, admission policies, and space utilization practices.

- (2) That college enrollments may be expressed as proportional parts of a total college enrollment, which is itself a proportional part of the age group, 18 through 24 years of age.
- (3) That total college enrollment will be an increased (at the present annual average trend rate) proportion of the college age (18-24) population group at 1978.
- (4) That the proportion of all college enrollees in these seventeen institutions will be at lease as great (but not greater than) it was in fall, 1965.
- (5) That the seventeen institutions for which monies are being provided through Article 7, Section 17, will bear the same relationship to each other in 1978 as they now do.
- (6) That eighty percent of the total enrollment in the seventeen institutions would be undergraduate enrollment.
- (7) That twenty-five percent of the enrollment in institutions now classed as universities would be graduate enrollment.
- (8) That fifteen percent of the enrollment in institutions now classed as colleges would be graduate enrollment.
- (9) That by 1978 undergraduate enrollments in full-time-studentequivalents would be the same as undergraduate headcount enrollments.
- (10) That the headcount/full-time-student-equivalent ratio in graduate programs at the universities would be the same as that now found at The University of Texas.
- (11) That the headcount/full-time-student-equivalent ratio in graduate programs at the universities would be the same as the average ratio now found in the State colleges and universities.

The adoption of these assumptions as working hypotheses resulted in the following procedures:

(1) Examination of the enrollment in the seventeen institutions, other public colleges, public junior colleges and private institutions as proportional parts of total enrollment.

- (2) Examination and projection of total enrollment as a proportional part of the age group 18-24.
- (3) Examination of enrollment in each of the seventeen institutions as proportional parts of their total projected enrollment.
  - (4) Projection of headcount enrollments as 1966 and 1978.
- (5) Conversion of undergraduate headcounts to full-time-student-equivalents on a one to one basis.
  - (6) Addition of graduate headcounts to universities and colleges.
- (7) Conversion of graduate headcounts to full-time-student-equivalents as noted in assumptions.
  - (8) Projection of total enrollments for 1978.

# INCREASE IN FULL TIME STUDENT EQUIVALENT ENROLLMENT FALL 1966 TO FALL 1978 SEVENTEEN INSTITUTIONS

Institution	Projected 1966 F.T.S.E.	Projected 1978 F.T.S.E.	Increase F.T.S.E.
Arlington	10,179	29,137	18,958
Texas Tech	16,840	36,665	19,825
North Texas	12,996	28,412	15,416
Lamar Tech	8,300	19,589	11,289
Texas A & I	4,452	9,456	5,004
Texas Woman's	3 <b>,7</b> 89	7,797	4,008
Texas Southern	4,051	8,976	4,925
Midwestern	2,831	7,002	4,171
Univ. of Houston	15,162	38,885	23,723
Pan American	2,671	6,368	3,697
East Texas	6,841	12,618	5,777
Sam Houston	6,891	13,092	6,201
Southwest Texas	5,629	11,755	6,126
West Texas	4,450	9,767	5,317
Stephen F. Austin	5,854	12,128	6,274
Sul Ross	1,744	3,315	1,571
Angelo State	2,335	5,135	2,800
Total	115,015	260,097	145,082

Campus Planning Committee April 20, 1966 Attachment No. 634 Item No. 3272

UNIVERSITY OF CALIFORNIA
HASTINGS COLLEGE OF THE LAW
198 McAllister Street
San Francisco, California 94102

April 11, 1966

Mr. M. L. Pennington Vice President for Business Affairs Texas Technological College Lubbock, Texas 79409

Dear Mr. Pennington:

In accordance with our earlier correspondence, enclosed you will find ten copies of what I have denominated a preliminary planning guide for the law building. Because of my fairly extensive contact with Dr. Pearce and Mr. Allison and my familiarity with their addresses, I have sent them copies directly. I will bring along a few additional copies next week, as well as the plans of approximately 30 recently constructed law schools.

Regarding the site for the building, Dr. Pearce listed several important considerations in his memorandum to you on December 26, 1965.

- 1. The possibility of vertical and horizontal expansion must be anticipated in this world of ever increasing enrollments. Some of the ideas encompassed in the preliminary planning guide may permit expansion within the original shell of the building, i.e., some of the areas suggested may be unfinished and unused for six to ten or more years after occupancy. Too, it may be that while the student body of the school should not be enlarged beyond the 550-600 students suggested for 1975, the library may well need expansion thereafter.
- 2. Separateness of the law facilities is necessary to the development of a professional attitude. Remoteness from the remainder of the campus is not desired, however, for ample occasions exist for interdisciplinary cooperation. Geographically, no part of the law building should be the shortest distance between two other campus points, to assure that it does not become a corridor for non-law school traffic.
- 3. Accessibility of the law building to attorneys is important for the reasons mentioned by Dr. Pearce. More specifically, attorneys can contribute to specialty courses and to trial and appellate moot court programs. In order to encourage this sort of participation, easy campus access and parking must be available. This fact alone may dictate location of the law building on the perimeter of the campus in order that the attorneys can be readily accommodated within the new campus traffic regulations.

Other factors not only may relate to the siting of the law building but may cause an alteration in the proposed plans for the building. For example, the planning guide suggests that a fairly complete cafeteria may be required, rather than merely providing vending machines adjacent to the multi-purpose room, if the law building is to be located some distance from existing eating facilities. No auditorium has been suggested for the law building, based merely upon projected law school use. However, if an auditorium has been needed in Lubbock for Continuing Legal Education programs, it may well be advantageous to locate one in the law building. (If an auditorium is to serve this function, however, ample parking must be provided for a complete audience.) If it is deemed advisable to include an auditorium in the law complex and to allow its use for other College activities, the auditorium should be sufficiently separate from the remainder of the law buildings to preserve the separateness described in paragraph 2 above.

If you have any questions before my arrival next week, don't hesitate to ask them. As Dr. Pearce is aware, I plan to be in Lubbock from Wednesday the 20th through Sunday the 24th. You might arrange with him an appropriate time to discuss matters concerning the building.

I look forward to working with you.

Sincerely,

/s/ Richard B. Amandes

Richard B. Amandes

RBA/dk Enclosures

cc: Dr. W. M. Pearce
Alvin R. Allison, Esq.

#### PRELIMINARY PLANNING GUIDE

#### Building for the School of Law

Texas Technological College

The following estimate of the space requirements for the law building represents considerable thought, based on particular study of plans of approximately 30 recently constructed law buildings in the United States, observation of several of them and discussion with faculty members regarding the good and bad points of several others. This guide contemplates a building which will maintain dominant features of the best kind of current, conventional legal education, while permitting the assimilation and addition of prospective developments.

The guide assumes a student body of between 550 and 600 students by 1975. These figures were selected as the most practical size for the school and assumes that there will be no problem in finding that many qualified students by 1975. Provision in the design plans should be made for possible expansion of the physical facilities should a larger school be desired beyond the currently suggested 1975 capacity.

The figures included in the report which follows contain only total square footage for each individual area rather than specific dimensions or sizes. This should allow greater architectural license while maintaining functional operation.

No provision is made in this guide for rest room facilities, janitorial plumbing, pay telephones, elevators, etc. More closely related to the special functions of a law school, extra hall space near the library reading room to house the card catalog and one or two display cases for recent books and articles has not been provided. Such an area will be necessary, but probably can be accommodated generally without specific allocation as an "area."

# Summary of Space Requirements

The planning for the building has been divided into five different functions or services. This should be helpful to architects in that, as a general rule, the space required for each function will be located in a separate contiguous area.

Sq.	ft. ea.	room	Total Sq.	Ft.
CLASSROOMS	-			
1 - seating 100	1700		1700	
3 - seating 75-80	1600		4800	
2 seminar - seating 50	1000		2000	
2 seminar - seating 30	900		1800	
1 Moot Court - seating 100	2000		2000	
Total				12,300
FACULTY OFFICES AND FACILITIE	œ			
26 offices			5000	
8 offices	200		5200	
2 research offices	150		1200	
	300	8	600	
15 secretarial office	100		1,000	
equivalents	120		1800	
Faculty lounge and meeting	1000		1000	
room Staff lounge and suict room			1000	
Staff lounge and quiet room Total	400		400	10,000
TOURI		(K)		10,200
STUDENT AREAS				
Multi-purpose Room	4800		4800	
Law Journal	4000		4000	
3 offices	120		360	
1 office	100		100	
Library and workroom	600		600	
Moot Court Board			000	
1 office	120		120	
meeting and workroom	400		400	
Associated Students, Law For			400	
meeting and work area	300		300	
Locker Room	2000		2000	
Total	2000		2000	8,680
20002				0,000
LIBRARY				
Reading Room - 250 stations	7500		7500	
Reserve Book Room	1000		1000	
Stacks	18000		18000	
Carrels - 180	30		5400	
Receiving Room	450		450	
Work and Processing Room	650		650	
Offices - Librarians				
2	225		450	
2	200		400	
Offices - sec'y & clerical	<b>-</b> 3 140		420	
Informal Reading Lounge	750		750	
Attorney's Room	300		300	
Small conference rooms - 8	150		1200	
Student typing area -				
50 stations	1000		1000	
Special Rooms				
Rare book	180		180	
Microfilm & micro-card	180		180	
Student duplication				
facilities	180		180	
Blind student study - 2	90		180	
Total				38,240

ADMINISTRATIVE		
Reception area & waiting	room 900	900
Dean's Office	275	275
Associate Dean's Office	225	225
Assistant Dean's Office	200	200
Placement interviewing		
offices - 2	120	240
Administrative Assistant	and	
Clerical	600	600
Office Service and Vault	1000	1000
Total		3,440
		72.860

### Projected Size of the School of Law

Discussions until now have indicated that the School of Law should aim for a student body of approximately 500 students within the first 10 years of its operation. There appears little doubt that sufficient demand will exist to provide that size of student body. In projecting actual figures based on a first year section size of approximately 75 students, and ultimately three sections of the first year class, the 1975 enrollment would appear more likely to be in the neighborhood of 550-600. This figure is reached on the basis of the following projection:

*	1967	1968	1969	1970	1971	1972	1973	1974	1975
First year	75	75	75	150	150	150	225	225	225
Second year		60	60	60	120	120	120	180	180
Third year			<u>60</u>	60	60	120	120	120	180
	75	135	195	270	330	390	465	525	585

# Faculty-Student Ratio

This guide has been assembled with the assumption that the faculty-student ratio would be in the area of 20:1 or 25:1. As indicated above, the first year class would receive most of its instruction in sections of approximately 75 students, although some instruction would be in smaller groups and some on an individual basis. Most of the second and third year work would be offered in smaller groups than in the first year, although there may be some second and third year courses which would lend themselves to use of the 100-seat room. It is contemplated that all of the third year work and much of the second year would be elective. The ratio described will permit small group teaching in the elective parts of the curriculum and should facilitate the development of close personal relationships between faculty and students.

# Comments on Requested Facilities

Below are comments regarding various spaces requested. Some are to point out specific needs of law school facilities, some to emphasize the uses to which various areas will be put, and some to point out interrelationships between areas.

# Classrooms

In the typical law school class, the professor lectures during a portion of the hour. However, much of the class time is devoted to discussion of cases and other legal materials that the students have read. During this discussion it is necessary that the students have their books open before them, and that they be able to take notes in a separate notebook.

There must be desk space before each student. This space should not be less than 20 inches in depth, and each student should have about 30 inches of desk width in front of him. Each student must have a chair, preferably fixed and swiveled.

It is absolutely necessary for each student to be able to hear not only the professor but also other students. Thus it is important that students be able to see each other as well as the professor. For this reason, tiered classes are preferred, especially for large classrooms. Even in seminar rooms, a two level arrangement improves visibility.

The teacher should have a desk on which to place his materials, a movable chair and a large blackboard on which to write. At least the largest classroom should be equipped with a screen and projection equipment, and one should be equipped with television monitors to receive broadcasts from local courtrooms, from other areas within the school or from a television tape recorder. Outlets for such instruments as overhead projectors should be provided near the teacher's desk. A clock should be located in each classroom, easily visible to the instructor but less so to the students.

Since students must read and write as well as talk and listen during a law class, adequate lighting that does not throw shadows is a must. The blackboards should be placed so that each student can see the board, and the writing on the board must not be obscured by glare from the lights.

The rooms should be free from external noise. If windows are employed for external lighting, they should not be located toward the front of the room where the professor's desk is located, unless they are up quite high.

#### Moot Court Room

This room may have auditorium type seats rather than the desk or counter type in the classrooms. The important consideration in a moot court room is that the "lawyer's area" in front of the bar be sufficiently roomy to convey a typical courtroom feeling or impression.

It may be that the audience area could advantageously be arranged in a half circle, allowing much of the audience a clear view of the faces of all participants.

Relationship of Classroom Space to Other Areas in the Building

The heaviest traffic in a law school building is generated by students moving to and from classrooms. Considerable noise occurs when classes are assembling or have concluded. For the above reasons, the major classrooms, at least, may well be located on the main floor of the building. They should not be located near the library.

Small seminar rooms may advantageously be located near the library, so they can also serve as study areas during the times when classes are not in session.

There is no need for the classrooms to be located near the faculty offices or the administrative offices. They should be located within convenient distance of rest rooms.

# Faculty Offices

Law professors spend a substantial amount of time in their offices. They have large numbers of books and reference materials which have to be stored in these office laboratories. These offices should not be drab or cramped. Each should have a lockable closet and storage space. The smaller offices should suffice for visitors, research assistants, instructors in the first year writing and the moot court programs and part-time faculty from other departments or from practice who should have a base from which to operate in the law school.

Consideration should be given to placing the faculty offices surrounding the stack areas of the library. In this manner, it may be possible to obviate the necessity of a separate faculty library. Too, the faculty and the library probably will expand together. If 10 offices are placed around each of three stack levels, it may be possible to finish and furnish only 10 at the time of completion of the building, leaving the subsequent layers of 10 for later completion.

The secretarial ratio for full-time faculty should be one for two. There are advantages and disadvantages to a secretarial pool and to placing the office of a secretary between each two faculty offices. It may be that a small pool plus some individual secretarial offices would best serve all interests.

# Research Offices

These are designed to house two or three people in each for joint research projects. The School of Law undoubtedly will be involved in governmental and foundation research projects which will require research personnel. Experience has shown that one room for such purposes is more desirable than small, individual offices.

#### Faculty Lounge and Meeting Room

This area should serve at least two functions. The faculty must have a room in which to hold its periodic faculty meetings. In many schools these occur at least weekly, and in a new school they may well occur more often. In addition, a faculty member should have a room to which he can repair for relaxation and informal discussion or contemplation. This room should include a kitchenette, a factor of considerable importance were the law school to be located at some distance from other eating facilities on campus. This room could also serve as an informal faculty library or study were the design of the building to place some faculty offices far from the most commonly used parts of the library.

#### Multi-Purpose Room

This area is designed to serve many functions. Primarily it is an informal student lounge. Law students spend from nine to twelve and sometimes more hours per day inside the law school building, making adequate lounge facilities a necessity both for comfort and as a place for carrying on those out-of-class discussions which are such a vital part of legal education.

Vending machines should be provided. If the School of Law is located at some distance from other eating facilities on campus, this area should include a steam table and other cafeteria equipment, in order that the students may continue their professional, academic contacts and outlook throughout the day without outside interruption. Part of the area should be reserved for informal discussion groups, sans food. Division of the large area could be accomplished by semipermanent screens, or movable partitions.

In the absence of a sizable auditorium readily available near the law building, this area could serve that function for groups of over 100, the size of the largest classroom in the building. In order to accommodate this latter function, a platform or stage should be provided along the middle of one wall.

#### Law Journal Complex

The offices and library-work room should be located near the library for there are many occasions for law journal staff to check original source material. Further, the closer the library, the less need for separate sets of duplicate materials in the law journal library. The individual offices are necessary for private discussion between writers and editors. Whether or not the journal specializes in some subject area, it will have extensive student participation which requires the type of space indicated. Some secretarial personnel should be convenient to the Law Journal suite and, to a lesser extent, to the Moot Court Board also.

#### Moot Court Board Complex

There is somewhat less need for this office and work room to be located near the library, but it should not be too far removed from the library either. It should be located near the moot court room.

# Associated Students, Law Forum

This room need not be in any particular location, although if convenient to the multi-purpose area, it might promote efficient student government.

# Lockers

A locker room for 600 lockers will be necessary. The lockers should be of sufficient size to store in each an overcoat, a jacket and should contain a shelf for storing books and notebooks. About 5 percent of the space and lockers should be allotted to a separate area for female students, although if rest room and quiet room facilities are located nearby, there is no need to separate male and female locker facilities completely.

#### Library Reading Room

This room is best placed on the main floor of the building. Library control can be handled quite readily if this plan is followed, entrance to and exit from the stacks being provided through the reading room area.

Law students need about 7.5 square feet of table space per student in order to handle the assortment of materials with which they work. Reading room space (including space for stacks to separate it into areas) works out to at least 30 square feet per student space. It would be advisable to divide the reading room space into at least two areas, perhaps on either side of the main stack core. The resulting smaller areas will be less noisy and will provide easier access to a greater number and variety of books.

#### Reserve Book Room

This area, normally adjacent to the desk staffed by library personnel, should be glass enclosed and otherwise sound-insulated from the reading room to allow the library personnel to type and use other equipment without disburbing those in the library, and to permit normal conversational tones to be used at the desk.

#### Stack Area

The stack area suggested should accommodate about 135,000 volumes and still allow some "book jockeying" room on the shelves. Approximately 10,000 additional volumes can be accommodated in stack shelving used to divide the reading room into smaller study areas.

Free standing stacks should be employed, thus permitting flexibility within stack areas. They need not all be emplaced when the building is completed, but additional stacks may be added as needed. It may be that an entire floor, perhaps the basement, could be left unfinished pending need.

The stack floors should be at least 7'6" in height in order to accommodate seven shelves of the National Reporter System and similar tall books. Lights should not extend so low that in effect stacks become permanent because of inability to move them around the lighting fixtures.

#### Carrels

Each senior should be provided his own separate carrel for advanced research and writing. These can be placed among the stacks, adding appropriate numbers as the size of the student body and the library collection increases. Each should have its own lighting and at least one other electrical outlet. At least a third of these carrels should be fully enclosed and lockable. In them it would be possible to use typewriters, phonographs, tape recorders, etc., without distraction to other students. Looking toward the future, these carrels might well house materials for programmed learning other self-instructional equipment.

# Receiving Room - Work and Processing Room

These two areas should be adjacent and as close to the loading dock as possible. Law books are big and heavy, so the least possible movement of them is quite important. The work and processing room should contain a sink with hot and cold water in order that all appropriate functions can be carried on in one place and frequent trips to a rest room to clean equipment are not necessary.

#### Offices - Librarians

Librarians have more books in their offices, and coming in and going through their offices than do any other group in a law school. Many of these books are on book trucks which require frequent movement. All these factors dictate that the librarians' offices be larger than faculty offices, and of course substantially larger than secretarial offices. For the same reasons, secretarial offices in the library should be larger than secretarial offices elsewhere in the building.

19571

#### Informal Reading Lounge

Some separate area, whether enclosed as a room or merely a large alcove, should exist where a student can take a short break from his assigned tasks, or otherwise engage in recreational reading, i.e., biographies, histories, legal fiction, magazines, newspapers.

# Attorneys' Room

In a very short time, the library of the School of Law will become the leading law library in West Texas. Many attorneys will want to take advantage of the materials on hand, and a place for them to do so should exist. In addition, attorneys will be invited to participate in the instructional program of the school rather continuously. This room can serve as the base of their final preparation.

#### Small Conference Rooms

Law students are perpetually discussing law and its problems, formally and informally. Small groups gather, sometimes daily for sessions of an hour or more. Small rooms such as these, which could hold six to eight students, if convenient to other library facilities, would be ideal to further and implement this natural tendency.

#### Student Typing Area

Many students do much of their written work, formal and informal, by typewriter. An area which can accommodate 40-50 students at a time will be occupied a substantial part of each day, and during the examination periods, will be filled to capacity by a student body of 550-600. Facilities for storing and locking the typewriters must also be provided.

#### Special Rooms

As law collections become ever larger, more and more of the basic materials will be reduced to micro-film and micro-card. A special viewing area, insulated from other areas of the library must be provided.

Over a period of time a library acquires various rare books which it cannot leave in open stacks, accessible to all. The rare book room also can house items not intended for general availability.

As duplicating processes become better and less expensive, students make ever more extensive use of them. A small separate room to handle this function, perhaps with several types of duplicating machines is a necessity.

Most sizable law schools have at least one blind student in their student body at all times. Each requires a reader and the student and his reader should have a place to call their own in order to allow the student the best opportunity to glean everything possible from his legal education.

### Administrative

# Reception Area and Waiting Room

A fairly substantial area should be provided, not only to house the personnel who will deal with those entering the administrative suite, but to allow those who enter sufficient space to accomplish their business which in many cases will include the completion and filing of forms. Though other parts of law buildings are often built with the possibility of future expansion in mind, administrative suites seldom are. Usually they are not appropriately situated for such expansion.

# Offices for Deans

Within two or three years of the arrival of the first students, an assistant dean will be required, probably to handle relationships with the practicing Bar, especially in the field of placement, as well as the

increased burden in connection with admissions. By the time the student body reaches 500, a third administrator will be necessary in order to allow each some time to maintain his contacts with students, faculty within and without the law school, the Bench and Bar, and alumni.

### Placement Services

As an adjunct of the placement function of an assistant or associate dean, two small interviewing offices should be available for firms and organizations which wish to interview at the school.

#### Administrative Assistant and Secretarial

In addition to the routine office operations, admissions and placement will occupy substantial time and personnel, and space must be available in which to perform these necessary functions.

### Office Service Vault

Modern law school teaching requires the constant creation and duplicating of teaching materials. The building should contain a room large enough to handle the machines and the collating of materials necessary for this task, as well as the preparation of administrative reports. It would seem best to have it attached to the administrative suite in order that appropriate control and scheduling can be maintained.

A vault is necessary to store grade cards, records of former students, examinations in the process of preparation, as well as examination books for at least a minimum period after grading.

Campus Planning Committee April 20, 1966 Attachment No. 635 Item No. 3272

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

Vice President for Academic Affairs

April 12, 1966

Mr. J. Edd McLaughlin Chairman, Academic Programs Committee Board of Directors Texas Technological College Ralls, Texas 79357

Dear Mr. McLaughlin:

It is essential that we obtain Board approval on several matters having to do with the School of Law. Accordingly, I have asked Dean Richard B. Amandes to be in Lubbock during the April 22-23 meeting of the Directors and to present his recommendations on these points to the Academic Programs Committee.

Among the items to be considered are:

- 1. The size of the first-year class which will enter in September, 1967;
- 2. Standards of admission to the law school;
- 3. The size of the school (its enrollment) at the end of a six- or seven-year period.

The last of these is particularly important since we must move immediately toward the development of plans for the law school building; these plans will rest largely on the anticipated size of the school. Dean Amandes' thoughts on the law school building are scheduled to be sent to Mr. Pennington by April 15.

The size of the first class (September, 1967) will be governed largely by the space available in the law school's temporary quarters, by the faculty available, and by the law library facilities.

Only one request for a new program--the Bachelor of Arts Degree with a major in geography--will be presented to the Committee at its meeting on Friday, April 22.

Sincerely yours,

/s/ W. M. Pearce

cc: Mr. Hinn
Dr. Tannery
Other Board Members
Dr. Murray
Dr. Goodwin
Mr. Pennington
Dean Amandes

W. M. Pearce Vice President for Academic Affairs Campus Planning Committee April 20, 1966 Attachment No. 636 Item No. 3275A

STILES, ROBERTS & MESSERSMITH
Members ... American Institute
of Architects

ARCHITECTS & ENGINEERS
3307 Ave. X Lubbock, Texas 79411

M. L. Stiles Architect
E. E. Roberts . Architect . Engineer
R. C. Messersmith . Architect

April 19, 1966

Mr. M L. Pennington Vice President for Business Affairs Texas Technological College Lubbock, Texas

Re: West Texas Museum

Dear Mr. Pennington:

As requested we have reviewed the building area in the present Museum building and include herein our analysis of its usable area.

As you know the building consists of a basement, first floor, second floor and attic floor in the main building and a planetarium and storage room in the auxiliary building. The basement, first and second floors of the main building and the planetarium are usable as habitable space and part of the attic space over the rotunda could be classified as habitable. The remaining portion of the attic is under the sloping roof and is being used for storage. Part of this latter space could be classified as possible storage dependent upon the requirements of the particular future occupants of the building. Since the Uniform Building Code defines an attic as "built as to be used for business, storage or habitation" and requires access openings only to those attics exceeding 30 inches in height, we have based our attic storage calculations on those areas having a clear height of 30 inches, or more. This building code (adopted by the City of Lubbock) does not further define the height of usable areas.

