TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 315 October 10, 1966

A meeting of the Campus Planning Committee was held at 1:30 on October 10, 1966, in Room 120 of the Administration Building.

Members present were Chairman M. L. Pennington and Mr. Nolan E. Barrick.

Other members of the College staff present were Mr. John G. Taylor, Mr. O. R. Downing and Miss Jerry Kirkwood.

Mrs. Shirley Bates and Mr. Guy Moore were present for the discussion of Item 3511, Wiggins Complex.

Mr. Howard Schmidt, Consulting Architect, was present.

3495. Administration Building Remodeling

Mr. Schmidt was requested to prepare an estimate of cost of additional excavation and the rehabilitation of existing basements for maximum usage.

The estimate will be included in the Legislative Budget request as a supplement to that amount previously requested.

3496. Agricultural Facilities (CPC No. 93-64)

Goat Facilities and Sheep Facilities

Mr. Schmidt, working with Dr. Gerald Thomas and Dr. Dale Zinn, had prepared schematic plans for which the estimated cost is $152,000.00.

The Campus Planning Committee recommended that programs and requests be restudied by the Agricultural Facilities Committee and that the request be justified based upon the academic program.

Mr. Schmidt was asked to continue working with the Facilities Committee.

Swine Facilities

The program has been received and is attached for information. (Attachment No. 677, page 2085)

3497. Architecture and Allied Arts

Mr. Schmidt was instructed, in accordance with the agreement, to proceed with the refinement of schematic plans filed with Title I.

A recommendation for the selection of Project Architects will be made to the Board of Directors at the December 3, 1966, meeting.

3498. Biology Facilities (CPC No. 99-65)
(Pierce & Pierce)

Nothing further has been heard from the Project Architects concerning the exterior design and the greenhouse design.

The Faculty Building Committee has expressed concern over the seating arrangements in lecture rooms. Mr. Schmidt was asked to contact the Architects and arrange a meeting with the Faculty Building Committee in order that the audiovisual needs may be established. The plans are in the construction drawing stage and such decisions are pertinent at this time.

3499. Business Administration Building (CPC No. 98-65)
(Page, Southerland, Page)

The Campus Planning Committee recommended that bids from sub-contractors be received on November 29, 1966, and from general contractors on November 30, 1966.

The above dates are dependent upon the concurrence of the Housing and Urban Development Field Engineer and the approval of the agency for advertising for bids.

Interior Designer Services

The Campus Planning Committee recommended that Interior Designer services be provided in the following areas:

1. Dean's suite of offices and spaces contiguous thereto.

2. Department Head's offices and spaces contiguous thereto.

3. Public lobbies and similar spaces where it is desirable for the College to make the most favorable impression on campus visitors.

4. A specified number of faculty offices designed around each basic exposure or lighting condition. Each basic design could be duplicated for all similar situations.

   It was felt that it is reasonable to ask the designer to offer a reduced fee for duplication in the above offices.

   Based upon the above recommendation, the designer will be requested to furnish a cost estimate including the designer's fee.

3500. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt & Vinther, Engineers)
(Pitts, Mebane, Phelps and White, Architects)

The architects and engineers have provided a schedule for the completion of the project which is attached for information. (Attachment No. 678, page 2086)

In order that the project stay on the extremely rigid schedule, it was recommended that the architects prepare a color rendering of the building to be presented to the Board of Directors on October 18, 1966. The Board of Directors will be requested to authorize the Campus Planning Committee to coordinate the project through to the completion of final construction drawings and specifications.

Approval to issue for bids and the award of the contract will be sought at the January 24, 1966, meeting.

3501. Chemistry Building Addition (CPC No. 87-64)
(Pitts, Mebane, Phelps and White)

It was recommended that the Faculty Building Committee be requested to meet with the Campus Planning Committee and review the schematic plan developments to date.

3502. Entry Stations (Interim)

The Traffic-Security Commission reviewed the construction drawings on October 6, 1966.

The plans are complete and were released to Mr. Ray Downing, coordinator for the project, who will see that construction is begun.

3503. Elevators (Hulen and Clement Halls)

The testing by the College for the presence of electrolysis is continuing.

3504. Home Economics Addition

Mr. Schmidt was instructed, in accordance with the agreement, to proceed with refining the schematic plans included with the Title I application.

A recommendation for the selection of Project Architects will be made to the Board of Directors at the December 3, 1966, meeting.

3505. Law School

Miss Clewell has prepared an outline of general use of the proposed facility, which can be considered as the Law School increases its enrollment. (Attachment No. 679, page 2087)

Mr. Schmidt was instructed, in accordance with the agreement, to proceed with refining the schematic plans filed with the Title II application on October 1, 1966.

A recommendation for the selection of Project Architects will be made to the Board of Directors at the December 3, 1966, meeting.

3506. Long Range Planning

It was recommended that Mr. Schmidt be authorized, in accordance with the agreement, to proceed with the Long Range Plan as soon as the five year academic plan is available.

3507. Student Union Building Addition

Additional data supporting the program submitted in August of 1965 has been prepared by Dean Allen and Mr. Longley and is included for information. (Attachment No. 680, page 2088)

Financing

The Student Union has outstanding bonds in the amount of $460,000, the last maturing in 1976. Possible means of financing the project are being studied.

3508. Temporary Buildings (Additional)

The Surplus Property Division, Department of Health, Education, and Welfare, in Dallas, has informed the college that Webb Air Force Base, Big Spring; Amarillo Air Force Base, Amarillo; and Sheppard Air Force Base, Wichita Falls, have no surplus buildings immediately available.

Reese Air Force Base may have two buildings, 80 feet by 29 feet, two-story structures, available in approximately 10 days from October 6, 1966.

Seventy-one buildings, of which several are 25 feet by 72 feet, are available at Ellington Air Force Base, Houston.

It was felt that the distance for moving the buildings is too great and securing those at Ellington Air Force Base would be impracticle.

The search will continue.

3509. Utilities and Tunnels Extensions (Wiggins Complex and the General Plant)

In order to stay on schedule and open bids on October 13, 1966, it became necessary to contact Mr. Hinn for approval to issue plans and specifications and to take bids. Approval was received by phone on September 29, 1966, and the plans and specifications were issued on September 30, 1966.

Bids will be received at 3:00 p.m., in Mr. Pennington's office, October 13, 1966. The estimated cost is $1,282,174.00.

3510. Utility Service Routing and Indiana Avenue

All parties concerned are preparing their proposals.

The City has resubmitted the proposed water main route and the revised proposed route of the power cable has been received from Southwestern Public Service Company.

All proposals will be reviewed by the Campus Planning Committee and a recommendation made at the October 18, 1966, Board Meeting if at all possible.

3511. Wiggins Complex (CPC No. 97-65)
(Schmidt & Stiles, Roberts & Messersmith, Architects)

Phase II

The Architects were requested to prepare the necessary documents for eliminating certain work now under contract in Phase I and to include this work in Phase II as proposed in a letter from the Architects, dated October 5, 1966. (Attachment No. 681, page 2089)

It was recommended that the College proceed with the application for Phase II, but with caution in view of the present enrollment trend.

Interior Designer

The Campus Planning Committee subcommittee recommended that Evans-Monical, Houston, Texas, be seriously considered for the project.

It was recommended that interior designer services be considered in the following areas:

1. Public spaces
2. Snack bar
3. Game room
4. All student lounges
5. Dining hall (to assist with the selection of colors and chair upholstering only)

Jerry Kirkwood
Coordinator

The meeting adjourned at 4:10 p.m.

Campus Planning Committee
October 10, 1966
Attachment No. 677
Item No. 3496

SWINE FACILITIES
Department of Animal Husbandry
Texas Technological College

BUILDING REQUIREMENTS

I. Farrowing House, 30' X 80'
- a. 16 farrowing stalls, each 5' wide X 7' long
- b. Individual water bowl in each stall
- c. Office, 12' X 12' with heat and a/c
- d. Locker, shower and rest room, 12' X 12' with heat and a/c
- e. Heater, air conditioner and water heater room, 6' X 12'
- f. Feed and supply room, 12' X 12'
- g. Wash room, sow--8' X 12' with hot and cold mixing hose faucet
- h. Holding pen, 10' X 12' with water bowl
- i. Sow exercise lot, exterior with cement
- j. Insulated walls and ceiling
- k. Zone ventilation of farrowing stalls
- l. Infra-red heater in each farrowing stall
- m. Cement floor throughout

II. Growing unit, 68' X 118'
- a. 16 pens, 12' X 24'
- b. Feed room, 12' X 29'
- c. Toledo scale and pens, 12' X 29'
- d. 8' feeders in each pen
- e. 3 water bowls in each pen
- f. Automatic washing facilities in each pen
- g. Insulated ceiling
- h. Walls which open up for ventilation
- i. Mist sprinkler in each pen
- j. Pen fence 40" high, concrete block or chain link
- k. Cement floor throughout

III. Finishing unit, 68' X 150'
- a. 16 pens, 16' X 24'
- b. Feed room, 12' X 29'
- c. Toledo scale and pens, 12' X 29'
- d. 12' feeder space per pen
- e. 3 water bowls each pen
- f. Auto. washing facilities in each pen
- g. Insulating ceiling
- h. Walls open for ventilation
- i. Mist sprinkler in each pen
- j. Pen fence 40" high, concrete block or chain link
- k. Cement floor throughout

IV. Sow unit, 17' X 130'
- a. Shed type building with cement floor, open to south or east
- b. Feeding stalls, 6' long, 20" wide, 36" high
- c. Divided into 4 pens with 16 stalls per pen
- d. 4 water bowls per pen (circulating type)
- e. Feedroom, 10' X 12'
- f. Mist sprinkler
- g. Pen fence 40" high chain link

V. Boar unit, 12' X 46'
- a. Shed type, open to south or east, cement floor
- b. Divided into 5 units, each unit 6 feet plus 1 unit 10 feet
- c. 1 water bowl, circulating type in each pen
- d. Feedroom 8' X 12'
- e. Mist sprinkler
- f. Pen fence 60" high, double chain link
- g. 4 breeding pens, 5' X 7' with concrete floor

Campus Planning Committee
October 10, 1966
Attachment No. 678
Item No. 3500

TEXAS TECHNOLOGICAL COLLEGE
CENTRAL HEATING AND COOLING PLANT — August 8, 1966

TIME SCHEDULE

DESCRIPTION	TIME ALLOWANCE FOR PHASE	DEADLINE
Completion of Title I Application - send data by air to Texas Tech		Sunday, August 28, 1966, or morning of August 29,1966
Arrive at Texas Tech		Monday, August 29, 1966
Texas Tech Application deadline		Tuesday, September 6, 1966
Zumwalt and Vinther receive data and start work		Wednesday, August 31, 1966
Jim Worley - M & E development to where PMPW can effectively commence design development	4 weeks	Wednesday, September 28,1966
PMPW design development to present to Texas Tech on this date	4 weeks	Wednesday, October 26, 1966
Presentation and approval by Texas Tech	1 week	Wednesday, November 2, 1966
Construction documents to issue for bids	12 weeks	Wednesday, January 25, 1967
Opening of bids and selection of contractor	4 weeks	Wednesday, February 22,1967
Construction started	2 weeks	Wednesday, March 8, 1967
Contingency	1 week	
	28 weeks total	March 15, 1967
Construction (foundation) Ready for boiler installation	8 weeks	May 10, 1967
Construction ready for refrigeration machine installation	12 weeks	June 7, 1967
Central plant in operation for checking		October 15, 1967
Steam from Central Plant to Wiggins Complex		November 15, 1967
Tunnels & Utilities to Business Administration Building - ready for occupation		September, 1968

Conference with Jack Roberts, Jim Worley, Ray Downing, Dan Talley, and Robert White, 8-23-66 in Zumwalt and Vinther Dallas office. Letter from Jerry Kirkwood, Texas Tech - 8-10-66

Campus Planning Committee
October 10, 1966
Attachment No. 679
Item No. 3505

TEXAS TECHNOLOGICAL COLLEGE

Lubbock, Texas

October 3, 1966

Memorandum to: Mr. M. L. Pennington

From: Evelyn Clewell, Coordinator of Space

Subject: General Usage of Proposed Building for School of Law

Areas available in the proposed Law Building which could conveniently and effectively be used for assignment for general usages, particularly general classroom spaces are:

Basement - (area for expanded library) (Approximately 15,400 square feet). Suitable for 3 classrooms of 100 each, 1 classroom of 150, and 9 rooms of 50 each. This would accommodate approximately 5000 students each week.

This area is designed for the expansion of the Law Library, who will utilize 1/2 or 3/4 of the space by 1972.

Of the 36 offices, Law probably will occupy 8 or 10 by 1969, depending on faculty available. These remaining 26 offices will be reassigned to The Law School at the rate of 8 each succeeding year.

The Law School plans to use the 8 classrooms approximately 80 hours per week, depending of course on the sizes of entering classes. The available space for general use in the planned classrooms for 1969 will be about 200 hours, or about 70 cycles a week.

I believe the building is so designed and is adequate enough to house The Law School efficiently and adequately and yet at the same time allow for good general use for 4 or 5 years or until The Law School grows into the facilities completely.

Existing Classrooms (based on 40 usable hours)

1969

	150	3 @ 80	2 @ 50	2 @ 30	Total
Law School	20 hrs.	1 @ 15 hrs.	1 @ 15 each	2 @ 15	80
General	20 hrs.	105	65	65	275

This equates to use of large room (150 capacity) for 5 classes, the 80 capacity rooms for 30 cycles, the 50 capacity rooms available for 18 cycles, and the 30 capacity rooms available for 18 cycles.

This space was evaluated on the assumption the building would be ready for occupancy by September 1969 and The Law School would expand each year into the space.

EC:em
cc: Dr. W. M. Pearce
Dean Richard Amandes
Miss Jerry Kirkwood

/s/ Evelyn Clewell
10/3/66

Campus Planning Committee
October 10, 1966
Attachment No. 680
Item No. 3507

TEXAS TECHNOLOGICAL COLLEGE

Lubbock, Texas

September 27, 1966

Office of
Dean of Student Life

Dr. Grover E. Murray, President
Mr. M. L. Pennington, Vice President for Business Affairs

Dear President Murray and Mr. Pennington:

Herewith is recommendation that we move with all urgency toward the further expansion of Tech Union.

Enclosed is an extension of the data on which this recommendation was made on August 31, 1965.

You will note that in the cover letter of that recommendation, I stated that the proposed addition was premised on the possibility of Tech Union's reaching, as soon as possible, a "self-sustaining basis of operation". The clearing of approximately $125,000 during the past twelve months confirms our diagnosis of a year ago.

We are now in most serious need of additional space and services for the increased student body which the Union is serving. Our crowded conditions approach at times a mob-like circumstance, which is most destructive and regrettable.

The Union space per student recommended by the Association of College Unions is 10 square feet per student. This time a year ago, ours was 5.4. At the present time it is 4.6. With our proposed addition, assuming our enrollment to be 20,000 by that time, we will be on a 6.1 ratio. Even if we are able to build the proposed addition in record time, we shall still be minimum Union-wise for our student body by the time we have it.

With over 60% of the additional space recommended revenue bearing areas, there is every reason to believe we can finance through our income the cost of the proposed addition.

Once more I urge that we give every consideration to the expansion of Tech Union. If additional figures would be helpful, we will assemble them. Mr. Longley and I will meet with you for further consideration of this recommendation at your request.

Yours very truly,

/s/ James G. Allen

James G. Allen
Dean of Student Life

JGA:mm

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas 79409

September 26, 1966

Dean James G. Allen
Dean of Student Life
Administration Building
Campus

Dear Dean Allen,

The attached information indicating the continued growth of the existing areas in the Union, included in our expansion recommendations to the College on August 31, 1965, provides further evidence that enlargement of these areas is becoming increasingly necessary each year. The overall growth of the Union seems to be limited only by the limitation of the available space per student. I think we must expect that the growth of all areas in the Union will very soon reach a maximum with the resulting curtailment of additional service until the areas are expanded.

One area not included in our recommendations last year has been added to the list this time since from all indications it will be inadequate also before the end of the 1966-67 school year. This area is the Union cafeteria and is listed as recommendation number eight. The other recommendations are brought up to date according to their number listed last year. I believe that college approval of the special needs in Union facilities as listed here would give Texas Tech a basically appropriate building for the entire campus community.

It is interesting to note that your reference last year to the Union's ability to reach a self-sustaining basis of operation to take care of its financial indebtedness has been realized for the first time this year with approximately $125,000.00 in income after expenditures.

Sincerely,

/s/ Nelson H. Longley

Nelson H. Longley
Director

NHL/nb

1. (Original recommendation remains the same.)

	1962-63	1963-64	1964-65	1965-66
Snack Bar Customer Count	525,539	592,776	645,321	683,376

2. (Original recommendation remains the same.)

	1964-65	1965-66
Conferences	71	75
Attendance	27,300	30,300

3. (Original recommendation remains the same.)

	1963-64	1964-65	1965-66
Customer Count*	12,966	14,033	17,335
Income*	$10,642.00	$10,855.00	$14,137.00

*Meal Service Only

4. (Original recommendation remains the same.)

	1963-64	1964-65	1965-66
No. of Meetings or Luncheons	1,811	1,724	1,848
Attendance	54,096	61,528	63,736

5. (Original recommendation remains the same.)

6. (Original recommendation remains the same.)

7. (Original recommendation remains the same.)

8. Expand the present Cafeteria area to the west with sufficient space to allow an additional serving line and seating area for 200 persons.

The percentage of growth in the Cafeteria area last year over the previous year is higher than in any other single revenue producing area in the Union. This growth was realized in an area that seats only 185 persons at one time, not counting the auxiliary seating set up in the 1/3 section of the ballroom to help with the peak periods in the morning and at noon. However, since other scheduled functions have priority in the ballroom the 1/3 section is many times not available for cafeteria patrons, which severely restricts the Union's capacity to serve customers due to insufficient seating. If the cafeteria could be expanded west to double the seating capacity with an additional serving counter the Union could greatly increase the service to the customers by dividing the actual food service according to type. This would allow the cafeteria service to be operated on a modified scramble system which many operations across the country are turning to in order to speed service.

In my opinion the present kitchen facilities in the cafeteria are adequate to serve the recommended addition with the exception of an additional dish washing area. The basic problem is serving and seating space.

