

A YACHT CLUB FOR BAY RIDGE, MARYLAND

by

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SECTION ONE

**Introduction and Analysis
of Situation**

INTRODUCTION

This particular subject for a thesis was chosen in order that the author might acquaint himself with the difficulties encountered in solving a design problem which is not placed before the architect every day. The problem is not entirely theoretical. It is true that the author realizes no organization is presently contemplating a yacht club design for Bay Ridge, Maryland or vicinity. However, this may be due to the lack of foresight of certain developers. Bay Ridge is in the midst of a yachting center where the few clubs which do exist are overcrowded and outdated. Only recently, the Annapolis Yacht Club, one of the oldest clubs on Chesapeake Bay, has realized that it is incapable of serving its members properly. The club has begun plans for expansion. How can a club serve one thousand members with facilities designed for only three hundred?

A new yacht club at Bay Ridge would not only draw members from Washington, D. C., but would tempt members of existing clubs in the Annapolis area to move their memberships. Other natural advantages of Bay Ridge besides location will be discussed later in this section. The previous discussion is only intended to suggest the possible reality of the problem to be studied.

Originally, yacht clubs were established for the purpose of forming a headquarters for regattas. Later, the club house idea was formed; it was to act as a meeting place for boat enthusiasts, as well as a common area in which to dock their boats. Finally, the social and recreational benefits of the club were realized, but have never been nurtured to their fullest extent.

"* * * it is becoming increasingly difficult to know our true selves in our daily surroundings. As an economic necessity to preserve our health and sanity, therefore, we are realizing that more time should be spent out of doors."¹

Also it might be possible to, "* * * obtain a better understanding of the human side of our fellowman, and perhaps more than suspected, God himself through the glories of nature."²

It is the hope of the author that the following study will suggest at least one means to satisfy these human needs.

SITE

Bay Ridge Beach, Maryland is located thirty-three miles east of Washington, D. C. and approximately four miles

1, 2, Clifford C. Wendehack, *Golf and Country Clubs* (New York, Helburn Inc., 1929) p. 19.

southeast of Annapolis, Maryland. Two sides of Bay Ridge are bounded by water. The Severn River empties into the Chesapeake Bay on the north side and the Bay flows by on the east side of the property. In addition, Bay Ridge itself, in the shape of a horseshoe, surrounds a small lake which is connected to the Bay by a channel.

The original tract of land was purchased by an organization which is now called the Bay Ridge Development Corporation. A site plan was soon developed and the land subdivided into lots which the Corporation felt would be of adequate size for beach houses. A road system was planned. Later, the south portion of Bay Ridge was developed into a public beach, the remaining land being reserved for private dwellings. A covenant was established which placed a minimum price on the houses to be built. Therefore, most of the existing homes at Bay Ridge were built for year round rather than summer cottage use.

Since beach privileges are not accorded to those who purchase land without beach frontage, many lots are still unsold. Also, land on the west shore of the lake does not offer a sand beach. Therefore, that portion of Bay Ridge is sparsely populated.

The natural protection of Lake Ogleton is one of the factors which inspired the author to select Bay Ridge as the site for a yacht club. Tidal waves are calmed by sandbars located on either side of the channel from the lake to the bay. The channel is periodically dredged in order to maintain at least a seven foot depth at low tide.

The east shore of the lake is bounded by privately owned home sites which form the most densely populated section of Bay Ridge. The south shore has not been developed. The water is extremely shallow there, making navigation almost impossible. The land on the west shore of the lake forms a small peninsula with relatively steep banks and deeper water than that found any place else on the lake. Either side of the peninsula, which is called Oak Point, is suitable for boat dockage near the shore, the northwest side probably offering the most suitable area.