Also, there is a question of whether the area of the rotunda at the second floor and attic floor could be made into usable space. It would be possible to construct a floor over the rotunda both at the second floor level and attic floor level, since there is sufficient height in these areas. The construction at the second floor level would need to be approximately  $1\frac{1}{2}$  to 2 feet above the present floor level so as not to cover the top portion of the Peter Hurd Murals on the lower walls. This area (approximately 35' in diameter) could be used as a lecture room or conference room.

Following is a tabulation of the various areas:

Main Building:		
Basement	9,417 sq. ft	t.
lst Floor	9,417 sq. ft	t.
2nd Floor (without rotunda)		
2nd Floor (including rotunda)	9,417 sq. ft	t.
Attic Floor (without rotunda)	2,596 sq. ft	t.
Attic Floor (including rotunda)	3,473 sq. ft	t.
Attic Storage	3,840 sq. ft	
Planetarium	1,440 sq. ft	t.
Storage	258 sq. ft	t.

Mr. M. L. Pennington

-2-

April 19, 1966

A tabulation of total areas is as follows:

Scheme A: Basement, 1st Floor, 2nd Floor and
Attic Floor (without rotunda and
attic storage) and Planetarium ----- 31,410 sq. ft.

We hope this analysis will assist you and the board in determining the usable area in the existing museum building. If we can be of any further assistance, please advise.

Very truly yours,

Associated Architects & Engineers of Lubbock

/s/ R. C. Messersmith

R. C. Messersmith

cc: McMurtry & Craig Howard Schmidt & Associates Dr. Earl Green

RCM: bw

STILES; ROBERTS & MESSERSMITH Members ... American Institute of Architects

ARCHITECTS & ENGINEERS 3307 Ave. X Lubbock, Texas 79411

M. L. Stiles

Architect

E. E. Roberts . Architect . Engineer

R. C. Messersmith

Architect

April 19, 1966

Mr. M. L. Pennington Vice President for Business Affairs Texas Technological College Lubbock, Texas

Re: West Texas Museum

Dear Mr. Pennington:

In reference to our letter dated April 19, 1966, concerning the usable area of the present museum building we wish to call your attention to the recent price increases in construction material and labor. Everyone in the industry has been alarmed in the past few weeks at the sudden and drastic increases in construction cost. We feel that the cost of the new Museum Building could very likely be from \$13.50 to \$14.00 per sq. ft. We are, of course, making every effort in our planning to keep the cost as low as possible consistent with good construction.

We are including a tabulation of possible construction costs in relation to the area tabulations contained in the referenced letter and indicating the possible participation of the college and the West Texas Museum Association in the construction of the new Museum facility.

		Const. Cost of New Museum @ \$13.50			Const. Cost of New Museum @ \$14.00			
	resent	Total Const. Cost 51,200 S.F.	Partici-	1	Total Const. Cost 51,200 S.F.	College   Partici-   pation	Museum Partici- pation	
Scheme A 31,43	lo s.f.	\$691,200	\$424,035	\$267,165	\$716,800	\$439,740	\$277,060	
Scheme B 35,50	08 S.F.	\$691,200	\$479,358	\$211,842	\$716,800	\$497,112	\$219,688	
Scheme C 37,26	62 S.F.	\$691,200	\$503,037	\$188,163	\$716,800	\$521,668	\$195,132	

If we can be of any further assistance please advise.

Very truly yours,

ASSOCIATED ARCHITECTS & ENGINEERS OF LUBBOCK

/s/ R. C. Messersmith

R. C. Messersmith

cc: McMurtry & Craig

Howard Schmidt & Associates

Dr. Earl Green

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 290

April 22, 1966

A meeting of the Campus and Building Committee of the Board of Directors and the Campus Planning Committee was held at 4 p.m. on April 22, 1966, in the Office of the President.

Members of the Building Committee present were Mr. Harold Hinn, Chairman, and Mr. C. A. Cash. Other members of the Board of Directors in attendance were Chairman R. Wright Armstrong, Mr. J. Edd McLaughlin, Mr. Alvin R. Allison, Mr. Roy Furr, and Mr. Retha R. Martin.

Members of the Campus Planning Committee present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. Others present from the College were President R. C. Goodwin, Dr. W. M. Pearce, Mr. J. Roy Wells, Miss Evelyn Clewell, Miss Jerry Kirkwood, Mr. O. R. Downing, Mr. John G. Taylor and Mr. R. B. Price. In addition, Mr. Howard Schmidt, Consulting Architect, was present, and Mr. Bob Messersmith was present for the consideration of the dormitory.

In order that the results of the meeting of the Board of Directors may be included in the Campus Planning Committee Minutes for record purposes, the action taken by the Board at the meeting on April 23, 1966, will follow that of the Campus and Building Committee for each item.

### 3279. Behavioral Sciences Training and Research Center

The Board of Directors endorsed the blessings of the Building Committee as set out in Item 3252 of the Campus Planning Committee Minutes No. 288 of April 13, 1966.

### 3280. Classrooms and Office Buildings (Temporary)

Approved procurement of Buildings Nos. 620, 622, 626, 627, 637, 725, 726, 728, 730, 731, and 733 from Sheppard Air Force Base, and authorized M. L. Pennington to make the necessary arrangements to complete the transactions. (Total estimated cost, \$63,789.40 and some 28,000 sq. ft. of floor space will be acquired.) At the meeting on April 23, 1966, the Campus Planning Committee was instructed to obtain the other seven available buildings at Sheppard Air Force Base.

(The Board of Directors approved.)

# 3281. Chemistry Research Building (CPC No. 87-64)

The Building Committee authorized an amendment to the contract with Pitts, Mebane, Phelps & White to include the undergraduate facilities in keeping with the study presented to the Building Committee, with the stipulation that the architects proceed as expeditiously as possible.

(The Board of Directors approved.)

# 3282. Constitutional Building Amendment

After additional information was received from Austin, Mr. R. B. Price, Comptroller, made a revised estimate of the funds

# 3282. Constitutional Building Amendment (continued)

available and it was presented to the Building Committee and the Board of Directors. A copy of the report is attached to and made a part of the Minutes. (Attachment No. 637, page 1963)

### 3283. Consulting Architect

The Board of Directors approved the action of the Building Committee in making arrangements with Howard Schmidt and Associates to serve as consulting architect for new projects in keeping with Item No. 3255, Campus Planning Committee Minutes No. 288 of April 13, 1966.

### 3284. Housing

### On-Campus

### Final Plans and Specifications

The Building Committee approved the final plans and specifications as presented by the architects.

(The Board of Directors approved.)

### Financing

A written report headed up "Summary, Residence Halls Financing," dated April 21, 1966, was presented and is attached to and made a part of the Minutes. (Attachment No. 638, page 1964)

The Building Committee approved a vigorous pursuit for funds to finance the project.

(The Board of Directors approved.)

# 3285. Matching Funds

Approved the recommendation of the CPC that applications for as many projects as possible be filed by July 1, 1966. The projects under consideration at the moment are listed under the priority list.

(The Board of Directors approved.)

### 3286. <u>Museum</u>

#### A. Square Footage

Approved the square footage to be provided by the College as a replacement for that now existing in the amount of 35,500 sq. ft. Dr. Earl Green had stated that the amount seemed acceptable and fair to him.

(The Board of Directors approved.)

### B. Architects Contract

Approved the commissioning of the Associated Architects & Engineers of Lubbock for the project. The contract should contain means to include the work to be done for the West Texas Museum Association.

Mr. Howard Schmidt has disassociated his firm from the architectural firm for the project.

(The Board of Directors approved.)

# 3286. Museum (continued)

### C. West Texas Museum Association

The Community Services Bureau has been engaged to make a feasibility study for a fund drive for the WTMA portion of the project.

### 3287. Priority List

### Home Economics

In keeping with approval of the Building Committee, the Consulting Architect has been asked to program the project and is at work.

The projects which are under consideration are: Architecture, Agricultural Plant Sciences, Chemistry, Hydrology, Law, Museum, Music, Physical Plant, Power Plant, Utilities, etc.

A good deal of discussion was devoted to the presentation of applications for matching funds by the closing date of July 1, 1966, and the priority in which the projects will be presented.

The Building Committee set the Chemistry project as the next project to implement (after Business Administration and Biology), and stated that one factor to keep in mind is how to get the greatest amount of funds from the matching program by using the best judgment available.

Other recommendations on the priority list are to be made by the Administration and the Campus Planning Committee to the Building Committee to the Board.

The Building Committee can act for the Board of Directors between meetings in the selection of new projects for programming. Also, if project architects must be obtained between meetings, the Building Committee was authorized to act.

(The Board of Directors approved.)

M. L. Pennington Chairman

The meeting adjourned at 6:10 p.m.

Campus Planning Committee April 22, 1966 Attachment No. 637 Item No. 3282

# ESTIMATE OF FUNDS AVAILABLE FROM 1966 ALLOCATION OF CONSTITUTIONAL TAX (FIRST 85%)

Actual tax collections as estimated by the State Comptroller 1966-1978		\$161,733,701
1966 Collection of 1965 Taxes	\$ 5,334,788	
One-half (5¢) of 1967 and 1968 collections may be allocated on old basis to cover outstanding obligations- 1967 \$11,006,056 1968 \$11,374,678 \$22,380,734 - 2 =	_11,190,367	
Total under old allocation method	16,525,155	
21.15599% to Texas Tech	3,496,060	
Present balance in debt retirement fund for Texas Tech	1,701,330	w.
Available for outstanding bonds & notes		
Requirements of outstanding bonds & notes	4,516,677	,
Net total to Texas Tech under old allocation		\$ 680,713
Actual collections of tax to be allocated under new method: Above total Less old allocation Amount	\$161,733,701 16,525,155 \$145,208,546	
85% to be allocated in 1966 based 90% on enrollment & 10% on square footage needs	\$123,427,264	
Texas Tech's share of above: 13.66% of 90% for enrollment 10.00% of 10% for square footage	,	\$ 15,174,160 1,234,272
New allocation to Texas Tech	9	<u>\$ 16,408,432</u>
Total net "old" allocation and "new" allocation		\$ 17,089,145
85% of above is the limitation set by the State Comptroller for total requirements of bonds to be issued		\$ 14,525,773
Assuming a 3-3/4% bond issue, the total principal amount available in August will be		\$ 11,930,000
Interest at 4-1/4% could possibly be earned over a spread of 48 months on above funds		1,035,000
Maximum available under Title I and II (it is probably not possible to realize this full amount)		<u>5,965,000</u>
Total Funds Possibly Available		\$ 18,930,000



Campus Planning Committee April 22, 1966 Attachment No. 638 Item No. 3284

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

Office of the Vice President for Business Affairs

# SUMMARY RESIDENCE HALLS FINANCING April 21, 1966

On December 28, 1966, Texas Tech filed an application with the Department of Housing and Urban Development (formerly HHFA) in the amount of \$8 million to finance the first phase of a proposed complex to house and feed 3,432 students in six towers and a commons area at a total estimated cost of \$16 million. It was contemplated that the first phase would be ready for occupancy by September 1, 1967, and would comprise three towers and enough of the commons area to accommodate the students. The second phase would be completed by September 1, 1969.

The enrollment increases in the schools across the nation and the 3 percent interest rate caused an unprecedented number of applications to be filed with DHUD. A recent report showed that since the program was started in 1951, 2,700 applications had been approved for some \$3 billion. There are now 650,000 students living in HHFA financed housing and the number is one-third of all the FTE students living in residence at institutions of higher education in the United States today.

Until 1964, the funds and the requests were just about even. In 1964, \$53 million in requests were carried over. At the end of 1965, \$192 million in requests were carried over. On January 31, 1966, the requests for loans reached the sum of \$760 million for a program that had only \$300 million. As a result, the applications were cut off on January 31, 1966, with the statement that no more would be accepted until further notice.

At that time, DHUD had made reservations for all funds available and had requests for \$460 million against the next year's funds. President Johnson's budget request for next year includes no increase for funds and none is contemplated over the \$300 million level.

During the process and in order to spread the funds available over as many institutions as possible, the loan limit per year per institution was reduced to \$4 million.

The regional office suggested that Texas Tech reduce its application from \$8 million to \$4 million for the first phase and refile by April 29, 1966.

The recommendation was made to the Building Committee that it be done and the Building Committee approved but further study indicated some real problems. Perhaps the biggest problem would be the time schedule for construction to have units available for occupancy in September, 1967. The architects have the plans and specifications in such condition that they can go out for bids on April 28, 1966. To stay on schedule, it would be necessary to break ground by the end of May, 1966, and even then that would allow only 15 months for a construction schedule which, in the past, has been 21 months. Some of the larger contractors have reported that the construction can be completed within the 15 months, although it would be a tight schedule.

If ground were broken during the latter part of May, it would be necessary to have construction funds very quickly and it probably would be impossible for the College to provide enough financial support for the project until funds could be available from a bond issue, as it would take from three to six months to realize any funds.

The fastest means of financing would be the open market for the entire \$8 million and it would probably be necessary to negotiate. Even then, no funds would be available until the bonds could be delivered and that could require some three to six months also.

In addition, there are some inherent dangers as there would be no way to know that the best price for the bonds was received. The interest rate would be higher than funds obtained through DHUD. For only \$4 million for 40 years at an interest rate on the open market of 4 percent over the 3 percent from DHUD, the additional interest cost would be \$1,140,000. The complex would more or less have to stand on its own as DHUD could not participate in a full private loan. If the contractor did not finish in time, a most difficult situation could result with students on hand and no place to house them until the halls could be completed. The tight construction schedule would most likely result in a higher construction cost. A real stiff liquidated damage

clause would also increase the cost to the College. There would be difficulty in ever returning to the type of financing that has been used in the past.

If the DMUD route were followed and it were possible to get \$4 million fiscal early in the next federal/year and an additional \$4 million the following year, there would still be the initial period of interim financing plus the fact that the \$4 million would not carry the construction until the second \$4 million might be available after July 1, 1967. There would seem to be no feasible way to finance the complex during construction.

In view of the overall problem, a meeting was held in Dallas on April 21, 1966, with representatives of DHUD and Mr. Howard Schmidt, Mr. Bob Messersmith, Mr. R. B. Price and M. L. Pennington.

After a very great deal of discussion, it looks as if the better route will be to reduce the pending application for the first phase to \$4 million and submit a letter of intent that the College plans to construct the total project for 3,432 students at an estimated cost of approximately \$16 million. The first phase to be ready in September, 1967, and comprise three towers and a sufficient portion of the commons area at an estimated cost of \$8 million. The target date for the second phase for the other three towers and the rest of the commons area would be September 1, 1969. The letter of intent would request a loan from DHUD in the amount of \$4 million with the other \$4 million to be borrowed on the open market for the first phase. The same process would be completed for the second phase.

If the proposal is followed, both bond issues (DHUD and private) would have to be processed simultaneously and the letter of intent would include the \$16 million.

The average interest rate for the first \$8 million would probably be about  $3\frac{1}{2}$  percent which is in the area of that now being paid. It would be necessary to close the existing system and start a new one. The procedure would be helpful, in that the coverage could be reduced to 1.25 rather than 1.35 and could be open-ended, which would allow future financing with the DHUD. Future financing could be more difficult, if not impossible, if a 100 percent private financing were secured. The College could still crosspledge the excess proceeds from the old system.

It looks as if the project should be pursued with full vigor and an attempt made to see if it would be possible to get a reservation of funds with the least possible amount of delay.

If it is utterly impossible to finance the complex now, it could be necessary to delay the completion until September, 1968, but still following the same financing schedule. The full application could be filed on very short notice if the DHUD should lift the ban on new applications. There is some possibility that the Federal Government may take additional steps to be of more help in the future in view of the tremendous demand for housing.

M. L. Pennington Vice President for Business Affairs

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 291 April 28, 1966

A meeting of the Campus Planning Committee was held at 3 p.m. on April 28, 1966, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. Other members of the college staff present were Miss Evelyn Clewell, Miss Jerry Kirkwood, Mr. John G. Taylor and Mr. O. R. Downing. In addition, Mr. Howard Schmidt, consulting architect, was present.

#### 3288. Behavioral Sciences Training and Research Center

The Board of Directors has endorsed the continuation of the study with the cost and all other aspects to be explored.

# 3289. Biology Building (CPC No. 99-65) (Pierce & Pierce)

### Schematic Plans

Mr. Felty is to arrange a meeting with the architects and the Campus Planning Committee at the earliest possible date in order to study the site plan.

The architects will also be requested to meet after May 10, 1966, and before May 16, 1966, to review changes in their latest plans dated April 21, 1966.

It was recommended that the building not be designed structurally for additional floors in the future and that the greenhouses be on top if the studies prove this to be the best location.

It was felt that it would be quite difficult to plan for proper function of future floors due to the nature of this particular field. Therefore, to design the foundation and upper structure for space use which cannot be easily determined was not felt to be an economy.

# 3290. Chemistry Facilities (CPC No. 87-64) (Priority No. 1 after Business (Pitts, Mebane, Phelps & White) Administration and Biology)

Pitts, Mebane, Phelps & White are the architects for complete project.

### Contract

Mr. John Taylor and Mr. Barrick will work out an amendment to the existing contract based upon Mr. White's suggestion. (Attachment No. 639, page 1970)

### Implementation of Project

The Board of Directors directed the Campus Planning Committee to see that the project is programmed according to procedures for new projects although this particular facility has been in the planning stage for some time.

Dr. Dennis and his committee will be briefed on the proper procedures for listing requirements and justification methods on April 29, 1966. Mr. Pennington, Mr. Howard Schmidt and Miss Kirkwood will participate.

Mr. Howard Schmidt, Consulting Architect, will have no responsibility concerning the programming of the project. The project architects will assume this responsibility.

# 3290. <u>Chemistry Facilities (CPC No. 87-64) (Priority No. 1 after Business (Pitts, Mebane, Phelps & White)</u> Administration and Biology)

# Application for Matching Funds (Title I and Title II)

It will be necessary to have the information from Dr. Dennis and his committee in the hands of the architects by May 15, 1966, in order that there is a possibility of meeting the July 1, 1966, date for filing the application.

Miss Clewell's analyzation of existing Chemistry facilities is almost complete.

### 3291. Classrooms (Large)

Miss Clewell submitted the schedule for next fall which indicates that with the use of the approved temporary buildings, we can handle the expected enrollment satisfactorily.
(Attachment No. 640, page 1971)

# 3292. Classrooms and Office's (Temporary)

#### Acquisition

The necessary documents have been executed by both parties.

#### <u>Uses</u>

The uses have been established by Miss Clewell.

### Sites

Mr. Urbanovsky presented a layout of proposed sites.

Miss Clewell requested that five buildings be located near the Traffic-Security facilities and the committee approved.

Three buildings will be moved to the site the week beginning May 2, 1966. Locations for the remaining buildings are to be recommended by Mr. Urbanovsky as soon as possible.

### Move

The contract has been made with the mover.

Mr. Downing will coordinate the project. In his absence, Mr. Jim Russell will be authorized to coordinate the project.

### Time Schedule

Mr. Downing will prepare the schedule.

### 3293. Constitutional Building Amendment Bonds

### Sale

A simultaneous sale is scheduled for 10 a.m. on June 7, 1966, in the House Chamber and it will be necessary for all Governing Boards to have a quorum present as the sale must be approved by each Board.

### Amount

It looks as if it would be to Texas Tech's advantage to sell as many bonds as possible.

### Chairman

Some thought should be given to the Chairmanship for the meeting in view of Mr. Armstrong's retirement on June 1, 1966, as the instruments must be prepared in advance of the meeting.

# Funds Available

It will be necessary to keep an accurate and up-to-date inventory of all projects that are authorized for programming and the funds that are available.

### 3294. Consulting Architect

### A. New Projects

### Assigned Projects

- 1. Home Economics
- 2. Law School
- 3. Architecture and Allied Arts
- 4. Agricultural Plant Sciences

### 5. Music

Further clarification for direction to be taken necessary from President Goodwin.

### 6. Power Plant

Zumwalt & Vinther, Inc., are proceeding with the longrange utility study and are preparing plans and specifications for provisions of heating and air-conditioning.

Consideration will be given to the possibility of having the engineering firm be the prime party to the contract and the architectural firm the secondary party to the contract. Either firm can be the prime party.

The building design problem is a difficult one and serious consideration for the recommendation of an architectural firm by the Campus Planning Committee for recommendation to the Board of Directors should be made soon.

#### B. Coordination

Mr. Schmidt and Miss Kirkwood are to work out a proposal as soon as possible.

#### C. Long-Range Planning

Mr. Schmidt and Miss Kirkwood are to work out a proposal as soon as possible.

### 3295. <u>Dormitory Renovation</u>

The request to renovate Thompson, Gaston, Wells and Carpenter Halls will be considered for summer of 1967.

The time allowed for bid taking, letting of contracts and performance of work this summer is inadequate.

Miss Kirkwood is to establish a time schedule for such work to be instigated next summer.

### 3296. Housing

### On-Campus

The letter was written under date of April 22, 1966, requesting that the application be reduced to \$4 million in order to be eligible for consideration.

The request for funds has gone to Congressman George Mahon in Washington, and he is working on it.

All methods for financing are still being explored.

### 3296. Housing

### On-Campus (continued)

Final plans and specifications are complete. Considering that the financing is available at this time, it might be well to think of delaying the project and shooting for 1968 as an occupancy date. Also, it was suggested that in the event that the \$4 million is not secured now, that we think of the possibility of taking bids for the total project initially and phase through the complete project with the schedule being set somewhat by the financing.

Mrs. Bates has indicated to Mr. Schmidt that although it would be extremely difficult she could provide some means for food service if two towers were constructed without the kitchen facilities.

If the project is delayed and an expected occupancy date for 1968 is established, women students will probably need to be housed in some housing now designated for men in order to house the women on campus.

It is imperative that Mr. Schmidt receive word from the College on Wednesday, May 4, 1966, what the intent of the College is.

### 3297. Law Building

(See Item No. 3294 - 2. Page 1967)

The Campus Planning Committee should be preparing to recommend a site.

### 3298. Priority List

A. Home Economics

(See Item No. 3294 - 1. Page 1967)

B. Law\_

(See Item No. 3294 - 2. Page 1967)

C. Architecture and Allied Arts

(See Item No. 3294 - 3. Page 1967)

D. Agricultural Plant Sciences

(See Item No. 3294 - 4. Page 1967)

E. Music

(See Item No. 3294 - 5. Page 1967)

F. Power Plant

(See Item No. 3294 - 6. Page 1967)

G. Hydrology

Materials Science Laboratory

### H. Behavioral Sciences Training and Research Center

### 3299. Project Architects

Carlotte Carlotte

Recommendations of the Campus Planning Committee should be presented to the Board of Directors at their meeting on May 28, 1966.

# 3300. Museum (Existing)

Mr. Harold Hinn, Chairman, Building Committee of the Board, has requested a use feasibility study.

Possible uses, all with expansion included:

- 1. Law School.
- 2. Large classrooms and offices.
- 3. Administration offices and classroom/offices.

Mr. Hinn would like to have the study completed for the May 28, 1966, Board meeting.

Mr. Howard Schmidt agreed to make the study. However, his assignment to the project should first be cleared through the Board as a commitment of money for services is involved.

Museum rehabilitation should be geared to the Legislative Appropriation Budget where applicable.

Jerry Kirkwood Coordinator

The meeting adjourned at 6:15 p.m.

Campus Planning Committee April 28, 1966 Attachment No. 639 Item No. 3290

#### PITTS MEBANE PHELPS & WHITE

470 Orleans Street, Beaumont, Texas 77701

Architects & Engineers

April 26, 1966

Mr. Marshall L. Pennington Vice President for Business Affairs TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

Re:

Chemistry Facilities Building TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

Dear Mr. Pennington:

Enclosed herewith are four (4) executed copies of a proposed amendment to our present service contract with respect to the Chemical Research Building. One returned signed copy is all that we will need for our files.

We trust that you will find the amendment satisfactorily written and wish to assure you of our appreciation of your continued confidence in our firm. We will do our very best to complete the data required for application submittal on the revised project prior to July 1, 1966.