	1963-64	1964-65	1965-66
Cafeteria Customer Count	145,959	155,354	200,378

SQUARE FEET COMPARISON OF REVENUE PRODUCING AREA AND NON-REVENUE PRODUCING AREA IN THE PROPOSED UNION ADDITION

(Revised September 15, 1966)

REVENUE PRODUCING AREA IN THE PROPOSED UNION ADDITION: (APPROXIMATE)

1.	ADDITION TO THE SNACK BAR AND KITCHEN	7,000 sq. ft.
2.	1/4 OF THE AUDITORIUM	3,000 sq. ft.
3.	FACULTY CLUB SERVING AREA	500 sq. ft.
4.	BOWLING AREA	7,500 sq. ft.
5.	CAFETERIA EXPANSION	3,500 sq. ft.
		21,500 sq. ft.

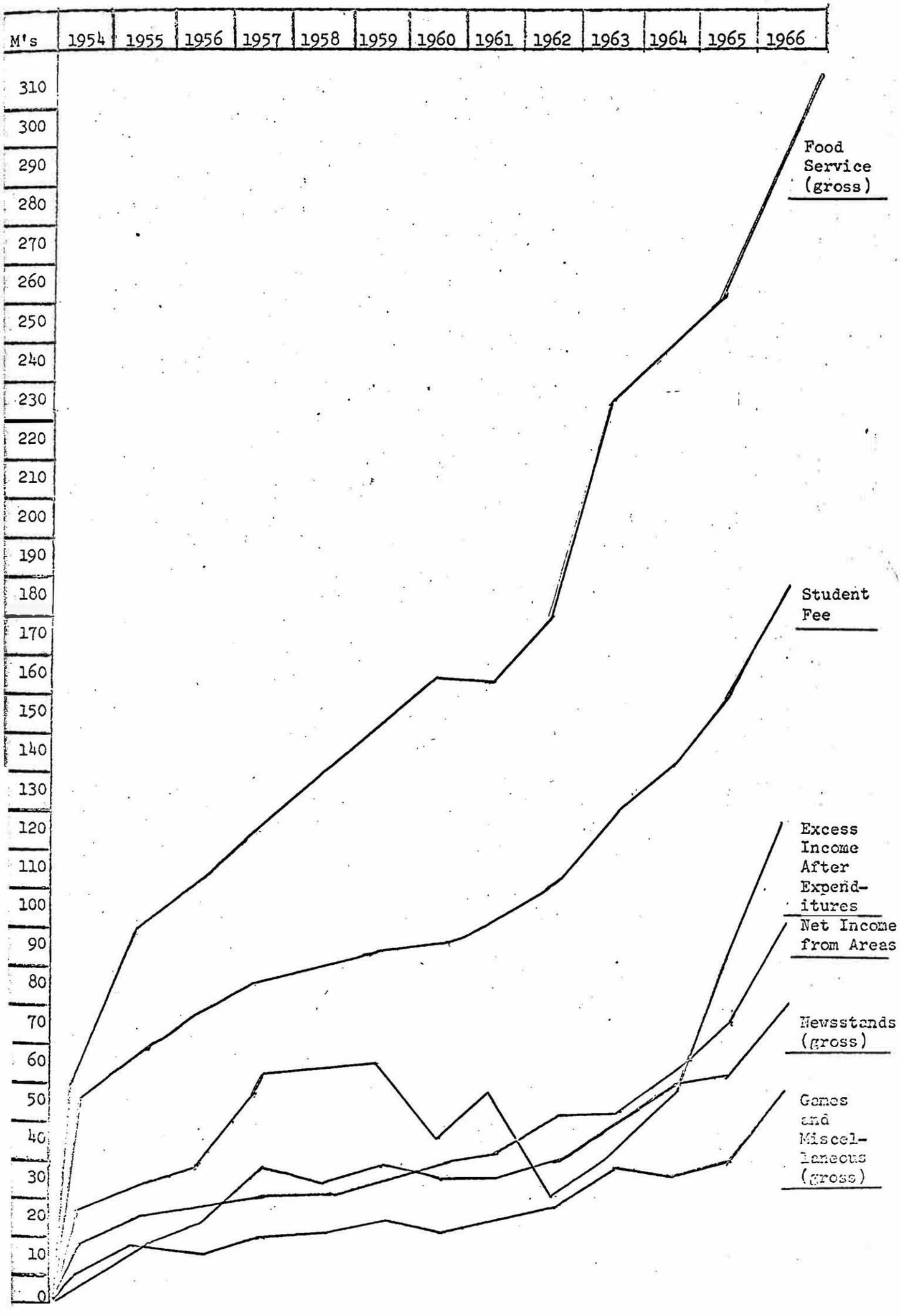
TOTAL AREA IN PROPOSED ADDITION (APPROX.)	35,500 sq. ft.	
TOTAL REVENUE AREA	21,500 sq. ft.	60.56%
TOTAL NON-REVENUE AREA IN PROPOSED ADDITION	14,000 sq. ft.	39.44%

TOTAL AREA IN PRESENT UNION	88,000 sq. ft.	
TOTAL REVENUE AREA	30,400 sq. ft.	34.54%
TOTAL NON-REVENUE AREA	57,600 sq. ft.	65.46%

COMBINED TOTAL FOR PRESENT BUILDING AND PROPOSED UNION ADDITION (APPROX.)	123,500 sq. ft.	
TOTAL REVENUE AREA	51,900 sq. ft.	42.02%
TOTAL NON-REVENUE AREA	71,600 sq. ft.	57.98%

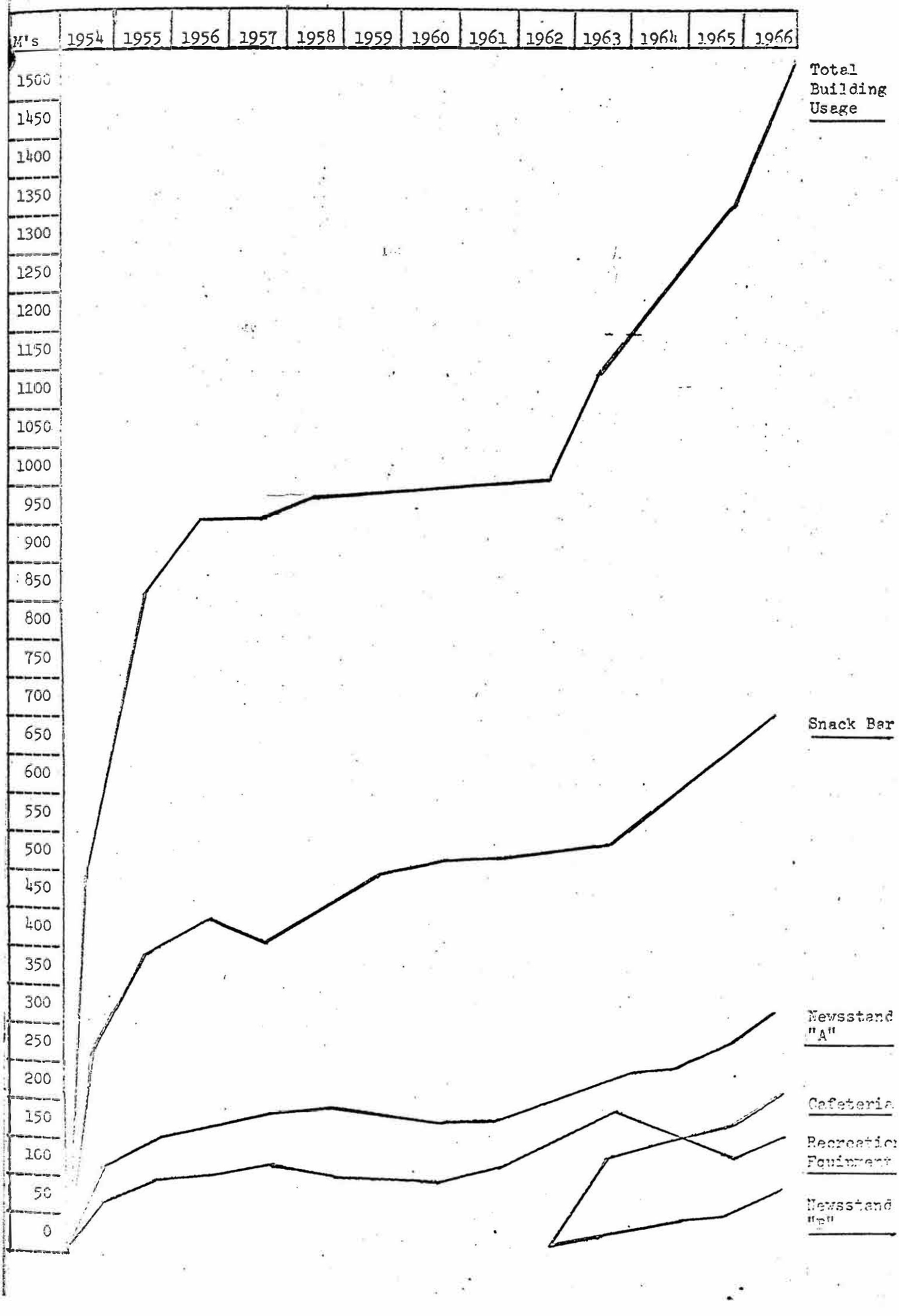
TECH UNION THIRTEENTH YEAR OPERATIONAL GRAPH

INCOME



TECH UNION THIRTEENTH YEAR GRAPH

CUSTOMER COUNT



Campus Planning Committee
October 10, 1966
Attachment No. 681
Item No. 3511

SCHMIDT AND STILES, ROBERTS & MESSERSMITH
Architects and Engineers

October 5, 1966

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

RE: Second Phase Wiggins Dormitory Complex
Texas Technological College

Dear Mr. Pennington:

In order to provide the necessary construction cost amounts required in the application for reservation of funds with the Department of Housing and Urban Development that you are now submitting, we have made the following preliminary estimate from information we now have at hand.

Phase One now under construction:

Total construction cost (H. A. Lott)		
$9,442,855.00 - for the purpose of this estimate only...		$9,443,000.00
Less "premium" for rushed construction.....		$ 312,000.00
		$9,131,000.00

$9,131,000 divided by 445,000 square feet = approx. $20.50/sq.ft.

Phase Two (as now master planned):

418,000 square feet X $20.50 =		$8,569,000.00
Less the following unnecessary items which were included in Phase One cost:		
Kitchen and most of equipment	$300,000	
Service court at kitchen	30,000	
Post office	25,000	
Lawn sprinkler system	20,000	
Earth fill	50,000	
Less exterior tunnel construction	160,000	
Exterior lighting	15,000	
Site work (walks, drives, etc.)	50,000	
		$ 650,000.00
		$7,919,000.00
Plus 5% contingency for inflationary rises, etc.		$ 396,000.00
Estimated Phase Two construction cost		$8,315,000.00

The above costs of course do not include moveable equipment, architectural-engineering fees, administrative expenses, interest during construction, etc.

It appears to us at this time that it would be very wise to develop a considerable deductive change order to eliminate work now under contract under Phase One which would not have to be done if Phase Two is constructed almost immediately after occupancy of Phase One. Such items as the finished south exterior treatment at the dining hall is one example, as well as the west wall of the connecting length between the single tower under construction as it ties into the new tower immediately west. We feel it would be unwise to develop the site work west of the first phase such as drives, parking lots, sidewalks, exterior lighting, earth fill, and lawn sprinkler system, and that these should be incorporated into the construction documents of Phase Two. It appears (without developing a detailed change order) that we might expect to get a credit of $150,000 to $200,000 for the above mentioned changes in Phase One. In the tabulation above for Phase Two the amounts were based on the assumption that this mentioned change order for Phase One would be initiated and the items that would be needed at a later date for Phase Two are included in the estimated total cost of Phase Two.

We hope this information is adequate for the Department of Housing and Urban Development application to reserve funds.

Cordially,

SCHMIDT AND STILES, ROBERTS & MESSERSMITH
ARCHITECTS AND ENGINEERS

Howard W. Schmidt, A. I. A.

cc: John Taylor
Miss Jerry Kirkwood

HWSmec

MR. PENNINGTON.
THE BRACKETS [ ] INDICATE WHAT APPEARS ON THE AGENDA WHICH EVERYONE ELSE HAS.

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

AGENDA FOR THE JOINT MEETING
OF THE CAMPUS AND BUILDING COMMITTEE AND CAMPUS PLANNING COMMITTEE
TO BE HELD AT 8:30 A.M. IN THE BLUE ROOM OF THE
STUDENT UNION BUILDING ON THE CAMPUS.
OCTOBER 18, 1966

3512. Agricultural Facilities

Goat and Sheep Facilities

Construction of the Wiggins Complex requires the moving of the facilities.

Programs have been submitted by the School of Agriculture.

ok [Consider the recommendation that Mr. Howard Schmidt, Consulting Architect, be authorized to proceed with the planning of new facilities.]

Swine Facilities

Additional facilities have been requested by the School of Agriculture.

ok [Consider the recommendation that Mr. Howard Schmidt, Consulting Architect, be authorized to proceed with the planning.]

3513. Business Administration Building (CPC No. 98-65)
(Page, Southerland, Page)

The construction drawings and specifications are complete. The Building Committee of the Board of Directors and the Board of Directors authorized the Campus Planning Committee to work with the Architects toward a satisfactory design of the exterior of the building which would be compatible with existing buildings.

The Department of Housing and Urban Development has approved the project and concurred in the proposed bid dates of November 29 and 30, 1966. The project now requires the approval of the United States Office of Education.

ok [Consider the presentation of final construction drawings and specifications, and the authorization to issue for receipt of bids on the dates of November 29 and 30, 1966.]

ok [Award of the contract to be considered at the December 3, 1966, Board Meeting.]

OK Adm Bldg Remodeling — H. A. Padgett — speed cost + $4,000, same as form used for West Hall — worked very well — authorize chairman to sign —

3514. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt and Vinther, Engineers)
(Pitts, Mebane, Phelps and White, Architects)

[(ATTACHMENT - Schedule of Work)]

In order that the extremely critical schedule be maintained, the Architects' have prepared a schematic drawing which indicates the direction they propose to take in developing the design of the total project.

OK [Consider the recommendation that the Architects and Engineers be authorized to proceed with the design development based upon the schematic drawing on display, in order that they may proceed with drawings to be presented to the Campus and Building Committee on December 3, 1966.]

OK [The Architects' and Engineers' schedule proposes issuance of documents for bidding on January 25, 1967.]

OK [The approval of the plans and specifications, authorization to issue documents, and the means to award the contract to be brought before the Board of Directors for consideration at the January 24, 1967 meeting.]

3515. Entrance Marker
(Amon G. Carter Plaza)

OK [Consider the proposal to construct Phase I of the Plaza.]

see Howard's note

3516. Funds Available

3517. Matching Funds

[At the last meeting, the Coordinating Board, Texas College and University Systems, approved matching funds for the programmed projects for which applications have been filed in the amounts indicated:

under Title I of Higher Education Facilities act of 1963.

PROJECT	AMOUNT
Biology	$324,207
Home Economics	317,488
Chemistry	- 0 -
Architecture & Allied Arts	$1,000,000

]

3518. Tunnels and Utilities Extensions
(Wiggins Complex, Business Administration, and the Central Plant)
(Estimated cost - $1,282,174)

(ATTACHMENT - Bid Tabulation)

The plans and specifications cover the work to the Wiggins Complex, Business Administration Building, and the Central Heating and Cooling Plant. This leg also completes the leg of service supporting the buildings south of the Campus Circle, existing and proposed.

Issuance of plans and specifications was authorized on September 29, 1966, by phone and circumstances recorded in Campus Planning Committee Minutes No's. 314 and 315.

OK Consider the award of the contract to the Anthony Company, the low bidder, in the amount of $933,000.00

OK Consider authorizing the Engineers to proceed with the Construction Phase, which includes the supervision of work under the terms of the contract between the Board of Directors and Zumwalt and Vinther, Inc., dated December 23, 1965.

3519. Utility Service Routing and Indiana Avenue

The City of Lubbock has established the east curb line of Indiana Avenue south of the Freeway to line with the existing curb line of Indiana Avenue south of 19th.

The east curb line north of the Freeway will line with the existing curb line north of 4th. Street

Actual construction of Indiana Avenue on College property is not anticipated by the City for several years.

Lubbock Power and Light, City of Lubbock Water Line, Southwestern Public Service Company and Pioneer Natural Gas Company have all made proposals which have been coordinated with each representative and the College.

Services proposed are required to serve the Wiggins Complex and the Central Heating and Cooling Plant.

Water The City wishes to take bids in October, 1966 — subj to satisfactory agreement + they get easement

Consider the recommendation that the proposed routes shown on the drawing prepared by Southwestern Public Service Company with overlays for remaining services indicated, dated received, October 14, 1966, be accepted — to secure easement from Legislature

x It will be understood that any rerouting which might be required in the future will be at no expense to the College.

3520. Wiggins Complex (CPC No. 97-65)
(Schmidt and Stiles, Roberts and Messersmith, Architects)

Phase I, Interior Designer

+OK [Consider the recommendation that Evans-Monical, Inc., Houston, Texas, be retained to render Interior Designer Services.]

The estimated cost of furnishings, including accessories for thirty (three) lounges, three formal lounges, one snack bar, one game room, and six apartments is $176,800. This figure also includes draperies for the dining area.

The Designers' fee is estimated at $10,000 based upon 7½% of the actual costs of all furnishings, plus a fee of $15 per hour for consulting services in areas where color coordination is desired. Traveling expenses are also included.

Phase II

all approve be

x [Consider the approval of revisions for inclusion in the application for Phase II loan from the Department of Housing and Urban Development.]

- per attachment - need to move on revised app. -

Moved and approved

Jacklewood dispute

Storage agreement

Committee - Bldg Comm. take to Jim →

NO 1 → Consulting Architect - Howard Schmidt

1. Contract - never been approved officially, all work done has been -

Send out copies of proposals,

No 2 → 2. Long range planning

Budgeted $7,621 - recommend college physical planning as soon as academic program is completed.

No new money required, this Howard's part is retainer, this would be for his help + time spent + established rate.

