

GROVES

A C E N T R A L B R A N C H

YMCA

f o r t w o r t h , t e x a s



A CENTRAL BRANCH

Y

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Fort Worth, Texas

Architecture 425

May 24, 1967

Robert T. Groves

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I would like to extend my thanks to each member of the design faculty who helped me to bring this problem to a successful design solution. I offer my thanks to each member of the preliminary juries who helped me at these points by pointing out problems that I had not seen, points that I had not considered, and further considerations that I needed to make. I would also like to thank those instructors who gave me individual help at different points throughout the process of development, most particularly Mr. Verkler, Mr. Harley, Mr. Vidaud, Mr. Warren and Mr. Troy. My thanks are also expressed to the three design faculty members who were our design instructors in the lab, Mr. Stewart, Mr. McCutcheon, and Miss Morse. Special thanks are extended to my advisor, Mr. Robinson, who gave me so much help and guidance as the design solution developed.

INTRODUCTION

This written thesis is prepared as a supplement to the design or graphic thesis which was completed this semester in Architecture 461. It is an extension of the written work which was begun with the program done in Architecture 422 in the fall semester. The intent in this composition is to further elaborate on the problems that were posed in the first part of the written material, show how these problems were solved, make any revisions or additions that are necessary to the program, explain the analysis and development which went into solving the problems in the design thesis, and finally to make a written presentation which will more fully explain the ideas, investigation, research, and criteria which went into the final design. This written thesis will also define the stages of development which occurred in the design and give some insight into the evolution of the design, revisions that were made and the elements which make up the final solution.

The clearest method of presentation for the above ideas is to first present the points about the problem which did not change in any great respect and then trace the evolution of the design through four sections which correspond to the four preliminary presentations which we made throughout the semester. The following thesis will follow this general pattern.

THE SITE

The site remained the same as that chosen in the program done in the fall semester. Additional research into the site selection only strengthened the choice as the correct one for the project being done. As stated in the program, it offered excellent parking facilities close to the facility itself, was easily accessible to all parts of the city, and is within easy walking distance of the Downtown Business Community. One additional bit of information was uncovered however which also improves the choice of this location. The streets which bound the site on the East and the West are to be part of the loop system which is to be developed in the downtown area in the near future. This loop will be a system of city streets, one moving clockwise and the other counterclockwise, which will be given right of way from all streets that cross them. The proposed loop will make Lamar Street on the East of the site one way going South and Burnett Street on the West of the site one way going North and will further facilitate access to the site from anywhere in the city.

The site upon which I was able to build is 200 feet long in the North-South direction and 220 feet long in the East-West direction. I also discovered that adequate utilities were available to the site for the size facility which I programmed to provide. Ample gas and electric lines were available as well as adequate sanitary and storm sewers and water supply lines.

CONCEPT

My original concept for this problem has several parts and these several have, for the most part, been incorporated into the final design solution.

The first and perhaps the most important was to try to develop a distinctive character for the YMCA in downtown Fort Worth. I wanted it to be something which would, as nearly as possible, reflect the stated purpose of the YMCA; to develop the body, mind, and spirit of each of those who used its facilities. I felt that this might be realized in several ways. One, it might be developed by making a very strong, positive structural statement which would be realized from the outside as well as from the inside wherever possible. Two, the design of spaces well suited to their individual purpose might also help to develop the desired character. Three, the use of different materials to accent these differences would let each space have its own individual character and yet not diversify the materials so much that the whole complex would become an amalgamation of different parts none of which related to any of the others.

Secondly, I thought that the use of landscaping and green areas both outside and inside the complex could help to establish the mood, character and spirit that was desired. This would give the YMCA a character which no other building in the downtown area has and would provide a desirable green area in the predominately grey and hard atmosphere of the Central Business District. I thought that if a "green belt" could perhaps encircle the entire complex and provide needed relief from this atmosphere as well as accent for entrances that I would have indeed created a distinctive atmosphere.

A third consideration that I thought should be made was to try to provide a better atmosphere for the participation in the activities and in the experience of moving from one space to another within the complex. This idea developed into the concept of trying to stay away from as many corridor type situations as possible. In every space in which it was possible, I thought that I should let the person move through the space itself and not in a hall outside the space. Also, if I should be able to incorporate interior court or courts into the complex, I should let these be a part of the experience of moving in the complex.

Fourth, I also wanted the character of the complex to be one of excitement and experience and not one of relaxation, although there should be some spaces for relaxation. One way to obtain this result was to try to keep the circulation paths as simple as possible and yet let the viewer experience as much of the atmosphere as possible. The possibility of bringing the participants in with green areas and then letting the green areas penetrate into the building also added to this feeling of excitement and experience.

As an overall statement, my idea was to try to create and design the best YMCA possible which fulfilled the functional requirements and yet also fulfilled the spiritual and mental requirements of the facility. I knew that there would be problems to do this within the limitations which I had set but this was my concept of the problem and the beginning of the design solution. From here the actual design started and as we progress we will see how the product took shape.

THE DESIGN PROCESS

STAGE I

Stage one of the design covers the time and investigation up to the introductory jury. In this presentation, my purpose was to acquaint the members of the jury with what problem I had chosen to study as a thesis, give them my basic requirements as outlined in the program, and also acquaint them with as much of the facts and data that I had compiled as possible. At this time I also wanted to present the site which I had chosen and the reasons why I had chosen it.

A considerable amount of additional research had been accomplished during the time between the submittal of the program and the time of the preliminary jury. A trip had been made to the site and another talk had been held with members of the staff at the present Central Branch YMCA in Fort Worth. Certain parts of the program had been discussed in detail and some additional material was incorporated into the program at this time and some of the program material was taken out. For instance, discussion with the personnel at the YMCA and further investigation led to the conclusion that an auxiliary gymnasium in which gymnastic equipment such as parallel and horizontal bars could be hung and in which classes could be held when the main gymnasium was in use would be a desirable element in the complex. As another example, with the swimming program set up as it would be with the beginning swimming being taught in the community branches, the program requirements for three pools would be rather unrealistic and it was decided to provide only one pool which would be a seventy-five yard competitive pool with six swimming lanes. This change in program would adequately serve the requirements of the Central Branch. One other element of the program was also altered prior to the first

presentation to the jury. It was also decided that with the present requirements and location, a cafeteria would not necessarily be a required element in the complex. A snack bar which also served plate lunches would in fact be more desirable since the complex is in the downtown area where numerous cafeterias and cafes are immediately accessible to the site. The snack bar would be somewhat enlarged to include some table space and a slightly larger kitchen would be needed than for the Snack Bar only but this increase would serve the purpose of a place to eat within the building.

This then was the stage of the design at which the first or introductory jury occurred. At this presentation, I showed a map of the city which showed the location of the seven community branch YMCA's and their position with respect to the Central Branch facilities and explained the site selection and the reasons for the selection. Detail about the site conditions was also presented as well as a quick summary of the program to acquaint the jury members with what work had already been completed. No attempt was made at this time to present any design solutions or even attempts at solutions other than schematic diagrams of the areas and their relation from an access point of view.

STAGE II

The next stage of the design development covers that work done between the introductory jury and the first preliminary jury.

After the first jury presentation and a discussion with my advisor, it was decided that the best route to take to try to arrive at a solution would be to draw up plans and sketches of as many spaces as possible and try in these to idealize what these spaces might be if there were no limitations and they were just individual spaces. Two weeks were spent on this phase of the design process and in this two weeks, most of the spaces were thought out and drawn up. I knew that some changes and revisions would be necessary when the attempt to put these spaces together was made but never the less, as many of them as possible were kept in the design. Room layouts and placement for the residence rooms were done, layouts for the youth and the adult lounge areas and control over these were sketched up, the desirable character for these rooms as well as the office and meeting rooms and classrooms was considered and larger spaces such as the pool and gym areas were analyzed considering the activities which were to be carried on in them.

After this two week period, I started trying to coordinate these spaces and incorporate all of them into a workable plan, keeping in mind the original concepts which I have already stated. At first this did not seem to work very well because I was trying to force the idealistic drawings I had done onto the site. I was crowding the spaces together on the first floor as though I couldn't put anything but residence rooms on the upper floors. I was also trying to let the swimming pool

project through the first floor and somehow arrange the gymnasium on the first floor so that the two worked harmoniously and yet left space enough for the other functions on the first floor also. Soon I abandoned this idea and began to consider the different parts of my building and how they should relate to the site. Then I zoned the site as to where certain spaces should be and how they should be oriented in relation to the site, the function of the space and to the approach to the complex. I spent some time on this and eventually came up with a schematic of the building on the site which worked. I placed the administrative areas and the adult-oriented activity areas on the northeast corner of the site oriented in an east-west direction, the residence rooms above the latter area also oriented in an east-west direction to avoid direct east west sun into the spaces. This then would let the swimming pool occupy the southwest corner of the site with the youth lounge in front of it on the southeast corner with its own private entry to avoid the cross-circulation between the adult spaces and the youth spaces. At this time the gymnasium was placed over the youth lounge and the swimming pool along the south side of the site.

It was this idea that I presented to the first preliminary jury. I had only worked up two of the floor plans and several of the sketches of the spaces for the presentation. The plans presented were the first floor plan and the basement floor plan. Admittedly, at this time the plans were still weak and forced but they did serve one valuable purpose; that of conveying to the jury just what it was I had in mind and how I was approaching the problem. My criticism at this jury was that I had created spaces in the planning that were no better

than those that I proposed to replace. I had made some of the same mistakes that had been made when the existing facility was designed and had created some spaces which were no improvement at all. This was partially the fault of trying to keep some arrangements that were similar to those that I was personally familiar with and not taking a whole new approach to my individual problems and requirements. The jury thought that the idea of idealizing the spaces was a good idea but that I had not carried enough of these idealized spaces into the drawings presented.

Several suggestions were made which were very helpful in going on to the next stage of design. One was that I should work more in the entire problem; that is, I should work not only from a planning standpoint but should try to work from the inside and the outside of the building at the same time. In doing this, I should let a little of each be reflected in the other. It was from this point that I started into the third stage of the design solution.

STAGE III

Stage three of the design process covers the work done between the first preliminary jury and the second preliminary jury presentation.

Taking the suggestions made to me at the first preliminary jury presentation, I went back to work trying to forget all that I had seen in other YMCA's and designing from my concept of the problem and the criteria that I had to work with. I began to try to move from the inside of the problem to the outside and then back again. This way of approaching the problem began to give me the results that I had desired all along.

The basic floor plan and the units for the residence tower worked out so that I had ten residence rooms with bath and six residence rooms with joint bath facilities on each floor. This meant that the tower part of the complex would be nine floors high to give me the desired programmed residence room space. In the joint bath wing of the tower, the residence rooms would contain 192 square feet which would contain a bed, night stand, end table, chair, and a built in unit containing a desk with drawers, a four drawer chest, and a closet with rod and shelf. The bath facilities would be at the elevator end of these rooms across from the elevator lobby and would contain two water closets, two urinals, two lavatories, and a gang type shower with two heads. The other end of the tower would contain the residence rooms with bath facilities. These rooms would contain the same furniture but the square footage would be increased by the amount of the bath. The bath facilities would contain a shower, a water closet, and a lavatory with shaving mirror and cabinet above. In this type of arrangement, the elevator mass and the restroom facilities for the joint bath rooms would form a strong vertical solid mass to connect the more broken up,

horizontal massing of the residence rooms themselves. I also decided at this time to elevate the tower above the administrative and adult sections of the facility and skylight the interior court which would be created below.

Along with the development of the tower, the areas in the adult section of the YMCA including the adult lounge and the TV lounge, the chapel, library, and the main information and control desk were arranged around an open interior court. This was not open to the outside except thru skylights but it was open for the three stories of this part of the complex. The three story unit contained not only the spaces listed above but on the second floor contained the snack bar and kitchen with the necessary storage, three club meeting rooms and both the Central Branch Offices and the Metropolitan Offices as programmed last semester. In this scheme of the design, the administrative and adult section of the complex and the tower were pushed back from Lamar Street and the main entry to the complex was located just to the South of the large firestair massing on the front of the tower. This gave the rest of the site in front of this unit to a landscaped courtyard which would accent the entry. The gymnasium, swimming pool, and youth lobby mass was then pulled forward to the front of the site along the South side to further define the entry. Service would be accomplished and handled on the Northwest corner of the site with entry from either 4th Street or Burnett Street.

This then is the stage the design solution was in when it was presented to the second preliminary jury. Plans for the above solution were presented along with several elevations of the east side of the complex (the main approach side from the downtown area). Several problems were pointed out by the jury in the connection of the two

strong masses which seemed to be competing in importance in this arrangement. No particular conflict was brought up about the plan and the way this was working out, but it was the feeling of the jury that the connection which was necessary between the two masses left much to be desired visually. There was agreement among the faculty members that I seemed to be moving along toward a solution to the building in plan but that I should also make more studies on the exterior appearance of the masses and see what the building looked like all the way around.