As mentioned during our telephone conversation yesterday, a reasonable starting point for our services would be after a detailed program of facility types, functional objectives for each facility, special laboratory apparatus requirements and relationship objectives have been prepared by Tech. This type of program would outline the numbers and types of facilities, facility occupancies and any special laboratory equipment or apparatus intended in programmed spaces. With this list of facility types and functional objectives we can, first, convert this criteria into gross building square feet and probable cost; and, second, following your approval of the building size and cost approximation, proceed with schematic planning of the building and preparation of the application data.

Prior to commencement of the schematic planning of the building involving precise location and relationships of individual facilities, we will need an instruction as to whether laboratory and non-laboratory spaces are to be, generally, separated for economy and flexibility reasons or integrated to

PITTS MEBANE PHELPS & WHITE
Architects & Engineers / 470 Orleans Street / Beaumont, Texas 77701

Mr. Marshall L. Pennington
Texas Technological College
Re: Chemistry Research Facilities Building

Page Two April 26, 1966

induce additional inter-action between staff and students. We will be pleased to prepare for your consideration prior to the need for this decision, a detailed analysis of the relative advantages and disadvantages of these two separate planning concepts for this type of building.

Thanks again for this opportunity to continue our service to Texas Tech.

Best personal regards,

PITTS, MEBANE, PHELPS & WHITE

/s/ Bob

Robert White RW/mm Enc cc: LWP RRP April 26, 1966

AMENDMENT TO CONTRACT BY AND BETWEEN THE BOARD OF DIRECTORS, TEXAS TEXAS TECHNOLOGICAL COLLEGE, LUBBOCK, LUBBOCK COUNTY, TEXAS, AND PITTS, MERANE, PHELPS & WHITE, ARCHITECTS, BEAUMONT, JEFFERSON COUNTY, TEXAS, DATED 1 OCTOBER 1964

Project B - Chemical Research Building referred to in the Agreement made the 1st day of October 1964, by and between the Board of Directors, Texas Technological College, Lubbock, Lubbock County, Texas, and Pitts, Mebane, Phelps & White, Architects, Beaumont, Jefferson County, Texas, is hereby expanded in scope to include undergraduate facilities. The revised and full scope of the facilities in the expanded project shall be as defined in a program of facility requirements to be furnished to the Architects by the Owner. Project B will be hereafter identified as "Chemistry Facilities Building," and the plans for such building shall be developed in general accordance with Scheme C of the Site Utilization Studies for Chemistry Department as prepared by Pitts, Mebane, Phelps & White, Architects, and dated March 2, 1966, excepting that the fourth floor (fifth level) of the south building wing shall be a full floor.

Fees paid for professional service rendered through December 6, 1965, with respect to Project B, Chemical Research Building, will not be credited in total to the fee for professional services for and based upon the costs of the expanded work, but only credited in ratio to the amount, if any, of services, studies, designs and/or drawings reused from service performed prior to December 6, 1965. Fee vouchered by the Architects on April 4, 1966, in the amount of \$2,586.59, and covering Site Utilization Studies for the expanded project will be credited in total to the six (6) percent fee applied to the cost of the work of the expanded program.

OWNER:

ATTEST	BOARD OF DIRECTORS TEXAS TECHNOLOGICAL COLLEGE
	BY
#:	ARCHITECTS: PITTS, MEBANE, PHELPS & WHITE
वं	ВУ

Campus Planning Committee April 28, 1966 Attachment No. 640 Item No. 3291

# CLASSROOMS AND CLASSES FALL SEMESTER 1966

Capacity	<u>30-50</u>	<u>50-75</u>	75-100	100-200	<u>200</u>	Total
8	95	56	23	1	5	181 Classrooms
School						
A & S	1303	46	85	33	43	1510
Agri.	107	38	4	0	0	149
Bus. Ad.	263	59	8	1	5	336
Engr.	221	7	9	0	2	239
Home Eco.	<u>262</u>	16		0	0	278
Total	2156	166	106	34	50	2512 Classes

Total Lab Rooms - 161

Probably could find room for one class in each room at odd hours, usually from 4-5 and 8 o'clock - Used 92% of hourly capacity.

Room for 2715 classes (181 x 15) 8-5 MWF; 8-4:30 TTS, using noon on MWF.

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 292

May 4, 1966

A meeting of the Campus Planning Committee was held at 9:30 a.m. on May 4, 1966, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. Others present were Miss Jerry Kirkwood, Mr. Howard Schmidt, consulting architect, and Mr. Bob Messersmith.

#### 3301. Housing

#### On-Campus

A letter was received from Congressman George Mahon which indicates that funds will be made available for construction. (Attachment No. 641, page 1973)

A letter of approval was prepared for the signature of Dr. Robert C. Weaver, Secretary, Housing and Urban Development. The letter contains conditions which are unknown at this time and necessarily delay decisions in setting a bidding date, construction period, and scope of the project.

The above mentioned letter has been received and is attached to and made a part of the Minutes. (Attachment No. 642, page 1974)

Miss Emma Brown, Chief of College Housing, Department of Housing and Urban Development, has suggested that the complete application be filed as soon as possible. The architects are preparing to do so.

All means of financing are still being explored.

Jerry Kirkwood Coordinator

The meeting adjourned at 10:30 a.m.

Campus Planning Committee May 4, 1966 Attachment No. 641 Item No. 3301

### TEXAS TECHNOLOGICAL COLLEGE P. O. Box 4610 Lubbock, Texas 79409

Office of the Vice President for Business Affairs

May 3, 1966

Mr. R. Wright Armstrong Mr. J. Edd McLaughlin

Mr. Herbert Allen

Mr. Alvin R. Allison

Mr. C. A. Cash

Mr. Roy Furr

Mr. Harold Hinn

Mr. Retha R. Martin

Dr. Fladger F. Tannery

#### Gentlemen:

Attached is a photocopy of a letter from Congressman George Mahon under the date of April 28, 1966, in which he states that he has been assured that funds will be made available to take care of the Texas Tech housing loan application.

Best wishes,

M. L. Pennington Vice President for Business Affairs

MLP:br Enclosure

cc: Dr. R. C. Goodwin Mr. Guy J. Moore
Dr. Grover E. Murray Mr. John G. Taylor
Dr. W. M. Pearce Mr. R. B. Price
Mr. Bill J. Parsley Miss Jerry Kirkwood

Mr. Bill J. Parsley Miss Jerry Kirkwood Mr. E. J. Urbanovsky Miss Evelyn Clewell Mr. Nolan E. Barrick Mr. Howard Schmidt

George Mahon 19th Dist., Texas Committee: Appropriations

HOUSE OF REPRESENTATIVES Washington, D. C.

April 28, 1966

### Dear Marshall:

I am getting ready to dash away to Houston for a quick trip and I wanted to drop you this little note before leaving. The Community Facilities Administration assures me that even though the funds are not available at the moment for approval of the Tech application, some way is going to be worked out to take care of the situation. I am told that you will hear from the Fort Worth office regarding the matter in the next few days. I will stay in close touch with the situation and advise you of any reports I receive here

Warmest regards and good wishes.

Cordially,

/s/ George

George Mahon

Mr. M. L. Pennington Vice President for Business Affairs Texas Technological College Lubbock, Texas

Campus Planning Committee May 4, 1966 Attachment No. 642 Item No. 3301

# THE SECRETARY OF HOUSING AND URBAN DEVELOPMENT Washington, D. C. 20410

May 5, 1966

Honorable George H. Mahon House of Representatives Washington, D. C. 20515

Dear Mr. Mahon:

In response to your telephone calls concerning the need to act promptly on the loan application of Texas Technological College, Lubbock, Texas, (CH-TEX-219(D)), I am pleased to inform you that we have taken steps to enable Texas Tech to proceed with its project without jeopardizing its loan application.

In view of the urgency of the problem at Texas Technological College as you have described it, I am today instructing the Regional Office in Fort Worth to tell officials of Texas Tech that they may proceed with the letting of bids and the start of construction without jeopardizing the loan application now awaiting fund reservation. The college officials will also be advised that they will be proceeding with their own money until action can be taken on the application.

Meanwhile, I suggest that the college officials immediately arrange to meet with our Fort Worth office to go over this plan in detail so that all requirements, including those relating to construction conditions, will have been met. I am instructing Mr. W. W. Collins, Regional Administrator in Fort Worth, to personally telephone the president of Texas Tech to make the necessary arrangements.

We are pleased to have worked with Texas Technological College over the years and to have participated in its development. Loans to Texas Tech under the College Housing Program have totaled \$17,833,000, not including the \$4,000,000 anticipated for early Fiscal Year 1967.

Requests for College Housing loans far exceed available funds. This fund shortage became serious in Fiscal Year 1965 when \$192,000,000 in applications could not be funded. The first seven months of the current year produced an additional \$568,000,000 in new applications making a total carryover plus new applications of \$760,000,000 at the end of January 1966.

Faced with this backlog against a budget level of \$300,000,000 and the prospect that this amount would increase to more than \$1,100,000,000 by June 30, 1966, if no action were taken, the receipt of applications was suspended effective January 31, 1966. At the same time measures were announced to provide for equitable distribution of available funds. These measures provided for a maximum loan of \$4,000,000 per campus per year, of which not more than \$500,000 could be for service (non-housing) facilities.

If I can be of further assistance, please do not hesitate to call upon me.

Sincerely yours,

/s/ Robert C. Weaver

Robert C. Weaver

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 293

May 12, 1966

A meeting of the Campus Planning Committee was held at 8:30 a.m. on May 12, 1966, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. Other members of the College staff present were Miss Evelyn Clewell, Miss Jerry Kirkwood, Mr. John G. Taylor, and Mr. O. R. Downing. In addition, Mr. Howard Schmidt, consulting architect, was present.

### 3301. Approval of Minutes

Minutes of Meetings Nos. 288, 289, 290 and 291 were approved.

### 3302. President's Approval of Minutes

President Goodwin approved the Minutes of Meetings Nos. 288 on April 25, 1966, 289 and 290 on April 28, 1966, and 291 on May 4, 1966.

# 3303. Agricultural Facilities

### Horse Facilities

The building construction has been completed.

The caliche base is in and the pavers are to begin work May 16, 1966.

The Department of Animal Husbandry has the fencing and will make the installation.

Mr. Downing will check out various sources for the possibilities of the sale of the materials in the existing horse facilities.

The proposed site for the Business Administration Building is directly in the area of the old facilities for horses, and Page-Southerland & Page, architects for the Business Administration project, have included in their estimates enough funds to clear the site by demolition in the event the site clearance cannot otherwise be arranged.

# 3304. Behavioral Sciences Training and Research Center (CPC No. 104-66)

The project is not ready for programming.

The Minutes of meetings held on April 13, 1966, and April 15, 1966, are attached to and made a part of the Minutes. (Attachments 643 and 644, pages 1982, 1983)

# 3305. Biology Building (CPC No. 99-65) Pierce & Pierce

The site plan dated May 5, 1966, has been revised in keeping with suggestions made by Mr. Barrick, Mr. Urbanovsky and Mr. Felty with the exception of the service drive which is shown to the east of the building. It is felt that the building would be better serviced by a drive coming off the dormitory parking lot. Mr. Felty will advise the architect.

Mr. Deshayes was instructed on May 3, 1966, to develop the schematic plans according to the space use recommendations prepared by Miss Clewell and dated February 8, 1966.

# 3305. <u>Biology Building (CPC No. 99-65)</u> (Continued) Pierce & Pierce

The architects will present the schematic plans to the Campus Planning Committee at 10:30 a.m., May 16, 1966.

# 3306. Business Administration Building (CPC No. 98-65) (Page-Southerland & Page)

The architects will be requested to present the final preliminary plans and design to the Board of Directors on May 28, 1966, if the Building Committee wants them to do so. The Building Committee of the Board has approved the plans and design.

The Biology Department is presently using the Bull Barn on the proposed site. After receiving the construction schedule from the architects, Miss Clewell will arrange a new space for Biology as necessary and notify the Department of the date to vacate the Bull Barn.

Miss Clewell's summary of the Biology Building based upon the plans dated revised May 5, 1966, is attached to and made a part of the Minutes. (Attachment No. 645, page 1984) The subcarmittee will work with Dr. Camp to re-evaluate various spaces originally designated for general use.

# 3307. Chemistry Building Addition (CPC No. 87-64) (Pitts, Mebane, Phelps & White)

The amendment to the contract for Project B. covering the site utilization studies and professional services for the expanded project has been prepared and will be included in the Agenda for the Board of Directors on May 28, 1966.

Dr. Joe Dennis and his committee submitted "A Description of Space Needed by the Chemistry Department by 1972." (Attachment No. 646, page 1985) The request for the information and an explanation of procedures for justification were outlined to Dr. Dennis and his committee by the Campus Planning Committee Subcommittee on April 29, 1966.

Considering the above requirements presented, it was felt that further justification in some areas would be necessary and Chairman Pennington asked the Campus Planning Committee members and Miss Clewell to review the request and prepare, in writing, an evaluation of the material. A meeting for 1:30 p.m. on May 13, 1966, was arranged with Dr. Goodwin and Dean Kennedy in order to seek their counsel. (Dr. Pearce could not be present.) Results of the meeting are attached to and made a part of the Minutes. (Attachment No. 647, page 1986)

The architects have requested that the requirements for Chemistry be available to them by May 15, 1966, in order that they will be able to meet the July 1, 1966, application date.

# 3308. Classrooms (Large)

Miss Clewell was requested to provide a study of large classrooms (100 to 500 capacity) which will be available in 1966, 1967, and 1968 including her evaluation of scheduling procedures which could be encountered.

### 3309. Classrooms and Offices (Temporary)

One building, X-53, has been set in place.

Four additional buildings have been prepared for moving.

# 3309. Classrooms and Offices (Temporary) (continued)

The sites for 18 of the 19 buildings have been determined. The building requested for Geosciences will house Evaporite Studies, the site of which is not definite and the location depending somewhat upon the Biology Building site.

Proposed temporary facilities and site for the Law School have met with the approval of Dean Amandes.

### 3310. Constitutional Building Amendment Bonds

The opinion of the Attorney General is expected around May 19, 1966.

### 3311. Consulting Architect

The Building Committee authorized the consulting architect, Howard Schmidt & Associates, to proceed as follows:

### I. Programming of New Projects

- a. Law School
- b. Architectural Addition
- c. Agricultural Plant Sciences

### II. Museum Feasibility Study

For a Law School, Administration Building, Classroom and Faculty offices or other purpose

### III. Renovation of the Existing President's Office

The voting of the Building Committee was as follows:

Mr. Harold Hinn "Aye" May 3, 1966

Mr. Herbert Allen "Aye" May 4, 1966

Mr. C. A. Cash Was out of the country and could not be reached.

### A. Behavioral Sciences

Not ready for programming.

### B. Foreign Languages - Mathematics Building

### C. Hydrology and Materials Science Laboratory

Not ready for programming.

Dean Bradford has been requested to survey the overall needs of the School of Engineering.

# D. Music

Not ready for programming.

### E. Physical Plant

Mr. Downing is preparing the requirements.

# 3311. Consulting Architect (continued)

### F. Power Plant

Mr. Schmidt's participation in the project is being considered as follows:

- 1. Site location
- 2. Coordination of the project after bids have been received.

### G. Coordination Proposal

Mr. Schmidt's participation in the following projects is being considered:

#### 1. Biology Building

Coordination after bids have been received.

### 2. Business Administration Building

Same as for Biology Building.

### 3. Museum (New)

Coordination beginning with "Refinement of Project Requirements and Exterior Design Studies" as outlined in the <u>Division of Responsibility for Work to be</u>
Performed

# H. Long Range Plan Proposal

Plans are still in the development stage.

# 3312. Engineering Survey

The survey is almost ready for presentation.

Amendment to the contract covering the specifications for heating and cooling equipment will be handled by letter.

# 3313. Foreign Languages - Mathematics Building (CPC No. 87-64) (Pitts, Mebane, Phelps & White)

On schedule.

Estimates for sump pump and installation have been checked and recommended for approval.

### 3314. Housing

### A. On-Campus

Action has been taken to enable Texas Tech to proceed with the dormitory project without jeopardizing its loan application.

(Note: On May 13, 1966, the Board of Directors met in special session and agreed to proceed with the project for completion by September 1, 1967, with an alternate bid for completion by January 15, 1968, and to finance it by the private placement of bonds.)

### B. Off-Campus

# 1. O'Meara-Chandler Corporation, Houston

Walls and roof slabs in place.

### 3314. Housing

- B. Off-Campus (continued)
  - Frenchmen's Creek Corporation, Dallas, (10th and College)
     No sign of activity.
  - 3. University Dormitory Development, Inc., Chicago, Illinois (19th and College)

Will appeal zoning ruling.

4. University Housing Construction, Ltd., Omaha, Nebraska
May have financing. No sign of activity.

### 3315. Law Building

Mr. Urbanovsky, Mr. Barrick and Mr. Schmidt, Consulting Architect, are studying various sites.

# 3316. Library

A. Completion of South Basement and Third Floor (CPC No. 101-65)
(Ed Lampe, Contractor, Lubbock, Texas, \$155,205)

Light fixtures have arrived.

Contractor on schedule.

B. Elevator (Hunter-Hayes Elevator Company, Dallas, Texas, \$1,746)
Completed.

### 3317. Museum (Existing)

Use feasibility study is in progress by consulting architect.

### 3318. Museum (New)

Working drawings in progress and on schedule.

Request for necessary information during development of the drawings shall be directed to Campus Planning Committee Coordinator.

# 3319. Painting Boiler Stacks, Power Plant

Specifications will be issued as soon as possible.

Payment will be made from Mr. Downing's budget.

# 3320. Parking Lot

Doak Hall (Bill Hood, \$5,154) (CPC No. 103-66)

Project was completed on May 9, 1966.

# 3321. Power Plant (CPC No. 105-66) (Zumwalt & Vinther, Lubbock and Dallas)

It was recommended, in the interest of time, that the advertisement for bids for the heating and cooling equipment be waived. Qualified bidders in the Lubbock area will be requested to bid and all proper procedures for bidding will be followed.

It is anticipated that bids will be available for Board action on May 28, 1966.

# 3321. Power Plant (CPC No. 105-66) (Zumwalt & Vinther, Lubbock and Dallas) (continued)

Consideration is being given to the recommendation that the engineers be the prime party of the contract and that the project architect be responsible to the owner.

In order to stay on schedule, a recommended site and project architect should be presented to the Board on May 28, 1966.

### 3322. Priority List

### 1. Business Administration Building

Title I funds have been approved.

### 2. Biology Building

Both Title I and Title II applications have been filed. Title II application is being considered at this time. The Title I application needs to be refiled on new forms by July 1, 1966.

3. Chemistry Building Addition - Title I and Title II

Justified program for July 1, 1966, filing date in progress.

#### For Consideration:

Architecture and Allied Arts - Title I
Agricultural Plant Sciences - Title I and II
Behavioral Sciences - Title II
Home Economics - Title I and II
Eydrology and Materials Science Laboratory - Title I and II
Law School - Title II
Music
Physical Plant
Power Plant
Texas Tech Press

The Campus Planning Committee has been directed by the Board of Board of Directors to work with the Administration in order to arrive at a recommended priority list.

Miss Clewell has been requested to (1) furnish a list of spaces which will become available in the existing Business Administration Building when the School of Business moves to the new facility, and (2) to furnish similar information for areas to be vacated by Foreign Languages and Mathematics when they occupy new space.

### 3323. Programming Progress - Consulting Architect

(Attachment No. 648, page 1987)

### 3324. Southwestern Public Service Company

The company foresees problems being created if the electric line runs down Flint Avenue.

It was recommended that the company be granted permission to run the extended electric line down Indiana Avenue.

Mr. John Taylor will draft a new set of documents concerning the easement.

# 3325. T.V. Station - KTXT Addition

The foundation and floor slab have been poured.

Jerry Kirkwood Coordinator

The meeting adjourned at 3 p.m.

Campus Planning Committee May 12, 1966 Attachment No. 643 Item No. 3304

### TEXAS TECHNOLOGICAL COLLEGE TRAINING AND RESEARCH CENTER COMMITTEE MEETING Minutes

A meeting of the core group of individuals interested in the development of a Behavioral Training and Research Center at Texas Tech was called by Doctor Goodwin Wednesday, April 13. Present at this conference were Doctor William Pearce, Mr. Marshall Pennington, and Beatrix Cobb, with Doctor Goodwin presiding.

Two basic problems were discussed. First, the question of clearing the proposed project through various committees to the Board of Regents was introduced. Second, possible financial assistance for construction of the Center was examined.

Clearance of Project. Mr. Pennington reported that the project had been presented to the Planning Committee and that the idea had been approved enthusiastically. He also mentioned that a member of the Board had been acquainted with the preliminary planning and had indicated interest and approval. Doctor Pearce reported that Doctor Harold, Acting Commissioner of Higher Education, had stated that it would not be necessary to clear the proposed construction and training and research programs through the Coordinating Committee. He did indicate, however, that the Committee would like to be kept informed as to progress.

Actual clearance of the proposed project through the Board of Regents remains to be accomplished. Further development of potential funds for the project seems indicated before a date for presentation to the Board can be set.

Potential Sources of Funds. Doctor Cobb reported on several preliminary explorations concerning possible construction funds. Each contact will be epitomized below.

1) The Hogg Foundation for Mental Health. This foundation is not set up to assist in construction. The contact was made for suggestions for feasible sources of funds.

### Suggestions:

- The Ford Foundation
- 2. Moody Foundation
- 3. West Texas Foundation (located in Ft. Worth) 4. Neiman-Marcus Foundation
- Department of Health, Education, and Welfare Regional Office, Dallas, Texas Mr. Glenn Rawlings
- 2) Department of Health, Education, and Welfare Regional Office, Dallas, Texas Mr. Glenn Rawlings

### Suggestion:

That Texas Tech make application to the National Office and seek a Demonstration Grant that would encompass the total program rather than approach the various segments represented by services to be included in the Center.

### Potential Sources of Funds. (continued)

3) Department of Health, Education, and Welfare
Washington Office
Doctor Simon - Representative, Training of Mental Health Personnel

### Suggestion:

That Texas Tech initiate a request for funds through the Regional Office in Dallas. Start with Doctor Hales and Mr. Glenn Rawlings.

4) Department of Health, Education, and Welfare Regional Office - Dallas, Texas Doctor Hales and Mr. Glenn Rawlings

In the meantime, the South Plains Guidance Center Board had indicated some interest in being considered as a part of the Training and Research Center. This opened new sources of funds through the Comprehensive Community Mental Health Center legislation.

Forms for application for these funds were requested by Doctor Cobb. It was further suggested that if the group decided to "go" for the Community Mental Health Center funds, a conference with Doctor Frazier, Commissioner for Mental Health and Mental Retardation for Texas, should be arranged at the earliest time possible.

Pertinent Future Conferences. Two conferences pertinent to the proposed Center were announced. First, on April 15, Doctor Cobb was to meet with members of the local Mental Health and Mental Retardation Board to discuss possibilities of a joint endeavor. Second, Doctor Barnett, Department of Mental Health and Mental Retardation, Austin, has been scheduled to meet with representatives from the College (Doctors Goodwin, Pearce, Pennington, Mattson, and Cobb) and Representative Delwin Jones and Mrs. Coats for a luncheon meeting on the 20th. The purpose of the conference is to be the consideration of locating the diagnostic center for the School for the Mentally Retarded in the Training and Research Complex rather than on the grounds of the School.

Prospectus. It was suggested that a prospectus should be prepared to be utilized in soliciting funds and in presenting the project to the College Board. The committee approved this endeavor. Doctor Cobb will proceed with planning. The final effort will be cleared through this committee.

In a telephone conversation with Mrs. Coats of the United Fund Thursday, April 14, she reported that she had spoken tentatively with Doctor Harris of the State Board for Hospitals and Special Education relative to the proposed merger of the mental health clinic and the Training and Research Center. After discussing it with Doctor Harris, it was her opinion that the nine member Board should vote to do this merger before Doctor Frazier is approached for support. Doctor Pearce is going to Austin, April 14. He will call Doctor Cobb Saturday to see whether or not the Mental Health Board voted to join the Training and Research Center at the April 15 meeting. If the vote is to merge, he will attempt to make an appointment with Doctor Frazier while he is in Austin.

Campus Planning Committee May 12, 1966 Attachment No. 644 Item No. 3304

# REPORT ON APRIL 15 MEETING WITH THE MENTAL HEALTH AND MENTAL RETARDATION BOARD

On the afternoon of April 15, Doctors Goodwin and Cobb met with the members of the United Fund nine member Mental Retardation and Mental Health Coordinating Board. Doctor Cobb presented the overall format of the Training and Research Center to the Board. The reaction of the Board at this point was not encouraging. This may be due to the fact that this is a new Board with members that have not been briefed on their responsibilities and on the status of the Guidance Clinic as it is now in operation. It is the prediction of this reporter, however, that the Guidance Center will not request to become a part of the proposed Training and Research Center.