TEXAS TECHNOLOGICAL COLLEGE
CENTRAL HEATING AND COOLING PLANT

August 8, 1966

TIME SCHEDULE

DESCRIPTION	TIME ALLOWANCE FOR PHASE	DEADLINE
Completion of Title I Application - send data by air to Texas Tech		Sunday, August 28, 1966, or morning of August 29,1966
Arrive at Texas Tech		Monday, August 29, 1966
Texas Tech Application deadline		Tuesday, September 6, 1966
Zumwalt and Vinther receive data and start work		Wednesday, August 31, 1966
Jim Worley - M & E development to where PMPW can effectively commence design development	4 weeks	Wednesday, September 28,1966
PMPW design development to present to Texas Tech on this date	4 weeks	Wednesday, October 26, 1966
Presentation and approval by Texas Tech	1 week	Wednesday, November 2, 1966
Construction documents to issue for bids	12 weeks	Wednesday, January 25, 1967
Opening of bids and selection of contractor	4 weeks	Wednesday, February 22,1967
Construction started	2 weeks	Wednesday, March 8, 1967
Contingency	1 week	
	28 weeks total	March 15, 1967
Construction (foundation) Ready for boiler installation	8 weeks	May 10, 1967
Construction ready for refrigeration machine installation	12 weeks	June 7, 1967
Central plant in operation for checking		October 15, 1967
Steam from Central Plant to Wiggins Complex		November 15, 1967
Tunnels & Utilities to Business Administration Building - ready for occupation		September, 1968

Conference with Jack Roberts, Jim Worley, Ray Downing, Dan Talley, and Robert White, 8-23-66 in Zumwalt and Vinther Dallas office. Letter from Jerry Kirkwood, Texas Tech - 8-10-66

October 17, 1966

ENTRANCE MARKER - FIRST PHASE
TEXAS TECHNOLOGICAL COLLEGE

CONSTRUCTION COST ESTIMATE

Reflection pool construction	$ 4,600
Terrace construction	$ 2,600
Fountains and lighting equipment	$ 8,500
Fountains and lighting installation	$ 1,200
Granite materials and labor	$11,000
Total	$27,900
Architectural-Engineering fee (approximately) (10% of construction cost less previous payment - see attached.)	$ 2,000
Contingency - approximately 10%	$ 2,700
	$32,600

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

TUNNELS AND UTILITIES EXTENSIONS

TEXAS TECHNOLOGICAL COLLEGE

Business Administration 4-1708

Wiggins Complex

B I D T A B U L A T I O N

October 13, 1966

29 Interested Persons Attended

CONTRACTOR	BASE BID	BID BOND	ADDENDA #1
Anthony Company	$ 933,000	X	X
Burden Brothers	N.B.	N.B.	N.B.
O. W. Chisum & Company	965,500	X	X
Farwell Company	N.B.	N.B.	N.B.
George Linsky Company	1,214,417	X	X
Roche Newton & Company	1,026,028	X	X

Please see Wiggins complex

SCHMIDT AND STILES, ROBERTS & MESSERSMITH

ARCHITECTS AND ENGINEERS

RECEIVED
TEXAS TECHNOLOGICAL COLLEGE
OCT 6 1966
Office of the
Vice President For Business Affairs

October 5, 1966

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

RE: Second Phase Wiggins Dormitory Complex
Texas Technological College

Dear Mr. Pennington:

In order to provide the necessary construction cost amounts required in the application for reservation of funds with the Department of Housing and Urban Development that you are now submitting, we have made the following preliminary estimate from information we now have at hand.

Phase One now under construction:

Total construction cost (H. A. Lott)	
$9,442,855.00 - for the purpose of this estimate only...	$9,443,000.00
Less "premium" for rushed construction	$ 312,000.00
	$9,131,000.00

$9,131,000 divided by 445,000 square feet = approx. $20.50/sq. ft.

Phase Two (as now master planned):

418,000 square feet X $20.50 =		$8,569,000.00
Less the following unnecessary items which were included in Phase One cost:		
Kitchen and most of equipment	$300,000	
Service court at kitchen	30,000	
Post office	25,000	
Lawn sprinkler system	20,000	
Earth fill	50,000	
Less exterior tunnel construction	160,000	
Exterior lighting	15,000	
Site work (walks, drives, etc.)	50,000	
		$ 650,000.00
		$7,919,000.00

PLEASE REPLY TO
1619 COLLEGE AVE
LUBBOCK, TEXAS 79401
PHONE POrter 3-4691

HOWARD W. SCHMIDT, Architect
M. L. STILES, Architect
E. E. ROBERTS, JR., P.E., Architect-Engineer
R. C. MESSERSMITH, Architect

MEMBERS • AMERICAN INSTITUTE OF ARCHITECTS

Plus 5% contingency for inflationary rises, etc.	$ 396,000.00
Estimated Phase two construction cost	$8,315,000.00

The above costs of course do not include moveable equipment, architectural-engineering fees, administrative expenses, interest during construction, etc.

It appears to us at this time that it would be very wise to develop a considerable deductive change order to eliminate work now under contract under Phase One which would not have to be done if Phase Two is constructed almost immediately after occupancy of Phase One. Such items as the finished south exterior treatment at the dining hall is one example, as well as the west wall of the connecting length between the single tower under construction as it ties into the new tower immediately west. We feel it would be unwise to develop the site work west of the first phase such as drives, parking lots, sidewalks, exterior lighting, earth fill, and lawn sprinkler system, and that these should be incorporated into the construction documents of Phase Two. It appears (without developing a detailed change order) that we might expect to get a credit of $150,000 to $200,000 for the above mentioned changes in Phase One. In the tabulation above for Phase Two the amounts were based on the assumption that this mentioned change order for Phase One would be initiated and the items that would be needed at a later date for Phase Two are included in the estimated total cost of Phase Two.

We hope this information is adequate for the Department of Housing and Urban Development application to reserve funds.

Cordially,

SCHMIDT AND STILES, ROBERTS & MESSERSMITH
ARCHITECTS AND ENGINEERS

[redacted]

Howard W. Schmidt, A.I.A.

cc: John Taylor
Miss Jerry Kirkwood

HWSmec

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 316 October 18, 1966

A meeting of the Campus and Building Committee of the Board of Directors and the Campus Planning Committee was held at 8:30 a.m. on October 18, 1966, in the Blue Room, Student Union Building, on the campus.

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 Mr. Roy Furr, Chairman, Mr. Alvin R. Allison, Mr. J. Edd McLaughlin, and Mr. Retha R. Martin.

Members of the Campus Planning Committee present were Mr. M. L. Pennington, Mr. Nolan E. Barrick, and Mr. E. J. Urbanovsky.

Others present from the College were President Grover E. Murray, Dr. W. M. Pearce, Mr. Bill J. Parsley, Mr. J. Roy Wells, Dr. Earl Braly, Mr. O. R. Downing, Mr. John G. Taylor, Mr. R. B. Price, Miss Jerry Kirkwood and Mr. Howard W. Schmidt.

The following items reflect the action of the Building Committee and the Board of Directors.

3512. Administration Building

Approved the construction contract with H. A. Padgett, Jr., for the remodeling and renovation of east wing first floor and basement.

3513. Agricultural Facilities

A. Goat and Sheep Facilities

Authorized Mr. Howard W. Schmidt, Consulting Architect, to proceed with the planning of new facilities.

B. Swine Facilities

Authorized Mr. Howard W. Schmidt, Consulting Architect, to proceed with the planning.

3514. Business Administration Building (CPC No. 98-65)
(Page, Southerland, Page)

Approved the final construction drawings and specifications as presented by Mr. Louis Southerland and authorized the issuance of requests for bids, receipt of bids on November 29 and 30, 1966, and consideration of a contract award at the December 3, 1966, Board Meeting.

3515. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt and Vinther, Engineers)
(Pitts, Mebane, Phelps and White, Architects)

Authorized the architects and engineers to proceed with the design development based upon the schematic drawings displayed and for the further developed drawings to be presented to the Campus and Building Committee of the Board of Directors on December 3, 1966.

Approval of the plans and specifications, authorization to issue bidding documents and the means to award the contract will be considered at the January 24, 1967, Board Meeting.

The architects' and engineers' schedule proposed issuance of the documents for bidding on January 25, 1967.

3516. Entrance Marker
(Amon G. Carter Plaza) (Estimated Cost, $32,600)

Authorized the construction of Phase I of the Amon G. Carter Plaza Entrance Marker. The Saddle Tramps have accumulated $11,571.70 and the balance will come from Bookstore funds. The estimated cost of Phase I is $32,600.

3517. Funds Available

A. Financial Report

The latest report was reviewed and is attached to and made a part of the minutes. (Attachment No. 682, page 2094)

B. Resulting Actions

In view of the funds available and the matching funds approved by the Coordinating Board, the following actions were taken.

1. Biology Building

The Architects are to proceed with the development of final plans and specifications on the Biology Building as planned.

2. Law School

The Consulting Architect is to complete the programming and the Project Architects are to be recommended to the Board of Directors at the meeting on December 3, 1966.

3. Architecture

The Consulting Architect is to complete the programming and the Project Architects are to be recommended to the Board of Directors at the meeting on December 3, 1966. (Maximum grant of $1 Million has been approved).

4. Chemistry

The Architects are to proceed on the development of the plans but as no matching funds have been obtained under Title I, the application is to be refiled for the next closing date, September 6, 1967, and a contract is to be awarded after that time.

5. Home Economics

The project, in view of the funds available and the matching funds awarded, is to be delayed pending further clarification.

3518. Matching Funds

At the last meeting, the Coordinating Board, Texas College and University Systems, approved matching funds for the programmed projects for which applications have been filed under Title I, Higher Education Facilities Act of 1963, in the amounts indicated:

PROJECT	AMOUNT
Biology	$324,207
Home Economics	317,488
Chemistry	- 0 -
Architecture & Allied Arts	$1,000,000

3519. Tunnels and Utilities Extensions
(Wiggins Complex, Business Administration Building, and the Central ~~Heating~~ and Cooling Plant) (Estimated cost, $1,282,174)

A. Contract Award

Approved a contract award to the Anthony Company, the low bidder, in the amount of $933,000.

A copy of the bid tabulation is attached to and made a part of the minutes. (Attachment No. 683, page 2095)

B. Construction Phase

Authorized the Engineers to proceed with the construction phase, which includes the supervision of work, under the terms of the contract between the Board of Directors and Zumwalt and Vinther, Inc., dated December 23, 1965.

3520. Utility Service Routing and Indiana Avenue

The City of Lubbock has established the east curb line of Indiana Avenue south of the Freeway to line with the existing curb line of Indiana Avenue south of 19th Street.

The east curb line north of the Freeway will line with the existing curb line north of 4th Street.

Actual construction of Indiana Avenue on College property is not anticipated by the City for several years.

The City of Lubbock (Electric and Water lines), Southwestern Public Service Company (Electric line) and Pioneer Natural Gas Company (Gas line) have all made proposals which have been coordinated with the representative of each and the College.

Services proposed are required to serve the Wiggins Complex and the Central Heating and Cooling Plant.

A. Approved the easement requested by the City of Lubbock for the water line, subject to preparation of a satisfactory agreement. The City wishes to take bids in October, 1966, and is to get the approval of the easement from the Legislature at the next session.

B. Approved easements and the proposed routes shown on the drawings prepared by the Southwestern Public Service Company for the remaining services indicated. A satisfactory agreement has been developed with the Southwestern Public Service Company and satisfactory agreements for the other easements are to be prepared. In each instance, the agency receiving the easement is to secure Legislative approval.

It is understood that any rerouting of the above lines which might be required in the future will be at no expense to the College.

It is also understood that the College will bear no additional expense should College underground lines or tunnels be located in the future for the convenience of any or all of the above mentioned lines.

3521. Wiggins Complex (CPC No. 97-65)
(Schmidt and Stiles, Roberts and Messersmith, Architects)

Phase I - Interior Designer (Estimated cost, $10,000)

Approved the employment of Evans-Monical, Inc., Houston, Texas, as Interior Designers.

Phase II

Approved the filing of a revised application for Phase II for loan assistance with the Department of Housing and Urban Development.

Jerry Kirkwood
Coordinator

The meeting adjourned at 11:50 a.m.

2094

Campus Planning Committee
October 18, 1966
Attachment No. 682
Item No. 3517

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

Present and Proposed Building Program
(Does Not Include Auxiliary Enterprise Projects)

October 17, 1966

Estimated Total Funds Available

1958-66 Constitutional Tax Funds	$ 1,500,000
1966-68 Constitutional Tax Funds	10,730,000
Interest on Investment of Tax Funds	383,000
Possible Proceeds from Skiles Act Bonds	2,510,000
Possible Proceeds from Building Use Fee Bonds	2,510,000
Possible Proceeds from Power Plant Revenue Bonds	3,120,000
Approved Facilities Act Funds	4,220,802
Possible Additional Facilities Act Funds	1,961,986
Estimated Total Funds Available	$26,935,788

Building Projects

		Project Total	Accumulative Total
Previously Completed or Near Completion		$ 241,485	$ 241,485
Library Addition		234,278	475,763
Foreign Language-Mathematics		1,391,397	1,867,160
Power Plant and Utility Extensions	$ 4,787,681		
Less:			
Amount in other projects	944,455		
Amount to be charged to Wiggins Complex	281,218	3,562,008	5,429,168
Business Administration		4,565,066	9,994,234
Museum		500,000	10,494,234
Law School		3,055,485	13,549,719
Biology		4,669,615	18,219,334
Chemistry		4,261,127	22,480,461
Home Economics		3,174,882	25,655,343
Architecture		4,414,653	30,069,996
		$30,069,996	

2094A

Campus Planning Committee
October 18, 1966
Attachment No. 682
Item No. 3517

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

Present and Proposed Building Program
(Does Not Include Auxiliary Enterprise Projects)

October 17, 1966

Source of Funds Available

Last notes on 5¢ Ad Valorem Tax	$ 1,500,000
Interest earned through June, 1966	133,000
Bond Sales through January, 1967 -- 10¢ Ad Valorem Tax	7,780,000
Bond Sale July, 1967 -- 10¢ Ad Valorem Tax	1,340,000
Bond Sale July, 1968,-- 10¢ Ad Valorem Tax	1,610,000
Estimated interest to be earned to August, 1968	250,000
Estimated Ad Valorem Tax Funds Available	$12,613,000

(Does not include Skiles Act, Power Plant Bonds or Building Use Fee Bonds)

Building Projects	Estimated Earliest Completion Date	Estimated Total Cost	Status at 10-17-66 Paid	Status at 10-17-66 Unpaid	Source of Funds College Funds	Source of Funds Facilities Act	Remarks
Horse Facilities	April, 1966	$ 51,685	$ 51,685	$ - 0 -	$ 51,685	$	
Engineering Survey	May, 1966	10,000	10,000	- 0 -	10,000		
Temporary Buildings	Sept., 1966	163,500	87,234	76,266	163,500		
Sidewalks for Temporary Buildings	Sept., 1966	16,300	- 0 -	16,300	16,300		
Library Completion	Oct., 1966	234,278	153,298	80,980	156,185	78,093	Shelving and other movable furniture due by October.
Foreign Lauguages-Mathematics Building	April, 1967	1,350,000	496,779	853,221	900,000	450,000	
Reworking Old Tunnel to Foreign Languages Mathematics Building	Sept., 1966	41,397	29,806	11,591	41,397		
Relocation of Museum	Aug., 1967	500,000	21,810	478,190	500,000		College portion only.
Central Heating Plant Phase I	Aug., 1967	3,797,681	9,990	3,787,691	3,119,794	677,887	The Facilities Act funds are included in the Biology Building, Chemistry Building and Law School Title II Applications.

2094B

Present and Proposed Building Program (Continued)
(Does Not Include Auxiliary Enterprise Projects)

Building Projects	Estimated Earliest Completion Date	Estimated Total Cost	Status at 10-17-66 Paid	Status at 10-17-66 Unpaid	Source of Funds College Funds	Source of Funds Facilities Act	Remarks
Utility Tunnels	Aug., 1967	$ 990,000	$	$ 990,000	$ 990,000	$	
Business Administration Building	April, 1968	4,565,066	76,737	4,488,329	3,065,066	1,500,000	Grant approved.
Biology Building	June, 1968	4,669,615	76,860	4,592,755	3,794,394	875,221	Title II grant approved. Title I - approved for 10% by Coordinating Board.
Chemistry Building Addition	June, 1968	4,261,127	70,139	4,190,988	3,317,636	943,491	Title II Application pending - Title I no funds.
Home Economics Addition	July, 1968	3,174,882		3,174,882	2,857,394	317,488	Title I - Approved 10% by Coordinating Board.
Law School Building	Aug., 1968	3,055,485		3,055,485	2,036,990	1,018,495	Title II Application filed September 29, 1966.
Architecture Building Addition	Sept., 1968	4,414,653		4,414,653	3,414,653	1,000,000	Title I - Approved for maximum.
Total Above		$31,295,669			$24,434,994	$6,860,675	
Less Duplicated Amount on Power Plant		1,225,673			547,786	677,887	
Net Total		$30,069,996			$23,887,208	$6,182,788	

Note: Title I State Plan allows maximum of $1,000,000 on first priority and 10% of all others below number one priority.

Campus Planning Committee
October 18, 1966
Attachment No. 682
Item No. 3519

TUNNELS AND UTILITIES EXTENSIONS — Business Administration 4-1708

TEXAS TECHNOLOGICAL COLLEGE — Wiggins Complex

B I D T A B U L A T I O N — October 13, 1966

29 Interested Persons Attended

CONTRACTOR	BASE BID	BID BOND	ADDENDA #1
Anthony Company	$ 933,000	X	X
Burden Brothers	N.B.	N.B.	N.B.
O. W. Chisum & Company	965,500	X	X
Farwell Company	N.B.	N.B.	N.B.
George Linsky Company	1,214,417	X	X
Roche Newton & Company	1,026,028	X	X

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 317 October 27, 1966

A meeting of the Campus Planning Committee was held at 2:30 p.m. on October 27, 1966, in Room 120 of the Administration Building.

Members present were Chairman M. L. Pennington, Mr. E. J. Urbanovsky and Mr. Nolan E. Barrick.

Other College staff members present were Mr. John G. Taylor, Mr. O. R. Downing, Miss Evelyn Clewell, Mr. Bill W. Felty and Miss Jerry Kirkwood.

Mr. Howard Schmidt, Consulting Architect, was also present.

Members of the Chemistry Faculty Building Committee present were Dr. R. B. Rekers, Chairman, Dr. Richard J. Thompson, Dr. J. A. Adamcik, Dr. John A. Anderson and Dr. A. L. Draper.