Two other points were presented to this the second preliminary jury which had been decided on since the last presentation. The selection of reinforced concrete for the structural system had been made and it had also been decided that a strong statement of structure softened somewhat by the green and planted areas would help to create the desired character for the complex. This too seemed to meet with the approval of the jury if it was well handled. The second point that was presented was the use of the interior court to set the character for the completion of the mind, body, and spirit purpose of the YMCA. It was submitted at this time that the furnishing of athletic facilities satisfied the "body" part of this stated purpose and that educational facilities and programs would do the same for the "mind" part of the purpose. The third (spirit) of the three points seemed to be a hard thing to satisfy until it was realized that the character of the building both interior and exterior could achieve this goal if properly handled. These two ideas seemed to meet with the approval of the jury again if they were properly handled.

STAGE IV

The work covered in this section will be that work done between the second preliminary jury and the submittal of the final design solution. It will also include a summary of the design solution and the presentation to the final jury.

After the second preliminary jury, I still had much work to do. I decided that there should be some way to better use the building masses that I had created and that in better using these I should be able to solve the connection problem that I had in the massing and arrangement that I had presented. I was fairly well satisfied with the design that I had and I felt that I had solved the problem of what each of the spaces needed to be in relation to function and access but I was not yet satisfied with the overall massing of the complex or the relation of the masses and spaces to the site. Soon after the jury presentation had been made, I reorganized the arrangement of spaces in the gymnasium part of the complex so that the mass was less rectangular and of more pleasing proportions in relation to the tower and administrative areas. Then I moved the swimming pool mass from the far Southwest corner of the complex up to the middle of the South side and let the solid wall at the East end of this mass help to define a large entry court on the Southeast corner of the site. This move allowed me to place the youth lobby in the corner where the pool had been and give it its own private entrance completely separate from the adult entry to the complex. This would also be more logically the point from which most of the people who would use this space would be arriving. This then placed the gymnasium over the youth lobby and part of the swimming pool toward the back of the site and allowed me to continue the

landscaped area completely around the building. In this scheme, the service access to the site would be from Burnett Street into a service court in which the service elevator and therefore service access to the entire complex would be located.

This final scheme also allowed me to create some large planted courts with a progression of areas which would lead the person into the complex. The previously mentioned large court on the Southeast corner of the site would be heavily landscaped near the outside of the site and this would progressively become less dense and also smaller in scale as it approached the main entry to the building. The other side of the main entry walk would also be landscaped to lead into the entry and then a smaller planted area would turn the person into the entry itself.

Another point about the final design solution is that the entry has been set back to where it enters into the middle of the interior court allowing the experience of almost all of this space immediately. This also keeps from taking a large portion of the court for circulation as would have occurred in the other scheme and brings the person in near the control and information desk. In this manner, all entry into the major portion of the complex is into one rather confined area which eases the control problem.

The entrance to the complex for those whose major interest is the residence rooms is located on the North side of the building immediately to the West of the strong vertical mass of the elevators. This entry too is accented by planted areas and is canopy covered.

In this final scheme, the tower and administration and adult areas remained in their same positions while the pool, gymnasium, and youth

lobby areas were moved to achieve the desired visual and functional relationships.

The original design concepts which were outlined and explained at the first of this thesis were all incorporated into the final design solution. Through the use of planted areas, a strong structural character and the juxtaposition of the elements of the design, I have created a strong distinctive character for the Central Branch YMCA. The incorporation and use of these green areas in themselves both inside and outside the complex would set a distinctive character for the building in relation to its surroundings. The openness of the interior spaces and particularly the circulation spaces is in keeping with my original concept of what these spaces should be to create the desired atmosphere and spirit. The design solution is also successful in reflecting the three points of the YMCA's stated purpose; that of helping to develop the mind, body, and spirit of all those who use the facilities. This, I think, has been reflected not only in the exterior character but also in the planning, the use and harmony of materials used, and in the spaces and atmosphere which have been created.

Summary

The final design solution was presented graphically on twelve 20 x 30 boards. The attempt here was to try to portray graphically the necessary information to explain fully the elements of the design and the overall solution to the problem. I would like to give some of the background to this presentation and then a short summary of the oral presentation which accompanied the graphic presentation. As I stated earlier, my thesis study was to design a Central Branch

Board three

Board three shows the East Elevation which is the side which faces the Downtown Business Community and shows the major entry to the complex as well as the large exterior court accenting the entry. The perspective drawing here illustrates the interior court which is open to the three floors of this part of the complex and which is lighted during the day by skylights at the third story level.

Board four

This is the North Elevation which shows the entry to the lobby for residence room patrons and the court area which defines and accents this area. Here again the massing of the different elements is apparent.

Board five

This drawing is of the West Elevation which shows the exterior of the youth lounge and the service entry to the complex as well as the massing of the different parts of the complex. Also, a dimetric schematic of the mechanical system for the building.

Board six

This is an overall perspective view of the complex which shows three dimensionally the massing and the unity of the parts of the final design solution. This view shows approximately what would be seen from one of the buildings downtown.

Board seven

The Basement Plan and some of the spaces which are located here

YMCA for Fort Worth, Texas, which would serve not only the current needs of this facility but also the needs of the future. My concept for the development of this design solution was to try to develop a distinctive character for the YMCA through the use of landscaped areas both inside and outside the complex, a strong structural statement, the use of materials, textures and light, and the development of spaces suited to their individual use. I also wanted to create an atmosphere of excitement and experience through the use of structure and landscaping and opening the spaces up as much as possible so that corridor type situations were cut to a minimum.

These are the basic ideas that I started with and the graphic solution which follows will show how these ideas were implemented into the design.

Board one

The drawings on the first board show the site that was selected, its location near the Downtown Business Community, and how the building relates to the site. The location map also shows the connection from the surrounding city with the site. The site plan pinpoints the location of the site and shows the development of the "green belt" around the building including the two major court areas.

Board two

The drawings on board two show the South Elevation including the massing of the different elements of the complex, the tower, the adult and administrative area, the pool and gymnasium, and the youth lounge. The perspective on this board is of the youth lounge showing one of the games areas.

are shown on this board. The circulation areas are defined and the egress and ingress to each space are shown. The two perspectives give some idea of the character of two of the spaces which are hardest to develop character in and show how these spaces have been treated.

Board eight

This is the board which most clearly shows the landscaping and the interior court areas . It is the Ground Floor Plan and also shows the relationship between the adult and the more public areas, the three entries to different parts of the complex. Drawings of two of the areas are also included here; the entry lobby and a reading and conversation area in the TV lounge. The grouping of the stairs for the complex into one core area and the circulation paths are also evident here.

Board nine

This board shows the second floor area and the spaces that are on this floor. The administrative areas of the complex occupy the front or east side of the complex with the clubrooms, snack bar, and the kitchen set further back toward the stairs and elevators. The service access is also evident here immediately accessible to the storage room for the floor. The stair connections to the second floor and gymnasium areas are in this plan as well as the location of the handball courts, auxiliary gymnasium, gymnasium storage and gymnasium mechanical area. An open air patio is also located immediately adjacent to the second floor area above the residence room entry.

Board ten

This board shows the Third Floor Plan and its arrangement of meeting/classrooms and the party room which may be divided into two spaces if necessary. The Tower Floor Plan is also shown on this board and the arrangement of the two types of residence room spaces, the joint bath facilities and the location of the elevators are evident here in relation to the roof areas immediately below the tower. A blow-up plan of the residence room with private bath facilities is also shown.

Board eleven

Board eleven contains two sections thru the complex showing the type of structural system used and the relationship of spaces to one another. One of these is cut thru the gymnasium and one of the residence room with joint bath facilities and the other is thru the administrative wing of the complex and one of the residence rooms with private bath facilities.

Board twelve

Board twelve contains another section thru the gymnasium and swimming pool areas and details of the structure including wall sections thru the residence room with private bath facilities and the administrative wing exterior walls. The details are from the gymnasium showing the floor structure and the construction of the running track above the gymnasium floor.

This then is a summary of what the graphic presentation consists of and leaves only two other things to cover to finish the supplement to the graphic thesis; structure and mechanical.

STRUCTURE

As previously stated, the structural system chosen for the thesis problem is reinforced concrete. To further elaborate on this structural system, a post and beam situation in concrete is used in the administrative and adult wing of the building and in the tower. This system was chosen because of the form of the design solution and the strength and excitement which this would impart to the character of the complex. In the gymnasium and swimming pool areas however, the spans and depth of structural members required with post and beam construction became too great so prestressed concrete structural tees were used to span these spaces and then the mechanical system was integrated into the open web areas. Where the gymnasium is above the swimming pool and columns are not allowable, the ends of the structural tees and the loads from them are picked up on a 48 LH 14 Long Span Steel Joist and transmitted to the columns which are in the swimming pool wall. In the tower, as I said before, the structural system is post and beam. The exterior wall surfaces are precast, insulated, two inch, insulated Mo-Sai panels which are set in place on the concrete frame and then used as forms against which the four inch concrete walls are poured with the anchors for the panel mounted in the wall. Similar Mo-Sai panels are used throughout the structure where panels are needed. The glass units are windowall units and are the same size throughout the entire complex so that all of them could be made up at the same time and delivered to the job site. The exterior walls of the elevator and restroom masses and the firestair masses are concrete poured walls which are bush-hammered to a rough textured concrete finish which would eliminate the floor joints being visible.

MECHANICAL

For the mechanical system for my building, I selected an air-water system using induction units in the individual spaces which would connect to hot and cold water pipes run from the central mechanical room. Two central units are employed in this complex; the room servicing the tower floors is located in the penthouse and feeds down to the rooms below. The largest mechanical room is located in the basement and would serve the rest of the complex with the use of booster units in the gymnasium and swimming pool areas because of the large volumes of air to be handled. Due to the somewhat changeable climate in Fort Worth, a four pipe system would be more practical and more efficient. The four pipes, hot water supply and return and cold water supply and return, would run in the mechanical chases up from the mechanical room to the lower three floors and then out into the drop ceiling space in the corridor and connect to the units in each space. In the tower, the pipes would run down from the mechanical room and run in the drop ceiling space over the hall and feed into the induction units which would be located above the bath in the rooms with private bath facilities and above the closet in the rooms with joint bath facilities. The temperature of each space would be controlled by a thermostat in the individual space and the control of the volume of air would be left to the occupant. The major part of the room thermal load in either space is balanced by the warm or cool water circulated through the induction units.

This type of mechanical system would require a boiler and a refrigeration machine in the central mechanical room as well as a cooling tower which would be located in the court on the Northwest

corner of the site immediately behind the firestair mass. For this size of installation, a centrifugal refrigeration machine would be used and the prime mover would be an electric motor. Calculations have been made on the amount of space required for this type of system and adequate space has been provided both in the mechanical rooms and in the mechanical chases.

ILLUSTRATIONS

Program for

A CENTRAL BRANCH YMCA FACILITY

for

Fort Worth, Texas

Architecture 422

January 21, 1967

Robert T. Groves

"The YMCA is a powerful force for good in the United States. It helps youth--all youth. It reaches out to where they are..... serves all ages and races, all creeds and economic levels. In their "Y" clubs, boys and girls give and take, create their own programs and solve problems together....and all the time they have fun while learning the fundamentals of our American Way. I know of no better citizenship training."

Dwight D. Eisenhower
34th President
United States of America

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PREFACE

"A Central Branch of the YMCA should be located in the inner city and designed to give special services to the Downtown Business Community, people living in the inner city and to the entire Metropolitan Area."

CENTRAL BRANCH YMCA FACILITY RECOMMENDATIONS
Fort Worth, Texas January 18, 1967

It is in keeping with this recommendation of the Central Branch Committee and previous actions and developments in cities of this size throughout the United States that this problem is approached. It is my purpose to try to develop a comprehensive program which will include all requirements, activities, and considerations necessary to the completion of a successful solution for a Central Branch YMCA for Fort Worth, Texas.

REASON FOR SELECTION OF PROBLEM

I have long been interested in the YMCA programs and I have in fact been a participant in the YMCA's programs for approximately 12 years. I was, however, disappointed in the facilities I found in Fort Worth when I moved there in 1963. I found the facilities to be out of date and woefully inadequate for the job to be accomplished. The facilities were also somewhat depressing in character.

Investigation has disclosed that the existing Central Branch was opened in 1925, after the YMCA's second and last capital fund campaign. It was also learned that the need for better facilities has been recognized and that, in fact, a capital fund drive has been initiated to remodel existing facilities and build better branch YMCA's in six locations throughout the city.

A new facility would be more desirable to solve the problems of the Central Branch and give the YMCA the image it should have.

It was for these reasons that this particular problem was chosen for a thesis problem.

HISTORICAL DEVELOPMENT

General History

The YMCA was started in London in 1844, during the Industrial Revolution by an English farmboy, George Williams, who called twelve of his contemporaries together and asked them if they would be willing to make a Christian sacrifice with him. They readily accepted his proposal and thus was begun the Young Men's Christian Association. At first it was only a religious organization dedicated to the advancement of religion, with none of the facilities or activities now associated with the YMCA, and was limited to members of certain recognized religions.

The idea soon caught on however, and the movement spread to other parts of England and other countries. Six years later, in 1851, Associations sprang up almost simultaneously in Montreal, Canada and Boston, Massachusetts; thus bringing the YMCA to the United States. Here too the movement spread rapidly. In 1856, the "Y" sponsored prayer meetings in downtown New York. In 1857, Association work with students was begun at the University of Virginia.