It was suggested at the meeting that the Board would reassemble the following week and at that time discuss the pros and cons of affiliation with the University Training and Research Center. The Board will report back to the University group the indication of interest or non-interest in this project.

### REPORT OF THE LUNCHEON MEETING APRIL 20

Present at this conference were Doctor Goodwin, Doctor Pearce, Mr. Pennington, Doctor Barnett, Representative Delwin Jones, Mrs. Nelda Coats, Doctor Theodore Andreychuk, Mr. Barney Rushing and Mr. W. B. Rushing and Doctor Cobb. This meeting was called for the purpose of discussing with Doctor Barnett (of the Mental Health and Mental Retardation Commission of Austin, Texas,) the possibility of a joint endeavor as far as the diagnostic portion of the proposed Training and Research Center is concerned. The proposed Center was reviewed for Doctor Barnett. He indicated an interest in collaborating in the use of staff and a possible interagency contract for service. He stated that there would be no possibility of utilizing funds earmarked for the State School here in the construction of the Center. Representative Delwin Jones stated that he felt it would be essential that a diagnostic unit be located in the State School, but suggested that a full time liaison person might be employed in collaboration with community service units and that this liaison person be given the responsibility of exploring possible sources of money through the Washington Offices and representing the College in the development of plans for the proposed Training and Research Center. This individual should be one already skilled in working in the complex of granting agencies in the Washington area. Mr. Jones indicated that he had a person in mind, but could not reveal the name unless adequate funds were available.

Doctor Barnett suggested that the College might seek a planning grant from the Department of Health, Education, and Welfare, Division of Chronic Diseases under the legislation related to University Affiliated Centers Construction Branch.

All present indicated a deep interest in the project. There was no feeling that duplication of services might lead to competition in other endeavors of the University or community.

### FOLLOW-UP ON THIS MEETING

Following the luncheon conference Doctor Cobb called the Mental Retardation Branch of the Division of Chronic Diseases in Washington and talked with Doctor Foreman of that Office. This inquiry was relative to forms for the filing of an application for a planning grant. Doctor Foreman indicated

Follow-up on This Meeting (continued)

interest in the project, said that funds were available for a planning grant, but that it should be initiated through the Regional Office in Dallas. He gave the name of Miss Kay Kimborough as the proper individual to contact.

A call was placed to Miss Kay Kimborough of the Mental Retardation Branch, Division of Chronic Diseases in the Dallas Office. Miss Kimborough is a native of Clovis, New Mexico, and knows the Universtry by reputation. Following a discussion of the general parameters of the project, she requested the material that had been developed for presentation to the nine man Mental Retardation and Mental Health Committee of the local Guidance Center. This material is in the mail. She will, today, place in the mail proper forms for application for a planning grant. This application is due prior to July 15.

It was requested that Miss Kimborough make an on-site visit to Texas Technological College and confer with the various members of the committee working on this proposal. Her schedule is so crowded that she would be unable to commit herself for this visit prior to the last week in May. Doctor Cobb requested that she hold this time, but that any unforeseen break in her travel schedule to the last week in May be earmarked for Texas Tech.

Miss Kimborough will read the material forwarded to her and discuss it with Doctor Head, Head of her Division and with the representatives of VRA (Mr. Doyle Best and Mr. Robert Thomas, also in the Regional Office in Dallas). The last two men are, of course, familiar with the project.

Campus Planning Committee May 12, 1966 Attachment No. 645 Item No. 3305

# TEXAS TECHNOLOGICAL COLLEGE Office of the Registrar

#### Summary of the Biology Building

When the plans were revised and design of rooms changed for the Biology Building, Biology Department originally designated 10,544 sq. ft. of space which will probably not be occupied by Biology at the time they move into the building.

The total designated area will be converted to general use as follows:

- 4 classrooms (784 sq. ft.) cap. 50 each = 200 capacity
- 2 classrooms (2,176 sq. ft.) cap. 75 each = 150 capacity
- 1 classroom (1,296 sq. ft.) cap. 90 each = 90 capacity
- 1 classroom (1,056 sq. ft.) cap. 75 each = 75 capacity
- 1 classroom (1,440 sq. ft.) cap. 100 each = 100 capacity
- $\frac{1 \text{ classroom}}{10 \text{ classrooms}} (864 \text{ sq. ft.}) \text{ cap. 60 each} = \frac{60 \text{ capacity}}{675 \text{ capacity}}$

2 offices (576 sq. ft.) for 5 or 6 people

Possibly 1,280 sq. ft. in radiation area and 992 sq. ft. in animal physiology converted to general use, making a total of 12,816 sq. ft.

The first designation of general use space was 20,179 sq. ft. which could be directed for general use resulting in 4 faculty offices, space for 36 additional graduate students and 15 additional classrooms (space for 778 students). The department head stated 2 labs in vertebrate zoology and 4 clean rooms (2,330 sq. ft.) were needed and had erronously been designated as general. This left 17,059 sq. ft. to be allocated to general use at this time, but ultimately will be diverted to Biology use. This would make a net of 13 additional classrooms.

The revised plans and designated areas for general use now show 10,544 sq. ft. and possibly 12,816 sq. ft. total.

Cytology professor has been appointed since then and thus reduced the square feet (784 sq. ft.) for general use formerly shown.

Equipment for electron-microscopy will be installed and make that area unusable for general use (E.M. training and dark room 624 sq. ft.) thus reducing the original tabulation to 16,441 sq. ft. as compared to 10,544 sq. ft. now designated.

Recommend that other areas, approximately 7,363 sq. ft. originally designated for general use, be re-evaluated and restudied.

Campus Planning Committee May 12, 1966 Attachment No. 646 Item No. 3307

# A DESCRIPTION OF SPACE NEEDED BY THE CHEMISTRY DEPARTMENT BY 1972

It is the ambition of the staff of this department to build, for the "University", a Chemistry Department of the First-Class. Each present staff member has had this intent from the time of his first connection with the department. We believe that, at the moment, we have a department which is as good as it can be with the kind of support that has been given us.

To have the kind of department desired, we must have staff of the highest caliber and enough in number to take care of the necessary instruction and research, good students, and adequate space and equipment for the proper instruction and research of both.

The <u>esprit</u> <u>de corps</u> of the department has been good - not as good now as it was in the time when we had not passed the saturation point for the instruction and research of students and faculty. At this point, it is interesting to quote from the statement of space requirements of the Architecture Department:

"The environment for effective support of the teaching objectives must be one of a stimulating, even exciting, atmosphere resulting from a unity of surroundings which incorporates, within the growing and changing techniques of the times, as many of the amenities of contemporary educational life as are available and feasible

This atmosphere is achieved only when a proper functional relationship of working spaces results in an all-over unity which encourages the solidification of the team of the student-faculty; wherein the first concern is the welfare of the student in the learning process, and the second concern is the welfare of the faculty in its pursuit of means of presenting efficiently the principles, disciplines and stimulation required for proper development. The faculty exists as the stabilizing core of the team, and works to maintain a unified and stimulating environment."

The growth in number of students in the Chemistry Department has just about paralleled that of the School of Arts and Sciences. Projection of the growth curve indicates that we should have between 3,600 and 4,000 students by 1970. By 1972 we should have at least 6,000 students in the department. If this enrollment increase were entirely at the undergraduate level, it would require additional usable space of 62,000 sq. ft. However, the graduate enrollment will go up far more steeply than total enrollment.

At this time we have approximately 40 graduate students; of these 15 are teaching assistants. Next year we will have about 20 research assistants, and 32 teaching assistants have been authorized in our teaching budget for next year. It is impossible at the moment to see how we will be able to take care of the graduate students we shall have next year. With proper facilities, we could easily have 200 graduate students in the department by 1972. Using this figure and the absolute space necessary for each graduate student, 120 sq. ft. (see Chemical and Engineering News, 1964, p. 80, which says 150 to 200 sq. ft. plus other adequate facilities), we find a needed additional space of 24,000 sq. ft.

Therefore, at this time it appears that by 1972 we shall need a total of 86,000 sq. ft. This analysis makes it appear that our request for 75,000 sq. ft. of additional space is too low.

We have five subdivisions within the department: analytical;

biochemistry; inorganic; organic; and physical chemistry. The following analysis is projected with respect to anticipated staff and graduate students by 1972:

Division	Full-Time Staff	Graduate Students	New Space Graduate	New Space Undergraduate
Analytical	4	20	2,425	2,850
Biochemistry	6	30	6,897	3,004
Inorganic	6	35	8,489	1,200
Organic d	8	40	9,175	4,750
Physical	_8_	48	10,650	_2,000
	32	173*	37,636	13,804

<sup>\*</sup> This is the sum of individual estimates. My own estimate is close to 200.

It is easy to see that the request being made for additional undergraduate space is lower than that indicated above. Certain space in the old building will become available for undergraduate work when the addition is completed. It is impossible to know just how much and which space this will be until floor plans of the new addition are available.

In addition to the above-mentioned space, general departmental space will be needed as follows:

Number	<u>Item</u>		Total Space Square Feet
1	500-Seat auditorium		5,035
1	Demonstration prep room		600
8	Seminar and conference rooms		2,000
1	Secretary's room and reception room		300
1	Department Head's office		250
1	Departmental workroom		250
4	Issuing storerooms		2,000
2	Small classrooms seating 100 each		3,600
1	Acid and volatile chemical storeroom		600
1	High pressure reaction room		300
1	Electronics shop		1,000
1	Mechanical shop		1,000
1	Area for Welch Professor and his studen	ts	8,000
1	Room for storage of liquid nitrogen, he	lium, etc.	100
1	Room for Departmental analyst		500
1	Glassblower room		500
1	Key punch room		100
		TOTAL	26,135

Shops and storerooms should be located about the middle of the "connecting link" in the basement. Insofar as possible the space for physical chemistry should be in the basement. Space for inorganic and analytical chemistry should be located on the first floor. Organic and biochemistry should be located on the second floor. There should be an issuing storeroom on each floor. It should be located about the middle

of each of the "connecting links." The third floor above grade will be used, of course, and by one or more of the areas mentioned. We cannot assign this until floor plans are available. Elevators of rather high weight lifting capacity should be conveniently located to serve all floors.

### <u>Detailed Description of Space</u>

## I. Analytical Chemistry

#### A. Undergraduate

1. Estimated undergraduate enrollment by 1972 420 Chemistry 241, 242 320 students Chemistry 4312 100 students

2. Estimated faculty by 1972

4

### 3. Description of laboratories

a. Chemistry 241, 242

Rooms C-112 and C-114 will be converted to an undergraduate laboratory and balance and instrument room patterned after the arrangement used in C-108 and C-110. This expansion would accommodate 64 additional students for a student clock-hour load of 384 hours per week. Additional space for students in this course is needed to meet the anticipated enrollment with a laboratory 25' x 34', or 850 sq. ft., with a balance and instrument room 25' x 10', or 250 sq. ft., for a total of 1,100 sq. ft.

## b. Chemistry 4312

This will require a space of 25'  $\times$  30', or 750 sq. ft., for an instrument room, and a 25'  $\times$  20', or 500 sq. ft., laboratory for a preparation laboratory for handling corrosive materials which is separate from the instrument room. This preparative lab needs hoods, sinks, and other equipment associated with wet chemical preparations. The number of students per laboratory session should be kept as low as reasonable so that individual experience is obtained on each instrument and experiment. Therefore, 20 students per laboratory session and five or more laboratories per week set a minimum time usage of 300 student hours per week. Additional time for this room would include use of the instruments for short-term research and graduate student use, a plan which is not too feasible at present. Also, the wear and tear on the equipment would be considerably reduced, since continual setups and tear downs with associated storage problems would be eliminated.

#### 4. Description of special rooms

A controlled low humidity room is needed for infrared instrumentation and other equipment which is sensitive to moisture. This room should be approximately  $25' \times 20'$ , or 500 sq. ft.

### B. Graduate

1. Estimated graduate enrollment by 197?

20

2. Estimated faculty by 1972

4

## 3. Description of laboratories

Three 25' x 15' laboratories for a total of 1,125 sq. ft. These labs probably should not be all of the wet lab type, where sinks, hoods, special HClO<sub>1</sub> hoods, etc., are installed, but rather plan one wet lab, one which can be used either wet or dry and one laboratory specifically for special instrument set-ups which can be used by all. The more versatile lab would probably have more student desks than the other two labs, although desks would not be excluded from either of the other labs. These laboratories would be in virtually continuous use.

6

## 4. Descriptions of special purpose rooms

- a. Darkroom for use with photographic recording equipment. This room should be 25' x 10', or 250 sq. ft.
- b. Staff offices

Provision should be made for offices for two staff members, each room of about 10' x 15' for a total of 300 sq. ft. and two laboratories of open design for instrumental and wet laboratory work of 25' x 15' each, or 750 sq. ft., for a gross of 1,050 sq. ft. These laboratories would also permit expansion of special instrumental programs and grants that may develop. The time usage would be approximately 120 clock hours per week.

#### II. Biochemistry

### A. Undergraduate

1. Estimated undergraduate enrollment by 1972 200

Chemistry 436, 437 100 Chemistry 342 100

2. Estimated faculty by 1972

3. Description of laboratories

Laboratories should have lab benches to accommodate a maximum of 40 students per laboratory section and lockers to accommodate three sections (120 lockers). Cabinet and shelf space should be on two sides of the room for storage of chromatography equipment, centrifuge equipment, spectrophotometers, etc. A refrigerator, constant temperature bath, and centrifuge will be in each laboratory. Each laboratory will be about 25' x 50' (1,250 sq. ft., total of 2,500 sq. ft.).

- a. Chemistry 436 meets in the fall and Chemistry 437 meets in the spring. The laboratory is three hours, once a week. Four sections are estimated by 1972. Each laboratory can accommodate three sections, so three sections could meet in one laboratory and one section in the other. Consequently, one laboratory would be used 12 hours per week and the other laboratory would be used three hours per week. There is a possibility that the laboratory may be expanded to six hours per week. In this case, the number of hours of use of the laboratory would double.
- b. At present, Chemistry 342 is a one-semester course which meets only in the spring. There is one three-hour laboratory per week. Four sections of this course are anticipated by 1972. Two of these sections can meet in the laboratory in which one of the 437 sections meets. The other two sections will need to occupy a laboratory in the present building. In the spring, both laboratories will be used 12 hours per week by Chemistry 437 (four sections) and 342 (two sections). There is a possibility that Chemistry 342 laboratory hours per week will be doubled in the future.

## 4. Description of special purpose rooms

#### a. Biochemistry storeroom

One-half the space in this room will be shelf space for chemicals used in the biochemistry labs. The other half should be for storage of items of equipment such as the fraction collector and pH meters. Approximate size of room - 14' x 12' (168 sq. ft.).

### b. Balance and instrument room

This room will contain six Mettler balances, a spectrophotofluorometer, a Beckman DB spectrophotometer with recorder, and a pH meter. Approximate size - 14' x 24' (336 sq. ft.).

#### B. Graduate

1. Estimated graduate enrollment by 1972

30

2. Estimated faculty by 1972

6

### 3. Description of laboratories

We will need six five-man laboratories. These laboratories will contain space for lab benches and desks for five research workers each, space for a refrigerator and centrifuge in each laboratory, floor space for temporarily used equipment such as fraction collectors, table space for balances, pH meters, and spectrophotometers, and shelf space for glassware and supplies. One laboratory will contain a setup for glass-redistilled water. Approximate size per lab, 25' x 30' (370 sq. ft., 4,500 sq. ft. total). All of the space requested should be available to staff and graduate students 24 hours a day. However, the five-man laboratories which are in excess of the needs of the staff and graduate students of the biochemistry section could be temporarily used for other purposes. It is expected that the laboratories requested will be completely filled before 1972 and will be in use around the clock.

## 4. Description of special purpose rooms

### a. Centrifuge room

This room will contain probably three centrifuges. Approximate size, 12' x 12' (144 sq. ft.).

## b. Instrument room

The instrument room will contain a Beckman DB spectrophotometer, liquid scintillation counter, Cary recording spectrophotometer, gas chromatograph, and other instruments. Approximate size 25' x 15' (375 sq. ft.).

## c. Dark room

The dark room will be separated into two rooms, both of which can be made completely dark. One room will be used as a photographic dark room and will be approximately 8' x 8' (64 sq. ft.). The other room, which must be well ventilated to remove ozone produced by the instrument, will contain a laboratory bench and on a table an Aminco Bowman Spectrofluorometer with accessories. Approximate size of this room 12' x 12' (144 sq. ft.). Area for both rooms 208 sq. ft.

#### d. Dishwasher room

A dishwasher room with facilities for an automatic dishwasher will be approximately 12' x 12' (144 sq. ft.).

#### e. Inoculating room

The inoculating room will consist of an entry room and an inner room with a table. Both rooms will contain ultraviolet lights which can be turned on and off from outside the rooms. The outer room will be about 4' x 5' and the inner room about 4' x 6'. This room should be near the fermentation room. Total area for both rooms 46 sq. ft.

f. Fermentation room (25' x 12', 300 sq. ft.)

The fermentation room will contain an autoclave and fermentation apparatus. There will be a lab bench. It should be near the 37 and 25° constant temperature rooms and the inoculating room.

g. Chromotography and solvent room

This room will be used for any operations involving volatile solvents. These would include column, paper, and thin layer chromatography and some kinds of paper electrophoresis. This room must be efficiently ventilated and contain a large hood. Approximate size 15' x 12' (180 sq. ft.)

- h. Constant temperature rooms (total 374 sq. ft.)
  - (1). 37° C Constant temperature room

This room should have the temperature adjustable from 30-40° C and constant to within 2° C. The room will be used primarily for growing bacterial cultures. Approximate size 6' x 8' (48 sq. ft.). This room should be near the fermentation room.

(2) 25° C Constant temperature room

This room should have the temperature adjustable from  $15\text{--}30^\circ$  C. and constant to within 2° C. The room will be primarily for growing fungus cultures. Approximate size 6' x 8' (48 sq. ft.). This room should be near the fermentation room.

(3) 5° C Constant temperature laboratory

The temperature should be constant within  $3^{\circ}$  C. This room will serve as a cold lab for preparation of heat-labile materials such as enzymes. There will be a lab bench in this room. Approximate size  $20' \times 15'$  (150 sq. ft.).

(4). 5° C Cold storage room

The temperature should be constant to within  $3^{\circ}$  C. This room will contain mainly shelf space for storage of materials which must be refigerated. Approximate size of room 8' x 8' (64 sq. ft.).

(5). -20° C Walk-in deep freeze

The temperature should be constant within  $3^{\circ}$  C. This room is for storage of materials which must be kept frozen or at very low temperature. Approximate dimensions  $8^{\circ}$  x  $8^{\circ}$  (64 sq. ft.).

i. Offices

There will be four staff offices, 25' x 10' (250 sq. ft.; total, 1000 sq. ft.).

## III. Inorganic Chemistry

- A. Undergraduate
  - 1. Estimated undergraduate enrollment by 1972

80

6

3. Description of laboratory

The laboratory and storage space for Chemistry 445 should be 25' x 48' for a total of 1200 sq. ft. This will be used 15 hours per week.

#### B. Graduate

1. Estimated graduate enrollment by 1972

35

2. Estimated faculty by 1972

6

3. Description of laboratories

There should be six five-man student laboratories, 25' x 25', for a total of 3750 sq. ft., to be in use about 60 hours per week.

- 4. Description of special purpose rooms
  - a. Synthetic-non-aqueous solvents room, 25' x 30', 750 sq. ft.
  - b. Shop and instrument storage room, 9' x 20', 180 sq. ft.
  - c. Dark and constant temperature room, 9' x 25', 225 sq. ft.
  - d. Chemical storage room, 7' x 25', 175 sq. ft.
  - e. Instrument room, 25' x 40', 1000 sq. ft., to house infrared, ultraviolet, visible, magnetic susceptibility, thermogravimetric analysis equipment, Toeppler pump, x-ray, etc.
  - f. Staff offices and laboratories, total 2544 sq. ft.
    - (1) Six offices, 12' x 16' (192 sq. ft.) for staff
    - (2) Divisional office and storage, 12' x 32', 384 sq. ft.
    - (3) Professional or postdoctoral laboratories, six 12' x 14', a total of 1008 sq. ft.

#### IV. Organic Chemistry

## A. Undergraduate

1.	Estimated	undergraduate	enrollment by 1972	520
	Chemistry	341	200	
	Chemistry	315-316	72	
	Chemistry	325-326	216	
	Chemistry	431	32	

2. Estimated faculty by 1972

8

- 3. Description of laboratories
  - a. Chemistry 341

Laboratories will be housed in the old building as follows:

(1). Room 204 accommodates 32 students in each of three laboratory sections of three hours duration. Total usage is 9 hours per week. A total of 96 students could be accommodated here.

- (2). Room 205 accommodates 24 students in each of three laboratory sections of three hours duration. Total usage nine hours per week. A total of 72 students could be accommodated here.
- (3). Room 212 accommodates 24 students in each of three laboratory sections of three hours duration. However, only two such sections of 16 each would be required if the enrollment is 200. Total usage would be six hours per week.

## b. Chemistry 315-316, and 325-326

These laboratories would be housed in the new building in the following facilities:

Four 25' x 40' laboratories (designated A, B, C and D) ranged in groups of two. A and B will be interconnected through an approximately 25' x 15' instrument and storage room (E) and C and D will be connected through a similar room (F). A, B, C, and D will be 375 sq. ft. each. Rooms A, B and C each would accommodate 24 students in one section of Chemistry 315 and 48 students in two sections of Chemistry 325. Total usage of 15 hours per week. Room D would accommodate 72 students in three sections of Chemistry 325. Total usage of 18 hours per week. Room E would be in use whenever Room A or Room B is in use; minimum usage 15 hours per week. Room F would be in use whenever Room C or Room D is in use; minimum usage 18 hours per week.

## c. Chemistry 431

The present laboratory (Room 4 of the old building) would accommodate the estimated enrollment of 32 if an additional laboratory bench is added. Usage would be six hours per week.

#### B. Graduate

1. Estimated graduate students by 1972

40

2. Estimated faculty by 1972

8

- 3. Description of laboratories
  - a. Two large research laboratories approximately 90' x 25' (2,250 sq. ft. each) with walk-around vacuum rack and eight laboratory benches. Built-in desks at end of benches and maximum possible hood space. These would provide laboratory and office space for 16 graduate students and/or postdoctoral fellows each, or a total of 32. Estimated usage is 60 hours per week.
  - b. One research laboratory, approximately 40' x 25', with four laboratory benches (1,000 sq. ft.). Built-in desks at end of benches and maximum possible hood space. This will accommodate eight graduate students and/or postdoctoral fellows. Estimated usage is 60 hours per week.
- 4. Description of special purpose rooms
  - a. One instrument room, approximately 40' x 25' (1,000 sq. ft.). This would be used to house major equipment such as the nuclear magnetic resonance instrument, electron spin resonance instrument, spectrometers, analytical gas chromatographs, etc. Specialized electrical wiring would be required.
  - b. One service room approximately 10' x 25' (250 sq. ft.). This should be adjacent to the instrument room and would house equipment necessary to provide services (such as magnet cooling water) to the instruments in the latter room.
  - c. One organic preparations and separations room, approximately 20' x 25' (500 sq. ft.). This room would be used to house equipment for separations (such as counter-current distribution apparatus, distilling columns, preparative gas chromatographs) and set-ups for relatively large scale preparations.

Because of the prevalence of solvent fumes, this type of equipment needs to be segregated and the room needs to be separately vented to the outside.

d. One storage room, approximately 20' x 25' (500 sq. ft.). This room would be used for storage of glassware, apparatus and small instruments.

#### e. Offices

- (1). Five faculty offices, approximately 20' x 12½' (250 sq. ft. each). This would accommodate five faculty members, the remaining three would be accommodated in the old building.
- (2). One secretary's office, approximately 14' x 12½' (175 sq. ft.)

### V. Physical Chemistry

### A. Undergraduate

1. Estimated undergraduate enrollment by 1972

255

Chemistry 343

80

Chemistry 347-348

175

2. Estimated faculty by 1972

8

3. Description of laboratories

Two 25' x 40' undergraduate physical chemistry laboratories, 1,000 sq. ft. each. Each lab will be used by 22 students four times per week for a three-hour lab period for a total of 12 hours per week. The present laboratory in the old building will be used in a like manner. The requirements for the new labs should be the same as for the present lab except for the addition of one hood per laboratory. The electrical load should be two or three times normal.