Dr. William M. Pearce and Dr. Joe Dennis were out of the City and could not attend.

The purpose of the meeting was to establish a schedule for the completion of the project and the procedures leading thereto.

3522. Chemistry Building Addition (CPC No. 87-64)

The meeting began with Dr. Rekers' presentation of slides showing exterior and interior views of the Chemistry and Physics Facilities at Baylor University.

Dr. Rekers pointed out both good and poor features of the facility and commented that the purpose of the presentation was to have the Campus Planning Committee aware of details which are not desirable and should not be included in the facility planned for Texas Technological College.

Detailed notes concerning the points raised by Dr. Rekers and his committee will be kept on file in the Coordinator's office.

Chairman M. L. Pennington outlined to those present the current status of the funds available for the building program underway which by no means meets the overall immediate needs for facilities to relieve unsatisfactory conditions prevailing.

The schedule for completion of the project is outlined below as based upon the recent action of the Coordinating Board, Texas College and University Systems, and the resulting action of the Board of Directors, Texas Technological College.

The Coordinating Board approved matching funds for the programmed projects for which applications have been filed under Title I, Higher Education Facilities Act of 1963, in the amounts indicated.

Project	Amount
Biology	$ 324,207
Home Economics	$ 317,488
Chemistry	- 0 -
Architecture and Allied Arts	$1,000,000

Title II application in the requested amount of $903,056 was filed for the July 1, 1966, closing date for the Chemistry project.

3522. Chemistry Building Addition (cont'd)

In view of the funds available and the matching funds approved by the Coordinating Board, the Board of Directors authorized the Architects to proceed on the development of the plans and instructed College officials to refile the Chemistry Title I Application as first priority by the next filing date, which is September 6, 1967.

It is planned that the construction drawings and specifications would be near completion at the time of the filing date and that a contract for construction would be awarded after that time.

The work to date on the plans of the Chemistry Building Addition has progressed through the programming phase and the schematic planning phase.

The Campus Planning Committee recommended that Mr. Howard Schmidt, Consulting Architect, and Miss Jerry Kirkwood, Campus Planning Committee Coordinator, work with the Chemistry Faculty Building Committee in order to adapt the program and refine the drawings submitted with the Title I Application.

It was also recommended that those faculty members interested travel to various academic chemistry facilities to gain additional knowledge of the latest in planning and methods.

Jerry Kirkwood
Coordinator

The meeting adjourned at 4:05 p.m.

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 318 November 9, 1966

A meeting of the Campus Planning Committee was held at 2:00 p.m. on November 9, 1966, in Room 120 of the Administration Building.

Members present were Chairman M. L. Pennington and Mr. Nolan E. Barrick.

Other College staff members present were Mr. John G. Taylor, Mr. O. R. Downing and Miss Jerry Kirkwood.

Mr. Howard Schmidt, Consulting Architect, was present.

The meeting was called on an emergency basis concerning the critical schedule for delivery of equipment and provision for the foundations to receive the equipment for the Central Heating and Cooling Plant.

3523. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt and Vinther, Inc., Engineers)
(Pitts, Mebane, Phelps and White, Architects)

Mr. Downing attended a meeting, on November 3 and 4, 1966, in the Dallas office of Zumwalt and Vinther, Inc. Mr. Russell Phelps, Mr. Robert White and Mr. Walter Bowman represented the architectural firm.

The purpose of the meeting was to establish details of the equipment felt to be necessary for the architects to proceed with the plans of the building.

It was found that the architects' and engineers' plans had not progressed, seemingly, because of the lack of shop drawings to be provided by the Carrier Air Conditioning Company. The shop drawings had been requested repeatedly and it appeared that the Elliott Company, manufacturers of turbine equipment and a subsidiary of the Carrier Corporation, had not provided the turbine information and the delay rested there.

Due to the lack of information concerning the equipment, Mr. White proposed that the schedule for having construction documents completed and ready for issuance on January 25, 1967, be delayed until April 15, 1967.

Both the boiler equipment and the refrigeration equipment manufacturers maintain that the May 15, 1967, delivery date is still in effect. Therefore, in order to complete the project on schedule, the proposal offered by Mr. White was not felt to be feasible.

The Campus Planning Committee recommended that a conference telephone call be arranged between Mr. L. W. Pitts, Pitts, Mebane, Phelps and White; Mr. Ross Zumwalt, Zumwalt and Vinther, Inc.; and Mr. M. L. Pennington for the purpose of again stressing the critical nature of the circumstances and requesting each firm do everything possible to have the construction documents ready for issuance for bids on January 25, 1967.

During the above mentioned telephone conversation, a meeting in the engineers' office, on November 11, 1966, was established. It was recommended that representatives from the architectural firm and the College be present. It was also recommended that Mr. Ross Zumwalt contact the Chairman of the Board of the Carrier Air Conditioning Company by telegram immediately, so that material information would be available for a conference telephone call to be held, on November 10, 1966, between Mr. Ross Zumwalt, Mr. M. L. Pennington and Mr. Howard Schmidt.

3523. Central Heating and Cooling Plant (cont'd)

(The first call was placed immediately after the meeting with Messrs. Pitts, Phelps and White of the Architect's office; Messrs. Zumwalt and Worley from the Engineer's office and Mr. Schmidt and M. L. Pennington participating.

It was found that the architects were and had been waiting since September 28, 1966, for the shop drawings and weights of the cooling equipment and the engineers were waiting for information from Carrier.

The second call was placed the next morning and involved Mr. Hendricks, Executive Assistant to the Chairman of the Carrier Corporation Board and Mr. Huffman who heads Sales Management; Messrs.Zumwalt and Worley, Mr. Schmidt and M. L. Pennington.

The critical schedule was explained and Mr. Hendricks said that needed information would be in Dallas for the meeting on Friday morning.)

Jerry Kirkwood
Coordinator

The meeting adjourned at 3:05 p.m.

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 319 November 28, 1966

A meeting of the Campus Planning Committee was held at 2:30 p.m. on November 28, 1966, in Room 120 of the Administration Building.

Members present were Chairman M. L. Pennington and Mr. Nolan E. Barrick.

Other College staff members present were Mr. John G. Taylor, Mr. O. R. Downing, Miss Evelyn Clewell, Dr. James W. Kitchen and Miss Jerry Kirkwood.

Mr. Howard Schmidt, Consulting Architect, was present.

Mr. R. C. Messersmith was present for the presentation of the proposal omitting certain items in Phase I of the Wiggins Complex project to be included in Phase II of the project.

3524. Administration Building Remodeling

A. East Wing - First Floor and Basement

The remodeling under H. A. Padgett's contract was completed during the Thanksgiving Holidays with the installation of ceilings and ductwork in offices 116 and 118, and the installation of additional air conditioning controls in the Comptroller's offices.

Mr. O. R. Downing will coordinate the installation of the ceiling in the comptroller's offices and furnish the labor to install new light fixtures during the Christmas holidays.

B. West Wing - Basement

Mr. Howard Schmidt and his staff have developed the plans necessary for remodeling the Data Processing Facilities. The Department of Building Maintenance and Utilities will prepare an estimate of cost and accomplish the work. Included in the work will be a portion of the central basement formerly used by the Speech Department for storage.

3525. Agricultural Facilities

A. Sheep and Goat Facilities

Mr. Howard Schmidt presented the drawings which have been developed based upon the program prepared by Dean Gerald Thomas and his staff. The estimated cost is $152,000.

The Campus Planning Committee recommended that the site near fourth street be reconsidered in favor of a site more remote from the center of the Campus.

It was also recommended that Dean Thomas and his Faculty Committee be invited to meet with the Campus Planning Committee to discuss the proposed program and the long range plan.

3525. Agricultural Facilities (cont'd)

B. Swine Facilities

The drawings developed from the program prepared by Dean Thomas and the Faculty Committee were presented by Mr. Schmidt.

The Campus Planning Committee asked that the site be reconsidered and Dean Thomas and his committee be invited to discuss the proposed facilities and the long range plan.

3526. Athletic Facilities - (Paving the North Parking Lot - Stadium)

The recorded acceptance date is August 31, 1966.

3527. Biology Building (CPC No. 99-65) (Pierce & Pierce)

The architects are on schedule with the development of construction drawings and working closely with Mr. Schmidt and the Faculty Building Committee.

3528. Business Administration Building (CPC No. 98-65)
(Page, Southerland, Page)

A. Bid Opening Date

Due to the scope of the project, the bid date has been changed as follows:

Bids for plumbing, heating and ventilating, electrical and elevators - 9:00 a.m., CST, December 13, 1966.

Bids for general construction - 3:00 p.m., CST, December 13, 1966.

B. Concrete Control

The Campus Planning Committee recommended that Dyess Testing Laboratories, Inc. be retained to perform the services and that Mr. Howard Schmidt inform the company of the performance expected by the College. Payment for such services is made directly by the College.

3529. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt and Vinther, Inc., Engineers)
(Pitts, Mebane, Phelps and White, Architects)

A. Accessory Equipment

Due to long delivery schedules and escalating prices, Mr. O. R. Downing was instructed to request the engineers to secure the information necessary to purchase some of the equipment prior to letting the mechanical and electrical contracts. (Attachment No. 683, page 3006)

B. Schedule

It has been established that one boiler has the capacity necessary for the Wiggins Complex. With this analyzation the architects and engineers were able to restudy the completion schedule.

The schedule depends upon many things and it is imperative that all concerned do everything possible in order that the project not be further delayed.

The revised schedule dated November 18, 1966, is attached for information. (Attachment No. 684 page 3007)

3529. Central Heating and Cooling Plant (Cont'd)

C. Soil Borings and Topography

It has been the practice of the College to retain the services of testing laboratories.

Based upon the architects' outlined specifications, the following quotations were requested and submitted.

Soil Borings

Dyess Testing Laboratories, Inc.	-	$1,680.00
Texas Testing Laboratories, Inc.	-	$1,540.00

Topography

Hugo Reed	-	$ 150.00
Sprawls and Wilson Company	-	$ 85.00

Mr. Howard Schmidt, Consulting Architect, recommended that the proposals of Texas Testing Laboratories, Inc. and Sprawls and Wilson Company be accepted.

November 23, 1966, Mr. M. L. Pennington, Vice President for Business Affairs, was contacted by phone and authorization to proceed, based upon Mr. Schmidt's recommendation, was obtained.

3530. Chapel

Mr. K. L. Riggs, Lubbock, Texas, presented to the College, for review, construction drawings of a chapel and offered his services to solicit funds toward the construction of such a structure on the campus.

Mr. Riggs' interest in helping to provide a chapel on the campus is greatly appreciated as consideration has been given in past years to the construction of a chapel dedicated to non-denominational uses.

The interest has been aroused again and further study can be given to the possibilities.

3531. Chemistry Building Addition (CPC No. 87-64)

The Chemistry Faculty Building Committee requested the Campus Planning Committee to consider proceeding with the construction of the Title II phase of the project should funds be received before a Title I grant is obtained.

It was recommended that the procedure follow the recommendation of the Board of Directors established at their meeting of October 18, 1966, which calls for the Title I application to be refiled for the next closing date, September 6, 1967.

It was not considered feasible to begin the Title II phase of the construction prior to obtaining matching funds under the Title I application.

3532. Consulting Architect

Architecture and Allied Arts

A. Mr. Schmidt had prepared a progress report which is attached. (Attachment No.685 page 3008)

B. It was recommended that the Campus Planning Committee explore the field of architects and be prepared to make a recommendation for a project architect at a future Campus Planning Committee meeting.

3532. Consulting Architect (cont'd)

Contract

The Campus Planning Committee recommended that the contract be approved as drafted. Copies of the contract will be provided the members of the Board of Directors for their review.

Law School

A. A progress report prepared by Mr. Schmidt is attached. (Attachment No. 686 page 3009)

B. The Campus Planning Committee will be prepared to make a recommendation for a project architect at a future meeting.

Long Range Plan

The Consulting Architect's contract provides for Long Range Planning and a sum has been budgeted. Under the budgeted retainer, no additional funds would be needed for the physical portion of the planning.

3533. Elevators (Hulen and Clement Halls)

The coring progress necessary for completing the electrolysis test has been slowed as the coring machine is out of commission and a new one has been ordered.

3534. Entrance Marker (Amon G. Carter Plaza)
(Howard Schmidt and Associates, Architects)

Cost estimates are being prepared.

3535. Entry Stations

A progress report is attached for information. (Attachment No.687, page 3010)

3536. Foreign Languages-Mathematics Building (CPC No. 79-63)
(Pitts. Mebane. Phelps and White. Architects)

A. A revised schedule and progress report has been requested of the Bennett Construction Company repeatedly without success.

Mr. Howard Schmidt was requested to talk with Mr. Frank Bennett and secure the new schedule for completion and a progress report.

B. Considering the regulations established by the Board of Directors that academic buildings will be named by the chief functions, it is the opinion of the Campus Planning Committee that Foreign Languages-Mathematics is the official name of the facility now under construction.

C. Mr. John G. Taylor is preparing a revised list of movable equipment. It is estimated that an order for the equipment can be placed in two to three weeks. The delivery date will need to be coordinated with the completion of the construction.

3537. Frenchmen's Creek Housing

The Board of Directors, on October 18, 1966, instructed the Campus Planning Committee to investigate thoroughly, with counsel, all possibilities of developing a program which would be desirable.

A meeting has been held with representatives of both parties and an attorney and the possibilities are being studied.

3538. Home Management Facilities

Dean Tinsley has requested that two mobile homes, for teaching purposes, be located near the existing facilities.

The Campus Planning Committee appointed Mr. O. R. Downing, Dr. James W. Kitchen, Mr. Howard Schmidt, and Miss Jerry Kirkwood as a sub-committee to study the site.

3539. Library - (Completion of South Basement and Third Floor)(CPC No. 191-65) (Ed Lampe, Contractor)

A. The final acceptance date is pending subject to the satisfactory balancing of the air conditioning system.

B. The movable equipment arrived on schedule and has been assembled and set in place. A few pieces were damaged and are being prepared at no cost to the College.

3540. Museum (CPC No. 65-61) (Associated Architects and Engineers of Lubbock)

Mr. Schmidt is the Coordinator for the project and reported that an effort is being made to set the budget for the project and the two fund raising agencies are working together to determine the amount of funds to be raised by each.

A letter from Mr. Schmidt to the West Texas Museum Association (Attachment No. 688, page 3011) and the reply from the Museum's Building Committee (Attachment No. 689 page 3012) are included for information.

3541. Sidewalks (Asphalt and Concrete)

All of the walks have been completed with the exception of those around the Agricultural Plant Sciences Building where the tunnel construction is in progress.

3542. Student Union Building Addition

Mr. John G. Taylor and Mr. R. B. Price are exploring all possibilities for financing the project.

3543. Temporary Buildings (Additional)

The search for supplemental buildings is continuing.

3544. Trash Receptacles for Pedestrian Use

Mr. E. J. Urbanovsky and Dr. James W. Kitchen have studied various designs and cost estimates and they are nearing a solution.

3545. Tunnels and Utilities Extensions (Wiggins Complex, Business Administration Building and Central Heating and Cooling Plant) (The Anthony Company, contract amount - $933,000)

A. Zumwalt and Vinther, Inc. secured cost proposals from the Anthony Company for including under their present contract the second set of piping provided for in the double width tunnel. This piping would serve the additional buildings west of Flint Avenue.

3545. Tunnels and Utilities Extensions (Cont'd)

As the piping can be installed in the future without too much difficulty, the Campus Planning Committee recommended that the contractor's offer not be accepted.

The proposal is attached for information.
(Attachment No. 690, page 3013)

B. The Engineers also secured a proposal from the Anthony Company for adding to their present contract, 100 feet of single width tunnel adjacent to the double width tunnel at the Central Heating and Cooling Plant.

This tunnel will be needed in the near future to serve the Biology Building and other buildings in that area. Construction of the tunnel at this time would simplify the piping in the Plant and the structure at the junction of the Plant basement wall and the tunnel entrance.

The Campus Planning Committee recommended that the proposal be accepted and a change order for the work be prepared.

The proposal is attached for information.
(Attachment No. 691 page 3014)

3546. Wiggins Complex (CPC No. 97-65)
(Schmidt and Stiles, Roberts and Messersmith)

A. Information concerning the Ellis Manufacturing Company tackboards and the warehousing agreement is being reviewed by Mr. James H. Milam.

B. The contract with Evans-Monical, Inc., for interior design services, has been prepared and approved for signatures.

C. The revised application for loan assistance was filed with the Department of Housing and Urban Development, dated October 18, 1966.

D. In order to obtain the maximum economies for Phase I, the Campus Planning Committee recommended that the detailed finishes not be included at the south elevation of Unit A, Kitchen and Dining Hall, and also be eliminated at the west elevation of Unit F of P. C. Coleman Hall.

It was also recommended that the parking, sprinkler systems and exterior lighting which is within the limits of Phase II construction be eliminated from Phase I.

The above action was taken due to the fact that Phase II construction will follow so closely after Phase I, it was felt the savings gained would far exceed the short duration of inconvenience.

The Architects were instructed to study the most feasible means of parking in the area and to include temporary parking if necessary.

Jerry Kirkwood
Coordinator

The meeting adjourned at 5:35 p.m.

Campus Planning Committee
November 28, 1966
Attachment No. 683
Item No. 3529A

ZUMWALT & VINTHER, INC.

Consulting Engineers
711 Mercantile Continental Building
Dallas, Texas 75201
Telephone RI 1-3691
Area Code 214

November 22, 1966

Mr. Robert White
Pitts, Mebane, Phelps & White
470 Orleans Street
Beaumont, Texas 77701

Dear Mr. White:

Central Heating and Cooling Plant
Texas Technological College
Lubbock, Texas

In accordance with our discussion in your office on November 17, we have been canvassing the various manufacturers who will be interested in furnishing equipment for the above-referenced project to determine their present equipment delivery schedule. It is becoming apparent that long delivery time of some of the items may indeed jeopardize our anticipated completion date unless they are purchased prior to letting mechanical and electrical contracts.

In addition to the time required for delivery of equipment after a firm order has been placed with a manufacturer, a considerable amount of time is ordinarily taken up by the contractors in shopping prices, the accumulation of shop drawings, obtaining approval of shop drawings, and entering of orders. This would probably take four weeks at least and probably much longer if the Contractor is not constantly supervised.