Oak Point consists of gently sloping land, dropping sharply only at the water's edge where there are almost vertical clay banks, the tops of which are approximately ten feet above water level at mean low tide. As the name implies there are many oak trees in the area, and these provide for a well shaded site. Utilities are already on the land, thereby eliminating certain development expenses. The road system at

Bay Ridge was installed and is maintained by the county. Most of the existing roads are adequate for two lane traffic and are constructed of macadam. Another advantage of Oak Point is that the existing road on the site leads directly to the Bay Ridge main entrance without passing through built-up residential areas.

PRELIMINARY REQUIREMENTS

The following discussion is intended to outline briefly the scope of the design which will be determined from the results of research, consultation and correspondence with representatives of existing yacht clubs in the Chesapeake Bay Area.

SIZE

The number and type of memberships which are to be served will naturally determine the facilities and the areas that will be required in order to produce a satisfactory design solution. Also, a knowledge of the number of memberships and the average membership fees will make it possible to estimate the annual gross income of the club. Expenditures can be estimated from the preliminary design scheme thus making it possible to check the design for financial feasibility.

SITE PLAN

An extensive study of the site will be conducted in order to locate the various elements of the design so that they will not disturb the natural aspects of the site. As much vegetation will be maintained as possible in order to provide an informal atmosphere conducive to relaxation. Paved areas for parking and roads are essential. However, since the automobile is itself now a symbol of congestion, an attempt will be made to provide for it in the most unobtrusive manner possible, and to create a natural park area for pedestrians.

YACHTING FACILITIES

All of the yachting conveniences normally provided at a yacht club will be included in this design. However, a detailed design of piers and docks would require the assistance of a specialist in this field, and this will not be undertaken.

SOCIAL AND RECREATIONAL FACILITIES

One of the main objectives of this thesis is to provide the social and recreational facilities which are lacking in many of the existing yacht clubs. A club house will be

included for the purpose of serving indoor social activities and a detailed plan of this and other related elements will be considered a part of the study.

LANDSCAPING

Since the site is already wooded, very little planting of trees will be necessary, except in places where specimen trees are desired. However, a suggested informal grouping of trees, and a shrub design scheme will be included in the presentation. This is felt to be necessary in order to create a harmonious expression of contemporary design within a natural environment.

SECTION TWO

**A Study of Existing
Yacht Clubs**

The following discussion has been compiled after consultation and correspondence with representatives of existing yacht clubs in the Chesapeake Bay Area. Information gathered in this manner was found by the writer to produce a realistic approach to the problem by extracting up-to-date information and recommendations from people who are constantly dealing with the organization, operation, and functioning of a club located in the vicinity for which this problem is designed. Research obtained from books alone can easily become too theoretical in substance.

In considering the above-mentioned thoughts, the writer has chosen to base many decisions, of a functional nature, on the experience gained by authoritative personnel at existing yacht clubs. Thus, the following discussion.

CLUB OPERATIONS

In order to facilitate an understanding of several functional relationships found in the design of the club plan, it might be advisable to explain the procedures by which a club operates. It has been found that most yacht clubs, with memberships of two hundred or less, operate administratively in a similar manner only deviating slightly with regard to certain appointed committees.

The management of the affairs of a yacht club is usually vested in a board of directors, consisting of approximately nine members, which is elected annually. The club officers are included in the board membership. All matters which may affect the welfare of the club are the responsibility of the board of directors. In addition, most of the committees which are necessary for the successful operation of a club are appointed by the board.

For those readers who are not familiar with the organization of a yacht club, some of the committees will be named. Many clubs have a special committee on admissions which, contrary to common belief, has more responsibility than the same committee for a golf and country club. A similar committee for a country club simply decides upon the character and financial standing of a prospective member. The admissions committee for a yacht club not only decides on an individual's character, but on his knowledge of general seamanship, "rules of the road", and knowledge about his own craft. Granted, many clubs do not observe this system, but those are the clubs with unfortunate accident records. The majority of organizations appoint a regatta committee, whose duty is to plan and conduct all regattas of the club. Other entertainments and social functions of a club are usually

the responsibility of the entertainment committee, which acts in the same capacity as that of any other club organization.