## B. Graduate

1. Estimated graduate enrollment by 1972

48

2. Estimated faculty by 1972

8

3. Description of laboratories

Seven research laboratories, 25' x 40', or 1,200 sq. ft., each. The research labs should have electrical wiring to handle a load which is two or three times the normal load. The laboratories will be used about nine or 10 hours per day by an average of six graduate students per lab. An additional six students can be accommodated in the facilities in the old building.

- 4. Description of special purpose rooms
  - a. Cne student shop and glassblowing area, 15' x 10', 150 sq. ft.
  - b. Seven staff offices, 12' x 16' each, 192 sq. ft. each
  - c. Seven secretary or postdoctoral offices, 12' x 9', 108 sq. ft. each.

Campus Planning Committee May 12, 1966 Attachment No. 647 Item No. 3307

Memorandum To: Mr. M. L. Pennington Date: May 14, 1966

From: Jerry Kirkwood, Campus Planning Committee Coordinator

RE: Meeting Held in Dr. Goodwin's Office at 1:30 p.m., May 13, 1966, Chemistry Committee Space Requirements

The requirements entitled "A Description of Space Needed by the Chemistry Department by 1972" as submitted by the Chemistry Committee was reviewed along with evaluations of the material which were prepared by Miss Evelyn Clewell and Mr. Nolan Barrick.

The request was discussed at length considering various details of plan organization, projected enrollments, graduate and undergraduate facilities, etc.

It was pointed out that the architects have requested that the program be available to them by May 15, 1966, in order that they are able to meet the July 1, 1966, filing date for the application.

Dr. Goodwin made the following suggestions for arriving at a possible solution for programming the space with adequate justification of the request:

- 1. Dr. Goodwin will request Dr. Dennis to submit:
  - a. A tabulation of hourly use of space in existing Chemistry Building.
  - b. The number of hours small laboratories are used.
  - c. An evaluation of the reassignment of spaces in the existing Chemistry Building when new facilities become available.
- 2. Requested that a study be made of the Scheme C site utilization plan breaking the construction of the Chemistry Building Addition into several phases in order that a comparison of time, needs and available construction funds could be made.

Mr. Felty has made the study which is attached.

Members of the College staff present were:

Dr. R. C. Goodwin

Mr. Nolan E. Barrick

Mr. M. L. Pennington

Mr. John G. Taylor

Mr. S. M. Kennedy

Mr. E. J. Urbanovsky

Mr. Bill Felty

Miss Jerry Kirkwood

Campus Planning Committee May 12, 1966 Attachment No. 648 Item No. 3323

#### PROGRAMMING PROGRESS - CONSULTING ARCHITECT

### ARCHITECTURE AND ALLIED ARTS:

April 28, 1966. Consulting Architect received a very comprehensive written program for expansion of facilities from Mr. Nolan Barrick. Included in the contents are:

- (a) General and instructional objectives with current room-use charts
- (b) Space needs defined
- (c) Space summary, square foot areas
- (d) Present space utilization summary
- (e) Projected space requirements by individual rooms
- (f) Supplementary explanatory information

May 4, 1966. Consulting Architect received written official confirmation to begin programming the Architectural and Allied Arts Facilities from Mr. M. L. Pennington.

May 11, 1966. Consulting Architect met with the Project Building Committee, Mr. Barrick, Mr. Robert Lockard, Mr. Dudley Thompson, Mr. Jim Howze, and Mr. Will Robinson. The meeting was an informal discussion to hear some of the philosophies behind the written program and to overview the expansion objectives as a starting place. Schematic studies will begin immediately. Miss Jerry Kirkwood has furnished the Consulting Architect plans of the existing Architecture Building.

## AGRUCULTURAL PLANT SCIENCES:

May 4, 1966. Consulting Architect received written official confirmation from Mr. M. L. Pennington to begin programming Agricultural Plant Sciences.

May 11, 1966. Consulting Architect and Miss Jerry Kirkwood met with Mr. George Elle and Mr. Tom Musiak. Rough drafts of the written program were received and other meetings are planned with Mr. Elo Urbanovsky and Dr. Art Young. Schematics will begin immediately.

## HOME ECONOMICS ADDITION:

April 13, 1966. Mr. M. L. Pennington, along with Miss Jerry Kirkwood, introduced the Consulting Architect to Dean Willa Vaughn Tinsley. A written program was presented.

April 14, 1966. Consulting Architect toured the existing facilities with Dean Tinsley and took in a general overview of the facilities and its operation.

April 20, 1966. Consulting Architect met with Dean Tinsley and her committee composed of Dr. Bill Lockhart, Dr. Mina Lamb and Mrs. Davidson in the Faculty Club and had lunch, a get-acquainted session and informal conversation.

April 26, 1966. Consulting Architect met with the Project Building Committee and among other items reviewed possible inspection trips to review Home Economic Facilities at other campuses.

April 28, 1966. Consulting Architect met Dr. Wathena Temple from East Texas University who was visiting the campus during the day. Dr. Temple is to be an associate dean next year and will also be a staff member in the Interior Design Department of Applied Arts.

April 29, 1966. The Building Committee was unable to participate in an inspection tour at this time. Consulting Architect visited the Campus at the University of New Mexico at Albuquerque and was given a very thoreough tour of the quite new School of Education by Dr. Maisley who is head of Art Education. Facilities inspected were Home Economics, Child Development Laboratories, and Art Lab Facilities. Many notes and 35 mm photographs were taken for review with the Building Committee at a later date.

April 30, 1966. The Consulting Architect visited the campus of Brigham Young University at Provo, Utah, and toured the College of Family Living which includes Child Development Laboratories, Home Economics Laboratories, Home Management Facilities, Art Facilities and Interior Design Labs. Consulting Architect was again given valuable assistance on the campus by a staff member, Mrs. Virginia Polson. Numerous 35 mm pictures, notes, and literature were taken for review later with the Building Committee.

May 3, 1966. Dr. Johnie Christian, Program Specialist, Home Economics Education with the U. S. Department of Health, Education, and Welfare's Regional Office in Dallas, visited the Texas Tech campus by invitation. Dr. Christian has edited a publication entitled "Planning Functional Facilities for Home Economics Education", and presented a slide presentation with comments to the Project Building Committee as well as other staff members in the Department. Further conversation in a smaller meeting with Dr. Christian followed the slide presentation.

The written program is being refined and schematic drawings have begun for the addition to the Home Economics Facilities.

May 5, 1966. Consulting Architect received written official confirmation to begin programming the Home Economics Addition.

#### LAW SCHOOL:

April 23, 1966. Consulting Architect met with the Dean of the Law School, Dr. Richard Amandes, and his newly appointed Librarian, Mr. U. V. Jones, to discuss his written program which had been presented to the Consulting Architect by Mr. Pennington earlier. This meeting was to take advantage of their time on the campus while they were present for the Board Meeting. The written program was reviewed quite extensively and the Consulting Architect received schematic plans of all the Law Schools in the United States. These are packaged together by the Association of Law School Deans. They are prepared for use in situations as ours for planning new buildings or additions to present buildings. These are going to be quite helpful. In addition, the Consulting Architect has since received approximately 160 slides indicateing "do's and don't's" in law school design which were also put together by this same association. They are accompanied by a written narrative, explaining each slide.

April 29, 1966. Consulting Architect met Dean Amandes at the Law School at the University of Utah in Salt Lake City and spent some five hours touring the facilities with Mr. Robert Schmid, the Librarian at this School of Law. Many pictures were taken and notes recorded. The following morning Dean Amandes and the Consulting Architect met with Mr. Walley Bennett, the Associate Dean of the Law School, and reviewed still further some experiences they have had with their quite well-planned three-year old building.

May 4, 1966. Consulting Architect received written official confirmation to begin programming the Law School. (This had earlier been confirmed by the Building Committee and the Board by telephone.)

Programming Progress

-3-

## LAW SCHOOL (continued)

Schematics have begun for new facilities as well as studies now being made on the use of the present Museum for a Law School. To assist in this analysis of using the Museum, the Consulting Architect has mailed floor plans and other data to Dean Amandes and to Mr. U. V. Jones and requested that they participate in the analysis of whether this present facility could serve as a Law School.

QUESTION?? WHEN WILL THE SPACE JUSTIFICATION BE OFFICIAL ON THESE FOUR PROGRAMS?

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 294

May 16, 1966

A meeting of the Campus Planning Committee was held at 10:40 a.m. on May 16, 1966, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. Other members of the College staff present were Miss Evelyn Clewell, Mr. John G. Taylor, Mr. O. R. Downing, Mr. Bill Felty and Miss Jerry Kirkwood.

The Biology Building project architects were represented by Mr. George Pierce and Mr. Robert Deshayes.

# 3326. Biology Building (CPC No. 98-65) (Pierce & Pierce)

En route to Lubbock the architects discovered that the revised schematic plans (dated May 12, 1966) show 21,000 gross square feet increase over the approved program.

6,000 square feet of the 21,000 can be accounted for in the full basement which was not programmed, but the architects feel that the space will not be too much more expensive than a half basement and affords functional access to the utility tunnel.

In discussing the location of the space occupied by electron microscopes, the architects were asked to study the possibility of absorbing some of the above mentioned basement space by relocating the electron-microscope area.

In addition, the architects were asked to consider the following:

- Restudy the greenhouse facilities on the roof providing an arrangement which will decrease shaded areas and provide access for spraying.
- 2. Orient the building toward the south, shifting to the west and/or south in order to allow for lateral expansion and a significant approach to the building from the south.
- 3. Study the physical detachment of the conservatory from the main instructional area.

The meeting recessed at 12:35 p.m. and reconvened at 1:30 p.m.

Miss Clewell was unable to return to the meeting.

- 4. Restudy the locationg of the concession area with the mass of the people in mind.
- 5. Restudy the location of the 500 capacity auditorium considering general college usage.
- 6. Provide approximately one custodial space with sink per each 15,000 square feet. Provide one storage space near the service elevator to house supplies for a two to three week period.

# 3326. Biology Building (CPC No. 98-65) (Continued) (Pierce & Pierce)

Miss Clewell, Mr. Urbanovsky, and Mr. Felty are preparing a new list of spaces which will be for general use until the Biology Department growth indicates the need for additional space. Upon the approval of the new list by the Campus Planning Committee, the information will be forwarded to the architects.

The architects will need additional time to remove the square footage increase and have requested a meeting with the Board of Directors, June 21, 1966, in Austin for the presentation of the schematic plans and design.

The architects were requested to prepare a revised time schedule covering a period from application filing date through receipt of bids.

Jerry Kirkwood Coordinator

The meeting adjourned at 3:15 p.m.

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 295

May 20, 1966

A meeting of the Campus Planning Committee was held at 10:30 a.m. on May 20, 1966, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky, Mr. Nolan E. Barrick and Chairman M. L. Pennington. Other members of the college staff present were Mr. O. R. Downing, Mr. John G. Taylor, Miss Evelyn Clewell, and Miss Jerry Kirkwood. Mr. Howard Schmidt, consulting architect, was also present.

### 3327. Priority List

Considered Agricultural Plant Sciences, Architecture and Allied Arts, and Home Economics placement in the list following Business Administration No. 1, Biology No. 2 and Chemistry Building Addition No. 3. Law School is a Title II project.

A recommendation for Architecture and Allied Arts and Agricultural Plant Sciences has been deferred until the complete analyzation of the programs can be made by Miss Clewell. Tentative date set for review is May 23, 1966.

It was established that the Title II application for the Law School could be filed October 1, 1966, for a second priority position and matching funds will be considered for 1967 as are applications filed July 1, 1966.

A recommendation that the application be filed later than July 1, 1966, was made in order that Dean Amandes have the opportunity to review the program and schematic plans thoroughly and that Texas Tech avoid submitting an application which could possibly need a great deal of revision.

## 3328. Project Architects

#### Agricultural Plant Sciences

The Campus Planning Committee recommended that the firm of Stiles, Roberts and Messersmith, Lubbock, Texas, be considered.

### Architecture and Allied Arts

The Campus Planning Committee recommended that the firm of O'Neill Ford, San Antonio, Texas, be considered.

#### Home Economics

The Campus Planning Committee recommended that the firm of Spencer and Associates, Lubbock, Texas, be considered.

The Building Committee has authorized Mr. Howard Schmidt, consulting architect, to proceed with the programming of the above projects. According to Mr. Schmidt's contract, he will receive one percent of the cost of each project. Therefore, the project architects for the above projects will have a fee for architectural services based upon five percent of the cost of each project.

## Law School

Recommendation for a project architect was deferred until Dean Amandes has had sufficient time to visit various schools of law and further study schematic plans prepared by Mr. Schmidt.

## 3328. Project Architects (continued)

## Power Plant

The Campus Planning Committee recommended that the firm of Pitts, Mebane, Phelps and White, Beaumont, Texas, be considered. Zumwalt & Vinther are the project engineers. The fee for their services will be based upon the percentage of cost of the work performed in their professional field.

It is recommended that the architects be issued a separate contract for their services.

Mr. Schmidt is not programming this facility and the architects' fee will be based upon six percent of the cost of the work performed in their professional field.

#### 3329. Sites

### Law School

The recommendation of the site was deferred until Dean Amandes can be contacted for consideration of any contributions he may be able to present.

### Power Plant

The Campus Planning Committee recommended that the project architect be allowed to study various sites within an area bounded by 14th Street to the Physical Plant and from Flint Avenue west to Indiana Avenue. This general area for the Power Plant site has been indicated by the project engineers based upon part of the Engineering Survey.

(Mr. Barrick and Mr. Urbanovsky left the meeting at 12:40 p.m. in order that the Priority List could be discussed in their absence. Each of them has a project which is being programmed and considered for entry into the Priority List.)

Jerry Kirkwood Coordinator

The meeting adjourned at 12:55 p.m.

#### TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 296

May 25, 1966

A meeting of the Campus Planning Committee was held at 3 p.m. on May 25, 1966, in Room 120 of the Administration Building. Members present were Mr. E. J. Urbanovsky and Chairman M. L. Pennington. In addition, Mr. John G. Taylor, Mr. Bill Felty, Mr. O. R. Downing, Mr. Howard Schmidt and Miss Jerry Kirkwood were present. Miss Evelyn Clewell attended during the discussion of Items Nos. 3332, 3333 and 3334.

Mr. Jack Roberts and Mr. J. T. Worley represented the firm of Zumwalt & Vinther, Inc.

Mr. E. Hoyce McMurtry represented the Associated Architects and Engineers.

## 3330. Approval of Minutes

By consensus, the Minutes of Meeting No. 292 were approved.

## 3331. President's Approval of Minutes

President Goodwin approved the Minutes of Meeting No. 292 on May 11, 1966.

# 3332. Biology Building (CPC No. 99-65) (Pierce & Pierce)

Mr. Felty reported that the architects stated that there will be no square footage changes necessary for the second through the sixth floors of the plans dated May 12, 1966. The gross square feet increase over the approved program apparently is contained in the basement and first floors. The architects have requested a meeting with the Board of Directors in Austin on June 21, 1966. (Tentative date has been revised to June 28, 1966.)

# 3333. Chemistry Building Addition (CPC No. 87-64) (Pitts, Mebane, Phelps & White)

Mr. Bob White and Mr. Dan Talley, representing the architects, met with Mr. Bill Felty and the Chemistry Faculty Committee on May 18 and 19, 1966. The following net assignable square footage was recommended by the Faculty Committee as the minimum amount with which they could operate.

The architects are proceeding with the development of a plan containing 58,990 net assignable square feet, not including the auditorium. The 58,990 net square feet includes graduate and undergraduate space at 44,560 net square feet and departmental space at 14,430 net square feet. The development will follow Scheme C.

The following schedule has been set by the architects in order that they will be able to complete the work required for the application for matching funds to be filed July 1, 1966.

- June 1, 1966 Drawings following Scheme C and including square footage as requested by Chemistry Faculty Building Committee on May 19, 1966.
- June 4, 1966 Drawings returned to the architects and reviewed by Mr. Bill Felty and Mr. Howard Schmidt in the interest of the Campus Planning Committee.

# 3333. Chemistry Building Addition (CPC No. 87-64) (continued) (Pitts, Mebane, Phelps & White)

June 15, 1966 - The architects will return for a final conference concerning information necessary for the application. After the Faculty Building Committee has reviewed the plans and program, the Campus Planning Committee will review the concept.

June 24, 1966 - The architects will forward the application data to Texas Tech. The expected arrival is not later than June 27, 1966.

An Analysis of the Department of Chemistry with Study of Departmental Utilization of Classroom and Laboratory Space -- Fall Semesters 1960-1965 prepared by the Assistant Registrar is available for review.

## 3334. Classrooms and Offices (Temporary)

The piers are poured for eight buildings to be located west of the Traffic-Security offices. One building is in place and three additional buildings are scheduled to be moved into this area May 26, 1966.

Ten other buildings have been sited west of the Library. One remaining building for Geosciences will probably be located west of the Science Building dependent upon the final location of the Biology Building.

## 3335. Constitutional Building Amendment

As the language in Constitutional Amendment I needed clarification in order for the 17 institutions to issue bonds, the Attorney General was asked for an opinion by the State Comptroller with the concurrence of the institutions, Coordinating Board, Bond Counsel, and Financial Adviser. The only portion of the amendment needing clarification was that for the next two years.

The original intent was for the old 12 schools to continue to receive the old five cents for the next two years, and the 17 institutions to share the new five cents for the next two years in order for all 17 to have building funds for matching and to be able to start the needed building programs two years earlier. In addition, the 17 institutions would share the ten cents for the following ten years.

The Attorney General must rule on the language of the amendment if there is no ambiguity. If there is ambiguity, the intent becomes a factor.

Opinion C-687, dated May 15, 1966, stipulated that the funds available from the ten cents ad valorem tax for the next 12 years would be allocated by the prescribed formula to the 17 institutions. The individual outstanding obligations of the old 12 (bonds and notes issued prior to the passage of Amendment I) would be deducted from the allocations for each institution.

The opinion would allow the five new schools with no outstanding obligations to issue bonds to the limit of the allocation for the next 12 years; some of the schools including Texas Tech could issue a limited amount of bonds for the next two years and some could issue none for the next two or three years.

The development seriously affects the building program of the 12 institutions and steps will be taken to attempt to improve the conditions.

## 3336. Consulting Architect

#### Coordination Proposal

It is proposed that the Consulting Architect assume his responsibility for the following projects at points as indicated:

### Business Administration Building

After bids are received.

Biology Building

After bids are received.

Chemistry Building Addition

After bids are received.

Power Plant

After bids are received.

Museum (New)

Under <u>Design Development and Contract Documents at the point of Refinement of Project Requirements and Exterior Design Studies as outlined in the Division of Responsibility for Work to be Performed - Consulting Architect - Project Architect.</u>

### Foreign Languages - Mathematics

At the point of progress of the construction on or before August 31, 1966.

Library Basement and Third Floor

Same as above.

Housing

After bids have been received.

The Consulting Architect's responsibilities for the above will follow the form as outlined in <u>Consulting Architect</u> - <u>Project Architect Division of Responsibility for Work to be Performed, Campus Planning Committee, April 13, 1966, Attachment No. 631, Item No. 3255A.</u>

Fees for existing contracts are not affected. The Campus Planning Committee recommends that the above proposal be approved.

## 337. Engineering Survey

The very comprehensive preliminary Engineering Survey by Zumwalt & Vinther, Inc., was presented by Mr. Jack Roberts.

## 338. Entry Stations (Permanent)

The Campus Planning Committee recommended that Mr. Howard Schmidt, Consulting Architect, proceed with the development of the design concepts, working drawings and contracts necessary to have the stations in operation at the beginning of classes, Fall 1966.

## 3339. Final Acceptance Dates

## Library Elevator (Hunter-Hayes, \$1,716)

The Campus Planning Committee recommended that April 15, 1966, be recorded as the final acceptance date.

## Parking Lot

## Doek Hall (CPC No. 103-66) (Bill Hood, \$5,154)

The Campus Planning Committee recommended that May 9, 1966, be recorded as the final acceptance date.

## 3340. Housing

#### On-Campus

Bids received from subcontractors will be opened 10 a.m., June 9, 1966, in Agricultural Auditorium.

Bids received from general contractors will be opened 2 p.m., June 10, 1966, in Chemistry Building, Room 101.

Mr. Howard Schmidt requested the bid dates be extended a few days. He and Mr. Messersmith will make a recommendation.

The Board of Directors will be requested to set a date on which they can meet in order to award the contracts.

#### Outside Lighting

Twenty-one exterior fixtures, similar to those installed last year, have been located from Stangel and Murdough Halls to the center of the campus.

Installation will be by the Department of Building Maintenance and Utilities. The cost will be paid from Dormitory Funds.

## 3341. Library

#### Movable Equipment Bids

Total Amount

It was recommended that the contracts be awarded to the following bidders subject to the approval of the Department of Housing and Urban Development and that Mr. M. L. Pennington be authorized to sign the contracts.

<u>4,903.00</u> \$45,296.00

The bid tabulation is attached to and made a part of the Minutes. (Attachment No. 649, page 1998)

## 3342. Museum (Existing)

The written material contained in the Use Feasibility Study prepared by Howard Schmidt and Associates is attached to and made a part of the Minutes. (Attachment No. 650, page 1999)

The drawings are available for review.

The Campus Planning Committee is in agreement with the recommendation that the building be rehabilitated for classroom and faculty office use and recommends that the rehabilitation be included in the Legislative Budget Request.

## 3342A. Museum (CPC No. 65-61)

(Associated Architects and Engineers)

Mr. Hoyce McMurtry presented a progress report on the working drawings. Two classrooms in the basement and one classroom on the second floor have been eliminated. Total estimated cost of the first phase of the project is \$716,800.

It is planned that bids will be received in August of 1966.

#### Utility Extension Budget

6" C.I. Water Assume 500 ft.	\$2,250.00
6" Clay Tile Sewer Assume 500 ft.	1,125.00
5" Black Iron wrapped gas Assume 500 ft.	1,625.00
TOTAL	\$5,000.00

NOTE: The 5" gas line may be too large or too small, but the 6" lines are in line.

Estimate prepared by O. W. Chisum, Mechanical Contractors, for McMurtry and Craig, Architects - Engineers.

It is recommended that the utility extension cost be included in the cost of the construction. The West Texas Museum and the College would then both participate in the cost on a prorated basis.

Mr. McMurtry left the meeting at 4:05 p.m.

## 3343. Power\_Plant (CPC No. 105-66)

(Zumwalt & Vinther, Lubbock and Dallas)

## Bids on Heating and Air Conditioning Equipment

The bids were opened May 24, 1966. Mr. Worley and Mr. Roberts indicated that Vogt with the low bid of \$350,150 for steam generating equipment and Carrier with the low bid of \$235,750 for water chilling equipment would probably be recommended. Further time to make the evaluation was requested, but the recommendation would be available for the meeting of the Building Committee of the Board of Directors on May 27, 1966. The bid tabulations are attached to and made a part of the Minutes. (Attachment No. 651, page 2000)

Mr. Worley and Mr. Roberts left the meeting at 3:30 p.m.

## 3344. Priority List

Business Administration Building No. 1 Biology Building No. 2 Chemistry Building Addition No. 3 Home Economics No. 4 Architecture and Allied Arts No. 5

## 3344. Priority List (continued)

The above is recommended based upon (1) the programs prepared by the Dean of Home Economics, the Head of the Department of Architecture and Allied Arts and the Heads of the Departments of Park Administration, Horticulture and Entomology and Agronomy and Range Management and (2) an analysis and study of space utilization prepared by the Assistant Registrar.

Mr. E. J. Urbanovsky and Mr. Nolan Barrick each had a project under consideration and left the meeting during the discussions and the voting.

Due to the time schedule and other responsibilities, the Assistant Registrar was unable to prepare a complete study of the present utilization and projected enrollments in the Departments of Park Administration, Horticulture and Entomology and Agronomy and Range Management. However, a brief analysis indicated that this project would receive a rating lower than those above recommended.

An Analysis of the Department of Architecture and Allied Arts, with a Study of Department Utilization of Classroom and Lab Space, Fall Semesters 1960-1965, prepared by the Assistant Registrar is available for review.

An Analysis of the School of Home Economics, with a Study of Department Utilization of Classroom and Lab Space, Fall Semesters 1960-1965, prepared by the Assistant Registrar is available for review.

Jerry Kirkwood Coordinator

The meeting adjourned at 5:20 p.m.

#### TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

## Bid Opening 3 p.m., May 24, 1966 9 Interested Parties Present

### BID TABULATION - MOVABLE EQUIPMENT

Project No. Tex 4-1113 Library Addition

Name of Bidder	Bid Bond	Library Shelving	Tables	Chairs	Card Catalog Cabinets	Total	Remarks
Remington Office Systems Division Sperry Rand Corp., Dallas, Texas	х	\$26,068.00	\$	\$	\$4,903.00	\$30,971.00	
Estey Corporation, Red Bank, N. J.	х	24,387.00	14,711.70			39,098.70	
Interior Coordinators, Dallas	х		11,941.50			11,941.50	Bid subject to award of shelving to Remington Office Systems.
John E. Sjostrom Company, Inc. Philadelphia, Penn.	х	.ee:			4,705.00	4,705.00	
Stewart Office Supply Co. Dallas, Texas	x	1% 30 days 25,590.65	12,255.00	13,200.00		51,045.65	
The Abel Stationers	x	24,745.00	7,444.20 8,379.00	6,711.00 8,562.00 10,032.00 13,182.00	6,680.00		
Joe Toombs Co., Lubbock	x		17,955.00	10,500.00		28,455.00	
Thomas Bros., Lubbock	x		9,114.30 10,117.50	9,276.00 14,235.00		18,390.30 24,352.50	
Frederic Weinberg Company			No Bid				
Bro-dart Library Supplies			No Bid				

Campus Planning Committee May 25, 1966 Attachment No. 649 Item No. 3341

Campus Planning Committee May 25, 1966 Attachment No. 650 Item No. 3342

HOWARD SCHMIDT AND ASSOCIATES ARCHITECTS 1619 COLLEGE AVENUE LUBBOCK, TEXAS

May 25, 1966

Mr. M. L. Pennington Vice President for Business Affairs Texas Technological College Lubbock, Texas

RE: Use Feasibility Study of Existing Museum

Dear Mr. Pennington:

In keeping with the Campus Planning Committee's request for us to make a Use Facility Study of the existing Museum at Texas Tech, we are transmitting the attached summary as we have analyzed it. We have commented on its use as an Administration Building, a Law School, and for Classrooms and Faculty Offices. Should more detailed study such as schematic planning be desired, we will follow your instructions.

Very sincerely,

HOWARD SCHMIDT AND ASSOCIATES A R C H I T E C T S

/s/ Howard W. Schmidt Howard W. Schmidt, AIA

#### THE USE OF THE PRESENT MUSEUM FOR AN ADMINISTRATION BUILDING

There is certainly adequate square footage in the present Museum to provide for the immediate needs for administration facilities as we now understand them.

There is, however, some question in our minds about locating an administration building in the thick of the population of students going to and from academic buildings. We think some thought should be given to locating any new administration building facility on the perimeter of the campus or at least on a major extery that would be easily accessible to townspeople and out-of-town visitors. (This is the primary reason the new Museum is located on Fourth Street.) We personally feel that real adequate parking facilities should be always available to the visitors and in close proximity to the entrance of an administration building. It should be an inviting entrance, we believe, free of all sorts of cross-traffic, both pedestrian and vehicular. The present Museum, in our opinion, does not offer these advantages and it appears to us they would be quite difficult to provide.

The Peter Hurd mural, which is a very outstanding piece of Southwestern art and which will probably attain more and more attention (and actual value) through the years, should always be accessible to visitors from over the entire Southwest. We recall at the request of the Museum Association's Board of Directors that its accessibility be given every consideration in their proposed agreement with the college to trade square feet for square feet. This feature leads us to believe that the activities associated with hundreds of people who will view the mural annually would conflict with the activities that should go on in a College Administration Building.

The high ceilings in all major areas of the present Museum are not conducive in any way to the type of rooms such as conference rooms, secretarial spaces, and private offices that normally make up an administration building facility. A good deal of work would be necessary to suspend the ceilings to put the new spaces in proper scale.

The entrances and exits in the building do not lend themselves to private exits to staff member parking areas with the privacy that should be expected.

The present air-conditioning in the Museum is designed for large open gallery spaces and would need to be converted quite extensively to provide the proper supply and return to administrative-type office areas. By the same token, the artificial lighting would need to be changed extensively since the building is essentially without windows in major areas of the first and second floors. Windows could be provided in the glass block and recessed brick areas but at considerable expense.

The administrative area that was studied with Dr. Grover Murray on Saturday, May 21, 1966, as a temporary measure for use beginning September, 1966, represents an area approximately 4700 square feet in size. It is, of course, certainly not known at this time how much administrative area will be needed. Presuming that three times that amount of space might be needed for the future plans of Dr. Murray, this still represents only a little over the amount of space available on one floor of the present Museum and would mean that other uses for the remainder of the building would need to be determined. It would be our opinion, admittedly knowing very little about the future plans for the administrative floor space requirements, that to mix other activities into the remaining spaces of the Museum would be a detriment to the total operation but we are certain that someone would be given the opportunity to use the other spaces. There are approximately 35,505 square feet total in the present Museum.

### THE USE OF THE PRESENT MUSEUM FOR A LAW SCHOOL

Attached is a copy of a letter from Richard B. Amandes, the new Dean of the Law School, expressing his views on the use of the existing Museum for a Law School.

In addition, we would like to point out that the structural slabs on the first floor of the Museum were designed using live load criteria for exhibit gallery usage. The Law Library would need to be located in the basement of the Museum because of its live load. This positioning of the library would be quite contrary to the desires of the Law Dean and we concur since their library is used so continously that it needs to be very centrally located and even adjacent to seminar spaces, classrooms and so forth.

As would be the case should the Museum be converted into an administrative building, the Peter Hurd mural would attract "lookers" who would not contribute to a general professional attitude within a law school and this point was brought out in Dean Amandes' review of the Use Feasibility Study.

University of California HASTINGS COLLEGE OF THE LAW 198 McAllister Street San Francisco, California 94102

14 May 1966

Mr. Howard Schmidt 1619 College Avenue Lubbock, Texas

Dear Howard:

Air Mail Special Delivery didn't do much good on the plans. The post-mark said Tuesday p.m., but the plans didn't arrive here until about 11 a.m. Thursday. I did get hold of an architect acquaintance that afternoon, but without much in the way of detailed results. He just sort of laughed at the idea of remodeling a building with a total square footage under 25,000 into a building which will require over 100,000 when the usable 72,000 is embellished by halls, toilets, mechanical equipment rooms, etc., to say nothing of the different type of function and design which should be employed for a school as distinguished from a museum.

A couple of the specifics he did mention were that substantially more air conditioning would be necessary than appears on the plans to handle the increased population of the building. He did feel that it would be substantially easier to turn it into an office building, considering the smaller number of people working there, than into a school with 500 or 575 students, from the standpoint of air conditioning.

Another costly item would be the enlarging of the rest rooms. Certainly a large men's room is necessary near the point of heavy student use, and if this building were to be used, that probably would be near the main entrance.

The site needed for the additional space probably would have to be three times larger than at present. Drawing upon my letter of April 11 to Mr. Pennington, substantial parking should be available too for attorneys whom we would wish to make use of the facilities, and whom we will encourage to participate in appropriate parts of the law program. Whether or not this law complex should be located so near the center of the campus, an area which could be used for other more central functions of the College, is debatable. Drawing further on that letter of April 11, horizontal expansion in the future would probably be impossible, and if vertical expansion is architecturally or structurally possible to the current building, it will destroy whatever esthetic value the current building has. Finally from that letter, I had suggested that the law building should not be located so as to become a corridor for non-law school personnel. If the law school were to be an enlarged museum building, many people would probably find some part of it the shortest way from other campus points, much the way the main entrance to the administration building is now used. That would create an intolerable interference with the development of a distinct professional attitude.

One final point: if the Peter Hurd mural were to remain in the building, this too would attract "lookers" which would not contribute to a general professional attitude. From the opposite point of view, the law students gathering in the area, discussing law or anything else, often in a fairly vigorous manner, would not be conducive to full appreciation of Mr. Hurd's work.

I hope these comments have been helpful. I hope too that your receipt of the comments and the plans by Monday hasn't delayed you. Even if I'd been able to get them out yesterday (impossible - I was in a meeting all day) considering the mail service, you probably wouldn't have received them any earlier.

If you have any questions, call me.

Cordially,

/s/ Dick Richard B. Amandes

#### THE USE OF THE EXISTING MUSEUM FOR CLASSROOMS AND FACULTY OFFICES

After carefully investigating every area of the present Museum, the mechanical features of the building as well as the acoustical and structural aspects, it is our opinion that this facility could be converted into classrooms and faculty offices rather quickly and without major renovation. The first and second floors are air-conditioned and would (with a little adjustment in introducing outside air) serve adequately for classroom use. Mr. Ray Downing, Director of Building Maintenance, concurs with this opinion.

It would be possible to convert the existing galleries into large classrooms to seat in the neighborhood of 270 students each. This information is more clearly defined on the attached floor plans of the building. The basement could be converted into smaller classrooms and offices. Without a question there would need to be more adequate air-conditioning or at least ventilation installed in the basement if it was occupied in this manner.

The Peter Hurd mural in the Rotunda could be viewed at all hours of the day, we believe, without interrupting the activities of classroom and office spaces. There might be some confusion between classes if there was a large group of people viewing the mural but this would be a ten minute interval that might not be too objectional. We actually feel ourselves that more students would be exposed to the mural which does depict a significant historical story about West Texas and that this might be very good. There are students now who attend Texas Tech four years and never view the mural.

The basement with its 8'-8" ceiling height does not lend itself to large classrooms and there are structural columns that would also cut down on large open spaces. Smaller classrooms as indicated on the attached floor plans could be devised in this area.

The attic space is really not usable for classroom activities or faculty office space but might be converted into custodial supply since it is served by the elevator. (The elevator, incidentally, is a good service elevator with a slow speed and it has a 1500 pound capacity.)

Mr. Charles Lubby, Director of the Custodial Service at the College, was contacted and he has concurred that this attic would be very adequate for his custodial supplies and equipment as long as he had the service elevator. When questioned about the adequacy of the public toilets in the building should it be converted into classroom spaces, he concurred with our thinking that additional toilets would be necessary in the basement. This should not be too extensive in terms of renovation costs, if it was done at the basement level.

#### SUMMARY: USE FEASIBILITY STUDY OF THE EXISTING MUSEUM

After our review of the three possible uses of the existing Museum beginning September, 1967, we would summarize as follows:

The Museum is presently located on very prime real estate on the campus of Texas Tech since it is well within walking distance of many, many other academic buildings.

With very dollar most important in the upcoming building program for Texas Tech, we feel that it is false economy to spend good money on extensive renovation work to convert this building into a facility that has specific use quite foreign from its present use.

It has always been our experience that it is never possible to design a well-planned, functional facility of any kind and come up with the proper solution if it has been a requirement to force it into existing "boundaries."

Since a Law School is operated as independently as possible from other academic facilities on any campus we feel that we should take advantage of this fact and position the new Law School around the perimeter of the campus thereby keeping other academic facilities closer one to another, cutting to a minimum students' walking time.

It is our opinion that this building is one of the least attractive buildings on campus. This statement is not intended to be in criticism to the architect because knowing the history of that project, the architect was handicapped with many problems not of his own design. These problems included the budget, the future intentions of the Museum Association to purposely construct the east and north walls of the building out of common brick (to encourage the completion of an eventual quadrangle), the instructions to provide "false windows" in hopes of providing a certain exterior fenestration and to keep wall space inside the gallery areas, etc. In any event we cannot, in our own minds, feel very good about imagining this structure as the image of the College should it be used as an Administration Building. By the same token, neither can we see it as the beginning of a law School of excellence.

Our conclusion to this Use Feasibility Study is that we would recommend that economically, functionally, and in the interest of any time schedule which always seems to be important, the best use of the present Museum facility in September, 1967, would be to convert it to classrooms and faculty office spaces.

Campus Planning Committee May 25, 1966 Attachment No. 651 Item No. 3343

## BID TABULATION

Steam Generating Equipment Texas Technological College May 24, 1966 3 p.m.

31 Interested Parties

CONTRACTOR	BASE BID	ALT. BID #1	ALT. BID #2	ADDENDA	BOND
Babcock and Wilcox	\$400,625	\$778,013		1 & 2	X
Combustion Engineering	\$350,500	\$701,000		1, 2 & 3	x
Erie City	\$464,960	\$861,860		1, 2 & 3	x
Vogt	<b>\$350,1</b> 50	\$670,024		1, 2 & 3	x

WATER CHILLING EQUIPMENT

TEXAS TECHNOLOGICAL COLLEGE

# BID TABULATION

May 24, 1966 3 p.m.

31 Interested Parties Present

CONTRACTOR	BASE BID	ALT. BID #1	ALT. BID #2	ADDENDA	BOND
CARRIER	\$235 <b>,75</b> 0	\$457,380		1,2&3	x
WORTHINGTON	261,395	503,070		1,2&3	x
YORK	273,901	532,515		1&2	x

# TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 297

May 27, 1966

A meeting of the Campus and Building Committee of the Board of Directors and the Campus Planning Committee was held at 3 p.m. on May 27, 1966, in the Office of the President.

Member of the Building Committee present was Mr. Harold Hinn, Chairman. Other members of the Board of Directors in attendance were Mr. J. Edd McLaughlin, Mr. Alvin R. Allison, and Mr. Retha R. Martin.

Members of the Campus Planning Committee present were Mr. E. J. Urbanovsky, and Mr. Nolan E. Barrick. Mr. M. L. Pennington, Chairman, was in Austin on official business. Others present from the College were Dr. R. C. Goodwin, Miss Evelyn Clewell, Miss Jerry Kirkwood, Mr. O. R. Downing, Mr. John G. Taylor and Mr. R. B. Price. In addition, Mr. Howard Schmidt, Consulting Architect, was present. Mr. E. Hoyse McMurtry, Mr. Bob Messersmith and Mr. Bill Hall were present for the consideration of the Museum.

In order that the results of the meeting of the Board of Directors may be included in the Campus Planning Committee Minutes for record purposes, the action taken by the Board at the meeting on May 28, 1966, will follow that of the Campus and Building Committee for each item.

# 3345. Biology Building (CPC No. 99-65) (Pierce & Pierce)

The Building Committee approved the request that the architects be allowed to present the preliminary plans and design to the Board of Directors at their meeting in Austin, Texas, tentatively scheduled on June 28, 1966.

(The Board of Directors approved.)

# 3346. Business Administration Building (CPC No. 98-65) (Page, Southerland, Page)

The Building Committee of the Board unanimously authorized the architects on March 31, 1966, to proceed with final working drawings in keeping with the authorization of the Board of Directors.

The design concept was on display.

(The Board of Directors approved.)

# 3347. Chemistry Building Addition (CPC No. 87-64) (Pitts, Mebane, Phelps & White)

The architects have met with the Chemistry Faculty Building Committee and are proceeding with the development of the plans based upon the Faculty Committee's recommended minimum acceptable addition.

The plan will follow Scheme C and contain 58,990 net assignable square feet, not including the auditorium.

The 58,990 net square feet includes graduate and undergraduate space at 44,560 net square feet and departmental space at 14,430 net square feet.

The Building Committee authorized the architects to proceed on the basis as presented, and for the College to file, under the supervision of the Campus Planning Committee, whatever application is necessary by the July 1, 1966, deadline or whatever date may be set by the Coordinating Board. There will be no further review by the Building Committee until the preliminary plans are completed.

# 3347. Chemistry Building Addition (CPC No. 87-64) (continued) (Pitts, Mebane, Phelps & White)

The Building Committee also approved the 500-seat auditorium with approximately 5,500 square feet, and instructed the architects to include it in the preliminary plans.

(The Board of Directors approved.)

## 3348. Classrooms and Offices (Temporary)

The Building Committee reviewed and approved the recommended sites.

(The Board of Directors approved.)

## 3349. Consulting Architect

The Building Committee approved the following proposal:

## Coordination Proposal

It was proposed that the Consulting Architect assume his responsibility for the following projects at points indicated below:

## Business Administration Building

After bids are received.

### Biology Building

After bids are received.

### Chemistry Building Addition

After bids are received.

#### Power Plant

After bids are received.

### Museum (New)

Under Design Development and Contract Documents at the point of Refinement of Project Requirements and Exterior Design Studies as outlined in the Division of Responsibility for Work to be Performed - Consulting Architect - Project Architect.

## Foreign Languages - Mathematics

At the point of progress of the construction on or before August 31, 1966.

#### Library Basement and Third Floor

Same as above.

### Housing

After bids have been received.

The Consulting Architect's responsibilities for the above will follow the form as outlined in Consulting Architect - Project Architect Division of Responsibility for Work to be Performed, Campus Planning Committee, April 13, 1966, Attachment No. 631, Item No. 3255A.

Note: Fees for the existing contracts are not affected.

(The Board of Directors approved.)

## 3350. Entry Stations (Permanent)

The Building Committee authorized Mr. Howard Schmidt, Consulting Architect to proceed with the development of the design concepts, working drawings and contracts necessary to have the stations in operation at the beginning of classes, Fall 1966, with the request that the preliminary plans and designs be presented to the Board of Directors at the tentatively scheduled meeting on June 28, 1966, in Austin.

(The Board of Directors approved.)

## 3351. Engineering Survey

(Zumwalt & Vinther, Lubbock and Dallas)

Mr. Downing briefly explained the preliminary Engineering Survey to the Building Committee on May 27, 1966.

The Board of Directors was informed that the survey had been presented, and is being refined and reviewed.

## 3352. Housing

#### A. On-Campus

The Building Committee and the Board of Directors approved the changing of the bid dates from June 9 and 10, 1966, to June 16 and 17, 1966, and approved a called meeting in Lubbock, Texas, at 10 a.m. on June 18, 1966, to consider the awarding of contracts.

### B. Outside Lighting

The Building Committee authorized the installation of twentyone exterior lighting fixtures similar to those installed last year.

(The Board of Directors approved.)

## 3353. Law Building

Approved the recommendation that the Title II application be filed October 1, 1966, and that the project architect and the site not be selected at this time.

(The Board of Directors approved.)

## 3354. Library

## A. <u>Elevator (Hunter-Hayes Elevator Company, Dallas, Texas, \$1,716)</u>

The Building Committee approved the final acceptance date of April 15, 1966.

(The Board of Directors approved.)

## B. Movable Equipment

Approved the recommendation to award contracts to the following bidders subject to the approval of the Department of Housing and Urban Development and authorized Mr. M. L. Pennington to sign the contracts.

## 3354. Library

### B. Movable Equipment (continued)

The Abel Stationers for tables in the amount of . . 7,444.20 and for chairs in the amount of . . . . . . . . . 8,562.00

<u>4,903.00</u> \$45,296.00

Total Amount

(The Board of Directors approved.)

### 3355. Museum (Existing)

The Use Feasibility Study prepared by Howard Schmidt and Associates was presented for review.

The Building Committee approved the recommendation that the building be rehabilitated for classroom and faculty office use and recommended that the rehabilitation be included in the Legislative Budget Request.

(The Board of Directors approved.)

## 3356. Museum (New)

The Building Committee approved the final plans and specifications presented by Mr. Hoyce McMurtry.

(The Board of Directors approved.)

#### 3357. Parking Lot

Doak Hall (Bill Hood, \$5,154) (CPC No. 103-66)

The Building Committee approved May 9, 1966, as the final acceptance date for the project.

(The Board of Directors approved.)

## 3358. Power Plant (CPC No. 105-66)

(Zumwalt & Vinther, Lubbock and Dallas)

Steam Generating Equipment and Water Chilling Equipment

Bids were taken on May 24, 1966.

The Building Committee approved the recommendation to purchase the equipment from the following bidders and authorized the Chairman of the Board of Directors to sign the necessary documents:

## Boiler

Henry Vogt \$350,150

Thirty day option to purchase a second boiler for a total cost of \$670,024.

Approved the purchase of one boiler from the Henry Vogt Company with the College to make a further study on whether or not it should take the option of purchasing the second boiler.

(The Board of Directors approved.)

# 3358. Power Plant (CPC No. 105-66) (Zumwalt & Vinther, Lubbock and Dallas)

Steam Generating Equipment and Water Chilling Equipment (continued)

Air Conditioning Equipment

Carrier \$235,750

Thirty day option to purchase a duplicate order of equipment for total cost of \$457,380.

Approved the purchase of the Carrier air conditioning unit with the provision that the College consider the option for the purchase of a second unit.

(The Board of Directors approved.)

#### Site

The Building Committee authorized the project architects to participate in the siting, but stated that the power plant should be sited so that it will never be in the way of any future educational building.

(The Board of Directors approved.)

#### 3359. Priority List

Approved the following:

Home Economics No. 4

Architecture and Allied Arts No. 5

(The Board of Directors approved.)

## 3360. Project Architects

The Building Committee delayed action until the next meeting on hiring architects for the Agricultural Plant Sciences, Architecture and Allied Arts, and Home Economics projects. The Board did authorize the hiring of Pitts, Mebane, Phelps & White of Beaumont at a fee of six percent for the Power Plant.

(The Board of Directors approved.)

Jerry Kirkwood Coordinator

## TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 298

June 7, 1966

A meeting of the Campus Planning Committee was held at 3 p.m. on June 7, 1966, in Room 120 of the Administration Building. Members present were Chairman M. L. Pennington and Mr. Nolan E. Barrick. Mr. E. J. Urbanovsky was out of town. In addition, Miss Evelyn Clewell, Mr. John G. Taylor, Mr. O. R. Downing, Mr. Howard W. Schmidt and Miss Jerry Kirkwood were present.

## 3361. Agricultural Facilities (CPC No. 93-64)

#### Horse Facilities

The facilities are essentially complete with the exception of minor items which will not interfere with the use of the building.

## 3362. Athletic Facilities

## Paving at the Stadium (north)

Since Mr. Urbanovsky is out of town, it was recommended that Dr. Bill Kitchen be contacted and requested to have the necessary information available for the next Campus Planning Committee meeting prior to the meeting of the Board of Directors in Lubbock on June 18, 1966.

## 3363. Behavioral Sciences Training and Research Center (CPC No. 104-66)

The project is in the investigation stage and is not yet ready for programming. The name has been changed to "Institute of Human Resources and Adjustment" and it will be used in the future.

## 3364. Biology Building (CPC No. 99-65) (Pierce & Pierce)

The requested presentation by the architects to the Board of Directors in Austin on June 28, 1966, may not be possible due to the possibility that the bond sale will not be held and there will be no need for the meeting.

It was agreed that Mr. Felty should ask the architects if they will be ready to present the preliminary plans to the Board of Directors at the meeting in Lubbock on June 18, 1966.

(Mr. Felty called Mr. George Pierce and he made a study with his staff and reported to the Chairman on June 8, 1966, that they could not have the type of presentation that they would like to present by June 18, 1966, and said that an additional delay of a month or so would not interfere with the progress of the project. In view of the uncertainty of the Constitutional Amendment interpretation, it was felt that the delay of a month would cause no problem, and if the Attorney General's Opinion No. C-687 is changed, there will need to be a meeting of the Board to sell bonds during the latter part of July.)

## 3365. Business Administration Building (CPC No. 98-65) (Page, Southerland, Page)

#### Interior Decorator

The architects have an interior decorator's service available within their organization and have verbally requested that the College consider the use of these services.

Miss Kirkwood was requested to contact the architects and gather information on possible working arrangements and fees. Mr. John G. Taylor will check into any requirements which are involved with the Title I application.

# 3365. Business Administration Building (CPC No. 98-65) (continued) (Page, Southerland, Page)

# Request Received from Members of the School of Business Building Committee and Facilities Committee

The Campus Planning Committee recommended the following:

- 1. That the freight elevator not be included.
- 2. That one public telephone per floor be included and that the type of booths provided be subject to the approval of the College.
- 3. That the student lockers be provided in the student concession area by a concessionaire.
- 4. That the architects be requested to locate clocks in strategic locations only.
- 5. That containers for the Toreador be provided by the College after the building is occupied.
- 6. That the dumbwaiter not be included.
- 7. That permanent-type projection screens be provided one each in Rooms A-17-C, A-18-C, A-19-C, A-20-C, A-11-C, A-12-C and A-13-C.
- 8. That A-13-C receive the conduit for services to eleven Model 026 key punch machines and one 407 Model Accounting Machine. This recommendation does not include an endorsement of the additional equipment required for this space.

## Site Clearance

Mr. Downing would hope to have the site cleared by the fall semester 1966.

Mr. Bill Daniels has indicated an interest in the horse facilities if he can have until September 1966, to clear the site. It was recommended that the College accept his proposal with the stipulation that the site be cleared except for concrete foundations by August 31, 1966.