Our preliminary delivery schedule information is as follows (the hyphenated groupings are the time estimates of each manufacturer contacted):

1. Switchgear: 20 - 22 weeks; 25 - 40 weeks

2. Large motors (100 - 300 HP): 16 - 20 weeks; 20 - 24 weeks

3. Large 2-speed motors: 18 - 24 weeks; 20 - 28 weeks

4. Feedwater Heater: 14 - 16 weeks; 30 - 34 weeks

5. Boiler Feed Pumps: 20 weeks; 25 weeks; 40 weeks

6. Chilled and Condensing Water Pumps: 14 - 16 weeks

7. Water Treating Equipment: 25 - 30 weeks

8. Large valves (this applies only to large steel valves with special stellite trim): 20 - 24 weeks.

In addition to delivery schedules which seem to be continually getting longer, the mechanical and electrical equipment markets are apparently in a continuous cost escalation situation. One manufacturer (Allis-Chalmers) reports three price increases on motors since last August and I'm sure that this also applies to other manufacturers.

In view of the deteriorating equipment delivery and pricing situations, it appears now that it may be vital to our completion date to purchase some of our equipment prior to letting the mechanical and electrical contracts. It also appears that delivery time may have to take preference over price on some of the items.

Some of the information we have received to date consists of estimates by manufacturers' local representatives. We have asked that these be confirmed by their factories and we will revise our report if necessary.

Yours very truly,

ZUMWALT AND VINTHER, INC.

/s/ James T. Worley /r

James T. Worley

JTW rr

cc: Mr. M. L. Pennington
: Mr. O. R. Downing
: Miss Jerry Kirkwood
: Mr. Howard Schmidt
: Mr. Jack F. Roberts

Campus Planning Committee
November 28, 1966
Attachment No. 684
Item No. 3529B

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

November 18, 1966

Mr. Howard Schmidt, AIA
Howard Schmidt & Associates
1619 College Avenue
Lubbock, Texas

Re: Central Heating and Cooling Plant
TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

Dear Mr. Schmidt:

Subsequent to our meeting in Dallas, we met with Mr. Downing and Mr. Worley in our Beaumont office on November 17. The purpose of this meeting was to permit the transmittal of information necessary to continue the design development of the subject project. We now feel that we have sufficient mechanical and electrical system information to enable us to continue our design development and, as discussed with you concurrently, bidding and construction documents.

We reviewed during our Dallas meeting with you, the possibility of pre-excavating, as a construction expediency, the basement area of the subject project. In reflecting on this possibility and after talking to Mr. Alan Farnsworth of H. A. Lott, Inc., we are of the opinion that this procedure would afford no savings in construction time. Mr. Farnsworth feels, as do we, that full excavation of the basement would take approximately three weeks. This much time would be required for the detailing, fabrication and delivery of foundation and basement slab reinforcing steel needed before any work beyond excavation could be done. Mr. Farnsworth estimated that within six weeks of a Notice to Proceed a contractor would have the greater part of the foundation and basement floor work completed.

On the basis of the basement structure being designed so that the floor slab can be poured prior to basement walls and the construction documents prepared to require an initial pour of the foundation and slabs for the boilers, we feel that the first boiler installation work can start approximately eight weeks from construction commencement. The same six weeks required for pouring of the basement floor and foundation in the boiler area will be needed for the detailing and fabrication of the structural steel supports for the boilers. Delivery and erection of these steel supports could approximate two weeks.

Mr. Downing and Mr. Worley advised during the meeting in our office on November 17, that steam for heating the new dormitory complex under construction can be taken from the first central plant boiler, immediately after initial firing and utilized during the boiler's check-out period.

On the above basis, a revised schedule for steam availability for the dormitory complex would approximate September 15, 1967. Such presumes a Notice to Proceed being given the successful bidder immediately after receipt of bids on April 6, 1967, and the contractor's expeditious commencement and direction of construction.

The writer telephoned Miss Jerry Kirkwood November 18 to convey the above information. The purpose of our subsequent call to you was to also advise of the above, of recent developments on the project and to assure our best interest and cooperation, including production of the project plans and specifications on an overtime basis, toward the objective of holding or accelerating the above schedule.

It was discussed that the three months stated as being required by the boiler manufacturer for the erection of the first boiler might be excessive and that the project mechanical engineers should immediately investigate the reduction of this period, whether by specifying that this phase of the construction be done on an overtime basis or other means, as discussed previously and to be investigated by the mechanical engineers is the possible advantage or necessity of early ordering of the boiler, pump and accessory equipment. The mechanical engineer's reports and recommendations of the above items will be contained in future correspondence.

We again wish to pledge our best efforts and abilities toward the above mentioned objectives.

Yours very truly,
PITTS, MEBANE, PHELPS & WHITE

Robert White
RW/mm

Miss Jerry Kirkwood
Mr. Marshall Pennington
Mr. Ray Downing
Zumwalt & Vinther, attn. Mr. Worley
LWP RRP RW WB

Campus Planning Committee
November 28, 1966
Attachment No. 685
Item No. 3532

ARCHITECTURE FACILITY PROGRAMMING

CONSULTING ARCHITECT'S PROGRESS REPORT

November 30, 1966

Preparation of the detailed Program of requirements for this building to house the Department of Architecture and Allied Arts has proceeded very smoothly. All parties involved have been most helpful and cooperative, and we do not anticipate any delays. This Program, for use by the Project Architect hopefully will be unusually complete, and should require a minimum of conferences and clarification on the part of the Project Architect.

We have had almost daily conferences with those who will use the building, including the Head of the Department, Faculty Building Committee, and various individuals and groups concerned with specific areas of instruction.

Additional schematic plans and scale drawings have been prepared to aid discussion and decision. Specific areas of this project, such as laboratories, offices, and lecture spaces have required a detailed study of plan schematics. Although some of these schematics will not be presented in the program as detailed drawings it was necessary to study these spaces and the different arrangement of each in order to insure a more thorough knowledge of the entire complex. Results of these meetings are being summarized, and supplemented by photographs, measurements, and catalog data of equipment and furnishings and will be contained in the "package" handed to the Project Architect.

Further studies are being made to refine elevator requirements in view of the developing program. Plans and new passenger loading estimates are being reviewed by engineers with elevator manufacturers to get better preliminary estimates of the influence of elevators on the building design.

Meetings are being scheduled with those people outside this department who are responsible for such areas as landscaping and site development., utilities and maintainance, and custodial services.

In the very near future meetings will be scheduled with the Campus Planning Committee to refine the exact positioning of the facility on the campus north of the existing Architecture facilities. Several of these studies are now in progress and they take into account other possible long-range plans for future buildings, campus drives, pedestrian walkways, utilities, etc.

HOWARD SCHMIDT AND ASSOCIATES
CONSULTING ARCHITECTS

Campus Planning Committee
November 28, 1966
Attachment No. 686
Item No. 3532

LAW SCHOOL FACILITY PROGRAMMING

CONSULTING ARCHITECT'S PROGRESS REPORT

November 30, 1966

Refinements are in progress for both site and floor plans in order to minimize the land coverage and to provide a more efficient building in ratio of assignable space to gross space. The possibility of utilizing a full basement is being explored in effort to realize this efficiency. In the same effort, the site is being studied for ease of future expansion of the school should it ever develop in the long-range future.

Further refinement is being made in each interior space by a thorough study of the furniture arrangement and type, special equipment and various classroom seating requirements. Studies are being made for more implicit requirements involving the elevator and book lift. Since "stepped platform seating" is required in the majority of classrooms, the data necessary for the comfort and efficiency of each student station is being compiled. Many students will be assigned a carrel in the law library and, consequently, these items are receiving further study for maximum use in minimum space as does the selection of the typical student locker and locker room requirements.

The solution to the problems of landscaping and its development, utilities, maintainance and custodial services will receive detailed attention of those responsible for each of these departments.

HOWARD SCHMIDT AND ASSOCIATES
CONSULTING ARCHITECTS

Campus Planning Committee
November 28, 1966
Attachment No. 687
Item No. 3535

PROGRESS REPORT - NOVEMBER 23, 1966

RE: PORTS OF ENTRY STATIONS
TEXAS TECHNOLOGICAL COLLEGE

The final completion of the five entry stations has been delayed due to slow shipment of the plexiglass panels. Temporary plywood panels have been constructed by the college to provide protection for the security officers from the cold weather. The contractor states that he should receive the plexiglass by Wednesday, November 30 and will begin installation immediately.

All of the steel frames and roof framing are in place and work is progressing on the copper fascias and roofing. The concrete curbs surrounding the stations have been constructed and the red reflectors are now being installed. The widening of 15th street near the Meats Lab to accomodate that entry station is under way and should be completed soon. All interior electric heaters have been installed and work is progressing on the exterior lighting as the copper work is completed. Some corrective work is necessary on the steel frames and the contractor has scheduled this work just prior to the installation of the plexiglass panels.

HOWARD SCHMIDT AND ASSOCIATES
CONSULTING ARCHITECTS

/s/ C. Berwyn Tisdel

C. Berwyn Tisdel A. I. A.

Campus Planning Committee
November 28, 1966
Attachment No. 688
Item No. 3540

November 17, 1965

Dr. Earl Green, Director
West Texas Museum
Texas Technological College
Lubbock, Texas

RE: New Museum Facility

Dear Earl,

This office has been asked to coordinate the several aspects of the design, planning timetable, and overall budget in order to rewrite the program for the referenced project so that we can properly implement it into an orderly construction program as quickly as possible. As you are well aware, the introduction of the ICASALS program into the function and service of the Museum, the enlarged total site to approximately 70 acres, and the additional consultant services that have been recommended, we must pull these various items into focus for the proper planning of what we all believe will be an even more exciting project.

We are requesting that you review with your building committee and executive board the following areas of concern and furnish your comments to us for use by the Administration of the College in rewriting the program. Any other concerns or suggestions will be most helpful, and we would appreciate your written comments at an early date .

1. What are the present budget and time schedule goals with respect to the West Texas Museum Association's fund raising campaign projected in the near future?

2. What are the feelings of your association with respect to your overall coordination and time scheduling of local fund raising by the Dallas group coinciding with the national and international fund raising by the Morrell group, recently commissioned by the College?

3. Does the West Texas Museum Association desire to declare at this time any design or layout criteria regarding the Museum site, location of the Museum on the site, configuration of interior space, outside facade, landscaping, future expansion, outdoor exhibits, etc.?

4. Does the West Texas Museum Association wish to add any functional areas such as offices, classrooms, etc. to the now existing plans of the Museum and to the program as developed by Witteborg and Williams, Inc. as the result of the introduction of ICASALS?

Thanking you for your continuing cooperation.

Respectfully,

HOWARD SCHMIDT AND ASSOCIATES
COORDINATING ARCHITECT FOR CONSTRUCTION IN PROGRESS
TEXAS TECHNOLOGICAL COLLEGE

Howard W. Schmidt, A. I. A.

cc: Dr. Grover Murray
M. L. Pennington
Dr. William Pearce
Bill Parsley
Jerry Kirkwood
Lothar Witteborg
Sydney Morrell & Associates
Associated Architects & Engineers of Lubbock

HWSmec

Campus Planning Committee
November 28, 1966
Attachment No. 689
Item No. 3540

THE MUSEUM
Texas Technological College
P. O. Box 4210
Lubbock, Texas 79409
November 18, 1966

Howard Schmidt
Coordinating Architect for Construction
in Progress
Texas Technological College
Lubbock, Texas

Dear Howard:

The Building Committee of the West Texas Museum Association met Thursday and gave serious and lengthy consideration to the questions posed in your letter of November 17. Some of the questions are based on expected contingencies, such as the structuring of ICASALS, and many of the answers are obviously tentative in nature; thus, I am listing in categorical outline the plans, ideas, and opinions that represent the position of the Museum's Building Committee, and that hopefully answer most of your questions.

Buildings and Site

Planning

1. Master planning for the entire 70 acre site reserved for the Museum and ICASALS should be the logical first step.
   a. Extent, detail, and financing of this phase of planning must be determined.
   b. The Museum is primarily concerned with changes that would involve relocation or re-orientation of the Museum building and its component parts, and secondarily concerned with plans for outdoor exhibits, a continuing education building, and other structures and features to be located on the 70 acre site.
   c. Maximum flexibility and functionalism should be the overriding concept in considering site usage and museum building expansion.
2. Working plans for the first building phase should be completed.
   a. The extent of the first phase of construction must be re-evaluated in view of greater potential.
   b. It is assumed that the working drawings in preparation until midsummer will be the drawings carried to completion when the project architects resume work.
   c. It is further assumed that:
      1). Additional working drawings will be required for the first phase in light of expanded scope and greater potential.
      2). The changes recommended by Witteborg and Williams, Inc., and approved by the Museum's Building Committee, will be incorporated in the unfinished working drawings now on hand.
      3). Modifications in the working drawings may be required if building components are re-oriented.

Facilities

1. In regard to building exterior, it is unanimously agreed that lines and appearances should be clean and simple.
2. Present allowances for classroom and office space are considered adequate, but should be subject to any modifications that might be imposed by a re-evaluation of construction phases.

Facilities (cont'd) 2.

3. It is assumed that priority in phasing the construction program will follow the previously established sequence, with the exception of the main exhibit wing which has become pre-eminent by virtue of the ICASALS program. Facilities with top priority are listed as follows:
   a. Central Unit
   b. Main Exhibit Wing -- construction of partial or total square footage to be determined by an evaluation of estimated funds to become available.
   c. Planetarium and connecting corridor
   d. The Moss Gallery portion of the Industrial Exhibits wing, for which long-standing commitments exist.

We have been contacted by a representative of the Lubbock Theatre Center in regard to part-time usage of the projected auditorium, and the offer of assistance in raising funds for this facility. With proper scheduling and usage policies, this affiliation would be desirable and in keeping with the Museum's objectives of becoming a center of activity, and getting maximum utilization for all of its facilities.

This affiliation would also make it possible for us to submit a meritorous proposal to the National Arts Foundation for construction funds.

Fund Raising

Budget

The original recommendation of Community Services Bureau, Inc., after completion of a feasibility study in early summer, 1966, was that the West Texas Museum Association should set its fund-raising goal at $511,000.

In a recent conversation between Mr. Snyder and Mr. Newberry, President of Community Services Bureau, it was suggested that a goal of $1,000,000 would be reasonable in view of the interest created by ICASALS and the expanded scope.

The Museum Building Committee feels that the Association's goal should be between $750,000 and $1,000,000.

Timing

Present thinking and planning in regard to a time schedule is outlined as follows:

1. Announcement of the DeVitt-Jones challenge gift will be made at the Annual Meeting of the West Texas Museum Association on December 1.

2. Organization of the various committees for the fund campaign will begin on January 2, 1967.

3. The "kick-off" for the fund drive will begin in March or April, 1967, with exact timing to be determined by professional fund-raisers.

Co-ordination

The Building Committee feels that co-ordination and cooperation between the Association's fund-raising counsel and the ICASALS fund-raising counsel is highly desirable.

To this end, tentative arrangements have been made for a meeting and discussion between Mr. Newberry and Mr. Morrell on Monday, November 21.

Items of Immediate Concern

From the standpoint of the overall project and timing, it is essential that areas of responsibility, construction phasing, and extent of detailed or working plans be re-established and as clear-cut as possible.

The Building Committee is much concerned that this project does not become over-planned and under-built, and that designated and anticipated funds do not become eroded or diverted by expenditures for unnecessary or experimental purposes.

This Committee, and I think the entire Museum Board, is enthusiastic about the plans for enlarged scope; and these people and the community should become more enthusiastic when these plans become fully known, and when the project resumes an orderly course.

Sincerely,

/s/ F. E. Green

F. E. Green
Director

FEG:mb
cc: President Grover Murray
Vice Presidents Wm. M. Pearce, Marshall Pennington,
Bill Parsley
Jerry Kirkwood
Associated Architects and Engineers of Lubbock
Lothar Witteborg
Sidney Morrell and Associates
Charles Maedgen, Jr.
W.T.M.A. Building Committee Members - Robert L. Snyder, Mark Hailey,
John Whitcomb, George Wilson

Campus Planning Committee
November 28, 1966
Attachment No. 690
Item No. 3545A

W. R. Anthony

902 E. 34th Street
Phone SH 4-1441

ANTHONY COMPANY
Mechanical Contracting
P. O. Box 745
Lubbock, Texas 79408

October 27, 1966

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

Re: Tunnels and Utilities Extensions
Texas Technological College

Gentlemen:

At the request of Mr. Jack F. Roberts we are submitting this proposal:

(1)	To add 2100 feet of 30" chilled water pipe installed and insulated at $41.00 per foot	$86,100.00
(2)	To add 1050 feet of 18" steam pipe installed and insulated at $39.00 per foot	$40,950.00
(3)	To add 1050 feet of 8" pumped condensate return installed and insulated at $11.60 per foot	$12,180.00
	Total	$139,230.00

The above prices are based on unit prices as presented in the original bid, and apply to pipe and fittings only. Other items such as valves and/or expansion joints would be separately priced.

We further propose:

(4)	To add expansion joints for piping proposed in items (1), (2) and (3) above installed and insulated	$18,800.00

These prices are firm for 60 days.

If we may be of further help, please contact us.

Thank you.

Yours truly,

ANTHONY COMPANY

/s/ W. R. Anthony

W. R. Anthony

Campus Planning Committee
November 28, 1966
Attachment No. 691
Item No. 3545B

W. R. Anthony

902 E. 34th Street
Phone SH 4-1441

ANTHONY COMPANY

Mechanical Contracting
P. O. Box 745
Lubbock, Texas 79408

November 8, 1966

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

Re: Tunnels & Utilities Extensions
Texas Technological College

Gentlemen:

We are submitting this proposal at the request of Mr. Jack F. Roberts.

We propose to add one hundred (100') lineal feet of tunnel complete with one 18" high pressure steam line, one 8" pumped condensate return line, and two 30" chilled water lines. The tunnel size would be eight feet wide by ten feet eight inches high, and would be located parallel to and in contact with the tunnel now under construction. The tunnel would start at the proposed power plant wall and would run 100 feet southeast on the northeast side of the tunnel now under construction. Specifications for the tunnel now under construction would be binding.