The officers of a yacht club generally consist of a commodore, vice-commodore, rear commodore, secretary, treasurer, and measurer, all of whom are elected to office by the active membership of the club.

Duties of the commodore are commensurate with the duties of the president of a country club. The vice-commodore, assisted by the rear commodore, is responsible for supervising the management of the club house, docks, and grounds. In addition to the former, the rear commodore usually inherits the task of regatta committee chairman. It is the duty of the measurer to measure all of the yachts enrolled in the club or engaged in any match, race or regatta sailed under the auspices of the club, and to report the same to the regatta committee. Aside from this duty, the office of measurer is purely an honorary position. The secretary and treasurer function essentially in the same manner as those officers of any club.

The majority of clubs employ a steward, and usually an assistant steward, who care for and protect the club property by periodically patrolling the docks, securing boats discovered

to be improperly fastened, and reporting to a club official any boats requiring pumping or other emergency attention. The steward's duties include that of a caretaker and watchman, as well as manager. Since the steward's duties are so involved with the responsibility for club property, it almost becomes mandatory that his quarters be located on the premises. During the yachting season either the steward or his assistant must be on duty at all hours of the day or night.

Just as in the organization of a golf and country club, a yacht club is usually composed of honorary, active, and associate members. This is significant in that the percentage of each type of membership will affect the space requirements which will be established in the design analysis phase of this problem. An example of the difference in privileges accorded the various members, the following is extracted from the By-Laws of the Capital Yacht Club, Washington, D. C.:

"Honorary members are persons of marked distinction who shall be accorded by the Board of Directors the privileges of the Club without payment of entrance fees or dues. Their number shall be

limited to ten, and their election must be by unanimous vote of the Board of Directors.

"Active members are those who have complied with the entrance requirements of that class, and who continue to pay the annual dues. They shall have all the privileges of the Club.

"Associate members are those who shall have been elected as such and have paid the entrance fee fixed for such members. They shall have all the privileges accorded to active members, except the right to vote, hold office, keep a yacht at the Club anchorage in care of the Club, enter a yacht in a Club Regatta, or fly the Club Pennant."

The associate membership of an average club in the Chesapeake Bay area consists of approximately fifteen per cent of the total membership, thus it is a small minority for which to provide additional facilities such as, lockers, lounge space, dining room facilities and recreation space. However, a yacht club which is planned to provide a "country club atmosphere", as stated in the preliminary requirements of this problem, must expect an associate membership twice that of an ordinary yacht club, or about thirty per cent. The reason for this is obvious. Many people in the Washington and Annapolis area who are interested in boats but are

not able to afford one at present will want to find a place in the summer where they can strengthen their knowledge of yachting as well as relax or participate in beach recreation.

FACILITIES AVAILABLE

The facilities that are available at Chesapeake Bay area yacht clubs vary so much that it would be difficult to state what an average club has to offer. More benefit will be gained from a general discussion of existing facilities at clubs in the immediate vicinity of the proposed club. This will include those from Annapolis to just south of West River.

Annapolis, Maryland may be considered a yachting center in itself. Boats of all sizes and types may be found there; eight foot dinghies, forty foot commercial fishing craft, seventy-five foot cabin cruisers and schooners, and boats well over one hundred feet in length. Storage and repair facilities, including marine railways and extensive dry docking equipment, are available for the smallest and the largest boats in that area. These conveniences have certainly been a major attraction for many yacht owners.

However, berthing space for boats at Annapolis is now at a premium, the docks are crowded. The town yacht clubs

are serving only the purpose of providing a storage space for boats. It may easily be compared with a large downtown automobile parking garage in a city. The yacht clubs located at Annapolis are town clubs which, in most cases, provide only a club house with bar or cocktail lounge, and perhaps a small dining room and lounge. The majority of these clubs were designed to attract persons who are interested only in a dockage for their boat and not in a country club or beach atmosphere.