The YMCA also served in the War between the States. The "Y" was, in fact, the first organization to provide large scale aid to troops of both North and South in battle. When the war was over, the YMCA converted the cannonballs used in war into barbells to be used in the development of physical fitness. In 1869, one building in San Francisco and another in New York, both of which

included gymnasiums in their facilities, was opened.

Fort Worth History

In 1890, Fort Worth was already an important transportation center of the Southwest, being served by eleven railroads. The city directory boasted that Fort Worth was a city "unsurpassed for energy, push, enterprise, and pluck."

On March 1, 1890, P.M. White, superintendent of city schools, stimulated by a revival at the Taylor Street Presbyterian Church, led a group of civic leaders in organizing the Fort Worth Young Men's Christian Association. One month later, the Fort Worth YMCA moved into its first permanent building; a rented office in two rooms on the second floor of a building on Houston Street between 3rd and 4th. At the end of its first year of operation, it had a membership of 176, an average daily attendance of 65, five Bible classes, 16 training classes, and 115 gospel meetings. The YMCA then bought a Gospel Wagon, mounted an organ on it and, with five young men donating their time, sent it around to out-lying communities to do evangelistic work.

Soon after 1900, the "Y" started its first capital funds drive. It was successful and in 1905, the Fort Worth YMCA moved into its own building erected at the corner of Texas and Monroe Streets. These new facilities, built at a cost of \$56,000 contained a small gymnasium, swimming pool, bowling alleys, 21 dormitory rooms, and an adjoining athletic field. At the end of the first year, the membership had grown to 789 and soon,

even though a third floor was added, the facilities were too small.

The Fort Worth YMCA initiated its second and, until now, last capital funds campaign in 1922. It's successful completion, plus the donation of her family homestead by Mrs. Elizabeth Scott, resulted in the erection of the present Central Branch facilities on the corner of Fifth and Lamar in 1925, at a cost, including land, furnishings, and the building, of \$385,000. This building included 124 residence rooms, a small gymnasium, swimming pool, club and social rooms, health club, banquet rooms for civic and business meetings, a sundeck and lobbies. It contained 46,000 square feet and was four stories tall.

This is the building now serving as the Central Branch of the YMCA in Fort Worth. It has been changed and converted to meet the growing YMCA needs. The dining room has now been converted into a health club to serve present demands and this space is ill-suited to the activities carried on there. Sections of the lobby, game, committee, handicraft, and residence rooms have been converted into office space for both Central Branch staff and the newer Metropolitan staff. The Youth Lobby has been converted into an auxilliary gymnasium despite an unsatisfactory floor. Offices are scattered throughout the building with access to one office, for instance, being through the gym.

This condition has been brought about by the increased use of the facilities. The membership in January, 1926, less than a year after the opening of the new facility, was 1,830. In 1963,

the membership was 13,027 and group attendance was 333,065, yet this increase was still being handled in the same building. The only aid to the Central Branch in the past 40 years has been the establishment of branch facilities in seven locations throughout the city; most of which are only places to store athletic equipment and offer no indoor facilities or program. Central Branch provides administrative space for all. Yet, even with these limitations, the yearly memberships total more than 17,500 and total aggregate participation is approaching 1,000,000. This summarizes the present situation.

THE FUNCTION OF A CENTRAL BRANCH

As indicated by the preface to this program, the Central Branch Committee has made certain general recommendations which they deem necessary for the Central Branch to fulfill. These are briefly outlined here and explained. These will be the functional requirements for which the physical facilities and spaces must be planned.

Health Center and Physical Education

The Central Branch should be a health center and physical fitness center for men in the Downtown Business Community and throughout the Metropolitan area. It should also be a training center for leaders in "Y" Branches and other organizations in Physical Education, class instruction and recreation.

Special Program for Youth

The Central Branch should have specialized skill development programs for youth and adults to develop skills to a higher degree. It should also provide space for athletic competition in such things as gymnastics, swimming, basketball, volleyball and other events.

Leadership Training

The Central Branch should provide facilities and direction for leadership training programs and personal development for people in other community groups, other "Y" Branch groups and the total community. It should also supply facilities for small committee and club groups meeting in the interest of the community and considering matters of civic development and growth.

Services to Inner-City Youth

The Central Branch must develop an athletic, educational, and guidance program which meets the needs of youth living in the inner city who use this central facility as their branch YMCA.

Headquarters for Metropolitan Offices and the Association

The Central Branch must provide office space for the Metropolitan staff and general services to the branches such as accounting, purchasing, records, coordination of activities, and basic programming of activities.

Social Services

The Central Branch should provide residence facilities for those who wish to use them. These should be of such a nature as to attract a desirable clientele such as college students, traveling men, and men coming to the new convention center, now under construction, who might desire residence accommodations with the other facilities that would be at their disposal.

A chapel should also be an integral part of this complex because although the YMCA is not actually a religious organization, its stated purpose is to develop the "spirit, mind, and body" of those that they serve. In this same purpose, spaces for lecture, counselling, and educational instruction are also suggested.

Other facilities serving those already mentioned, such as a snack bar and health club should be provided and will be discussed at greater length in another section of this program.

ACTIVITIES

Athletic Activities

The following is a listing of the general athletic activities and the extent of the program that will be offered at the Central Branch. As nearly as possible, these will be grouped according to the similarity of spaces required.

Tumbling

- Intermediate
- Advanced
- Competitive team

Gymnastics

- Intermediate
- Advanced
- Competitive team

Basketball

- Intermediate
- Advanced
- Competitive teams

Volleyball

- Intermediate
- Advanced
- Competitive program

Badminton

- Intermediate
- Advanced
- Competitive program

Trampoline

- Intermediate
- Advanced
- Competitive team

Wrestling

- Instruction and practice
- Competitive team

Weight Lifting

- Instruction and practice
- Competitive team

Judo and Karate Instruction

Handball

Paddleball

Swimming

Intermediate

Advanced

Life saving

Aquatic instructor classes

Syncronized swimming

Competitive team(s)

Fun and family swims

Special Activities for Adults

In addition to the general athletic activities listed above, the Central Branch should offer special programs for both men and women. The program for women has become an integral part of the services that the YMCA has offered in the past to the total community and it is desirable that this continue in the future.

A suggested list follows:

Activities for adult men

Run-for-your-life program

Noon volleyball

Noon basketball

Exercise classes

Health club--massage

Swim-for-your-life program

Activities for adult women

Morning slenderizing classes

Evening slenderizing classes

Clubs

The following is a listing of the clubs sponsored by the YMCA and some information about the main objectives and programs that these organizations offer.

Indian guides (Father-son 6 to 9)

- Hikes
- Campouts
- Crafts
- Encouragement of joint father-son activities

Grade school-Y (boys 9 to 12 in the 4th, 5th and 6th)

- Club meetings
- Games
- Overnight trips
- Father-son dinners
- "Y" World Service

Junior-Hi-Y (boys 12 to 14)

- Development of leadership skills
- Help with social adjustment

Junior and Senior Tri-Hi-Y (high school girls)

- Develop high standards of Christian character
- Help with personal problems
- Club programs and discussion sessions
- Leadership training
- Politics--Texas Youth-in-Government program
- National Hi-Y, Tri-Hi-Y Congress

Senior Hi-Y (senior high school boys)

- Help with personal problems in the "make-or-break" time
- Christian character development
- Inspiration to worthwhile goals
- Leadership habits and training
- Talks and familiarization with world affairs
- Social training at joint meetings with Tri-Hi-Y groups
- Dances and parties
- National Congress
- Politics--Texas Youth-in-Government program

Camp Carter

This is a 211 acre camping ground located just below Lake Worth which provides resident camping space for more than 600 boys each summer in 13 stone and brick buildings. Here the camping groups of 120 boys at a time enjoy eating, sleeping, playing and praying together in a Christian atmosphere. They learn archery, horseback riding, how to shoot rifles, sail boats, swim and handle a canoe. They can get acquainted with handicrafts, go on hikes, and gather around campfires at night for discussion and singing. It was originally established and is now operated by the Amen G. Carter Foundation and is recognized as the finest YMCA camp in the nation.

Day Camp

The day camp program is a special summer program for elementary school boys and girls. Camp participants are organized in groups of ten with an adult sponsor. In these sessions, the programs include swimming (with instruction), hiking, nature study and lore, archery, crafts, cook-outs, and one overnight campout. These programs are usually held in parks, at church camp sites, and on private property, but in certain cases, such as bad weather or for special programs, the meetings will be held in the Central Branch or in the Community Branch facilities.

Y's Men's Club

YMCA-oriented service club
Community service
Youth service in the community

Educational Activities

Educational programs have been tried at the Central Branch in the past and have not proven successful. It is my opinion and that of the staff personnel to whom I talked that this was due to a great extent to the lack of adequate facilities. This opinion and information brings me to recommend that facilities for educational programs be provided and that different programs be originated and tested to determine the interest and possible participation of those that use Central Branch. It might be possible to combine this use with the spaces used for club meetings but this possibility will have to be studied finally in the design phase of this problem. Some criteria for these spaces should be established at this time however. The classes should be limited in participation to 20 to 24 students per leader just as school courses because this is the optimum number a teacher can instruct effectively. The spaces in which these courses are held will have to be very flexible and able to serve any program which proves successful from a participation viewpoint; because

it is not considered desirable that a space stand unused because of a lack of interest in a particular program offered. Some blackboard and tackboard space will be desirable and well-lighted spaces approaching those found in schools are indicated. Tables and chairs as well as desks will at one time or another be used although not for all courses.

For the purposes of this program, the following courses or subjects will be considered:

- Language Courses
- Family-life Courses
- Speech Courses
- Sex Education
- Leadership training
- Arts and Crafts
- Painting
- Drawing
- Sculpture

These courses are widely varied in their nature and offer a challenge in the spaces in which they are taught but it is considered important that spaces which can serve these subjects be offered. In some of these subjects, classes would be offered for adults, young people, and children. In others, combined classes would be offered.

As a final consideration, it must be stated that this is not a list which must be strictly adhered to. If other interests and/or demands are recognized, then these should also be offered. In other words, the desires of the people will determine the curriculum to be offered.

Social Activities

These activities are usually provided by the YMCA as social services to the community. They include relaxation and recreational activities and help to round out the scope of activities and services offered by the Central Branch. A partial list of these activities follows:

- Residence Rooms
- Adult Games
- Youth Games
- Chapel and Religious Activities
- Masseur training for the blind
- Television viewing
- Library and reading room activities
- Administrative activities
- Counseling

REQUIREMENTS

Rooms and Spaces Required

The following list is a determination of those spaces required for a satisfactory Central Branch YMCA and was made after investigation and research into the problem. I understand that this list may not be complete and that others may have to be added but this will be a starting place for the analysis of space requirements which will follow and other spaces will be added as required.

Athletic Space Requirements

- Gymnasium
- Pool(s)
- Wrestling Room(s)
- Weight Room
- Handball Courts
- Track
- Equipment Storage
- Locker Rooms
- Dressing Rooms (men's, boy's, women's and girls)
- Shower Rooms
- Health Club with Locker Space

Administrative Space Requirements

- Metropolitan Offices
- Central Branch Offices
- Secretarial Space(s)
- Filing Space
- Conference Room

Social Spaces

- Entry Lobby
- Adult Lounge
- Youth Lounge
- Library
- Chapel
- TV Lounge
- Snack Bar
- Cafeteria
- Kitchen

Meeting Rooms-Classrooms
Equipment Storage Rooms
Party Rooms
Residence Rooms
Janitorial and Maintenance Rooms
Mechanical Space
Circulation Space

Analysis of Spaces Required

The following will be a discussion of the activities to be carried on in the spaces which were listed in the previous section. This discussion will help to determine the actual square footage requirements with the use of some reference material for the square footage requirements of certain areas.

Gymnasium

The gymnasium will be the center for all of the physical activities in the Activities section of this program. The facilities will be provided here for tumbling, gymnastics, basketball, volleyball, badminton, trampoline, and for special workouts. The physical dimensions of the gymnasium will be determined to a great extent by the largest space requirement of the activities to be held there: basketball. This means a space large enough to permit a regulation collegiate size basketball court. This court will also allow two smaller courts to be used crossways at each end. However, this is not the only consideration. The gymnasium space should allow enough space for other activities to take place simultaneously with the use of the basketball court(s) and also allow some room for spectators for competition events. The other activities

to be carried on in this same space will require only a portion of the space required for the basketball floor. In some cases, such as that of badminton and volleyball, two courts could be set up at the same time. In the same way, two trampolines could be erected and used at the same time if needed, as in the case of a competition event. The gymnasium would also be used any time that competitive events are scheduled at the YMCA. Other spaces may be provided for practice and instruction but since this space is one of the few that should be accessible to the public, it would be the place for competitive events.

Pool(s)

The pool area is another of the spaces that should be available to the entire public and provide a spectator area. This area will be the center of activity for all aquatic activities sponsored by or held at the YMCA. The space required to house the pool will be determined by the area of the pools required and the circulation and spectator space required around them. It is deemed desirable by the staff of the YMCA and this student that a six or eight lane standard indoor olympic pool be provided plus a special diving pool and a child's pool. This would allow maximum use of the facilities at almost all times; provide excellent instructional facilities, competitive facilities, and the safest possible use by all ages at the same time.