Our price for this work is:

(1)	100 feet tunnel (8' - 0" X 10' - 8") @ $100.00 per foot	$10,000.00
(2)	200 feet 30" chilled water pipe, insulated and installed @ $41.00 per foot	8,200.00
(3)	100 feet 18" steam pipe, insulated and installed @ $39.00 per foot	3,900.00
(4)	100 feet 8" pumped condensate return, insulated and installed @ $11.60 per foot	1,160.00
	Total	$23,260.00

The above prices are based on unit prices as presented in the original bid.

Please note that expansion joints and any valves are not included in the above prices.

These prices are firm for sixty days.

If we may be of further help please contact us.

Thank you.

Yours truly

ANTHONY COMPANY

/s/ W. R. Anthony

W. R. Anthony

CONSULTING ARCHITECT CONTRACT

This Agreement made this 18th day of October, 1966, by and between the Board of Directors, Texas Technological College, Lubbock, Lubbock County, Texas, acting herein by and through Roy Furr of Lubbock, Lubbock County, Texas, Chairman of the Board of Directors, hereinafter called the "Owner", and;

Howard Schmidt and Associates, Architects, Lubbock, Lubbock County, Texas, hereinafter called the "Consulting Architect";

WHEREAS, the Owner desires the services of a Consulting Architect to program and coordinate the building program including projects now under construction and on the drawing boards; and,

WHEREAS, the Owner desires to employ a Consulting Architect to update and keep current the master plan; and,

WHEREAS, the Owner desires to employ the firm of Howard Schmidt and Associates to perform the consulting, coordinating, and other architectural services provided herein, to implement said program;

NOW, THEREFORE, Texas Technological College, Owner, and Howard Schmidt and Associates, Consulting Architect, agree as follows:

ARTICLE I - CONSULTING ARCHITECT'S DUTIES AND RESPONSIBILITIES

A. PROGRAMMING SERVICES DEFINED AND OUTLINED AS FOLLOWS (ALSO GRAPHICALLY ILLUSTRATED IN "EXHIBIT C")

1. Program and develop schematics for each new construction project. Programming and schematic planning would include the following:
   a. A survey of existing conditions and the determination of the requirements of the Owner.
   b. Prepare detailed written program of functional requirements based on space allowances.
   c. Prepare preliminary cost estimate.
   d. Develop schematic studies showing functional departmental relationships together with the general description of the project for the approval of the Owner, including drawings showing single-line departmental layouts and also including schematic layouts of case work, equipment locations, and mechanical services required.

e. Prepare suggested room finish schedule.

f. Revise preliminary cost estimates for building and equipment.

g. Furnish pertinent advise to project architects during development of working drawings and review completed working drawings.

h. During the construction of the project furnish advise on approval of materials, technical equipment and mechanical equipment.

i. Attend the necessary conferences of the Owner and Project Architects to carry out the program.

j. Consulting with the Project Architects assigned to each project early in the stages of schematic planning to keep the Project Architect aware of the planning. Incorporate the Project Architect's advise in matters of the configuration of the plan and how it will later relate to the Project Architect's exterior design studies when the program goes into the design development phase.

2. Assist the Owner in the selection of Project Architects.

3. Continually work in close cooperation with individual Project Architect assigned to each project during construction as well as the Clerk-of-the-Works if selected. (See "Exhibit C")

4. Attend major presentations by individual Project Architects to the Administration and/or the Board of Directors of design development and construction documents.

5. Attend major bid openings and make recommendations to the Administration and/or Board of Directors regarding the awarding of the construction contracts.

6. Prepare appropriate schematics on a time schedule set by the Owner for use by the Owner in making applications for matching funds and grants.

B. <u>COORDINATION SERVICES DEFINED AND OUTLINED AS FOLLOWS (ALSO GRAPHICALLY ILLUSTRATED IN "EXHIBIT C")</u>

1. Assist the Owner in the establishment of uniform construction and procedures for all future projects by implementing a "Project

Architect's Guide for Design and Construction at Texas Technological College". Contents of this Procedures Guide to be continually expanded by the Consulting Architect as needed. (Outlined in more detail under "Exhibit A")

2. Assist the Owner in the selection of Project Architects.

3. Continually work in close cooperation with individual Project Architect assigned to each project as well as the Clerk-of-the-Works if selected. (See "Exhibit C")

4. Attend major presentations by individual Project Architects to the Administration and/or the Board of Directors of design development and construction documents.

5. Attend major bid openings and make recommendations to the Administration and/or Board of Directors regarding the awarding of the construction contracts.

6. Serve as both Consulting Architect and Project Architect on any project the Owner determines that this would be advantageous and/or expeditious.

7. Advise the Owner of all important national and regional seminars and conferences which deal with master planning college campuses and/or problems dealing with planning educational facilities. Consulting Architect shall advise on the importance of the meetings and attend the meetings if it is the Owner's desire.

8. Develop a filing system on all matters dealing with the Consulting Architect's services. This filing system of material dealing with all areas of College building programs will be located in the Consulting Architect's office available to the Owner at any time and it is agreed that these files become the property of the College when requested.

C. MASTER PLAN SERVICES DEFINED AND OUTLINED AS FOLLOWS

1. Under the direction of the Owner, continually study and develop the master plan of the campus as relates to immediate and future construction.

2. Work with the Owner's Consulting Engineers to coordinate their work with the master plan.

3. Advise the Owner of all important national and regional seminars and conferences which deal with master planning college campuses and/or problems dealing with planning educational facilities. Consulting Architect shall advise on the importance of the meetings and attend the meetings if it is the Owner's desire.

D. PROJECTS TO BE PROGRAMMED

Programming and schematic planning will be performed by the Consulting Architect on the projects designated by the Owner.

E. PROJECTS TO BE COORDINATED

Coordination services will be performed by the Consulting Architect on the following projects:

1. Math and Foreign Languages (Under construction)
2. Library Addition (Under construction)
3. Chemistry Research (On the drawing boards)
4. Biological Sciences (On the drawing boards)
5. Business Administration (On the drawing boards)
6. Central Power Plant (Engineer being selected)
7. Coeducational Dormitory Complex (Phase I under construction, Phase II on the drawing boards)
8. Museum (On the drawing boards)

F. RESPONSIBILITIES AFTER PROGRAMMING AND SCHEMATIC PLANNING

After approval of programming and schematic floor plans, Consulting Architect shall have no further responsibility for the performance of architectural services on individual projects except for the coordination services outlined herein. The Project Architect shall have the major responsibility of exterior design, design development, preparation of construction documents, and general administration of the construction contracts. The division of responsibility of work to be performed by the Consulting Architect and the Project Architect is symbolically outlined in "Exhibit B" which is attached hereto and made a part of the agreement for all purposes.

ARTICLE II - PAYMENTS TO CONSULTING ARCHITECT

A. FOR PROGRAMMING AND DEVELOPING SCHEMATICS

Owner agrees to pay Consulting Architect as compensation for his services one (1%) percent of the actual construction cost for performing the services

outlined in Article I and indicated in "Exhibit B".

B. FOR COORDINATION SERVICES, DEVELOPING PROCEDURES MANUAL, AND MASTER PLANNING

Owner agrees to pay the Consulting Architect as compensation for his services ($ 7,200) Dollars per year for the personal attention of those coordinating duties by Howard W. Schmidt. In addition the Consulting Architect will be reimbursed at 2.75 times technical labor costs of all other employees of the Consulting Architect when they are required to perform duties of a coordinating nature such as drafting, shop drawings, model construction, etc.

The hourly rates for technical employees in the Consulting Architect's office are as follows:

Senior Associate (Registered Architect & Engineer).....$4.00

Senior Draftsman (Registered Architect).....$3.50

Junior Draftsman (College Graduate - B.A. in Architecture).....$3.00

Architectural Students and Other Draftsmen.....Varies (Below $3.00)

C. SCHEDULE OF PAYMENTS TO THE CONSULTING ARCHITECT SHALL BE MADE BY THE OWNER AS FOLLOWS

1. For programming and developing schematics
   a. 9/10 of 1% of estimated construction cost upon completion and acceptance of the schematic planning.
   b. 1/10 of 1% of final construction cost upon final acceptance of completed building by the Owner. (If project is abandoned for any reason, this remaining 1/10 of 1% shall become due based on the estimated construction cost.)
2. Coordinating services, developing Procedures Manual, and master planning
   a. The reimbursements of 2.75 times technical labor cost shall become due monthly as they accumulate.
   b. Compensation for coordinating duties by Howard W. Schmidt shall be paid monthly.

ARTICLE III - DEFINITION OF CONSTRUCTION COST

A. Construction Cost as herein referred to means the total cost of all work designed or specified by the Project Architects in which Consulting Architect

is specifically involved, but does not include any payments made to the Architects or Consultants.

B. Construction Cost shall be based upon one of the following sources with precedence in the order listed:

1. Lowest acceptable bona fide Contractor's proposal received for any or all portions of the project.
2. Semi-detailed or Detailed Estimate of Project Construction Cost as agreed upon by the Owner and Consulting Architect.
3. The Project Architect's latest Statement of Probable Project Construction Cost based on current area, volume or other unit costs.

ARTICLE IV - OTHER RESPONSIBILITIES OF THE OWNER TO THE CONSULTING ARCHITECT

A. TO FURNISH INFORMATION

The Owner designates the Vice President for Business Affairs as its authorized representative and authorizes such representative to furnish full information as to requirements of the Consulting Architect under this contract. This includes, but is not limited to, any information Owner may have regarding site data, existing buildings, educational requirements, enrollment statistics, curriculum, soil tests, construction documents, and any other such information requested by Consulting Architect which is normally related to the performance of its duties and responsibilities under this contract.

ARTICLE V - ARCHITECT'S ACCOUNTING RECORDS

Records of the Architect's Direct Personnel, and Reimburseable Expense pertaining to this project shall be kept on a generally recognized accounting basis and shall be available to the Owner or its authorized representative at mutually convenient times.

ARTICLE VI - SUCCESSORS AND ASSIGNS

The Owner and the Consulting Architect each binds himself, his partners, successors, assigns and legal representatives to the other party to this Agreement and to the partners, successors, assigns and legal representatives of such other party in respect of all covenants of this Agreement. Neither the Owner nor the Consulting Architect shall assign, sublet or transfer his interest in this Agreement without the written consent of the other.

ARTICLE VII - TERMINATION OF THE CONTRACT

It is agreed that the terms of this contract will be in effect for

one (1) year(s) unless it is terminated in one of the methods listed below.

A. In the event that the Project is abandoned or suspended indefinitely, this agreement may be terminated upon a 30-day written notice by the Owner to the Consulting Architect that the project is abandoned or suspended.

B. In the event of notice of termination at the completion of any given stage of the work as outlined herein, the Consulting Architect shall be paid a portion of the fee stipulated for that stage of the work.

C. In the event of notice of termination at any time during the normal progress of the Consulting Architect's work, the Owner shall pay to the Consulting Architect a proportionally adjusted amount of the fee due as mutually agreed upon.

IN WITNESS WHEREOF, the parties have executed this Agreement the day and year first above written.

OWNER:
BOARD OF DIRECTORS
TEXAS TECHNOLOGICAL COLLEGE

BY: _____
Roy Furr, Chairman

ATTEST:

_____

CONSULTING ARCHITECT:
HOWARD SCHMIDT AND ASSOCIATES

BY: _____
Howard W. Schmidt

"EXHIBIT A"

Suggested contents for "Project Architect's Guide for Design and Construction at Texas Technological College". (With more detailed study, the contents of the Procedures Manual should be expanded and ammended through the years to stay current with new construction materials on the market, changes in personnel and policy at the College, etc.)

1. A suggested format for the specifications. Since many times the same bidders are bidding on most or all of the projects on the campus, it would probably assist all the contractors to have a little consistancy here, and thereby produce more competitive bids for a savings to the College.

2. Texas Tech desires certain contractual procedures which are different from other Owners, and if the bidding documents in the way of proposals, insurance requirements, special conditions, etc. were standardized, this would assist both the architects and the bidders. The manual could also include the procedure for monthly certificates of payment and how the College desires the breakdown.

3. The manual could include the desires of the College with respect to barricades during construction, project sign limitations, parking lots for the contractor's employees, traffic patterns desired coming and going to the projects, etc.

4. The College always has specific desires for the depositing of caliche removed during construction, and the method top soil should be handled while it is stored during construction, and then specific methods of replacing, tamping, and grading when it is finally replaced.

5. There should be some standardization as to how the contractor handles his utilities during construction. (At one time I was of the opinion that it was figured in the proposal anyway, and it might as well be provided by the College. However, since the dormitory construction, I am of the opinion that this certainly leaves no incentive for the contractor to make certain all lights are turned off at night, and I personally would recommend that the contractor pay for his utilities during construction.)

6. Bid bond, contract, performance bond, and payment bond forms, should be consistant with each project and the manual would be a good place to spell out for each project architect exactly what was desired and thereby save a lot of conversation on each specific project.

7. The College's desires with respect to soil and concrete testing and concrete control and who is responsible for the charges in this respect could be standardized.

8. The degree of fireproofing the building to place it in a certain fire rating catagory (since the College does not have insurance on its classroom buildings) would be a helpful matter for the project architects to understand at the outset.

9. Minimum roofing requirements, parapet construction, roof drain systems, roof bond desires, etc. could be tied down in the manual.

10. Service drive requirements might be outlined, particularly with respect to what is required by Dempster equipment as well as loading dock requirements.

11. Services available in the steam tunnels, water and sewer main locations, and underground electrical conduits might be placed in the manual with maybe even some reproduced College plot plans indicating their locations and contents.

12. Policies of air conditioning, ventilation, temperature control systems desired, etc. might be worked out with Ray Downing and certain minimum desires recorded in the manual.

13. The clock system and telephone systems on campus could be described.

14. Desires with respect to grounds maintenance procedures, storage, and shop requirements, hose bibb versus lawn sprinkler policies, roof drain splash blocks, sidewalk construction, etc. could be standardized here to avoid past mistakes.

15. Exterior lighting of buildings and walks and how they should be handled could be covered.

16. Desired drainage patterns on campus for the different "zones" might be outlined.

17. Custodial space requirements such as square foot areas, distribution per floor, shelving requirements, water and sink requirements, electrical outlets, and their spacing for polishing equipment, etc. could be spelled out in the manual.

18. Elevator standards such as acceptable manufacturers, cab allowances, length of warranty period, future maintenance contracts, etc. could be included.

19. Toilet accessory standards for paper towel holders, soap dispensers, toilet tissue holders, mirrors, etc. could be listed.

20. Hardware and keying is always a complicated specification item, and it would be most helpful if all project architects had the desires of the College clearly spelled out in front of them as they prepared their specifications. Such items as brands acceptable, number of master and tunnel keys desired, door closers and panic hardware desired, key cabinets and their location, construction key requirements, who is to receive the keys ultimately, etc. could be clearly stated.

21. The number of equipment maintenance manuals desired by the College and for whom.

22. Floor and base materials desired for classrooms, corridors, and stairs as well as the initial treatments acceptable to the College maintenance personnel and the condition the floors should be in when accepted by the Owner could be covered.

23. Minimum standards for the type of windows which are acceptable and the weather-stripping desired would be helpful to the project architect.

24. Since there will be numerous faculty office spaces provided in most of the buildings designed in the future, an acceptable list of required features for each office could be outlined such as cloak storage, personal library shelving, lighting, telephone requirements, etc.

25. Concession machines are Big Business now on campus, and the project architect should know what to expect here for space, utility connections, etc.

26. You now have building identification signs on each building, and a standardization for these letters and their material might be included in the manual.

27. This might be a good place to spell out the method of distributing plans and specifications on the campus at the time they are put out for bids. (Ground Maintenance - Ray Downing, etc.) Also it would be a good place to record what is expected of each project architect with respect to reproducible as-built drawings and specifications and where they should be delivered.

"EXHIBIT B"

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 given serious consideration to such things as trash disposal and service drives.	Major Responsibility	No Responsibility

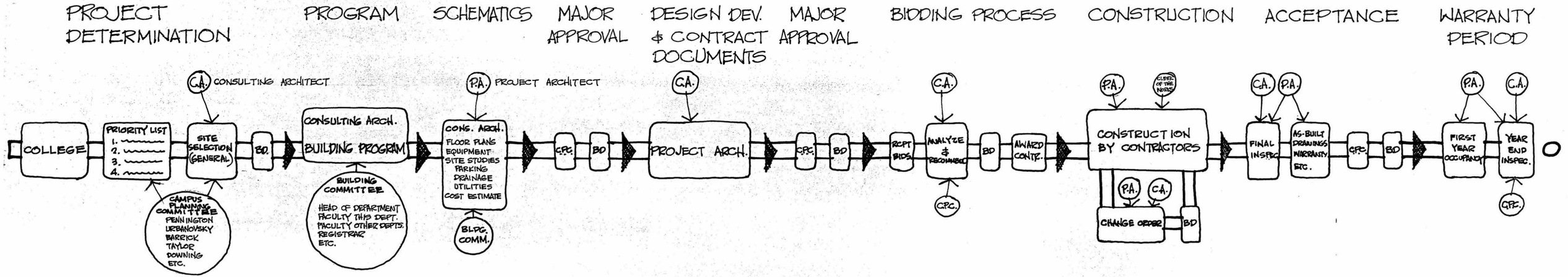
	RESPONSIBILITY	
	CONSULTING ARCHITECT	PROJECT ARCHITECT
Schematic Studies and a Recommended Solution Consulting Architect refines in more detail the earlier diagramatic studies and offers a recommended suggestion(s). At this point the Project Architect sits in on the studies periodically to offer advice and to begin getting the "feel" of the intended facility.	Major Responsibility	Minor Responsibility
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.	Major Responsibility	Minor 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 Responsibility	Minor Responsibility
Reviews with Campus Planning Committee Formal presentation of the completed programming to the Campus Planning Committee.	Major Responsibility	Minor Responsibility
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.	Major Responsibility	Minor Responsibility
Application for Matching Funds if Desired Consulting Architect will prepare the necessary schematics to accompany the application to the Federal Agency.	Major Responsibility	No 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 attendance.	Major Responsibility	Minor 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.	Minor Responsibility	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 Responsibility	Major Responsibility
B. Working Drawing Elevations	No 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
Reviewing Plans with all Applicable Agencies 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 will be made by the Project Architect.	Minor Responsibility	Major Responsibility
Review of Check Sets At this point the Consulting Architect thoroughly checks each sheet of the working drawings and each page of the specifications to see that they do satisfy the needs of the original program and meet the requirements requested by such departments on the campus as Building Maintenance and Grounds Maintenance.	Major Responsibility	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.	Minor Responsibility	Major Responsibility
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 Responsibility	Major Responsibility
Presentation of Design Development Documents (Working Drawings and Specifications) to the Owner Official sets of plans and specifications are placed on file on campus at the designated locations.	Minor Responsibility	Major Responsibility
BIDDING AND CONSTRUCTION PERIOD		
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 for the bid opening and for an analysis of the contract amounts, alternates, etc.	Minor Responsibility	Major Responsibility
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.	Minor Responsibility	Major Responsibility
Approval by the Board of Directors Campus Planning Committee's recommendation is approved by the Board of Directors in meeting or by the telephone prior to awarding of the contracts.	Minor Responsibility	Major Responsibility
Awarding Contracts Project Architect will prepare the contracts with the assistance, if requested, of the Consulting Architect on forms previously approved by the Owner.	Minor Responsibility	Major 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.	Minor Responsibility	Major 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.	Minor Responsibility	Major Responsibility