The research project being conducted in the bull barn is inactive this summer. Mr. Downing plans to store the equipment until September 15, 1966.

Miss Clewell will make the arrangements for a new location as necessary.

#### 3366. Chemistry Building Addition (CPC No. 87-64)

The architects are on schedule.

The application for Title II should be filed July 1, 1966 if at all possible.

## 3367. Constitutional Building Amendment

The Chairman started with the plans that were made prior to the beginning of the past legislative session and reviewed the developments to date. The following is a summary of information presented:

S.J.R. 24 and S.J.R. 29 were both introduced during the past session and were competing bills. S.J.R. 29 would have provided funds through legislative appropriations and the source of funds was later changed to the Ominous Tax Fund. S.J.R. 24 provided funds by raising the ad valorem tax from five to ten cents. Both bills would have provided building funds for the old 12 institutions plus the four new ones.

## 3367. Constitutional Building Amendment (continued)

Two of the most outstanding steps in the process were the change from a historical allocation of funds to the projected enrollment and building usage basis and the addition of Arlington to both bills. S.J.R. 29 did not get out of committee and S.J.R. 24 was passed by the Senate.

S.J.R. 24 was amended in the House to start in 1966 rather than 1968 in order to have new funds for the 17 institutions to start the building programs two years earlier and to secure Federal matching funds which would go to other states otherwise. The House passed the amendment and it was confirmed by the Senate.

The Coordinating Board needed to project the enrollments and calculate the usage of the buildings. The State Comptroller needed some interpretation of the language of the bill in order to be able to handle his part of the process. It was agreed by the institutions, the comptroller and the Coordinating Board that an Attorney General's Opinion was necessary.

The Attorney General must render his opinion on the language in the act if it is clear and unambiguous. If it is ambiguous, legislative intent becomes a factor. Opinion C-687 stated that the language was clear and stipulated that the ten cent tax for the next twelve years would be allocated to the 17 institutions in keeping with the formula.

The outstanding obligations of the 12 original schools under the five cent tax would be deducted from the individual institutions shares, although the obligations were incurred prior to the passage of the new amendment and were allocated in the Constitutional Amendment in 1958.

If, or when, the outstanding obligations are subtracted from the individual institutional shares, three groups of institutions are created. The five new institutions could issue bonds immediately to the full extent of the allocation. Another group including Texas Tech could issue bonds to the extent that the balance remaining for the next two years would pay the interest. Four institutions would have deficits as the new method of allocation and the inclusion of Arlington would produce less money for them than they would have had under the old five cent tax and the 12 institutions. the opinion stated that the outstanding obligations could not be impaired, it would be essential to remove the \$479,000 total deficits from the top and to go through the allocation process again. The results would be a fifth deficit institution and two more so close to zero that they would be unable to issue any bonds. net results would allow the five institutions to issue substantial amounts of bonds for the next ten years, approximately five other institutions including Texas Tech could issue limited amounts of bonds for the next two years and probably seven schools could issue no bonds at all for the next two years.

When the results of the opinion became apparent, the twelve institutions requested a hearing with the Attorney General and his staff in order to request reconsideration in keeping with the intent to preserve the old five cents for the twelve institutions for the next two years and to allow the seventeen institutions to participate in the new five cent tax for the next two years. The hearing was held on Friday afternoon, May 27, 1966, with representatives from the twelve institutions present.

The five new institutions were granted a hearing by the Attorney General and his staff on the following Tuesday. As the University of Houston had employed attorneys to prepare a brief some months before the opinion, the twelve institutions engaged counsel in Austin to file a brief supporting their contentions. At the present time, the attorneys for the twelve institutions are in the process of writing the brief and it is to be available during the early part of next week. The brief will be the next determining factor.

### 3367. Constitutional Building Amendment (continued)

The Attorney General has four alternatives:

- 1. Let the Opinion stand.
- 2. Revise the Opinion in favor of the twelve institutions.
- 3. Withdraw the Opinion for reconsideration.
- 4. If mandamus action or other court proceedings are taken, the Opinion would in effect be withdrawn as it is not binding in face of court actions.

The picture at the moment for the next two years is not bright, and it looks as if Texas Tech would not be able to issue enough bonds or notes to finance the Business Administration Building under the Opinion as it now stands.

Relief is being vigorously sought.

## 3368. Engineering Survey (CPC No. 100-65) (Zumwalt & Vinther, \$10,000)

The completed survey has been delivered to Mr. Downing.

It was recommended that Mr. Ross Zumwalt present the survey to the Campus Planning Committee on Tuesday, June 14, 1966.

## 3369. Foreign Languages-Mathematics Building (CPC No. 87-64)

### Interior Decorator

Pitts, Mebane, Phelps & White plan to retain Jack Evans as a consultant to their firm. Mr. White has suggested that the College work out an arrangement with Mr. Evans whereby he could assist in the selection of the building furnishings. Miss Kirkwood will contact Mr. Jack Evans and arrange for an outline of possible working agreements and fees.

#### Progress of Construction

Chairman Pennington will ask Mr. White to review the time schedule. (On June 8, 1966, Mr. White told the Chairman that he would ask Mr. Bennett for a progress analysis and report.)

## Utility Tunnel - (Zumwalt & Vinther, Inc.)

The Building Committee of the Board approved the recommendation of the Campus Planning Committee to commission Zumwalt & Vinther to provide engineering services for the utility extension. Additional services can be covered by an amendment to the existing contract.

Considered the recommendation that the Chairman of the Board of Directors be authorized to sign the necessary documents.

It was agreed that Mr. Zumwalt be asked to assist in drafting a letter which will cover the above mentioned services while he is in Lubbock on Tuesday, June 14, 1966.

### 3370. Matching Funds

The Coordinating Board, Texas College & University System, changed the closing dates for filing applications under Title I of the Higher Education Facilities Act from July 1, 1966, to September 6, 1966.

# 3371. Power Plant (CPC No. 105-66) (Zumwalt & Vinther, Engineers) (Pitts, Mebane, Phelps & White, Architects)

#### Contract - Architects

It was recommended that since Mr. White plans to be in Lubbock on June 14 or 15, it would be advisable to ask him and Mr. Zumwalt to meet on June 14, 1966, and define the responsibilities of the architects and the engineers. An understanding between all parties will be helpful in amending the engineers' contract and in writing the architects' contract.

#### Equipment

Mr. O. R. Downing and Miss Kirkwood were asked to prepare the necessary documents which will cover the intention of the College to purchase the heating equipment from Vogt in the amount of \$350,150 and the cooling equipment in the amount of \$235,750.

Information necessary to decide upon the recommendation concerning alternate bid No. 1 will be compiled after the presentation of the Engineering Survey and the opening of the bids on the Wiggins Complex.

#### 3372. Priority List

#### Agricultural Plant Sciences

Miss Clewell has not completed her analyzation of existing space. More time will be available due to the unstable position of the Building Amendment Funds at this time.

#### Engineering Facilities

As requested by Mr. Harold Hinn, Dean Bradford has begun the study of the overall engineering needs. Thus far Dean Bradford's committees have presented the programs for a Fluid Dynamics or Civil Engineering Laboratories Building and the Materials Research Building. Both of the programs have been forwarded to Mr. Hinn. A copy of the programs is on file in the Coordinator's office.

### Music

Dr. Hemmle has presented Proposals for New Music Building Complex, dated June 3, 1966. (Attachment No. 652, page 2011)

## Physical Plant Facilities

Mr. O. R. Downing presented the program which includes the warehouse and the Texas Tech Press expansion. (Attachment No. 653, page 2012)

#### 3373. Tech Press Addition

It was recommended that Mr. John Taylor investigate the availability of funds, and that the Board of Directors be requested, on June 18, 1966, to authorize Mr. Howard Schmidt to begin programming the needs.

#### 3374. Wiggins Complex

## Interior Decorator

Design Today, Inc., has submitted a proposal which was not opened. The Campus Planning Committee recommended that Design Today, Inc., be notified of the receipt of their proposal and that Mr. Barrick, Mr. Urbanovsky, Mr. Howard Schmidt, and Miss Kirkwood investigate working arrangements and fees of several firms or individuals offering such services.

Mr. John Taylor will investigate the limits and requirements concerning government participation.

Jerry Kirkwood Coordinator

Campus Planning Committee June 7, 1966 Attachment No. 652 Item No. 3372

#### Proposals for New Music Building Complex

#### I. Practice facilities:

- 50 practice rooms with grand pianos (piano practice, rehearsal with accompaniment)
- 80 somewhat smaller practice rooms with upright pianos (instrumental practice, theory practice, music education assignments)
- 12 organ practice rooms -- larger and higher ceilings
  - 8 ensemble practice (without piano)
- 7 ensemble practice rooms with piano
- 3 percussion practice rooms (equipped)

The above allocation of space is based on the following estimated needs:

Daily practice use:

400 music majors at 3 hours use per day for applied music	
and theory preparation	1200
200 nonmusic majors applied study at 1 hour per day	200
350 music education students (nonmusic major at ½ hour	
per day	175
Estimated use by members of band, choir and orchestra	25
	1600

At 12 hours use per day for each room, equals approximately 133 rooms. Organ, ensemble, and percussion practice rooms are based on doubling of present enrollment. Percussion major is now being offered at Texas Tech. These rooms are essential due to nature of the instruments.

#### II. Classrooms:

- 4 general purpose lecture rooms, piano, sound and projection equipment (music literature) capacity 60 seats.
- 10 general purpose lecture rooms, piano and sound equipment capacity 30 seats (theory, literature, music education)
- 4 classrooms, 30 seats, 11 pianos, sound equipment (theory, class piano music education)
- l piano classroom with 10 pianos
- 3 classrooms for instrumental classes (winds, strings, percussion)
- 1 classroom ~ laboratory room with open stage adequate for solo or chamber music performances, a "neo-classic" tracker action organ, all lecture facilities. Seating capacity 150.
- 1 classroom laboratory room with open stage adequate for solo or chamber music performances, and with lights for operatic "scene" performances and rehearsals, and dance performances and rehearsals. All lecture facilities. Seating capacity 150.

Note on these two rooms: Multipurpose instructional rooms, comfortably appointed and suitable for junior and senior recitals, lab recitals, etc. Full lecture facilities permit use for large classes; particularly useful for summer programs as instruction rooms; and as rooms for hosting local, district, regional or state meetings, guest lectures, etc.

The above is required to meet the proper scheduling of the multiple sections necessary to conduct a successful program with the anticipated increase in enrollment. It is pointed out again that even present operations are extremely difficult in the areas of classrooms, individual and small group facilities, rehearsal space for large organizations and performance space is virtually nonexistent.

#### III. Studios and Offices:

- 1) 42 teaching studios (and offices)
- 10 faculty offices (theory and composition--5, music education--3, music literature--2)

#### IV. Rehearsal Facilities:

1) Band rehearsal hall

1) Large rehearsal hall, sound and recording equipment
Risers to seat 110, plus front floor space to seat 40 additional
players. The total size of room should be at least twice that
specified above to care for 300 marching bandsmen used in fall,
as well as for acoustical considerations.

2) Band office suite
Director's office
Secretary's office
Library

3) Instrument rooms
Storage/locker room or rooms
Instrument repair room
Reed-making room

4) Fifty seat visitors gallery
To be located near concert hall stage for facility in transfer
of instruments.

- 2) Orchestra will rehearse on concert hall stage (see: Performance Facilities)
  - 1) Orchestra office suite Director's office Secretary's office Library
  - 2) Stringed instrument/and harp storage room

    The above to be located near the concert hall stage
- 3) Choral rehearsal hall
  - 1) Rehearsal hall, sound and recording equipment. Hall should be sufficiently large to rehearse 250 singers. Usual use of room will care for 125 singers on risers. Balance of room should be flat.
  - 2) Choral office suite
    Director's office
    Secretary's office
    Library, music binding/repair room
    Storage room-- costumes and portable risers

Lecture courses should not be scheduled in the above rehearsal rooms to avoid damage to exposed instruments.

#### V. Performance Facilities:

1) One Opera/recital Hall. Primarily a fine theater stage for opera, large ante room space, equipment, but also large forestage aprons and elevator orchestra pit, so that the forestage will be well adapted to other performances. Seating capacity, maximum 500 seats.

It is impossible for the Music Department to make use of the existing University Theater due to the extensive programs to be offered by both Drama and Music. The University Theater orchestra pit is impossibly small for the orchestra necessary for standard musical productions.

2) One Concert Hall. Large stage (no proscenium, no curtain) adequate for band, orchestra and choral performances. Fine organ of good size, properly installed into architecture of room. Stage equipped with retracting shell for solo or small ensemble performances. Seating capacity (continental style) is held to 800 in order to insure perfection in acoustics and spatial design. The architectural staff is requested to duplicate the concert hall in Oberlin College's new Music Building.

## V. Performance Facilities (continued)

3) Continued Use of the Municipal Auditorium.

It is pointed out that the concert hall will be used daily for teaching organ. The halls will also have heavy use in our staging musical festivals throughout the year. Three thousand singers and 5,000 instrumentalists now participate annually in Interscholastic League Competition Festivals. The Summer Music Camp program in Texas Tech now attracts 700 students to our campus for four to six weeks each semester.

#### VI. Administrative suite: Offices for

Head of department

- 2 administrative assistants
- 2 secretaries in reception offices stenographic equipment room

### VII. Recording and Score Library and Listening Facilities

- 1) Score, music education, and record library
- 2) Multiple listening facilities, group and individual

The music education portion of this library is comprised only of the graded musical series used in public school music. All text and reference books, etc. will be retained in the Texas Tech General Library.

Listening facilities <u>must</u> be made available for intensive individual and group study of music for music literature, music theory, and applied music. More than 700 students currently enrolled in music literature classes are being denied proper instruction due to our failure to provide proper listening facilities.

#### VIII. Central Sound Studio and Office (and workshop)

- 1) Central sound studio and office (and workshop) with full time technicians, possibility of recording from several rehearsal, performance and classrooms.
- 2) Portable tape recorders maintained for studio and practice room use.
- 3) Electronic music studio.

The mere keeping pace with adequate recording equipment as an instructional aid is obvious.

With the theory and composition program now implemented it is necessary that the Music Department provide a studio for the study and composition of electronic music.

- IX. Student Study Room (in addition to library space)
- X. Faculty conference room and ante room
- XI. Student Locker Space

The architectural staff is requested to provide locker space similar to that in the new Music Buildings in Oberlin College and in the University of Michigan.

## XII. Maintenance Workshops

- 1) Piano Technician's workshop
- 2) Organbuilder's workshop
- 3) Adequate custodial space

#### XIII. Restrooms

Restrooms of sufficient size and properly ventilated. Should be centrally located.

#### XIV. Elevators

Freight elevator of sufficient capacity to transport concert grand piano and other large musical instruments.

- XV. Additional storage space.
- XVI. Adequate parking area and approach area and landing docks to allow moving in and out bulky stage equipment and instruments frequently necessary for musical productions.

## XVII. N.B. particularly relevant to music buildings:

Noise cortrol: Sound must be good in rooms, ceilings high enough, etc., but there must be an absolute minimum of transferral of sound from room to room through walls, floors, heating-cooling ducts, etc. A complex of buildings is preferable to one large building. The entire building must be designed with the help of acoustical engineers, but the performance halls in particular must have special attention.

Temperature and humidity control is of paramount importance to equipment maintenance.

Campus Planning Committee June 7, 1966 Attachment No. 653 Item No. 3372

Texas Technological College Lubbock, Texas

M E M O R A N D U M
From
Building Maintenance
And Utilities

To: Mr. M. L. Pennington

Date: June 7, 1966

Subject: Additions to Physical Plant Facilities

The Department of Building Maintenance and Utilities is in need of additional space in Cabinet Shop, Paint Shop, and a Carpenter Shop at the present time:

CABINET SHOP ADDITION - 1,120 square feet

At present three cabinetmakers and one cabinetmaker foreman are employed in the Cabinet Shop. This is all of the workmen that can be used in the shop at the present time as all machines are used to full capacity by this number of people. There is no room at the present time to add additional equipment. A total of 13 work orders was outstanding as of April 1, 1966. A number of these are sizeable jobs and must be completed this summer. Additional help cannot be placed in the shop due to a lack of space and equipment needed for them to work with. The work in this shop has more than tripled in the last three years and it is anticipated the needs will continue to increase at this rate.

CARPENTER SHOP - 1,700 square feet

The work in this shop has increased to the extent that a shop for carpenters only must be constructed. They are presently attempting to share the cabinet shop and this has proven unsatisfactory as the materials used by cabinetmakers is much more expensive and the machines must be kept sharp and in very close tolerances for cabinet work. As a result the materials brought in by the carpenters if often mixed with that of the cabinet shop and many times ripping of used lumber will have unforeseen material such as metal objects in it which damages the more expensive machines required for cabinet work. Therefore, this shop is needed as soon as it can be obtained.

PAINT DRYING ROOM - 800 square feet

At the present time the paint spray room is used as a drying room also. As a majority of this work is done with a spray gun, flying materials prevent the spraying of additional items until the ones previously sprayed have been dried enough to be placed in the location for which they are constructed. This often creates a backlog of work in the paint spray room which could be prevented if additional space was provided to move completed items in to dry.

FILTER CLEANING SHOP - 560 square feet

A number of places have been used for this operation, but non have proven successful. At the present time it is in the temporary addition to the Traffic-Security Building. In this operation analkaline type of material is used which emits an objectionable odor while cleaning the filters. This odor filters into the offices of Traffic-Security and causes irritation of the eyes and nose. This shop should be constructed somewhere within the Physical Plant compound.

LOCK AND DOOR CLOSER SHOP - 560 square feet

A portion of the present lock and door closer shop occupies a space which must be used to expand the office area for Building Maintenance and Utilities. If Central Warehouse is expanded to the west, the area now used for offices by them would provide an excellent addition for this shop. Page 2

June 7, 1966

#### MACHINE AND SHEET METAL SHOP - 1,600 square feet

At the time of construction of Physical Plant facilities a small area was designated as a welding and machine shop. The work in the welding shop has increased to the extent that the available space is used for this activity, curtailing the operation of the machine shop. Better utilization of the talent available could be realized if there was sufficient space to install turning lathes and other items of equipment required in machine shop work. At this time all sheet metal work is done on a contract basis. Sufficient equipment obtained from War Surplus is on hand to set up a sheet metal shop if building space can be made available. This would insure a considerable savings each year.

#### OFFICE SPACE FOR SAFETY AND ENVIRONMENTAL HEALTH ENGINEER

This department is presently housed in temporary type building on campus with no space available for lab work. If this department is to function as intended, this type of space must be provided. An office of approximately 168 square feet with office for a secretary of approximately the same size will be required. Also, space for lab work of approximately 160 square feet will be needed.

Also, additional space is requested by the Central Warehouse, Tech Press, Department of Care and Maintenance of Grounds, and Custodial Services. Copies of their requests are attached.

/s/ O. R. Downing

O. R. Downing, Director

ORD/lv

## TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

Department of Care and Maintenance of Grounds

November 23, 1965

Mr. O. R. Downing, Director Building Maintenance and Utilities Campus

Dear Mr. Downing:

In considering the future needs for the Physical Plant, the Department of Care and Maintenance of Grounds requests additional space for storage of vehicles (tractors and mowers).

Currently, several vehicles are stored in the open. All available shed type parking spaces are filled with existing vehicles. Several tractors are stored within the warehouse area. As the campus expands in area, the existing warehouse area facilities will have to be employed for storage of larger amounts of fertilizers, seed, insecticides, peat moss, peat pots. Tractors currently stored within the warehouse will have to be moved outside.

### Space Requested:

#### Shed Type Structure - Parking Stalls

No.	Size	Sq. Feet
2	16' x 40'	1,280
2	20' x 20'	800
		2,080

Sincerely yours,

/s/ James W. Kitchen

James W. Kitchen Superintendent

JWK:dab

### TEXAS TECHNOLOGICAL COLLEGE P. O. Box 4188-Tech Station Lubbock, Texas

Custodial Department

January 21, 1966

Mr. O. R. Downing Director of Building Maintenance Texas Technological College

Subject: Physical Plant Expansion Needs

Relative to your memorandum to me dated November 15, 1965, I am enclosing a schedule of present square footage and additional square feet required for the several areas which house administrative and operational employees.

During the last few months of 1960, we had a total of approximately 64 employees, 4 of which were administrative. Presently, this figure has jumped to 105 employees, 5 of which are administrative. It is difficult to determine how many operational employees we will have 5 years hence with a major building program in the offing. The size of the supervisory staff also will depend upon the number of custodians in the Department.

At present, three offices, the storeroom and workshop are over-crowded to the point that it is very difficult for the office staff to find room in which to move.

With the present size of the Department, and the way it has been growing, I am sure that at least one more office clerk will be required, inasmuch, as all records are kept in this Department.

The workshop is over-crowded because much of the material and equipment which normally would be kept in the storeroom had to be moved into it.

The secretarial and office clerk office is far too small and too narrow. This is particularly difficult for the ladies on pay days or when we have departmental meetings.

Both the offices of the Director of Building Operations and his Assistant are far too small. This has not been due to lack of vision on my part, but because in 1959, I was asked to cut down on the amount of square footage which I originally requested in view of the lack of building funds. An office which will accomodate 5 supervisors is a must, in order that they may discuss their problems in private, talk to employees privately, and whereby, the Director and/or the Assistant Director of Building Operations may hold small staff meetings. At the present time, we are using a 3 x 4 foot table in the storeroom.

Because of the lack of space, filing cabinets and other such equipment are being kept in the storeroom for the convenience of the secretary who uses them daily. Hence the need of the filing room, which will also accommodate tape recorder, dictating and other electrical, electronic and mechanical equipment.

Closet space for 4 additional areas will be required and of a larger size because the three we now have represent a total footage of 52 feet and all three closets are over-crowded, even though additional shelving has been built.

The foregoing represents minimum requirements of this Department for the next five years. The dimensions of the new areas can be given after the architectural preliminary sketches have been reviewed.

/s/ C. F. Libby
Charles F. Libby
Director of Building Operations

## CUSTODIAL DEPARTMENT

AREA	PRESENT SQUARE FEET	PRESENT SIZE	Additional Square feet Requested	TOTAL SQUARE FEET REQUIRED
-1,				
Storeroom	493	24 8" x 20 1	500	993
Workshop	279	2018" x 1316"	279	558
Secretarial and Office Clerk	252	91 x 281	248	500
Office of Assistant Director	122	10°2" x 12°	122	544
Office of Director	130	10'2" x 12'9"	130	260
Filing Room	None		130	130
Office for 5 Supervisors	None	31)	400	400
Closet Space for 4 areas	52	Two 2' x 10' One 3' x 4'	188	540
Totals	1,328		1,997	3,325

Texas Technological College Lubbock, Texas

#### M E M O R A N D U M From Central Warehouse

To: Mr. Ray Downing

Date: December 6, 1965

At the present time we have approximately 19,000 sq. ft. of floor space in the Central Warehouse of which approximately 95% is now in use.

We have eleven full-time employees and one part-time employee working in the office, which has approximately 700 sq. ft. of floor space.

In order to take care of the anticipated growth of the Central Warehouse and Receiving, it is requested that approximately 20,000 sq. ft. of floor space be added to the present warehouse. Approximately 2,000 sq. ft. of floor space is requested for office. The area requested for this expansion is to the west of the present building.

Our primary concern is additional office space and moving the receiving from the east side to the south side. The receiving and shipping from the present location is becoming very congested by the movement of vehicles to and from this area. Our present office space could be used by some other department if needed.

In connection with the office, restroom facilities would be needed. Also the lumber bin would have to be relocated.

Attached is a rough sketch of the requested addition.
(Note: Copy of rough sketch on file in Coordinator's office.)

/s/ J. E. Crawford

J. E. Crawford Central Stores and Property Manager

JEC/mt cc: Mr. Bob Price

## TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

The Texas Tech Press

December 2, 1965

Mr. Ray Downing Director Building Maintenance Texas Technological College Campus

Dear Mr. Downing:

The other day you asked me about any building changes Tech Press might want of which might affect the Physical Plant area.

You have my letter and sketch concerning the additional space to be added to Tech Press. One plan calling for about 4,554 square feet of floor space and another plan for about 6,831 square feet of floor space. This space will presently be used for paper storage.

Some of the other things we have in mind are: improving our front entrance to keep out the wind during the cold months of the year; adequately heating our office area; changing or adding office space to allow for more customers to be served and space for waiting; and insulating from the top of the walls to the ceiling or roof decking in order to keep heat in, cold out, insects out, dust out, and air conditioning inside the building.