Wrestling Room

The wrestling room mentioned here would be primarily for

use as an instructional space and for practice by a competitive team. It could also serve as an auxiliary space for the teaching of tumbling, judo, and karate and for private lessons. It should be a room with a mat covering the entire floor area.

Weight Room

The physical activity of weight lifting has progressed rapidly in the time since the "Y" had to make barbells from the cannonballs used in war. Many pieces of equipment have now been developed for use strictly with this kind of training and activity. It is for this reason that a separate space is desired for the weight room. Much of the equipment can be erected and remain in place for use anytime there is a demand and the amount of this permanent equipment will help to determine the size of the space. Competition would still take place in the gymnasium.

Handball and Paddleball Courts

This is one of the YMCA's most popular and best used facilities. Usually a noon men's club is formed which meets two or three times a week (or sometimes every day) to play handball or paddleball. The size of these courts has been standardized and the standard size handball courts will be used in this facility instead of the slightly smaller paddleball courts as in the existing facility. These courts can be used for either activity. The number of people who use the existing two courts indicates the need for and desirability of having four courts in the new facility.

Track

A running track is considered to be a desirable part of this complex. The present Central Branch has such a track and it is one of the best used facilities in the complex. It is especially well used by adult men in the "Run-for-your-life" program which has been established and which has been very successful. To be eligible for membership, a man must run at least 200 miles each year. The present track requires the completion of 30 laps for running one mile but it is deemed desirable that a new facility be longer, if possible, and that it be combined with the gymnasium. This is usually accomplished by putting the running floor around the gymnasium floor at a high enough level that it will not interfere with the use of any of the gymnasium facilities at any time.

Equipment Storage

This will prove to be more than one single space. Storage facilities will be provided with each of the athletic spaces listed above to provide space to put any equipment that is not in use or extra equipment. The weight room, wrestling room, gymnasium, and pool(s) will all have spaces for this purpose and these will need to be large enough to store any equipment that might be present. Some will need to be locked and supervised but others can be open depending on their location and use.

Locker Rooms

Locker rooms will be provided near all dressing rooms. These will also serve as the control point at the entry to each dressing

room and the attendant at the locker room will have the responsibility of checking to make sure that only authorized visitors and members enter these facilities. The locker room itself will provide basket storage facilities for members and guests, lockers for adult men and young men, and a place to keep valuables while using any of the facilities. A locker room serving the ladies and girls dressing room will also be provided with similar services. Some space for the storage of equipment which the "Y" will rent to those who might not have their own will be provided.

Dressing Rooms

Three dressing rooms are deemed desirable in this problem. One to serve the young men and boys, one to serve adult men and high school and college age men, and one to serve both girls and adult women. It is felt that a joint facility can serve this latter requirement because there are far fewer programs offered for women than for men and that these are offered at different times and no difficulty will be encountered in double use of this facility. All three dressing rooms will offer benches at which to change clothes, adjacent shower facilities and some locker space for those who do not have lockers in the locker room or do not wish to use these for short periods of time. Restroom facilities will also be offered within or adjacent to the dressing rooms. As stated before, it is necessary that some control over who enters these spaces be available and a door buzzer system will be used to satisfy this requirement.

Shower Rooms

Shower rooms will be provided with each of the dressing rooms. Gang type shower installations are deemed desirable in all dressing rooms serving men and boys, but individual shower stall installations are preferred for the women's. These shower rooms should be accessible both from the dressing rooms and from the pool since showers will be required before entering the pool and are usually desirable for after swimming. This direct connection will eliminate the tracking of water into the dressing rooms and will save on maintenance as well as provide a safety precaution by eliminating wet floors. Drying rooms will be provided with each shower facility.

Health Club with Locker Space

The Health Club will need specialized facilities to offer the services desired. These services include massage, steam baths, and weight reduction and muscle toning. The Health Club, at present, has 300 members and facilities for this number plus future expansion of membership will be provided. The Health Club also has a unique program which should be considered in the placement of the facilities: it trains blind persons to become masseurs and helps to make these men self-supporting. This will not be a great influence on the design but should be considered.

Metropolitan Offices

Offices will be provided in the Central Branch for the Metropolitan Executive Director, Associate Executive Director,

and Program Director. It will also contain space for secretarial help for these offices as well as file space for Metropolitan records and files. A conference room is to be included with the Metropolitan Offices for conferences with the Metropolitan Board of Directors, YMCA Advisory Council, or any of the committees through which the YMCA conducts its business and organizes its programs.

Central Branch Offices

The Central Branch offices will be located in close proximity to the Metropolitan offices so that communication between the two staffs is facilitated. Office space for the Central Branch Executive Secretary, Associate Executive Secretary, Program Director, and part-time instructors will be provided. These offices will also need secretarial space and filing space and access to the conference room.

Entry Lobby

The entry lobby will be the main entrance to the entire complex. It will handle the majority of the people who enter the facility to participate in any of the programs. It will be mostly circulation space but it should contain the main desk as well as some chairs for those who might be waiting for residents of the residence rooms. It will be the control point for entry into the other lobbies, lounges, and activity spaces as well as serving as an information desk for visitors.

Adult Lounge

The adult lounge will contain space for activities that those

who are waiting for scheduled activities might use as well as those who are there just for relaxation. Activities to be included here are: table games, ping pong, and billiards and pool.

Youth Lounge

It is my feeling that the youth lounge should have its own entrance separate from the main entry lobby. It should also contain an area for the storage of games and equipment. Table games, ping pong, and billiards and pool will also be provided here. It will be from here that entry to the dressing rooms and locker rooms for the boys and young men will be controlled. A buzzer system for the doors should satisfy this requirement as it does in other control points.

Library

The complex should contain a small library and reading room for the convenience of its patrons. This will probably not be extensive at the beginning but it should be provided and space for expansion should be considered.

Chapel

The chapel is a necessary and integral part of this complex. The YMCA is not a religious organization in the strictest sense of the word; but its ideals and goals are religiously oriented from its founding as a religious association. The chapel should seat from 30 to 50 people and should have a warm natural quality that will be conducive to religious activities and meetings. This space should be easily accessible to the main entry lobby.

Television Lounge

The TV lounge is just what the name implies. It will contain a television set and chairs and sofas for watching television. It will be a quiet area located near the entry lobby so that visitors might have access to it. It might also be used as an auxiliary reading room and will have spaces for magazines and pamphlets in it.

Snack Bar

The Snack Bar will be a short order grill accessible from the two lounges and near the main lobby. It will offer snacks and sandwiches for the patrons of the YMCA but will not have full meals available as a rule. It will be located near the kitchen however, so that central preparation of orders is possible and two kitchens will not be necessary. It should seat 12 to 15 people on stools.

Cafeteria

The Cafeteria will also be a small facility with normal cafeteria services. The seating will be at chairs and tables and space for seating approximately 50 people at any one time should be sufficient.

Kitchen

The kitchen will be where all meals and sandwiches will be prepared. It will house cold storage and other storage facilities necessary for the required service. It will need to be located on the service access to the complex.

Meeting Rooms-Classrooms

These spaces have been discussed earlier in this program, but it should be restated here that these will be large enough to accommodate classes of 20 to 24 people for educational activities and up to about 40 for club and business meetings.

Equipment Storage Rooms

The spaces mentioned in this section refer to storage rooms throughout the building in which materials, games, and other things which will be necessary for the many programs and activities of Central Branch. These will include storage rooms in the classroom areas for storage of materials. The size of these will be determined by their use or projected use.

Party Rooms

This space will probably be a multi-use space but it will be large enough to handle such diverse activities as teenage dances, large club meetings, clubs such as a ping pong club which would need a large space to set up several tables, and other such activities.

Residence Rooms

Several types of residence rooms are deemed desirable. Single rooms which use gang-type restroom and shower facilities are all that are now offered. It is desirable to include some of these facilities but it is also necessary to provide some rooms with private restroom and shower facilities for those who might prefer this type of accommodations. Each room should provide a

bed, at least one chair, a desk, some book storage facilities, and either a closet or some type of clothes hanging space. In rooms with private restroom accommodations, a shower, lavatory, water closet, and a shaving mirror with some storage for shaving equipment should be provided. These are the requirements which will determine the size of the residence rooms.

Janitorial and Maintenance Rooms.

These will be found throughout the building. Their size will be determined by the equipment to be stored in them and the space each is to serve. For instance, the ones in the dormitory area will have to be large enough to contain the maid's cart and clean linen and towels while others will just have to accommodate brooms, mops, and other general clean-up equipment.

Mechanical Space

The mechanical space will have to be large enough to handle the heating and air conditioning for the entire building. Depending on the type of system selected, this will be either one large space or several smaller spaces. It will contain the heating system including all piping, valves, and gauges necessary for its operation; the air conditioning system exclusive of the cooling tower; and the hot water supply system. It must be large enough to allow easy access to this equipment for service. If one space is used for this function, it may also contain the pool filter system and facilities for heating water for the pool(s).

SQUARE FOOTAGE REQUIREMENTS

<u>Room or Space</u>	<u>No. Required</u>	<u>Square Footage</u>
Gymnasium	1	7,000
Pool	3	total 11,000
Wrestling Room	1	400
Weight Room	1	600
Handball Courts	4 @ 800	3,200
Locker Rooms		
Men and boys	1 @ 600	600
Women and girls	1 @ 300	300
Dressing Rooms		
Young Men	1 @ 1500	1,500
Adult Men	1 @ 1500	1,500
Women and girls	1 @ 900	900
Shower Rooms		
Young Men	1 @ 360	360
Adult Men	1 @ 300	300
Women and girls	1 @ 200	200
Drying Rooms		
Young Men	1 @ 200	200
Adult Men	1 @ 150	150
Women and Girls	1 @ 20	200
Health Club	1 @ 1500	total 1,500
Metropolitan Offices	4 @ 150 avg.	600
Secretarial	2 @ 120	240
Filing	1 @ 180	180
Conference	1 @ 250	250
Central Branch Offices	5 @ 140 avg.	700
Secretarial	2 @ 120	240
Filing	1 @ 150	150
Entry Lobby	1 @ 800	800
Adult Lounge	1 @ 1500	1,500
Youth Lounge	1 @ 3000	3,000

Library	1 @ 540	540
Chapel	1 @ 500	500
Television Lounge	1 @ 1200	1,200
Snack Bar	1 @ 450	450
Cafeteria	1 @ 700	700
Kitchen	1 @ 1000	1,000
Meeting-Classrooms	6 @ 400	2,400
Party Room	1 @ 2500	2,500
Residence Rooms		
w/o Bath	60 @ 140	8,400
w/ Bath	90 @ 210	18,900

This list of square footage requirements is by no means complete. Some spaces will be sized by their location and function which can not be determined at this time; an example would be janitor closets and storage spaces. Also, the above footages will not be taken as maximum; in fact, in some cases these figures will be closer to minimum for the spaces listed since these figures reflect usable floor space and do not take into account circulation or structure. In most cases, however, the figures listed above will be within 25% \pm of the actual square footage requirements and this will be taken into consideration in the planning of this project.