	RESPONSIBILITY	
	CONSULTING ARCHITECT	PROJECT ARCHITECT
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.	Minor Responsibility	Major 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-of-the-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.	Minor Responsibility	Major 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.	Minor Responsibility	Major 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.	Minor Responsibility	Major Responsibility
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	Minor Responsibility	Major Responsibility

	RESPONSIBILITY	
	CONSULTING ARCHITECT	PROJECT ARCHITECT
of the work. After the Consulting Architect's inspection if he feels it is ready for the Owner's acceptance he will so inform the Campus Planning Committee who in 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 Responsibility	Major 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 Responsibility	Major Responsibility


PROJECT DETERMINATION
PROGRAM
SCHEMATICS
MAJOR APPROVAL
DESIGN DEV. & CONTRACT DOCUMENTS
MAJOR APPROVAL
BIDDING PROCESS
CONSTRUCTION
ACCEPTANCE
WARRANTY PERIOD
C.A. CONSULTING ARCHITECT
P.A. PROJECT ARCHITECT
COLLEGE
PRIORITY LIST
1.
2.
3.
4.
SITE SELECTION (GENERAL)
BD.
CAMPUS PLANNING COMMITTEE
PENNINGTON
URBANOVSKY
BARRICK
TAYLOR
DOWNING
ETC.
CONSULTING ARCH.
BUILDING PROGRAM
BUILDING COMMITTEE
HEAD OF DEPARTMENT
FACULTY THIS DEPT.
FACULTY OTHER DEPTS.
REGISTRAR
ETC.
CONS. ARCH.
FLOOR PLANS
EQUIPMENT
SITE STUDIES
PARKING
DRAINAGE
UTILITIES
COST ESTIMATE
BLDG. COMM.
C.P.C.
BD
PROJECT ARCH.
C.P.C.
BD
RCPT BIDS
ANALYZE & RECOMMEND
C.P.C.
BD
AWARD CONTR.
CONSTRUCTION BY CONTRACTORS
CLERK OF THE WORKS
CHANGE ORDER
BD
FINAL INSPEC.
AS-BUILT DRAWINGS WARRANTY ETC.
C.P.C.
BD
FIRST YEAR OCCUPANCY
YEAR END INSPEC.
C.P.C.

"EXHIBIT C"

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 320 December 7, 1966

A meeting of the Campus Planning Committee was held at 2:30 p.m. on December 7, 1966, in Room 120 of the Administration Building.

Members present were Chairman M. L. Pennington and Mr. Nolan E. Barrick.

Other members of the College staff present were Mr. John G. Taylor, Miss Evelyn Clewell, Dr. James W. Kitchen and Miss Jerry Kirkwood.

Mr. Howard Schmidt, Consulting Architect, was present.

Dr. Gerald Thomas, Dean of the School of Agriculture, was present for the discussion of the Agricultural Facilities.

3547. Agricultural Facilities

A. Sheep and Goat Facilities

Dr. Thomas explained that the facilities are used for both teaching and research and with the proposed plan, developed by Mr. Howard Schmidt, the project could feasibly be constructed in phases.

Mr. Schmidt was instructed to study the cost of the construction of the central core and two wings of the plan, and the use of various building materials. Flexibility within the plan should be maintained.

The proposed site near the present Agricultural Facilities north of Fourth Street will be given additional study with consideration of the development of a long range directional plan in mind.

B. Swine Facilities

The existing facilities are considered temporary but Dr. Thomas estimated that operations could continue for some time without new facilities.

In view of the limited amount of funds, Dr. Thomas feels that the Sheep and Goat Facilities should have the first priority.

The Campus Planning Committee requested that Dr. Thomas and his committee prepare a replacement cost per acre for developed farm land in order that means for replacing the land captured by campus expansion can be studied.

Dr. Thomas agreed that the site for moved and future Agricultural Facilities should be considered carefully to avoid conflict with campus expansion. His faculty is presently studying various locations.

C. Rodeo Association

The Association has requested two additional acres at the present site for use by the Association.

The request was referred to Dr. Thomas for a recommendation.

3548. Business Administration Building (CPC No. 98-65)
(Page, Southerland, Page)

It was recommended that Mr. Justin Elliott represent the College as Resident Construction Coordinator for the project after construction begins.

3549. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt & Vinther, Inc., Engineers)
(Pitts, Mebane, Phelps and White, Architects)

The Campus Planning Committee will meet with the Architects and Engineers on December 13, 1966, prior to the meeting of the Campus and Building Committee of the Board of Directors.

3550. Chemistry Building Addition (CPC No. 87-64)
(Pitts, Mebane, Phelps and White, Architects)

Observations made by the Chemistry Faculty Building Committee concerning the schematic plans filed with the Title I Application of September 6, 1966, are listed below.

Action recommended by the Campus Planning Committee follows each item.

1. A. The 500 capacity lecture hall is not properly located considering that the estimated use by the Department of Chemistry would be 12 hours per week to the full capacity.

It was agreed that the above statement is valid. In view of the Chemistry Faculty Building Committee's reconsideration and in the interest of overall College needs, it was recommended that Miss Evelyn Clewell be requested to reevaluate the inclusion of the third 500 capacity lecture hall in this project. It was felt that the Biology lecture hall for 500 was not in the picture when it was decided to include one in the Chemistry project.

B. A 200 capacity lecture room for Chemistry use only would be more desirable.

A 200 capacity lecture room might not be adequate and Miss Clewell was asked to include the suggestion in her reevaluation.

C. The lobby and lounge spaces at the 500 capacity lecture hall are considered in excess of needs should the present plan prevail.

It was questioned. Adequate space for moving a possible 1,000 students within a 10 minute period should be included. The Architects will be asked to study the traffic flow.

2. Movable partitions in office areas are not desired.

The Campus Planning Committee agreed as the added expense exceeds the practicality.

3. Segregated faculty offices are not desired at research areas for graduate students. It is requested that faculty offices be integrated with labs at research areas, as a safety factor, in order that supervision over work in the labs can be maintained.

The Campus Planning Committee agreed.

4. Aisle spaces cannot be set as one constant dimension. Aisle widths can be determined by the function of the individual laboratories.

It was agreed, but with the reservation that the aisle widths would be subject to acceptable standards.

5. A specific request for areas necessary for "canned" programs to supplement applications of theories for students is recorded.

It was agreed that such areas would be teaching aids and could be developed later.

3550. Chemistry Building Addition (Cont'd)

6. The location of the Biochemistry Lab as shown in the schematic plan is felt to be isolated.

The Architects will be asked to restudy the location.

7. Undergraduate spaces should be located near entrances and/or exits as proposed by the Project Architects.

The Campus Planning Committee agreed.

In consideration of the above comments, the Faculty Building Committee agreed that (1) the modular structural system established by the Project Architects is acceptable; (2) the spaces need regrouping toward the double-loaded corridor system as the functions of activities will indicate; and (3) that the program entitled "A Description of Space Need by the Chemistry Department by 1972" is essentially representative of the needs of the Department of Chemistry insofar as present indications can predict.

Referring to Item (2) in the above paragraph, the Campus Planning Committee felt that the double-loaded corridors offer economies and that the single-loaded corridors in the present schematic plan were forced by the location of the 500 capacity lecture hall.

Were the lecture hall relocated on the site, the plan could be oriented toward double-loaded corridors.

3551. Consulting Architect

A. Project Architect for the Architecture and Allied Arts Project

The following firms were recommended and the order indicates the preference.

1. O'Neil Ford - San Antonio, Texas

2. Harrell and Hamilton - Dallas, Texas

3. Wilson, Morris, Crain and Anderson - Houston, Texas

B. Project Architect for the Law School Project

It was recommended that further study be given as Mr. E. J. Urbanovsky, who is in the hospital, has not had the opportunity to consider his recommendation. However, a recommendation will be available for consideration by the Board of Directors on December 13, 1966.

3552. Engineering Survey (Zumwalt & Vinther, Inc., Engineers)

The Campus Planning Committee recommended that the possibility of keeping the survey up-to-date be discussed with the Engineers.

3553. Foreign Languages - Mathematics Building (CPC No. 79-63) (Pitts, Mebane, Phelps and White)

1. The Campus Planning Committee concurred with Miss Clewell's recommendation that uses of service areas B-4, B-43 and B-35 be changed as follows:

A. B-4 and B-43 - To include study carrels with conference space for doctoral candidates who will be teaching assistants.

B. B-35 - Classroom for 40 to 42 students.

3553. Foreign Languages - Mathematics Building (Cont'd)

2. Due to advances made in the design of consoles and other teaching equipment, the Foreign Languages Department has requested that the locations for existing equipment to be reused be changed. It will be necessary to include services for the equipment.

The Campus Planning Committee recommended that the Architects obtain price quotations from the contractor for the requested construction changes in order that further study may be given the requests.

3554. Home Management Facilities (Mobile Homes Site)

It was recommended that the site immediately north of the Home Management House be accepted.

The Department of Grounds Maintenance will develop a landscaping plan when the floor plans of the units are available.

3555. Student Health Service

A request for additional space has been made.

Mr. Nolan Barrick was asked to ascertain if the structural system allows for an additional floor.

3556. Student Union Building

A. Financing

Mr. John G. Taylor and Mr. R. B. Price have established that an intent to sell revenue bonds can be filed with the application to the Office of Housing and Urban Development for Phase II of the Dossie M. Wiggins Complex.

B. Implementation

It was recommended that Mr. Howard Schmidt, under the terms of his contract, establish the cost of the addition using the program and supplements already submitted.

The application will be filed on or before January 19, 1967.

3557. Tunnels and Utilities Extensions (Biology Building)

The Campus Planning Committee recommended that Zumwalt & Vinther, Incorporated be authorized to begin the Design Phase of the work under the terms of the existing contract.

3558. Wiggins Complex (CPC No. 97-65)
(Schmidt and Stiles, Roberts and Messersmith)

Phase I

A. It was recommended that the furniture contractor prepare a sample model detail with an aluminum angle set on the leading edge of the lumber core plywood floor of the wardrobe unit.

The leg of the angle at the floor shall be recessed so that it is flush with the floor. The angle shall be glued to the plywood and screwed to solid blocking or trim.

The detail is under consideration as a corrective measure involving 420 wardrobe units which were not assembled according to the specifications.

B. The Campus Planning Committee recommended that an estimate of cost for omitting certain items in Phase I, to be included in Phase II, be presented to the Board of Directors and that procedures for obtaining approval to proceed be requested.

Phase II

Additional time is needed to review the Architects' fee which has been submitted for approval.

Jerry Kirkwood
Coordinator

The meeting adjourned at 6:05 p.m.

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 321 December 13, 1966

A meeting of the Campus Planning Committee was held at 1:30 p.m. on December 13, 1966, in Room 120 of the Administration Building.

Member present was Chairman M. L. Pennington. Mr. Nolan E. Barrick was detained in Dallas and arrived at the meeting at 4:10 p.m. Mr. Urbanovsky remains in the hospital.

Other members of the College staff present were Mr. John G. Taylor, Miss Evelyn Clewell, Dr. James W. Kitchen, Mr. O. R. Downing and Miss Jerry Kirkwood.

Mr. Howard Schmidt, Consulting Architect, was also present.

Mr. Robert White and Mr. Walter Bowman of Pitts, Mebane, Phelps and White, Architects, and Mr. J. T. Worley of Zumwalt & Vinther, Inc., Engineers, were present for the presentation of the Central Heating and Cooling Plant.

Mr. R. C. Messersmith was present during the discussion of the Wiggins Complex.

3559. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt & Vinther, Inc., Engineers)
(Pitts, Mebane, Phelps and White, Architects)

On October 18, 1966, at the meeting of the Board of Directors, the architects had on display a perspective sketch showing the building exterior appearance. The preliminary design was presented for approval in order that the architects and engineers could proceed with some direction toward the completion of construction drawings without delay.

The architects presented a further developed perspective and the schematic plans upon which they have begun the construction drawings.

Mr. White explained the exterior materials proposed which include the standard brick used on the campus, a terra cotta cap around the top of the building to conceal unsightly fans and other equipment, and the use of terra cotta in a long horizontal line at the mezzanine office area. The stressed horizontal line was incorporated in order to relieve the appearance of the necessary height of the structure.

The terra cotta reflects the colors of the tile used on roofs and in screening materials used on the campus in the past.

The building, as designed, relates to the mass and materials of the adjacent Central Foods Facilities.

Mr. White presented to all present, copies of the Design Development Data Brochure and explained the contents. (A copy of the brochure will be kept on file in the Office of the Campus Planning Committee Coordinator.)

The total gross square foot area of the building is 40,345 and the estimated cost of the structure is $3,646,154. Two boilers and two refrigeration units have already been purchased at a total contract price of $1,127,404.

Chairman Pennington expressed the concern of the Campus Planning Committee over the critical schedule which must be met if steam is to be available for the Wiggins Complex by possible winter months in 1967.

3559. Central Heating and Cooling Plant (Cont'd)

The architects and engineers presented the following schedule for completion of the project:

February 17, 1967	-	Send near completed plans to the Office of Housing and Urban Development.
March 9, 1967	-	Construction documents to be issued to bidders.
March 30, 1967	-	Receipt of bids.
April 6, 1967	-	Start construction.
June 1, 1967	-	Start boiler erection.
October 15, 1967	-	Steam capacity available for tunnel distribution.
December 15, 1967	-	Refrigeration capacity available for tunnel.
July 6, 1968	-	Estimated project completion.

The above schedule is dependent upon many things, one of which is the need to order additional accessory equipment necessary for the operation of the Plant.

Mr. J. T. Worley requested that the College find some means of purchasing the equipment prior to awarding mechanical and electrical contracts in order to avoid the critical delivery schedules of such equipment.

Mr. Howard Schmidt pointed out that the above schedule does not allow time for the "check-out" of equipment which will have been installed in the Wiggins Complex before the Central Plant operation date. The College would not wish to be placed in a position of having delayed the project by not having utilities available.

Mr. O. R. Downing stated that it is possible to divert enough steam at short periods (weekends suggested) to allow the Wiggins Complex equipment to be checked out for operation and balancing. This diversion would be scheduled for the month of August, 1967.

Should warm weather prevail before the refrigeration equipment for the Central Plant can be in operation, Mr. Downing feels enough cooling could be diverted from the central station at the Student Union Building to cool the critical spaces in the Wiggins Complex only.

The above emergency measures are possible if the tunnel and piping work from the Foreign Languages-Mathematics Building to the Wiggins Complex is complete. The completion date for this work is June 22, 1967.

The Campus Planning Committee recommended that the architects and engineers proceed with the project and asked that everyone interested in the completion of the project on schedule consider the Wiggins Complex and the Central Plant as emergency matters.

- - - -

The meeting recessed at 2:50 p.m. so that the 3:00 p.m. opening of general construction bids for the Business Administration Building could be attended.

- - - -

The meeting resumed at 4:00 p.m. Mr. Barrick arrived and was informed of the earlier considerations.

- - - -

3560. Project Architects (Law School)

The Campus Planning Committee recommended the following architectural firms with the preferences listed as follows:

1. Harrell and Hamilton - Dallas, Texas

2. Wilson, Morris, Crain, & Anderson - Houston, Texas

3. Page, Southerland, Page - Austin, Texas

3561. Wiggins Complex (CPC No. 97-65)
(Schmidt and Stiles, Roberts and Messersmith)

Phase I

Considering that Phase II will follow so closely after Phase I of the project, Mr. R. C. Messersmith presented the architects' estimate for deletion of ornamental finishes from the west end of Coleman Hall and the south wall of the commons area, and some walks, parking and sprinklers in Phase II.

Seventy-five percent of the subcontractors are involved in establishing the prices to be a part of the change order and all actual figures are not available.

The estimated savings prepared by the architects by deleting the ornamental treatments, paving, sidewalks and sprinkler systems, above mentioned, is approximately $20,000.

The Campus Planning Committee recommended that the architects pursue the possible savings and that the contractor itemize the breakdown and substantiate all costs with unit prices where possible.

Jerry Kirkwood
Coordinator

The meeting adjourned at 5:30 p.m.

Chemistry grant Title II - $929,980 see notes.

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

AGENDA FOR THE JOINT MEETING
OF THE CAMPUS AND BUILDING COMMITTEE AND CAMPUS PLANNING COMMITTEE
TO BE HELD AT 8:15 P.M. IN THE ANNIVERSARY ROOM OF THE
STUDENT UNION BUILDING ON THE CAMPUS
December 13, 1966

3562. Athletic Facilities (Paving North Parking Lot - Stadium) OK

The recorded acceptance date is August 31, 1966.

3563. Business Administration Building (CPC No. 98-65)
(Page, Southerland, Page)

12,700
13,998.24 (1½% sub's)
26,698.24
33,216.00
59,914.24

Consider the bids received for the project. approved

J. J. Kritch Constr. Co. - Dallas
total contract $3,359,914.24
authorized Chairman to sign contract.

3564. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt & Vinther, Inc. - Engineers)
(Pitts, Mebane, Phelps and White, Architects)

At the October 18, 1966, Board meeting, the Architects and Engineers were authorized to proceed with the design development based upon the schematic drawing which was displayed.

The further developed drawings were to be presented to the Campus and Building Committee at the next scheduled Board meeting.

A. Consider the presentation by the Architects of the progress to date. — current approval of Bd. approved

B. Time schedule — means to go out for bids in Feb. —

...rley's letter
...e the equipment
...livery times is
...ed to your agenda

Delivery schedules for accessory equipment necessary for the operation of the Central Plant are apparently getting longer and the prices, according to the Engineers, are in a state of escalation. The long delivery periods could delay the completion date which is already critical.