Any help or suggestions you can give us on this matter would be greatly appreciated.

Yours truly,

/s/ Benge R. Daniel

Benge R. Daniel Manager--Tech Press

BRD:pp

June 17, 1965

Mr. M. L. Pennington Vice President for Business Affairs Texas Technological College Campus

Dear Mr. Pennington:

Due to our present crowded condition at Tech Press, we need an addition to our building as soon as practicable.

The additional space is to be used for paper storage.

At the present time we are storing paper in our bookbinding area and in other vacant temporary spots around the shop. Next year we plan to double our output of Library books bound--from approximately 1,000 books per month to 2,000 per month. This expansion of our bookbindery will necessitate our using all this area for binding books. The number of printed jobs is also increasing and we need more room now in all areas--composing (setting type), imposing (make-up of jobs, lock-up, and proofing), presswork (letterpress and offset) and printing bindery (folding, gathering, wire stitching, padding, paper drilling, round cornering, perforating, plastic strip binding, and paper cutting). Paper is often inconveniently stacked where it needs to be moved several times before it is printed and several times after it is printed.

If we had about 4,554 square feet of floor space added (Plan 1) it would be sufficient for our present needs. This would enable us to buy paper in larger quantities, carload lots in some instances, and perhaps buy at a cheaper price. Cartons and skids of paper would be kept here.

With about 6,831 square feet of floor space added (Plan 2) we would have extra space and this should be sufficient for some 10 years or more. Until such a time as we need this extra space, about three years, the Mimeograph Department could store paper here; and Building Maintenance could store some equipment which might need to be inside (example, extra waste containers, air conditioners awaiting installation, etc.) at no cost. The addition would not need to be air conditioned—we would move the paper as needed into the present shop for cooling and humidification. It would need some lighting but would not need water or gas.

We would like for the Building Maintenance Department of the College to have a bid on this job. The ideas for future expansion of the Warehouse and Building Maintenance should be taken into consideration so that the Physical Plant area buildings would be functional as well as beautiful.

The money for such a project is available in our Prior Year Balance account.

Yours truly,

/s/ Benge R. Daniel

Benge R. Daniel Manager-Tech Press

Attached: Plan 1 )(Note: Copy of drawings on file in Coordinator's office.)

Carbon Copy: Mr. Ray Downing

Mr. Robert Mason Mr. Jesse Crawford

#### TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 299

June 14, 1966

A meeting of the Campus Planning Committee was held at 3:15 p.m. on June 14, 1966, in Room 120 of the Administration Building. Members present were Chairman M. L. Pennington, Mr. E. J. Urbanovsky and Mr. Nolan E. Barrick. In addition, Mr. John G. Taylor, Mr. Ray Downing, Miss Jerry Kirkwood and Mr. Howard Schmidt, Consulting Architect, were present. Miss Evelyn Clewell attended during the discussion of Item Nos. 3378, 3381, 3383, and 3384.

Mr. Robert White represented the firm of Pitts, Mebane, Phelps and White; Mr. Ross Zumwalt, Mr. J. T. Worley and Mr. Jack F. Roberts represented the firm of Zumwalt & Vinther. (For discussion of Item Nos. 3379 and 3380.)

#### 3375. Approval of Minutes

On the motion of Mr. Urbanovsky, seconded by Mr. Barrick, the Minutes of Meetings Nos. 293, 294, 295, 296 and 297 were approved.

### 3376. President's Approval of Minutes

President Goodwin approved the Minutes of Meetings Nos. 293, 294, 295, 296 and 297 on June 7, 1966.

#### 3377. Athletic Facilities

#### Paving the North Parking Area at the Stadium

Mr. Urbanovsky and his staff have completed the plans and specifications.

The recommendation was made that bids be taken on July 1, 1966. The Athletic Council meets on July 6, 1966, and will have the opportunity of reviewing the bids.

It was further recommended that the Board of Directors be requested to authorize the Building Committee of the Board to award the contract and that the Chairman of the Board be authorized to sign the necessary documents.

## 3378. Biology Building (CPC No. 99-65) (Pierce & Pierce)

#### Summary of the Biology Building

The Campus Planning Committee recommended that the summary of the general purpose space presented by Miss Clewell be accepted.

The net square footage of such space is approximately 3,000 square feet less than originally anticipated, but the locations and sizes of the spaces accepted are better suited for general use.

Miss Clewell's analyzation is attached to and made a part of the Minutes. (Attachment No. 654, page 2016)

The architects feel that they will be unable to do properly the work necessary for a presentation to the Board of Directors on June 18, 1966. They have indicated that a presentation a month or more hence will not delay the project.

# 3379. Engineering Survey (CPC No. 100-65) (Zumwalt & Vinther, \$10,000)

Mr. Ross Zumwalt gave the formal presentation of the completed report and Engineering Survey.

Mr. Zumwalt recommended, based upon this survey, that the site of the new Power Plant be located within an area bounded by 15th Street to the south and the Physical Plant and Central Foods Area to the north, by Flint Avenue to the east and to the west in the vicinity of Indiana Avenue. He stated that the farther north the site is considered, the greater the tunnel expense would be.

It was pointed out that the size of the plant shown on the drawings is an approximate ultimate size and shape of a central plant, based upon the future needs, as predicted in the survey.

Asked for his opinion, Mr. Zumwalt recommended that if the College can at all afford the expenditure, one boiler and one refrigeration unit be purchased under the awards of contracts now being considered and that Alternate No. 1 including the second boiler be accepted.

The above equipment would carry the demands made by the buildings under construction, those out for bids, and those in the programming stages at this time with the existing Power Plant being used finally as a standby system.

He recommended that the second refrigeration unit be considered for purchase by the early part of 1967.

The completed "Engineering Survey and Report on the Utility Systems" is available for review.

# 3380. Foreign Languages-Mathematics Building (CPC No. 87-64) (Pitts, Mebane, Phelps and White)

#### Utility Tunnel Extension

Mr. Jack Roberts presented the preliminary drawings.

It was established that it is necessary to complete the work this summer in order that the contractor have the services available to complete the work on the project which includes the connections of utilities. The project is scheduled for completion in April of 1967.

Covering fees for the preparation of plans and specifications, Mr. Roberts, Mr. Downing and Mr. Taylor will formulate a letter which will be made a part of the agreement between the College and the engineers for professional services rendered for the "Engineering Survey and Report on the Utility Systems."

# 3381. Interior Decorators Services (For Title I and Title II Projects)

Mr. Taylor reported that the Department of Housing and Urban Development offices have at this time no procedures concerning such services. However, they will accept any request which states the services and fees involved and will forward a recommendation to the U.S. Office of Education in Washington.

## 3382. Museum (Existing)

Mr. Schmidt has received requests for the Museum to be considered for use by specific departments.

The Campus Planning Committee completed its assignment when the recommendation was made to the Building Committee that the building be confined essentially to classroom and faculty office use. The Board of Directors approved the recommendation and the specific assignment of space is the responsibility of Miss Evelyn Clewell who is the Space Coordinator.

# 3383. Power Plant (CPC No. 105-66) (Zumwalt & Vinther, Engineers) (Pitts, Mebane, Phelps, & White, Architects)

Mr. Robert White and Mr. Ross Zumwalt have agreed upon the divisions of responsibilities of the two firms and will furnish in writing a guide for preparing the architects' contract and an amendment to the contract between the College and the engineers.

## 3384. Texas Tech Press Addition

#### Scope of the Project

It was recommended that the addition be included in the expansion of the Physical Plant area and that the Board of Directors be requested to authorize Mr. Howard Schmidt to begin programming the project.

## 3385. Wiggins Complex

#### Interior Decorators' Services

Mr. Pennington and Mr. Schmidt reported interests from people in this field. All proposals will be held until the time that such services need to be considered for coordination with the project.

Because of a request from a ceramic tile manufacturer that the company be allowed to quote prices to subcontractors for furnishing material for the project, the following recommendation was made: The requirements of the specifications will be followed explicitly.

Mr. Schmidt stated that all ceramic tile manufacturers desiring to bid this project must be members of the Tile Council of America as specified. This was written into the specifications to insure high quality ceramic tile only and the architects are assured that numerous competitive bids will be received.

Jerry Kirkwood Coordinator

The meeting adjourned at 5:15 p.m.

Campus Planning Committee June 14, 1966 Attachment No. 654 Item No. 3378

## TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MEMORANDUM

Office of the Registrar

To: Mr. M. L. Pennington

Date: June 13, 1966

From:

Miss Evelyn Clewell

Subject: Summary of Space in New Proposed Biology Building

Enclosed is a summary of the space that may be used for general assignment in the new proposed Biology Building. This summary will point out that the modified plan, even though some 3,000 square feet less than space originally designated for general use, is much better and more conveniently grouped. If you need more information please let me know.

cc: Mr. John Taylor
Mr. Nolan Barrick
Miss Jerry Kirkwood
Mr. Elo Urbanovsky
Mr. Howard Schmidt

#### Biology Building

The modified plan of the Biology Building of April 21 shows assignable space for general use as 16,042 sq. ft. as listed:

12 Classrooms (11,696 sq. ft.)

6 Grad offices (1,296 sq. ft.) (6 offices for 28 graduates)

19 Faculty offices (2,758)
(19 offices for 19 faculty)

Original plans showed 20,179 sq. ft. which could be designated as general. An increase of square feet overall in areas designed especially for Biology, and new justification of certain areas as needed by the Biology Department accounts for the difference between original plans (Jan. 15) and modified plans (Apr. 21).

Square feet in assignable area in April 21 modified plan shows 104,239 sq. ft. as compared to 98,695 sq. ft. in original plan, an increase of 3,137 sq. ft. assignable.

#### Summary:

Increased sq. ft. in areas designated as Biology space, and increased sq. ft. in areas designated as general usage, accounts for the differences in original and modified plans.

Not only differences are reflected, but more space in some rooms and less in others changes the total square feet assignable to Biology and general use.

Biology has justified the use of the following areas which were originally designated as general usage:

	Origi	inal	Modifie	<u>ed</u>
Invertebrate zool. lab (grad.)	768 sq	l. ft.	480 sq	. ft.
Animal Physiology (separate programs and will need space)	992	11	1,000	и
Cytology research & cleaning rooms (New professor employed)	968	11	1,008	n
E M training & research (Equipment for electron- microscope will be install	848 ed)	11	1,040	11
Cytogenetics office & research lab (grad. lab. & new professor	1,024	11	986	11
employed)				
Total square feet	4,600		4,313	

If equipment is not available for many of these areas at the time of occupancy of building, the space will be available for general assignment.

#### SUMMARY:

Under the modified plan, 15% or 16,042 square feet has been designated as general use space. Originally 20% was designated as general use space.

Rearrangements and increase in square feet in Biology use space, as well as justifications for new spaces under the modified plan, accounts for the differences in percentages of assignable general use and special purpose areas in the Biology Building.

Biology Building

Assignable	Revised Requested Space	Schematics Jan. 15	Modified Apr. 21
Basement	17,772	17,486	17,960
lst floor	13,068	11,169	11,793
2nd floor	17,050	16,472	18,721
3rd floor	12,520	11,396	11,798
4th floor	10,390	10,912	11,316
5th floor	11,690	11,122	12,560
6th floor	10,566	11,135	12,088
Roof	9,020	9,003	9,003
TOTAL SQ. FT.	102,026	98,695	104,239

Graduate -- 35,248 (Jan. 15) -- 38,121 (Apr. 21) Undergrad-- 63,447 " -- 66,118 "

April 21 had a 5.65% larger academic area than in Jan. 15 plan.

720

Grad plant physiology research

## Summary of the Biology Building

Classroom

Floor	Sq. Ft.	Areas Designated by Biology from modified list to be used as General Space	Proposed General Use	Area Formerly Designated (Not in current list)	Sq. Ft.	Justification
Ground	392 392 392	Graduate office Graduate office Graduate office	Classroom A	Cytology research prep and 2 clean rooms	1,008	Biology has new professor
	392 392	Graduate office Graduate office	Classroom B	EM faculty office EM training	288 496	Biology will equip at time
	392	Graduate office	Classroom C	3 Dark rooms	352	of building
	392 392	Graduate office Graudate office	Classroom D	EM research	1,008	
	144 144 144 144	Student couns. office Student couns. office Lecture coordinator Lab coordinator	Interchange these for four graduate offices (12 grad. students)	#. **		
	1,088 1,088	Freshmen zoology lab Freshmen botany lab	Classroom			
Second	1,296 1,056	Herbarium graduate research Mycology plant path. lab	Classroom Interchange with radiation area on 6th - thus creating a classroom en 2nd	Plant physiology office Advanced botany (physiology)	1,040	Biology will not use unless equipped but will need since Herbarium was
	576	Plant physiology faculty research and physiology office	3 faculty offices			made into a classroom
	576	Herbarium prep	3 faculty offices			

Floor	Sq. Ft.	Areas Designated by Biology from modified list to be used as General Space	Proposed General Use	Area Formerly Designated (Not in current list)	Sq. Ft.	Justification
Third	1,440	General microbiology lab Advanced microbiology grad lab	Classroom Classroom	Faculty office Faculty office	144 144	
	1,008	2 microbiology research labs and 2 offices	8 Faculty offices	Graduate student (7) office Graduate student (8) office	210 336	Needed by Biology, Increase in doctoral program. Subs- tituted for grad offices on ground floor
Fourth	864 144	Bird/Mammalogy collection Ecology office	Classroom	9		
Fifth	132	Animal physiology office	Office	Graduate invertebrate zoology lab Invertebrate zoology research	480 288	Erroneously designated before
				Animal physiology lab	992	Separate programs Need space
Sixth	182	Radio Biology office	Faculty office for 2	Cytogenetics office Cytogenetics research lab	108 300	Justified as needed if equip-
	416	Radiation AreaDark room	Leave the 2 radiation	Cytogenetics lab (graduate) Prep room	576 160	ment can be purchased. New
	720	Counting and Instrument Rooms 2 radiation prep rooms	prep rooms for offices (This will office 16 graduate students)	8		professor employ- ed for cytogen. program.
	1,008	Radiation prep research	Make 4 faculty offices out of the dark room and counting and instrument room Interchange with mycology plant/path lab on 2nd - thus creating another classroom.		\$)	

#### TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

AGENDA FOR THE JOINT MEETING OF THE CAMPUS AND BUILDING COMMITTEE AND CAMPUS PLANNING COMMITTEE TO BE HELD AT 9 A.M. IN THE OFFICE OF THE PRESIDENT JUNE 18, 1966

### Athletic Facilities

### Paving the North Parking Area at the Stadium (Estimated Cost. \$12.500)

The Board of Directors has approved the paving of the area.

Consider the recommendation of the CPC that bids be taken on July 1, 1966, in keeping with the plans and specifications prepared by Mr. Urbanovsky and his staff; that the Building Committee of the Board be authorized to award the contract between meetings, and that the chairman of the Board be authorized to sign the necessary documents.

agreement with Highway seeps for alloss

## 3387. Biology Building (CPC No. 99-65) (Pierce & Pierce)

In lieu of the previously requested date of June 28, 1966, by the architects for the presentation of the schematic plane to the of Directors. Mr. Googa Directors are plane to the schematic plane to the of Directors. architects for the presentation of the schematic plans to the Board of Directors Mr. Goorge Pierre of Directors, Mr. George Pierce was asked if the presentation could be made on June 18, 1966. He felt they would be unable to do properly the work necessary by this date and said that an additional delay of a month or more would not interfere with the progress of the project.

Engineering Survey (CPC No. 100-65)
(Zumwalt & Vinther, \$10,000)

The CPC recommends that the "Engineering Survey and Report on the Unitity Systems" be accepted.

Copies of the survey and the report have been sent to the members of the Building Committee of the Board. The report and the survey are available for review.

Foreign Languages-Mathematics Building (CPC No. 87-64) (Pitts, Mebane, Phelps & White)

## Utilities and Tunnel Extension (Zumwalt & Vinther)

It is recommended that the Board of Directors authorize the CPC and the Building Committee of the Board of Directors to approve the plans and specifications and award the contract, and that the Chairman of the Board be authorized to sign the necessary contract documents.

The estimated cost of the tunnel with heating and cooling piping is \$97,920.

The estimated cost of the electrical extension is \$5,500.

Lowing (off-Compus) - grin 
Lowing (off-Compus) - grin 
Lowing (off-Compus) - here

# 3390. Power Plant (CPC No. 105-66) (Zumwalt & Vinther, Engineers) (Pitts, Mebane, Phelps & White, Architects)



## Heating and Air-conditioning Equipment

The Board of Directors has authorized the purchase of one boiler and one refrigeration unit under the base bids.

On the advice of the engineers and after study by the CPC, the recommendation is that the second boiler be purchased under Alternate No. 1.

0 K

Vogt	Base Bid	Alternate No. 1

\$350,150 \$670,024

Refrigeration Unit Carrier Base Bid

\$235,750

Two boilers and one refrigeration unit would carry the demands made by existing buildings, the buildings under construction, those out for bids, and those in the progamming stage.

With necessary tunnel connections, the existing power plant would become a standby station.

## 3391. Project Architects



The Building Committee, with the approval of the Board of Directors, delayed the selection of architects until this meeting. Should the selection be further delayed?

## 3392. Texas Tech Press Addition

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The CPC recommends for Board approval that the addition to the Texas Tech Press be included in the expansion of the Physical Plant area, and that Mr. Howard Schmidt, Consulting Architect, be authorized to begin the programming when the project is approved.

#### Wiggins Complex 3393.

#### Contract Awards

#### Financing

#### 3394. Museum (New)

The Board of Directors has approved the plans and specifications. The architects plan to issue the bidding documents in July, 1966, and ground needs to be broken in August.

Consider the recommendation that the CPC be authorized to approve the issuance of the plans and specifications for bidding, action dend and Const. Bldg. Assert.

## TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

#### MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 300

June 18, 1966

A meeting of the Campus and Building Committee of the Board of Directors and the Campus Planning Committee was held at 9 a.m. on June 18, 1966, in the Office of the President.

Members of the Campus and Building Committee present were Mr. Harold Hinn, Chairman, Mr. C. A. Cash and Mr. Herbert Allen. Other members of the Board of Directors in attendance were Mr. Alvin R. Allison, Mr. Roy Furr, Mr. Retha R. Martin and Dr. Fladger F. Tannery.

Members of the Campus Planning Committee present were Mr. M. L. Pennington, Chairman, Mr. E. J. Urbanovsky and Mr. Nolan E. Barrick. Others present from the College were President R. C. Goodwin, Dr. W. M. Pearce, Mr. Bill Parsley, Mr. John G. Taylor, Mr. R. B. Price and Miss Jerry Kirkwood.

In addition, Mr. Howard Schmidt, Consulting Architect, Mr. Paul Horton, Bond Counsel, and Mr. S. E. Maclin, Financial Adviser, were present.

Mr. R. C. Messersmith was present for the discussion of the Wiggins Complex.

In order that the results of the meeting of the Board of Directors may be included in the Campus Planning Committee Minutes for record purposes, the action taken by the Board at the meeting on June 18, 1966, will follow that of the Campus Building Committee for each item.

#### 3386. Athletic Facilities

## Paving the North Parking Area at Jones Stadium (Estimated cost, \$12,500)

The Building Committee of the Board of Directors approved the recommendation that bids be taken July 1, 1966, in keeping with the plans and specifications prepared by Mr. Urbanovsky and his staff. It was further approved that the Building Committee be authorized to award the contract between Board meetings and that the Chairman of the Board be authorized to sign the necessary documents.

(The Board of Directors approved.)

# 3387. Biology Building (CPC No. 99-65) (Pierce & Pierce)

The Building Committee approved the recommendation that the architects be invited to present the schematic plans at the Board Meeting in Austin, Texas, on July 25, 1966.

(The Board of Directors approved.)

# 3388. Engineering Survey (CPC No. 100-65) (Zumwalt & Vinther, \$10,000)

The "Engineering Survey and Report on Utility System" was accepted by The Building Committee.

The work outlined in the survey will be implemented in phases necessary to support the expansion of the campus and as funds become available.

(The Board of Directors approved.)

The report and the survey are available for review.

# 3389. Foreign Languages-Mathematics Building (CPC No. 87-64) (Pitts, Mebane, Phelps & White)

## Utilities and Tunnel Extension (Zumwalt & Vinther)

The Building Committee approved the recommendation that the Campus Planning and the Building Committees be authorized to approve the plans and specifications and award the contract; and that the Chairman of the Board of Directors be authorized to sign the contract documents.

The estimated cost of the tunnel with heating and cooling piping to the Foreign Languages-Mathematics Building only and sized for future extension is \$97,920.

The estimated cost of the electrical extension to the Foreign Languages-Mathematics Building only is \$5,500.

(The Board of Directors approved.)

#### 3390. Housing

#### Off-Campus

The Board of Directors passed a resolution which refers the matter of off-campus housing back to the administration. A copy of the resolution will be available later.

## 3391. Museum (New)

The Building Committee recommended that the Board of Directors review the possibility of issuing plans and specifications for bids at the meeting in Austin on July 25, 1966.

(The Board of Directors approved.)

# 3392. Power Plant (CPC No. 105-66) (Zumwalt & Vinther, Engineers) (Pitts, Mebane, Phelps & White, Architects)

#### Heating and Air-Conditioning Equipment

Purchase of the second boiler under Alternate No. 1 was approved by the Building Committee.

The total base cost for two boilers and one refrigeration unit is as follows:

Boiler		Alternate No. 1
aj	**	(Two Boilers)
Henry Vogt		\$670,024
Refrigeration Unit		Base Bid (One Unit)
Carrier		\$235,750
Total		\$905 <b>,</b> 774

Two boilers and one refrigeration unit will carry the demands made by existing buildings, the buildings under construction, those out for bids, and those in the programming stage.

With necessary tunnel connections, the existing power plant would become a standby station.

(The Board of Directors approved.)

#### 3393. Project Architects

It was approved by the Building Committee that the selection of architects be delayed until the status of the Constitutional Building Amendment Fund has been established.

(The Board of Directors approved.)

## 3394. Texas Tech Press Addition

The Building Committee approved the recommendation that the addition to the Texas Tech Press be included in the expansion of the Physical Plant area, and that Mr. Howard Schmidt, Consulting Architect, be authorized to begin programming the facilities upon the approval of the project.

(The Board of Directors approved.)

# 3395. Wiggins Complex (CPC No. 97-65) (Howard Schmidt & Associates, Stiles, Roberts & Messersmith)

#### Contract Awards

A quorum of the Board of Directors agreed to meet on June 22, 1966, to consider the recommendation of the Campus Planning Committee concerning the acceptance of alternates offered in the bid documents of the low bidders, and make the award.

#### Financing

Award of the building contract cannot be made until an additional \$1 million dollars in bonds can be sold. It is planned to have the additional bonds sold by June 22, 1966.

Jerry Kirkwood Coordinator

## TEXAS TECHNOLOGICAL COLLEGE Lubbock, Texas

## MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 301

June 21, 1966

A meeting of the Campus Planning Committee was held at 4 p.m. on June 21, 1966, in Room 120 of the Administration Building. Members present were Chairman M. L. Pennington and Mr. E. J. Urbanovsky. Others present from the College staff were Mr. John G. Taylor and Miss Jerry Kirkwood. Mr. Howard Schmidt, Consulting Architect, was also present.

Mr. R. C. Messersmith represented the architects.

# 3396. Wiggins Complex (CPC No. 97-65) (Howard Schmidt & Associates, Stiles, Roberts & Messersmith)

The purpose of the called meeting was to study the deductive alternates offered by the low bidders in their proposals opened on June 16 and 17, 1966.

With the advice of the architects and after study, the Campus Planning Committee recommended that the following alternates as offered by the low bidders be accepted:

tow products be accepted:	
<u>Alt. M-4</u> (11,800 + 3%)	\$12,154
Changes automatic lawn sprinkling system piping from galvanized steel pipe to 125 psi PVC.	
<u>Alt. E-3</u> (15,000 + 3%)	15,450
Omits conduit and fixtures for the exterior flood- lighting of the 12 story parapet and the floodlighting of the mechanical penthouses.	
<u>Alt. GC-4</u>	12,500
Replaces cushioned vinyl floor (with 1/8" sponge rubber cushion) in typical floor lounges with 1/8" thick vinyl-asbestos tile.	
Alt. GC-6	37,000
Changes all brick paver walks to concrete.	
Alt. GC-9	18,000
Omits wood and vinyl sun decks on roofs of the three towers.	
Total Deductible Amount Recommended	\$95,104

Jerry Kirkwood Coordinator