RELATIONSHIP OF ROOMS AND SPACES

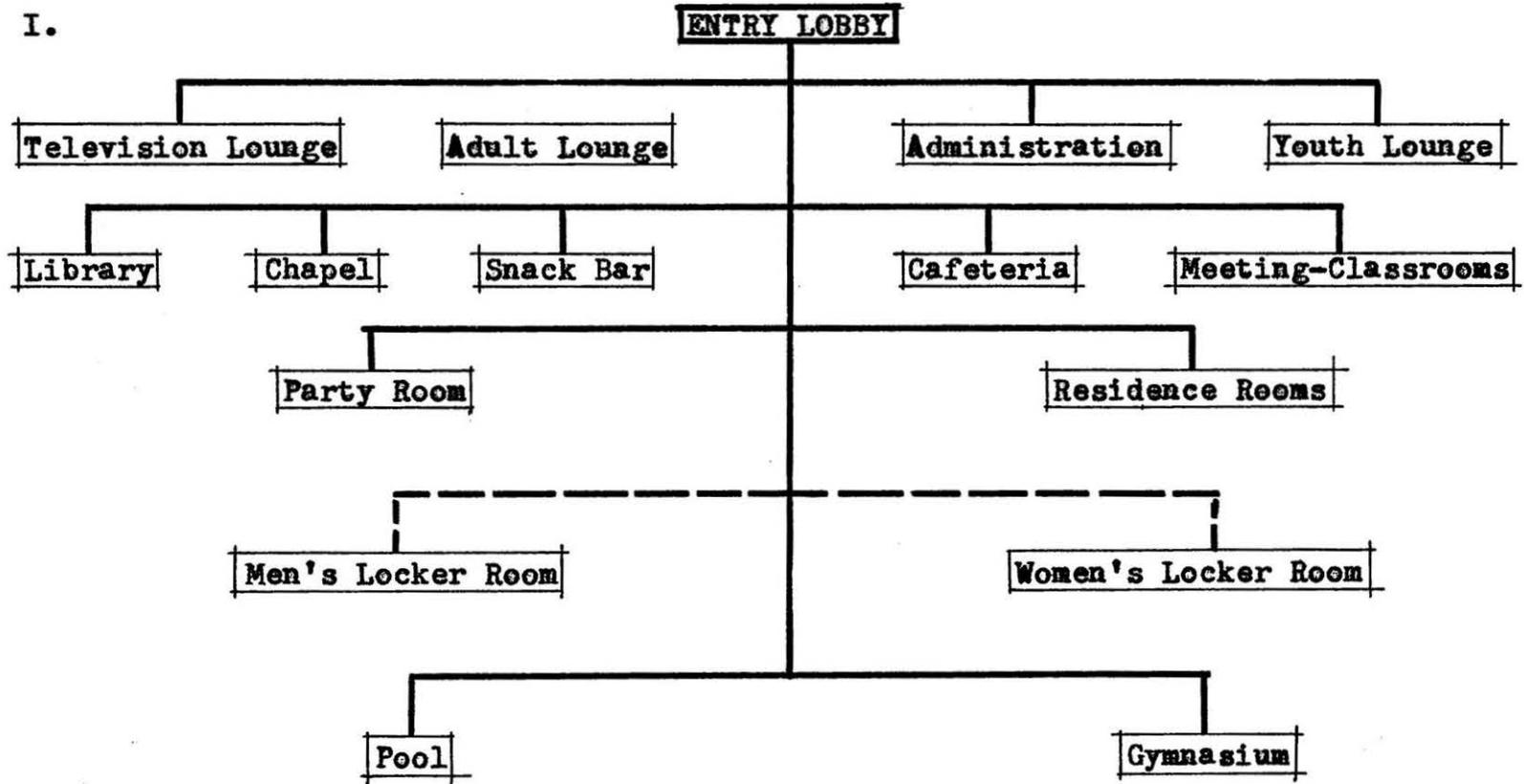
The following material is a series of diagrams which will show the physical relationships between spaces that are desired. These show which spaces are to control entry into other spaces. They also show which spaces are to be accessible to the general public and how access to these spaces will be handled as well as how the arrangement of such things as dressing rooms and pool and gymnasium will be handled. These are schematic diagrams only and will not show the size of the spaces nor how they are to be planned, or formed and finished.

The following symbols will be used:

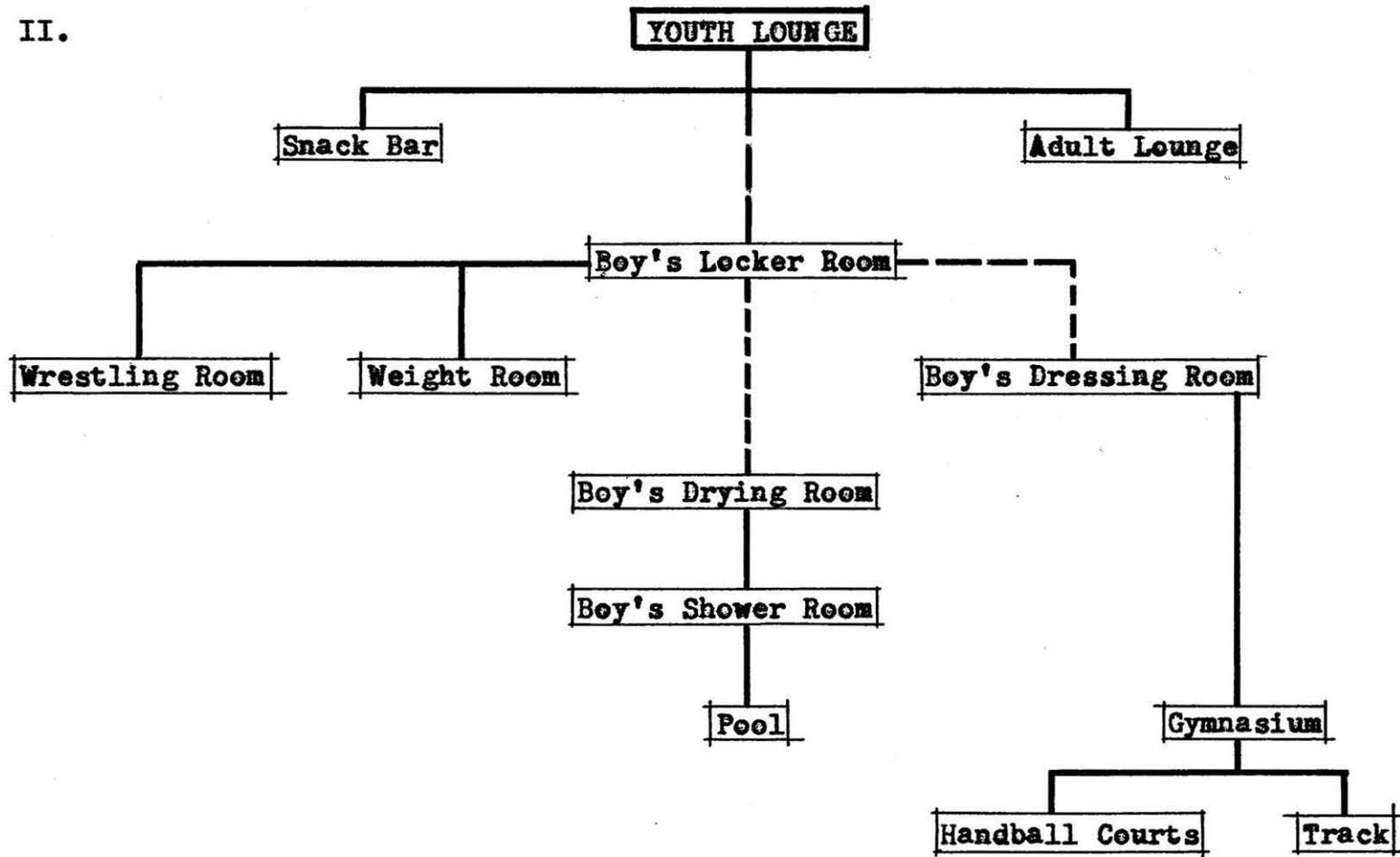
———— Free access

----- Controlled access

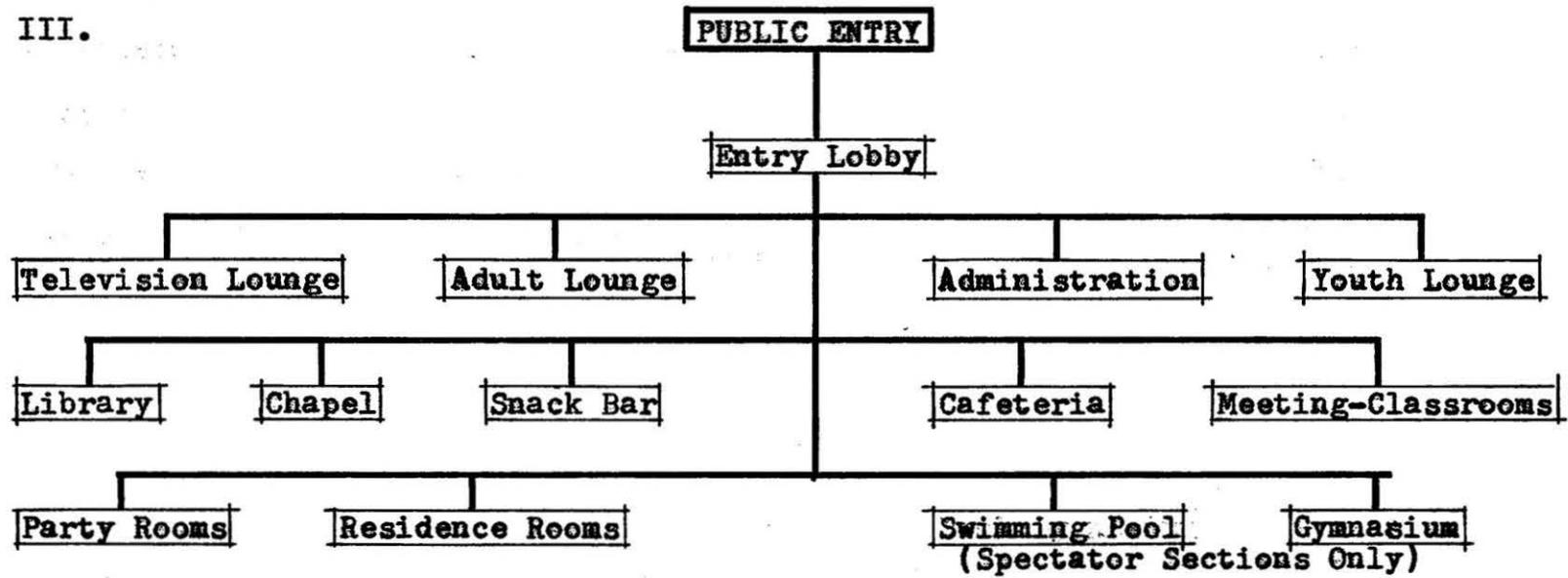
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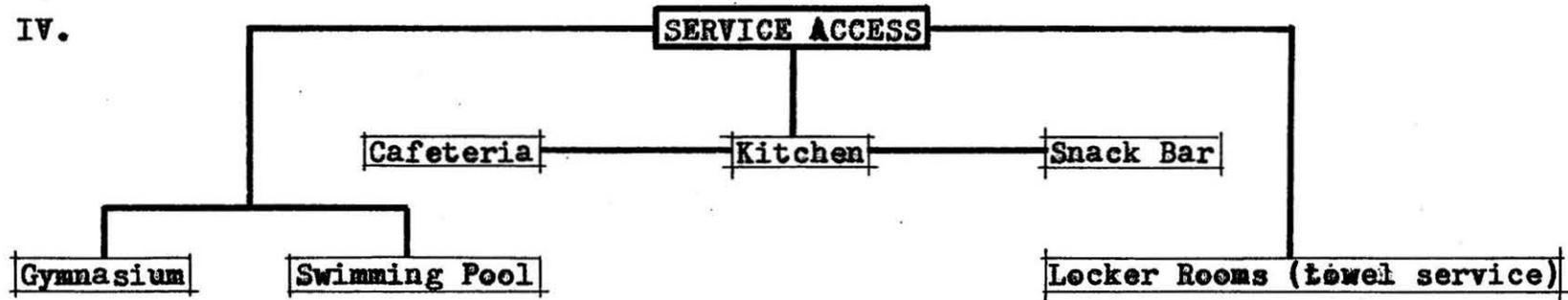
II.



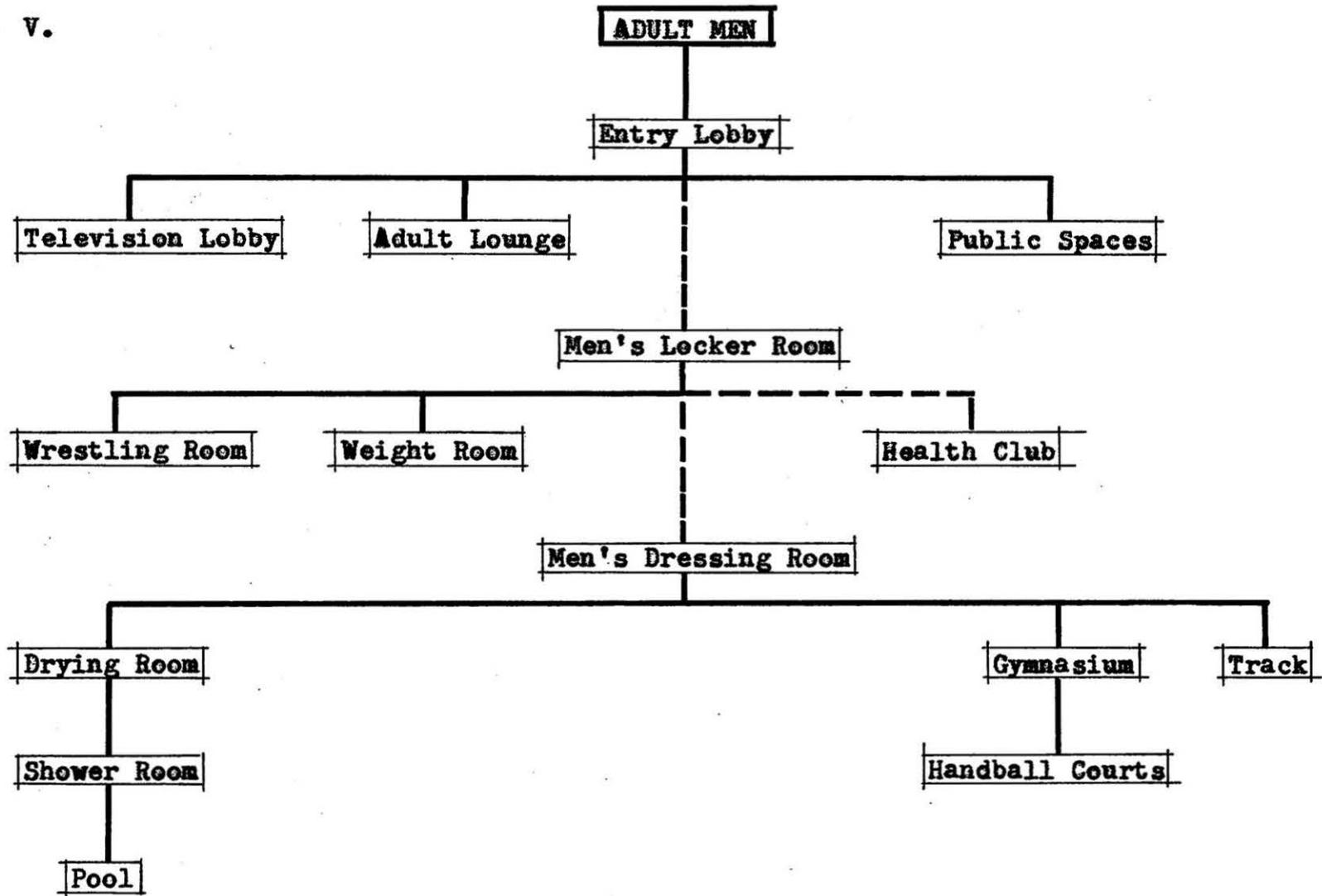
III.