South of Annapolis the situation is pleasingly different. There are no cities or towns on the Bay between Annapolis and Solomon's Island, except North Beach which, as the name implies, is a beach town. Therefore, most sites which are suitable for the location of a yacht club already possess a natural openness and freedom conducive to relaxation. Of course, in many cases as the result of careless planning this feeling of openness has not been maintained. Clubs located on the shores of West River and on the Bay in the West River vicinity are of an entirely different type than those found at Annapolis. Many clubs in the first mentioned area have spacious indoor and outdoor lounges, and swimming facilities; some have sand beaches as well as pools. Others provide for outdoor dining, dancing, and games, including badminton, shuffleboard, quoits, horseshoes, croquet, and tennis.

However, it must be noted that no single yacht club which was studied offers all of these facilities.

Of course the facilities found in the Annapolis Clubs, which were mentioned earlier, are also included in most of the clubs in the West River area.

RECOMMENDATIONS

In response to a general inquiry and questionnaire which was sent to various yacht clubs in the Bay area, several recommendations were made by officials of existing clubs which they felt would be of value to the planner of a new club.

Many of the persons replying expressed the opinion that their own clubs should give complete managerial responsibility of the club to the steward. The reason for this is that a full-time employee of the organization who has a knowledge of club management and operations as well as of seamanship is in a much better position to control and perform efficiently than is a group of appointed men who have their own businesses to tend. Committees for the planning of regattas and organized socials, and other committees of a similar nature could remain within the membership; however, matters

dealing with many of the club's expenditures should become the responsibility of an experienced manager.

It is felt that every club, regardless of size should plan at least one large area for the general congregation of members when they are not on their craft. Just as golf and country clubs always seem to provide the traditional "nineteenth hole," yacht clubs should provide a "steerage." This can be in the form of a cocktail lounge, bar, grill, or possibly just an informal area for yachting conversation. One of the most important considerations for the design of this space, one that will be discussed in detail in Section IV, is that it be separated from the quiet areas of the clubhouse, for example the dining room and lounge.

Several clubs have found the need for a dinghy storage area. At present, in some clubs, an owner of a small boat must take his boat home for the winter season or store it in the open at the club. A small boat exposed to the winter elements will not have a very extensive life span.

It has been found that existing clubs are lacking in workshop facilities. Many do not provide work space at all. There are several minor maintenance tasks which a yacht owner cannot perform on his boat because he does not have a suitable place for a bench vise or does not own a complete set of

wrenches. A complete workshop equipped with lathes and power saws is not necessary; just a small heated room, large enough for two or three people to work, and equipped with the basic tools of a carpenter, would serve the purpose. The area should be heated so that during cold weekends in the winter or spring it will afford a warm place in which to make repairs for the coming summer season.

It has been recommended that a space be planned in which marine supplies can be displayed and sold. An area of this nature would not compete with Annapolis marine supply dealers, but only serve as a convenience for members who need to purchase small replacement parts such as fuses, light bulbs, or accessories. For examples, life preservers, small compasses, running lights and covers, cleats, and other items of a similar nature are always in demand.

Owners of large power boats are constantly planning cruises. By nature, it seems, they have an incessant desire to explore new waters. A small river, an old port, or new fishing grounds all appear enchanting to the yacht owner. In order to assist him in his planning, it would be well to provide a chart room where an indexed file of geodedic survey maps of the east coast could be established. This chart room might easily be combined with a small library or the conference room.

A radio receiver is an essential furnishing for the club, because local weather and distant storm reports, as well as emergency ship broadcasts, can be of value in many ways. A sending set is not absolutely essential but it can be of value during emergencies when a certain boat must be contacted or during periods of small craft warning.

SECTION THREE

Program and Analysis

PROGRAM

SIZE OF CLUB

Recommendations for facilities which should be included in the design of a yacht club have been made by officials of some of the clubs which were surveyed by the writer. Several of these suggestions were presented in Section Two and will be incorporated in the design program. A discussion of the remaining areas to be considered will be presented in this section. In order to form a basis for determining the requirements for these and other areas, facilities, and equipment in the program, an estimate must be made of the approximate total number of members the club will serve at its maximum desirable size.