The office of Housing and Urban Development has suggested we send them the documents we propose to use in purchasing the equipment as soon as possible and they will advise us how to proceed. It could be possible to use a purchase order with assignment later to the contractor on the project. The estimated cost is

C. Consider authorizing the Campus Planning Committee and the Engineers to study and prepare specifications and to take bids on accessory equipment necessary for the operation of the Central Plant. approved

[illegible]

3565. Consulting Architect

approved

l's contract is
ed to your
only.

Consider approving the contract between the Board of Directors and Mr. Howard Schmidt.

Project Architects

A. Architecture and Allied Arts

1. O'Neil Ford – San Antonio, Texas

2. Harrell and Hamilton – Dallas, Texas

3. Wilson, Morris, Crain and Anderson - Houston, Texas

listed in
d Agenda.

B. Law School

1. Harrell + Hamilton
2. Wilson, Morris, Crain + Anderson
3. Page, Southerland + Page

Under the contract with the Consulting Architect, the Project Architect's fee will be 5% and the Consulting Architect's fee will be 1%.

3566. ~~Engineering Survey (Turnbull & Winther, Inc., Engineers)~~

~~The original contract does not provide for revising the survey in accordance with work accomplished.~~

~~Consider the recommendation that the Engineers be authorized to keep the drawings up-to-date as the work progresses.~~

~~Agenda only.~~ The fee proposed

3567. Frenchmen's Creek Housing

NO

Progress report

3568. Funds Available

3569. Museum (CPC No. 65-61) (Associated Architects and Engineers of Lubbock)
Progress report

Refer to Earl's letter

3570. Student Union Building Addition

ur agenda
nly.

double overall-
ment
show plans for enlarge-
ment in future, keep it
open-ended financially

A. Consider the recommendation that the intent to sell revenue bonds in an amount to be established be included in the application for Phase II of the Wiggins Complex.

B. Consider the recommendation that Mr. Howard Schmidt proceed with programming the facility in order that the amount of bonds necessary can be established.

3571. Tunnels and Utilities Extensions - (Biology Building) OK

The Biology Architects are on schedule with the construction drawings. The schedule provides for bids to be received in March 1967, and construction completion in December 1968.

rawings are
ble.

In order that utilities will be available for the building, consider the recommendation that the Engineers be authorized to begin the Design Phase of the work under the terms of the existing contract.

r agenda
ly.

The estimated cost of construction is $74,550.
THE ENGINEERS' FEE IS 5.5% UNDER THE TERMS OF THEIR CONTRACT.

(THE ESTIMATE PREPARED BY THE ENGINEERS IS ATTACHED TO YOUR AGENDA ONLY.)

3572. Wiggins Complex (CPC No. 97-65)
(Schmidt and Stiles, Roberts and Messersmith)

Phase I

The Architects have proposed that certain details be omitted from Phase I construction and included in Phase II construction.

Consider the proposal as presented by Mr. R. C. Messersmith.

Phase II getting underway soon - south end of Commons area + east end of Coleman Hall treatment
Walks, sprinklers + parking
Complicated, involves 70% of [illegible], [illegible] it, info not available.
Could be $70,000 to $85,000, some would have to be put back in Phase II, probably could save some $20,000

our agenda
nly.

Estimated prices

2 letters Jim Milam
1. Storage
2. [illegible]

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

AGENDA FOR THE JOINT MEETING
OF THE CAMPUS AND BUILDING COMMITTEE AND CAMPUS PLANNING COMMITTEE
TO BE HELD AT 8:15 P.M. IN THE ANNIVERSARY ROOM OF THE
STUDENT UNION BUILDING ON THE CAMPUS
December 13, 1966

3562. Athletic Facilities (Paving North Parking Lot - Stadium)

The recorded acceptance date is August 31, 1966 ~~w~~ approved
OK

3563. Business Administration Building (CPC No. 98-65)
(Page, Southerland, Page)

Consider the bids received for the project. OK
approved a construction contract award to J. C. Hutch Construction Co. of Dallas, the low bidder, in the amount of $3,359,914.24 and authorized the chairman to sign the contract.

3564. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt & Vinther, Inc. - Engineers)
(Pitts, Mebane, Phelps and White, Architects) OK

A. Consider the presentation by the Architects of the progress to date.
approved the plans and specifications as developed to date and authorized the architects and engineers to continue the development.

tremely tight schedule;
Dec 17 - send reconstructed plans to HUD
MAR 9 - OUT FOR BIDS
MAR 30 - RECEIVE BIDS
APR 6 - START CONSTR.
JUNE 1 - ~~v~~ BOILER ERECTION
OCT 15 - HAVE STEAM
DEC. 15 - HAVE REFRIGERATION
JULY 6 1968 - TOTAL COMPLETION

B. Consider authorizing the Campus Planning Committee and the Engineers to study and prepare specifications and to take bids on accessory equipment necessary for the operation of the Central Plant. approved
bid basis
CRITICAL EQUIP. - LONG DELIVERY DATE.

3565. Consulting Architect OK

Consider approving the contract between the Board of Directors and Mr. Howard Schmidt. APPROVED

3 PHASES:
1. Programming new facilities -
2 Coordination of construction and planning by other architects - Y L M, BUS. ADM, BIOL, CHEM.
3. Master Planning -

~~3566. Engineering Survey~~ (Zumwalt & Vinther, Inc. - Engineers)

Consider the recommendation that the Engineers be authorized to keep the drawings up-to-date as the work progresses.

ARCHITECTS!

1. ARCHITECTURE BLDG -

2. LAW BLDG -

3567. Frenchmen's Creek Housing — NO

Progress Report

3568. Funds Available — up. report

3569. Museum (CPC No. 65-61) (Associated Architects and Engineers of Lubbock)

Progress Report

3570. Student Union Building Addition

A. Consider the recommendation that the intent to sell revenue bonds in an amount to be established be included in the application for Phase II of the Wiggins Complex. APPROVED WITH UNDERSTANDING THAT PLANS BE PREPARED FOR FUTURE ADDITIONS TO ACCOMODATE TWICE THE PRESENT ENROLLMENT AND THAT FINANCIAL ARRANGEMENTS BE OPEN ENDED IN ORDER TO ISSUE BONDS FOR FUTURE ADDITIONS. OK

B. Consider the recommendation that Mr. Howard Schmidt proceed with programming the facility in order that the amount of bonds necessary can be established. ? X

3571. Tunnels and Utilities Extensions - (Biology Building) OK

In order that utilities will be available for the building, consider the recommendation that the Engineers be authorized to begin the Design Phase of the work under the terms of the existing contract. approved

3572. Wiggins Complex (CPC No. 97-65)
(Schmidt and Stiles, Roberts and Messersmith) OK

Phase I

The Architects have proposed that certain details be omitted from the Phase I construction and included in Phase II construction.

Phase II will be so close behind Phase I.

~~Consider the proposal as presented by Mr. R. C. Messersmith.~~

South end of Commons area, west end of Coleman Hall, some of roads, parking and sprinklers) — approved to go ahead & see what can be worked out —

pc + architects and all possible practical economies),

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

MINUTES OF THE CAMPUS PLANNING COMMITTEE

Meeting No. 322 December 13, 1966

A meeting of the Campus and Building Committee of the Board of Directors and the Campus Planning Committee was held at 9:15 p.m. on December 13, 1966, in the Anniversary Room, Student Union Building, on the campus.

Members of the Building Committee present were Mr. Harold Hinn, Chairman, Mr. Herbert Allen and Mr. C. A. Cash.

Other members of the Board of Directors in attendance were Mr. Roy Furr, Chairman, Mr. Alvin R. Allison, Mr. Retha R. Martin and Mr. J. Edd McLaughlin.

Members of the Campus Planning Committee present were Mr. M. L. Pennington and Mr. Nolan E. Barrick.

Others present from the College were President Grover E. Murray, Dr. W. M. Pearce, Mr. O. R. Downing, Dr. James W. Kitchen, Mr. John G. Taylor, Mr. R. B. Price and Miss Jerry Kirkwood.

Mr. Howard Schmidt, Consulting Architect, was present.

Mr. Robert White and Mr. Walter Bowman of Pitts, Mebane, Phelps and White, Architects, and Mr. J. T. Worley of Zumwalt & Vinther, Inc., Engineers, were present for the presentation of the Central Heating and Cooling Plant.

Mr. Lothar Witteborg of Witteborg & Williams, New York, was present for the presentation of the Museum.

3562. Architecture Building

Project Architects

Approved the commissioning of Mr. O'Neil Ford of San Antonio as the project architect.

Mr. Ford could not be reached prior to the adjournment of the Board meeting but later said that he would be delighted to serve as the project architect.

3563. Athletic Facilities (Paving North Parking Lot - Stadium)

Approved the final acceptance date of August 31, 1966.

3564. Business Administration Building (CPC No. 98-65)
(Page, Southerland, Page)

Approved a construction contract award to the J. J. Fritch Construction Company of Dallas, Texas, the low bidder, in the amount of $3,359,914.24 and authorized the Chairman to sign the contract.

Bids which were opened and read aloud in the Physical Plant Auditorium at 9 a.m. on Tuesday, December 13, 1966, for the subcontracts and at 3 p.m. for the general contracts, are attached to and made a part of the Minutes for record purposes. (Attachment No. 692, page 3026)

3565. Central Heating and Cooling Plant (CPC No. 105-66)
(Zumwalt & Vinther, Inc., Engineers)
(Pitts, Mebane, Phelps and White, Architects)

A. Plans and Specifications

Approved the plans and specifications as developed to date and authorized the architects and engineers to continue the development.

3565. Central Heating and Cooling Plant (Cont'd)

B. Schedule

The architects, engineers, and Campus Planning Committee agreed that the time schedule is critical and that every possible step must be taken in order to expedite progress and assure compliance in order that heat can be available at the necessary time.

The schedule was presented to the Building Committee and is as follows:

February 17, 1967	- Send near completed plans to HUD for approval.
March 9, 1967	- Go out for bids.
March 30, 1967	- Receive bids.
April 6, 1967	- Start construction.
June 1, 1967	- Start boiler erection.
October 15, 1967	- Have steam
December 15, 1967	- Have refrigeration.
July 6, 1968	- Total completion.

C. Equipment

Authorized the Campus Planning Committee and the engineers to study and prepare specifications and to take bids on additional accessory equipment necessary for the operation of the Plant.

The delivery date on critical equipment has developed to the point that it is essential to order it with the least possible delay.

3566. Consulting Architect

Approved the contract with Mr. Howard W. Schmidt to serve as Consulting Architect.

There are three phases:

1. Programming new facilities.
2. Coordination of construction and planning by other architects, and prepare a manual of construction procedures at Texas Tech.
3. Master planning.

3567. Frenchman's Creek Housing

Declined to accept the offer of the Frenchman's Creek Corporation to form a nonprofit corporation to handle the proposed men's housing project across the street from Bledsoe Hall with the cash flow and eventually the facilities to go to Texas Tech.

3568. Funds Available

The informational report was presented and is attached to and made a part of the Minutes. (Attachment No. 693, page 3027)

3569. Law Building

Project Architects

Approved Harrell and Hamilton of Dallas as the project architects.

The firm could not be reached prior to the adjournment of the Board meeting but later Mr. Harrell said that he would be very happy to serve as the project architect.

3570. Museum (CPC No. 65-61) (Associated Architects and Engineers of Lubbock)

The subject was not reached at the Building Committee meeting but informational presentations to the Board were made by Mr. Howard Schmidt, Coordinator, and Mr. Lothar P. Witteborg of Witteborg & Williams, Inc., of New York.

Mr. Schmidt covered the site and acreage, the history, original plans, the ICASALS announcement, and flow diagram.

Mr. Witteborg explained the idea of the International Center, the exhibits, more meaningful displays, outdoor exhibits, a tentative study of the 70 acres, various types of housing showing the countries with arid and semiarid lands and the crops and water, the outer buildings, accessories, etc.

3571. Student Union Building Addition

Approved the inclusion of an amount to be determined by the Campus Planning Committee, with the help of Mr. Howard Schmidt, in the application for Phase II of the Wiggins Complex, with the understanding that the plans will be prepared for future additions to accommodate twice the present enrollment and the financial arrangements will be open-ended in order to issue bonds for future additions.

3572. Tunnels and Utilities Extensions (Biology Building)

Approved the recommendation that Zumwalt & Vinther, Inc., the engineers, be authorized to begin the design phase of the work under the terms of the existing contract.

3573. Wiggins Complex (CPC No. 97-65)
(Schmidt and Stiles, Roberts and Messersmith)

Phase I

Authorized the Campus Planning Committee and the architects to find all possible practical savings in omitting details on the south wall of the commons area and west end of Coleman Hall, and some of the walks, parking and sprinklers in Phase I of the project.

Jerry Kirkwood
Coordinator

The meeting adjourned at 11:45 p.m.

3026

Campus Planning Committee
December 13, 1966
Attachment No. 692
Item No. 3564

BID TABULATION
Project No. Tex. 4-1708

December 13, 1966, 3 p.m., C.S.T.
Location: Auditorium
Physical Plant Building
80 Interested Parties

GENERAL CONSTRUCTION

BUSINESS ADMINISTRATION BUILDING TEXAS TECHNOLOGICAL COLLEGE LUBBOCK, TEXAS

BIDDING FIRM	BOND	ADDENDA	BASE BID	PERCENTAGE OF SUBCONTRACT AMOUNTS FOR ASSUMING TOTAL PROJECT
J. M. Odom Austin, Texas	NO	BID		
Area Builders, Inc. Odessa, Texas	X	X	$2,566,660	3½%
H. A. Lott Co. Houston, Texas	X	X	2,460,000	3%
Avery Mays Construction Co. Dallas, Texas	X	X	2,566,200	2½%
Warrior Constructors Houston, Texas	NO	BID		
T. C. Bateson Co. Dallas, Texas	X	X	2,582,900	4½%
J. J. Fritch Construction Co. Dallas, Texas	X	X	2,412,700	1½%
Harmon Construction Co. Oklahoma City, Oklahoma	X	X	2,511,788	2%

3026A

BID TABULATION
PROJECT NO. TEX. 4-1708

December 13, 1966, 9 a.m., C.S.T.
Location: Auditorium
Physical Plant Building
99 Interested Parties

PLUMBING; HEATING, VENTILATING & AIR CONDITIONING

BUSINESS ADMINISTRATION BUILDING TEXAS TECHNOLOGICAL COLLEGE LUBBOCK, TEXAS

Bidding Firm	Bond	Addenda	Plumbing	Heating, Ventilating & Air Conditioning	Combined Heating, Ventilating, Air Conditioning & Plumbing
George Linskie Co. Dallas, Texas	X	X			$611,889
Burden Brothers, Inc. Dallas, Texas	X	X			578,000
Beals Mechanical Contractors Ft. Worth, Texas	X	X	$132,700	$446,700	565,400
Drew Woods, Inc. Carthage, Texas	X	X			534,000
The McCally Co. Dallas, Texas	X	X	150,000	505,000	627,700
Armstrong Corp. Dallas, Texas	NO	BID			
Roche Newton & Co. Lubbock, Texas	X	X			535,757 + 3,000 = 538,757
Rountree Company Lubbock, Texas	X	X			564,000
Harry Fortune Co. Ft. Worth, Texas	X	X			663,000
Kasch Brothers, Inc. Big Spring, Texas	X	X			573,000
Natkin & Company Dallas, Texas	X	X			646,904
Wattie Wolfe Co. Oklahoma City, Oklahoma	NO	BID			
C. Wallace Plumbing Co. Dallas, Texas	NO	BID			

3026B

BID TABULATION
PROJECT NO. TEX. 4-1708
ELECTRICAL CONSTRUCTION
ELEVATORS

December 13, 1966, 9 a.m., C.S.T.
Location: Auditorium
Physical Plant Building
99 Interested Parties

BUSINESS ADMINISTRATION BUILDING TEXAS TECHNOLOGICAL COLLEGE LUBBOCK, TEXAS

Bidding Firm	Bond	Addenda	Electrical Work	Elevators	Remarks
Amco Electrical Co. Lubbock, Texas	X	X	334,496		
John C. Pickett, E. E. Lubbock, Texas	X	X	354,983		
Tarver Electric Co. Lubbock, Texas	X	X	336,500		
Duke Electric Company Amarillo, Texas	X	X	331,416		
Watco Electric Company Lubbock, Texas	X	Not Acknowledged	347,572		
Clark Electric Company Lubbock, Texas	X	X	353,709		
Westinghouse Elevator Division Dallas, Texas	X	X		67,800	
Hunter-Hayes Elevator Company Dallas, Texas	X	X		81.200	
Otis Elevator Company Dallas, Texas	X	X		76,778	
Esco Elevators, Inc. Ft. Worth, Texas	X	X		76,292	

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Campus Planning Committee
December 13, 1966
Attachment No. 693
Item No. 3568

TEXAS TECHNOLOGICAL COLLEGE
Lubbock, Texas

Present and Proposed Building Program
(Does Not Include Auxiliary Enterprise Projects)

December 12, 1966

Estimated Total Funds Available

1958-66 Constitutional Tax Funds	$ 1,500,000
1966-68 Constitutional Tax Funds	10,730,000
Interest on Investment of Tax Funds	383,000
Possible Proceeds from Skiles Act Bonds	2,510,000
Possible Proceeds from Building Use Fee Bonds	2,510,000
Possible Proceeds from Power Plant Revenue Bonds	3,120,000
Approved Facilities Act Funds	5,140,512
Possible Additional Facilities Act Funds	1,018,495
Estimated Total Funds Available	$26,912,007

Building Projects

		Project Total	Accumulative Total
Previously Completed or Near Completion		$ 449,668	449,668
Foreign Language-Mathematics		1,391,397	1,841,065
Power Plant and Utility Extensions	$4,935,332		
Less:			
Amount in other projects	944,455		
Amount to be charged to Wiggins Complex	277,018	3,713,859	5,554,924
Business Administration		4,565,066	10,119,990
Museum		500,000	10,619,990
Law School		3,055,485	13,675,475
Biology		4,669,615	18,345,090
Chemistry		4,327,707	22,672,797
Home Economics		3,174,882	25,847,679
Architecture		4,414,653	30,262,332
		$30,262,332	