IV.



V.



MATERIAL AND FINISH CONSIDERATIONS

Many finish and material considerations will have to be made in this problem because of the varied nature of the facilities to be offered. This will have to be considered both from an aesthetic point of view and from a functional point of view. As an overall statement, it must be remembered that the stated purpose of this organization is to develop the "mind, body, and spirit" of those who use these facilities. This must be kept in mind at all times and the materials and finishes must reflect the consideration of these elements. The materials and finishes must also be used to differentiate between the different spaces and their use. In many of the common use areas, ease of maintenance and the wearing qualities of the materials will become a very important factor in selection of suitable materials. I have tried to evaluate the many materials available for use in this problem and have selected several materials and finishes which will be used in different areas in the complex. A list of these follows although some have not been specifically noted for a space.

Floor

- Wood (gymnasium)
- Vinyl tile
- Ceramic tile (showers, drying rooms, and dressing rooms)
- Carpet (offices and maybe residence rooms)

Walls

- Plaster
- Vinyl Fabric
- Ceramic tile
- Terra cotta tile
- Wood (plywood paneling)
- Plastic (Fermica type)

Ceiling

- Plaster
- Accoustical tile

Exterior Finish

The selection of an exterior finish material has not been made at this time for the selection of a structural system and material has not been made. Almost any type of building material is available in Fort Worth and experience in building with any type of common building material is available. Both concrete and structural steel buildings have been erected in the downtown area and construction in either of these will not be a problem. As a consideration, however, it is thought by the student that this building should not try to compete in importance of exterior appearance with the Skidmore, Owings, and Merrill bank building which is its neighbor on the South of the selected site. It should present an exterior character and appearance that is quite different in fact and one that is recognisable as a YMCA, if this is possible.

CHARACTER AND AESTHETIC CONSIDERATIONS

No single character would be acceptable for this problem. The same character which would be appropriate for dormitory rooms would not be appropriate for a gymnasium or a youth games lobby. In these interior spaces then, an appropriate character for the use will have to be provided. The only single character which can be developed will be the character of the whole complex as a composed whole. It is my feeling that the exterior character should be a contemporary one which in some way depicts the activities to be found inside the structure. Yet, it should not look like or try to compete with the office facilities around it. This contemporary character, which also reflects the facilities of the YMCA should be achieved in the arrangement and form of the spaces within the structure and the use of different materials and different textures to accent the difference between the major spaces to be found within. It should not, however, become a hedgepodge of materials and textures; subtle and maybe some "sharp" changes should achieve this distinction. The building should encourage the viewer to want to participate in the activities inside.

The character of the lobby spaces and the athletic areas should be one in which competition and participation in the programs is a pleasure. Again, this will have to be accomplished thru the use of different materials and textures as well as the use of light where possible to brighten the facilities and make them more inviting to participation than those now existing.

The residence rooms should have a character as nearly personal as possible. This can be accomplished in the planning by not making them just four walls and a door as are the present rooms. This feeling of something personal can also be aided by using warm, natural materials such as wood and carpet for finish materials and providing comfortable, well-styled furniture with which the occupant can identify. This, as opposed to the impersonal, institutional surroundings sometimes found in such facilities can help a great deal in establishing the desired character for the residence spaces. Access to the outdoors and to well landscaped indoor and outdoor court areas could also help to establish a desirable atmosphere for this area.

The administration areas should present a character that is removed but not remote from the character of the lobbies. A definite distinction should be immediately noticeable and this might best be handled by using a short transitional area such as a courtyard or interior court and then present a quiet, efficient character in the administrative areas, again thru the use of different and well chosen materials and finishes.

As an overall statement, the materials listed in the preceding sections of this program will be used in different combinations to achieve the desired character for each type of space. The introduction of natural light will supplement these materials in every space possible to create a warm, inviting overall character for the entire complex. To make the complex something which everyone can enjoy being in, is the goal and the reason for establishing this type of character.

CODES, ZONING, AND UTILITIES

Codes

This project will be under the Fort Worth City Building Code and this will be followed in satisfying code requirements.

Zoning

The site selected is in a zone which will permit the construction of the type of structure which will serve the requirements since it is the existing Central Branch.

Utilities

The utilities available to the site are also adequate to serve the proposed project without enlarging them or adding to the existing lines.

SITE CONSIDERATIONS

Location

To adequately serve the purpose of a Central Branch YMCA as stated in another section of this program, it is my feeling that the facility must be located within walking distance of the Downtown Business Community. It should also be easily accessible from all parts of the city to fulfill its function as a place with facilities for special programs and for service to the inner city youth. Its facilities are to be used whenever all or some of the branches have joint meetings or programs and for educational classes and leadership classes. The residence and club meeting spaces should also be within easy walking distance of downtown, mass transit systems and the new convention center.

Parking

It is deemed desirable that some off-street parking be provided for the patrons of the YMCA. However, it is also realized that the YMCA will not be able to offer parking for all its patrons at times of peak use and therefore should, if possible, be located near some other off-street parking. It should provide reserved off-street parking for the Central Branch staff and the Metropolitan staff and some reserved spaces for special visitors should also be considered.

Service

Not very many of the YMCA facilities will need service access. However, two spaces in particular will need some service.

The Snack Bar and Cafeteria will be the major service problems. However, delivery of athletic equipment for competitions and equipment which the YMCA might borrow or have on trial before purchase will also need to be considered.

Landscaping

Landscaping will be determined by the design solution and is not really a part of this program. However, I do consider that the landscaping could become a very important design element which could establish, or help to establish, the desired character for the building. It is to this extent that it enters into this program.

Site Selection

It is my feeling that the site upon which the present Central Branch is located fits all the requirements for this problem. The present site is at the corner of Sixth and Lamar Streets in downtown Fort Worth. It is within four blocks of the major Downtown Business Community and the office space located therein and within the same distance of the major retail core as well. It would therefore be considered within walking distance of the Downtown Business Community and close to the major transit systems which serve the downtown area; the city bus lines and the privately owned and operated subway system which may be extended into the downtown area. This site would be within six blocks of the new Convention Center which is now under construction.

This site is also easily accessible to all parts of the city through the use of the existing East-West Expressway, Interstate 35W and the proposed extension of state 121 which will be called the Southwest Freeway. These three major transportation routes would connect all parts of the city to the proposed site.

The site is bounded on the South by Fifth Street and immediately across Fifth Street is the eight story parking garage built by the First National Bank of Fort Worth. It is bounded on the East by Lamar Street and except for a small beauty shop, the next block to the East is devoted entirely to parking. (In "A Proposal for the Core Area" a report published by the City Planning Commission, the entire block is marked for parking) Thus, it is my feeling that the location would satisfy the supplementary parking requirement.

One other consideration also enters into this site selection. The YMCA already owns the block selected with the exception of the Northeast corner which is now occupied by the First Church of Christ Scientist of Fort Worth. Preliminary talks have been held between the YMCA and members of the church council and the feeling gained from these talks is that the YMCA could buy the property should it ever be feasible and necessary for expansion.

FINANCING AND BUDGET

Project Financing

Financing for this project would be achieved thru a capital funds drive similar to those held previously to build the "Y" facilities in 1905 and 1925, and the one now in progress to rehabilitate the existing facilities.

Daily Operating Expenses

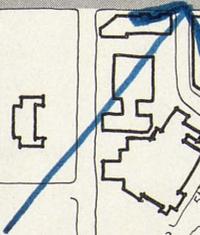
The YMCA in Fort Worth has, in the past, been about 75% self-supporting. In the past two or three years however, this percentage has begun to decline gradually. The estimated expenditures for the 1967 fiscal year show an expected figure of 71.5% self supporting. This figure is supplemented by the United Fund to meet operating expenses. Overall, this is very good for a YMCA because the national average is only about 65% self-supporting. This budget includes all salaries, maintenance, replacement of equipment and other expenses met by the YMCA each year.



PROPOSAL MAP

- LEGEND
- PARKING
 - RETAIL
 - OFFICE
 - GOVERNMENTAL
 - SUPPORTING ELEMENTS

SITE



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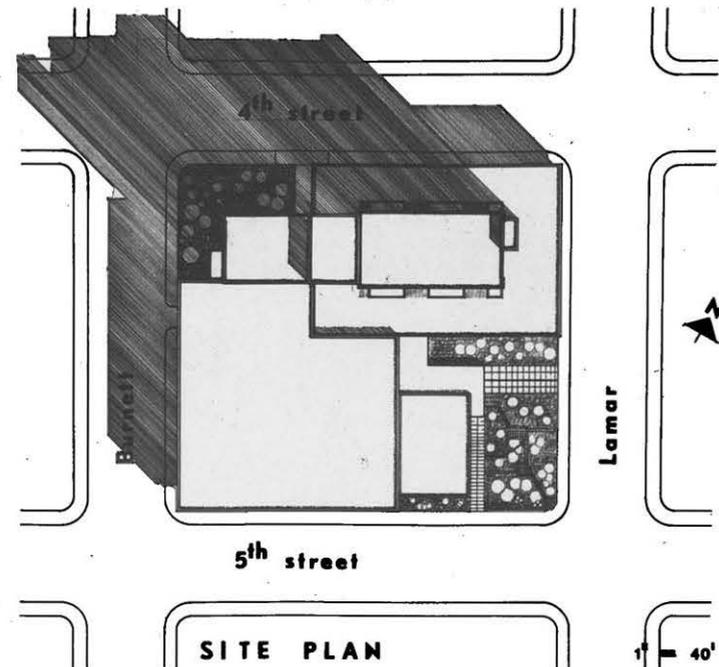
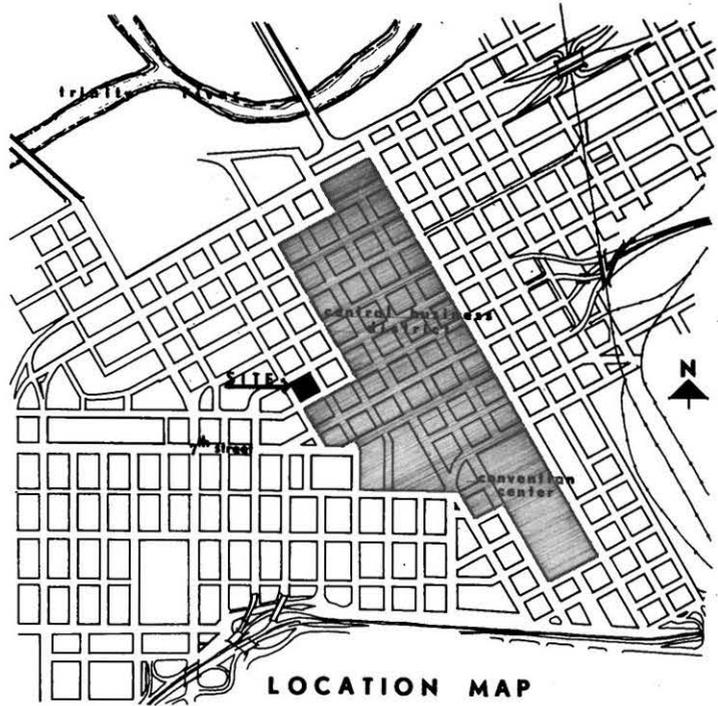
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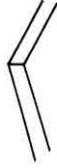
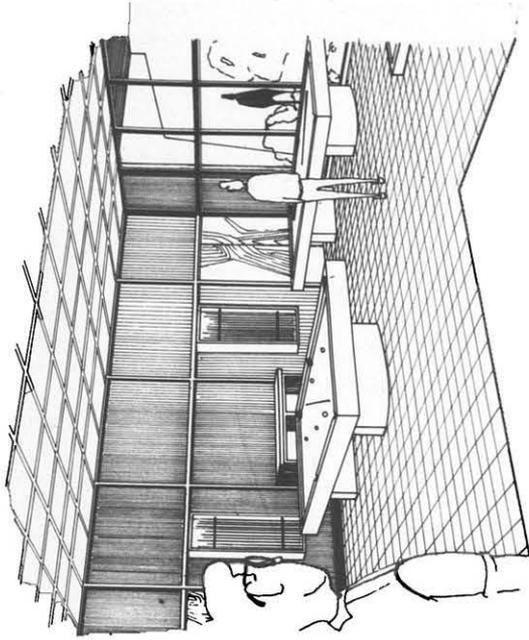