The survey of existing clubs in the Bay area reveals that an average maximum membership for a small club is approximately two hundred. This figure represents both associate and active memberships. In using a figure of between thirty and thirty-five per cent, as mentioned earlier, for the portion of memberships reserved for associate privileges, it is found that between sixty and seventy members will not be eligible for dock privileges. Since no definite rules have been established which govern the ratio of active to associate members, the various design elements should be flexible enough to accommodate changing conditions.

DISCUSSION OF MAIN ELEMENTS

It has been mentioned earlier in this report that many of the yacht clubs in the Bay Ridge vicinity were originally designed with only the yacht owner in mind; they provided parking space for boats. Also, the few clubs which do provide for social activities have either outgrown their club house facilities or, never served this particular type of membership adequately. In either case, the field is open for a design which will integrate the requirements of the yachtsman with those of the social member, and thus establish the foundation for a well balanced organization. The next step is to anticipate the organization itself, which of course is beyond the scope of this problem. Suggestions for a possible organization have been outlined, but it is not the architect's responsibility to supervise club operations beyond this point.

One of the major faults discovered in yacht clubs, as well as in country clubs, one which destroys the unity of the plan, but one that can be corrected in the design phase by proper education of the building committee by the architect is that:

"Members of some clubs indulge their individual whimsies to a degree where the design is no longer a well-integrated whole."¹

When it is insisted that a lighthouse be included in the design, or that the dining room must be in the shape of the bow of a boat, or that all fish over a certain size caught by members must be stuffed and mounted on the walls of the lounge, sensible planning and functional design are lost. These examples may appear ridiculous to the reader, but they are apparent in many clubs today. Another misconception in planning, which is strongly expressed in too many clubs, is that the interior lounge areas must present a formal setting. This theory holds true only until the facilities are used a few months.

Primarily a club house should be able to accommodate small intimate seating groups without their interfering with the general flow of traffic and in such a manner that one small group does not seem to preempt one entire area of the club. Seating arrangements should be in open plan, allowing wide avenues of passageways. Rearrangement of the

1, Progressive Architecture, Vol. 35 (March 1954). Pg 127

furniture according to need is simplest if seating is along the walls of rooms. This also has the advantage of allowing the members to view the surrounding water and grounds.

Separate spaces may be developed through any one of several methods; a fireplace wall; light, display type room dividers, or accordian folding walls which may easily be opened or closed.

Throughout the club house large glass areas are especially desirable to allow a view of out-of-doors, and also to establish a certain informality which is accomplished through openness.

In brief, the main considerations in planning a club house are to provide accommodations for small groups, a pleasant dining area, a relaxing lounge area, all with flexibility so that they can be adjusted to varying needs.

Aside from the facilities already discussed in this section and in Section Two, certain additional functions in the club house must be served. The thought of inclement weather might suggest an indoor recreation area which can double as a party room, a nautical classroom, or a space for any organized social gatherings.

A club can either be tormented by the unplanned for activities of the members' children, or it can provide for them and thus create an asset for the club. A teenager, if he is given the chance and the proper training, can prove himself to be an excellent sailor. The idea of holding club sponsored junior class sailing meets is growing rapidly, and presents a fine medium through which a club with a well-informed younger set may gain prestige. This information may not seem pertinent at this point, but, a means of encouraging teenage cooperation is to provide a teen room so that the younger set will feel itself a part of the club, and a junior membership organization may eventually be established. The teen room is only a start in the right direction.

Previously, it was recommended that more provision should be made for recreation in the planning stage of a new club. An indoor recreation area located in the club house has been mentioned for use during inclement weather. This is only part of the program. Warm summer days and evenings suggest outdoor recreational activities such as badminton, shuffleboard, horseshoes, croquet, tennis, and swimming. The latter requires the most careful attention, not only because of the cost involved, but because of its planning complexities and its popularity. If a natural sand beach

is available, the problem is simplified somewhat. Then, the only cost and construction involved would be a first aid station and locker house. However, since the proposed site at Bay Ridge is not so favored in this respect, a swimming pool will be considered and later discussed in detail in the area analysis.