A CENTRAL BRANCH YMCA

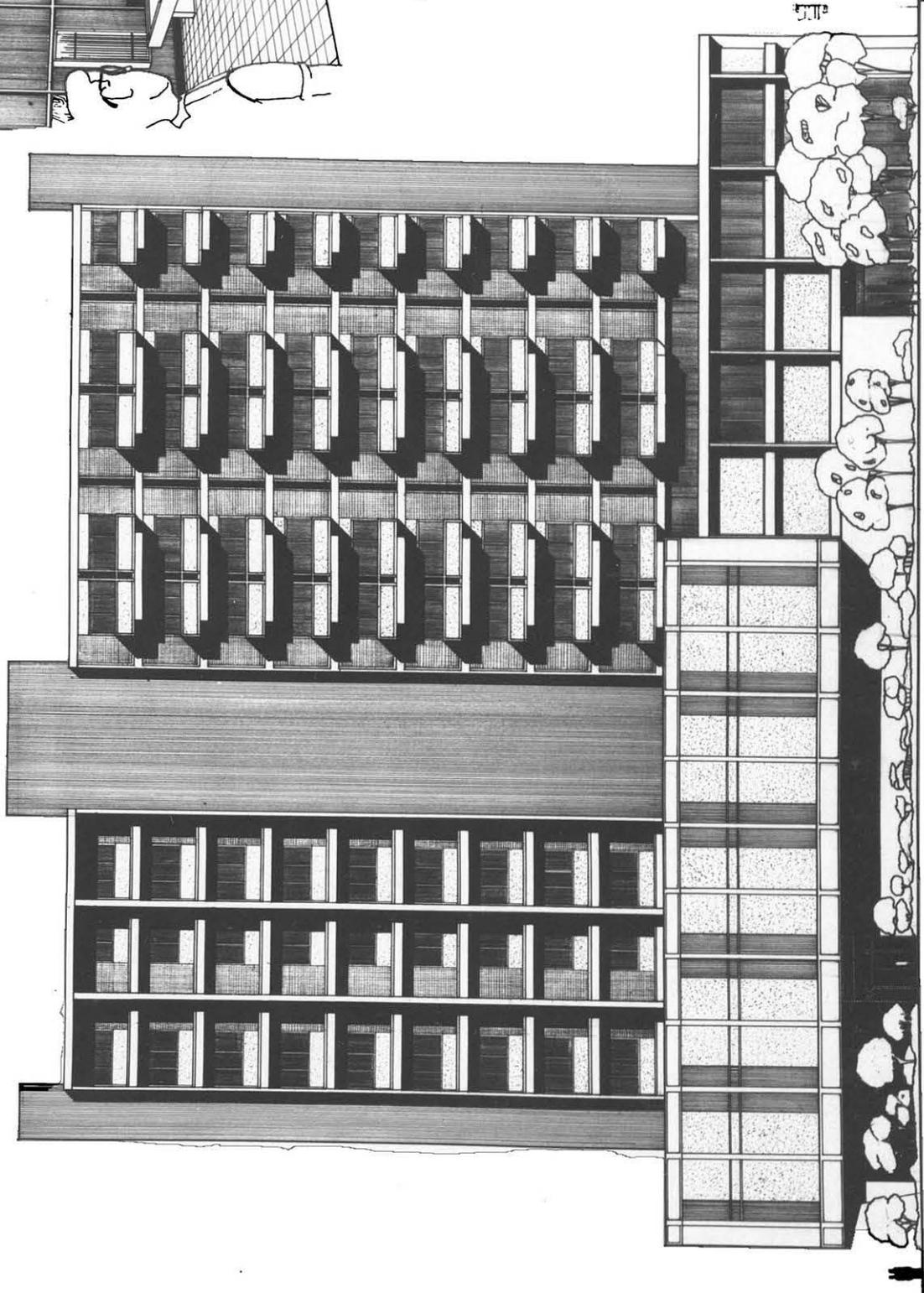
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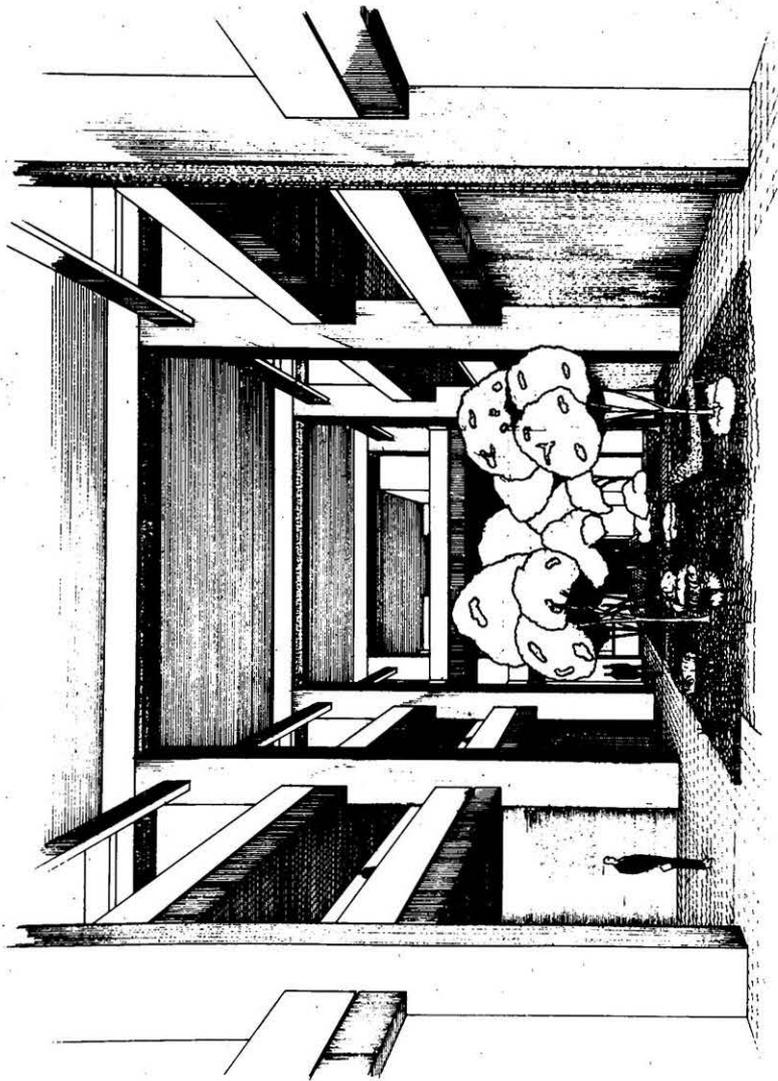


YOUTH LOUNGE

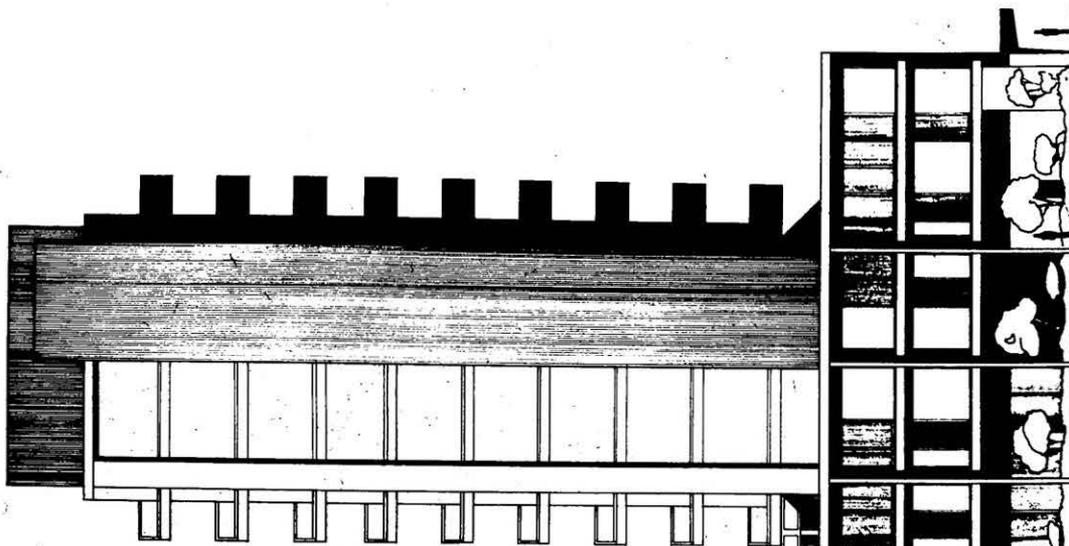


3 32'1"-0"

SOUTH ELEVATION

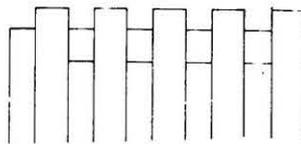


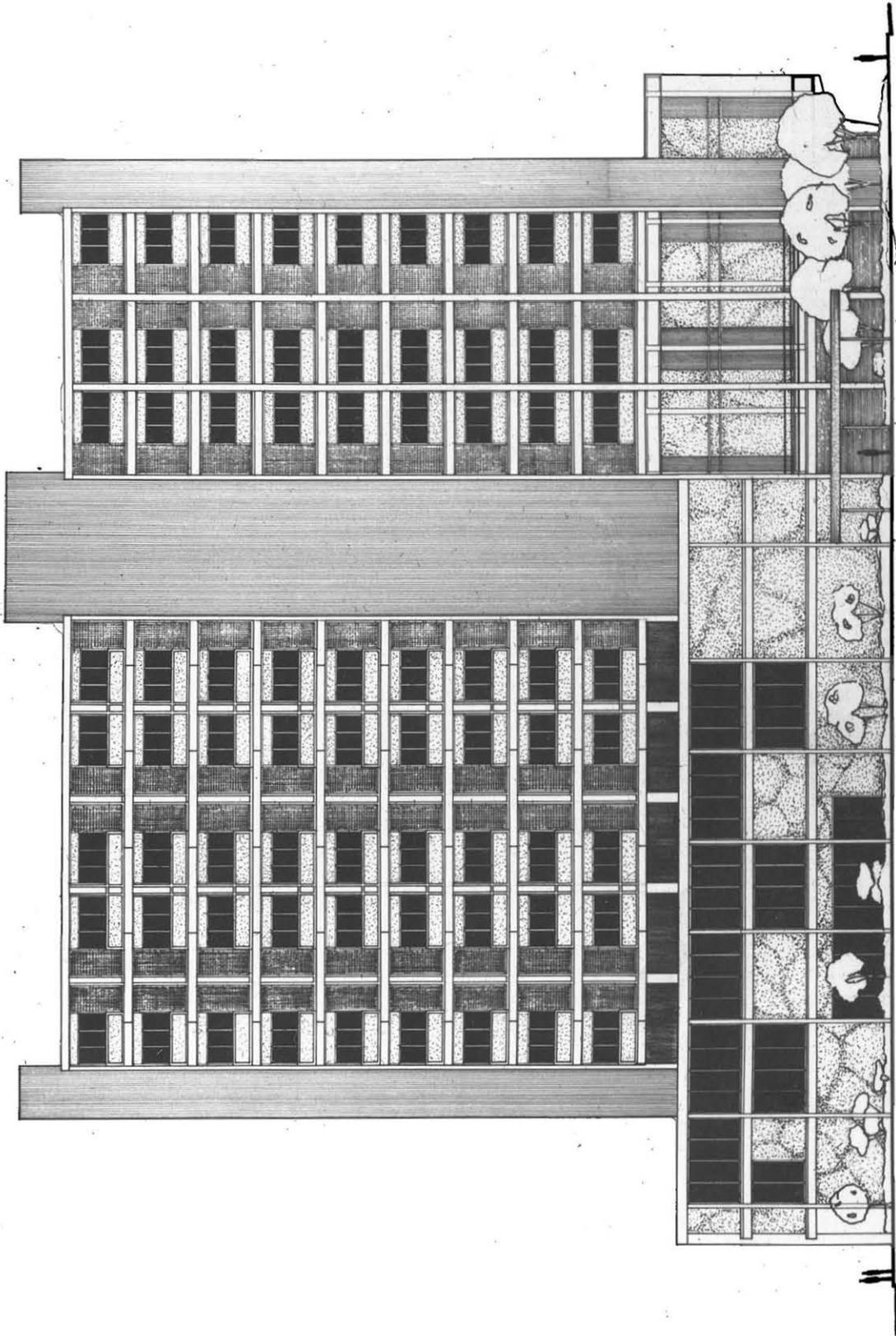
INTERIOR COURT



EAST ELEVATION

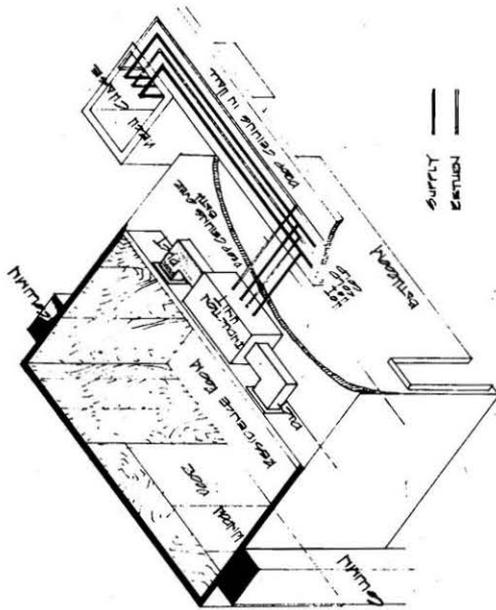
3
32'-11"-0"





332'1'-0"

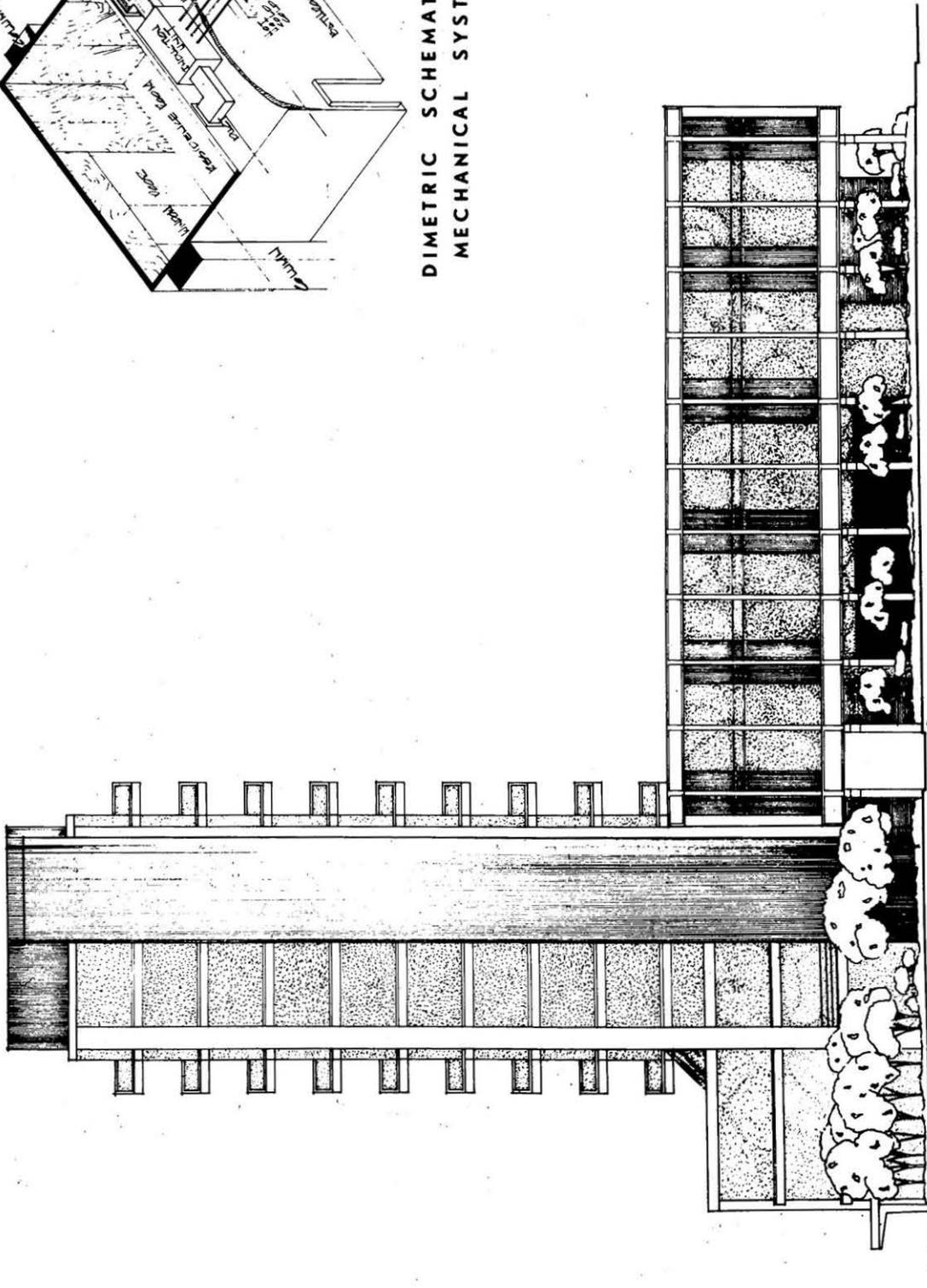
NORTH ELEVATION



DIMETRIC SCHEMATIC OF MECHANICAL SYSTEM

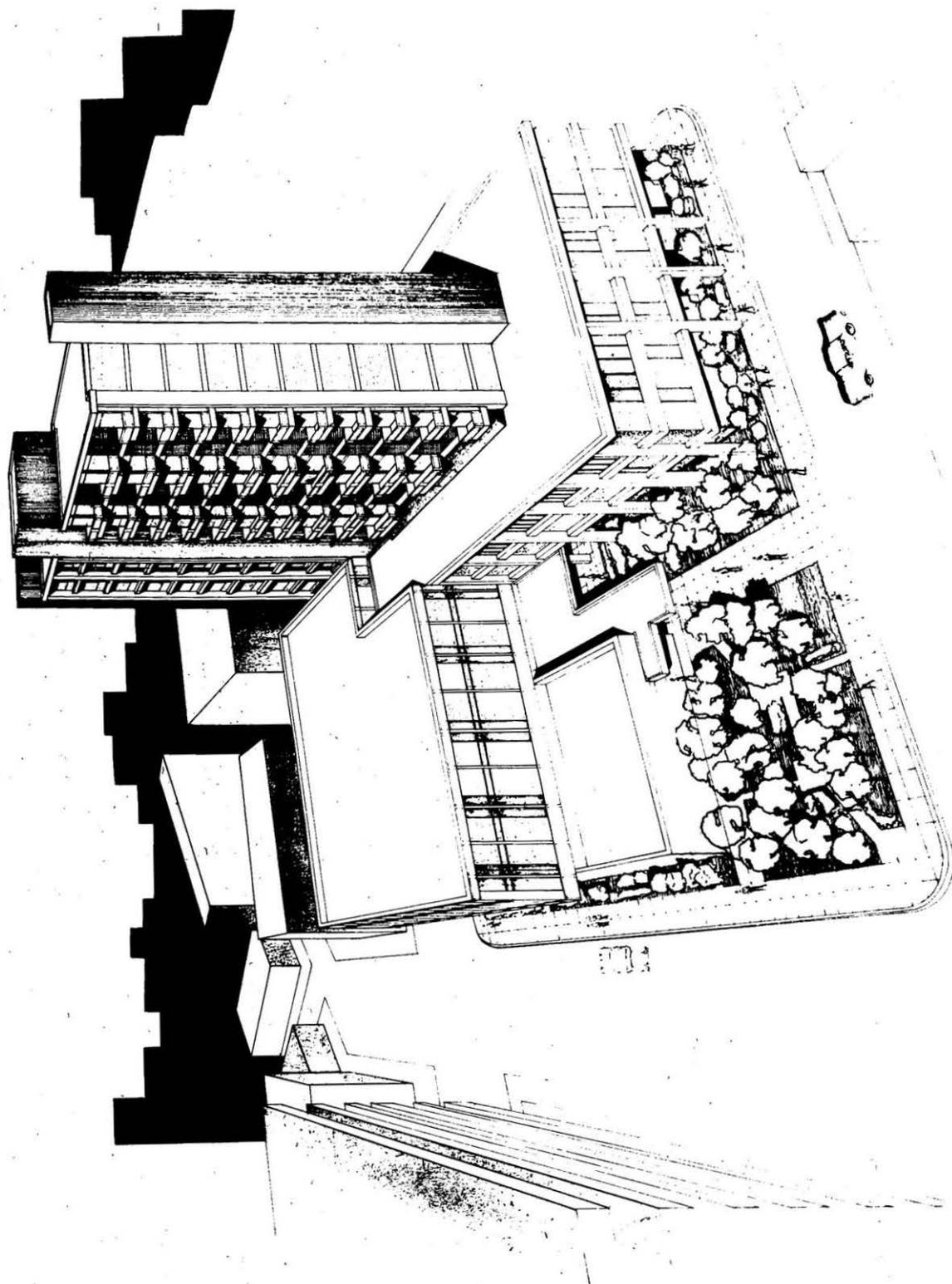
MECHANICAL SYSTEM

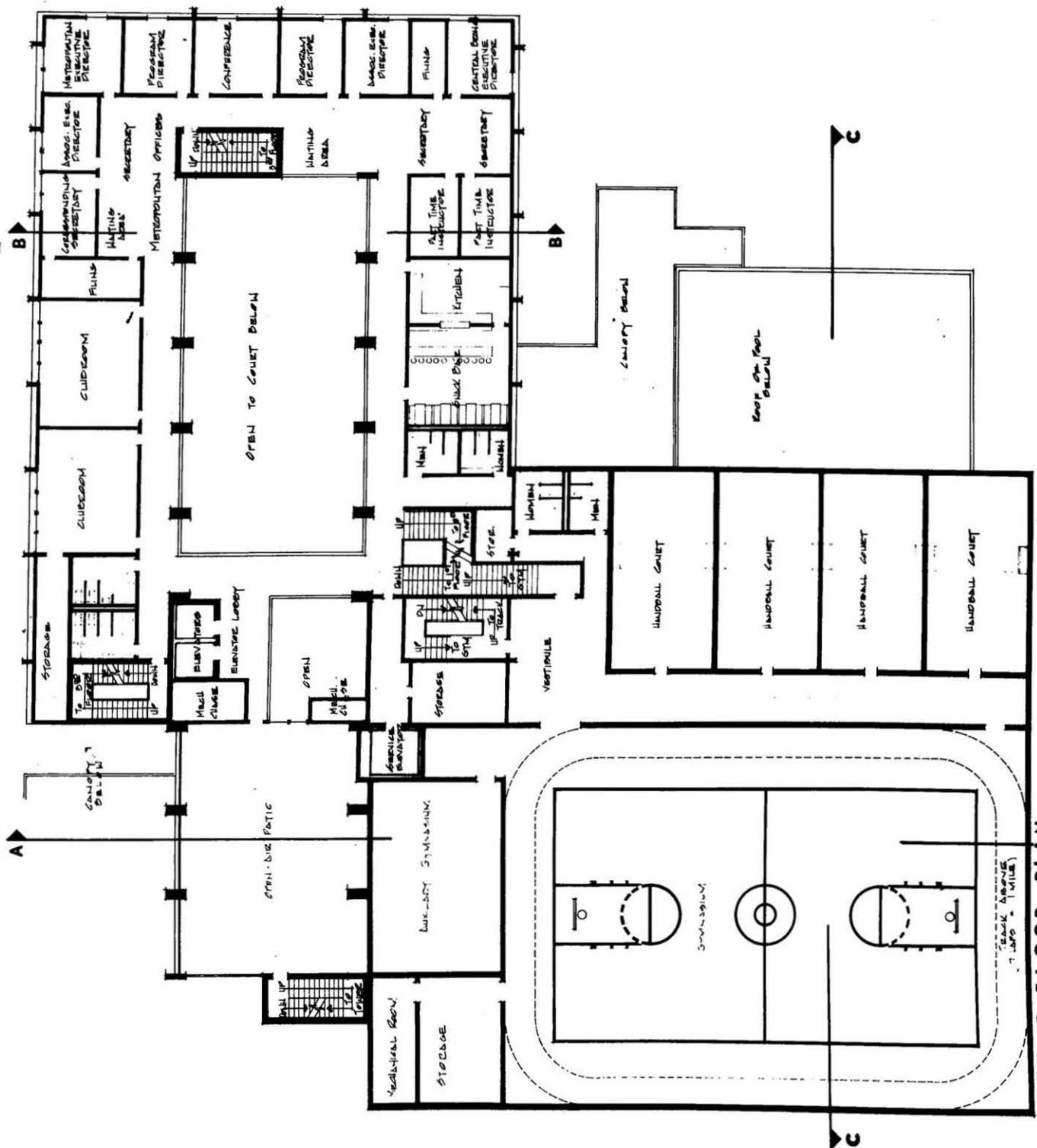
The mechanical system chosen as best suited for this building is an all-water system using induction units in the individual office units. The central units, one serving the lounge areas located in the penthouse and one in the basement serving the rest of the complex. The cooling unit is located in the penthouse. Due to the large volumes of air to be handled a common mechanical shaft penetrates the complex vertically but the pipes for the return air at the bottom of the shaft, due to the circulation of air in the shaft, a noise pipe system was chosen. Hot supply air from the induction units in each space and the central unit is also sent to the shaft. The volume of air is also sent to the shaft. The shaft is located on one of the levels and is a common shaft for cooling and heating. The shaft is not necessarily one and a half stories but in this case it would be located in air of the shaft. In the service shaft at the end of the shaft on the highest level.



3'-32" x 1'-0"

WEST ELEVATION





SECOND FLOOR PLAN

332'-1"