Emphasis, so far in this report, has been placed on the social functions which are to be served in the club, however, the other major phase to this problem, which cannot be neglected, is the service and facilities provided for the yachtsman. As it has already been suggested, most existing clubs are not deficient in providing the proper facilities in this area, although dock maintenance could stand improvement in some organizations. The usual dock essentials include provision for fuel, water, electricity, lockers, and some means of launching small boats. These facilities, plus individual slip accommodations for each boat, are considered minimum standards. In addition to the above-mentioned facilities, a yacht club should have access to a marine railway to dry dock the larger boats for repair. This is not intended to imply that a club must construct its own railway, only that one be available within a reasonable distance of the club. The advantages of a workshop, dinghy storage area, and

marine supply shop were discussed earlier as recommendations for the boat area, and may be catalogued as conveniences rather than essentials.

Since it is anticipated that many of the memberships will come to this club from the Washington area, additional revenue for the club might be obtained through overnight guest facilities. Washington is located only thirty-three miles from Bay Ridge, slightly more than an hour's drive over congested roads in the ~~summer~~ season. However, Washington's heat and humidity during the summer months make most warm blooded residents want to retire to cooler areas on weekends. Many members will spend the weekends on boats which provide sleeping quarters, but associate members, with social privileges only, are not this fortunate. Therefore, a study of overnight guest accommodations is appropriate.

Briefly, four main elements should be included in the design of the proposed yacht club; the club house, outdoor recreation, boat area, and overnight facilities.

REQUIREMENTS

The requirements for the club, as determined by research, authoritative recommendations, and deductive

reasoning from the previous discussions, are outlined below. After the outline there is a detailed analysis of each area:

I. Club House

A. Entry

B. Manager

1. Private office

2. Outer office for secretary

C. Dining-Ball room, provision for indoor and dining-dancing.

D. Galley (kitchen)

1. Serving area

2. Food preparation

3. Refrigeration

4. Storage

5. Washing

6. Employee dining

7. Lavatories and lockers

E. Snack Bar and Cocktail Lounge

F. Recreation area, suitable for table tennis, pool, and party games.

G. Conference room for fifteen people to include:

1. Chart storage and layout

2. Small reference library

H. Teen room, for meetings, lounging, and passive games.

I. Lounge area

1. Indoor lounge

2. Sun Deck

J. Mechanical equipment

K. Storage for club supplies, janatorial, etc.

L. Public toilets

M. Parking

II Outdoor Recreation

A. Swimming pools (Adult and children, separate)

1. Filtration plant

2. Clothes lockers and showers

B. Active game areas

(Shuffleboard, horseshoes, tennis, badminton)

C. First aid room

D. Equipment storage

III Boat Area

A. Docks

1. Dock lockers - one/ slip

2. Fuel pump

3. Hoist

4. Provision for water and electricity

B. Workshop

1. Bench area
2. Tool and material storage

C. Dinghy storage

D. Marine supply shop

E. Steward's office

1. Files
2. Radio room

F. General storage

1. Cleaning materials
2. Pumps, hose, line, etc.

IV Guest Units

- A. Ten unit blocks
- B. Parking

ANALYSIS

CLUB HOUSE

The club house should be located so as to afford the maximum view without sacrificing the circulation between elements of the overall design. Even though the club house has an indirect relationship with the boating area, the designer must use discretion in placing the various elements of each, in order to maintain certain quiet areas within the club house. In fact, when the high percentage of social memberships for which the club is planned is considered, the functions of the club appear to be twofold, yachting activities and social activities. This suggests a possible separation in the two major activities and might well be considered in the site plan. Activity and traffic flow of the yachting and social functions should not conflict.

Members should not be required to bear the expenses which result from poorly planned areas within a club. True, it is difficult to estimate accurately the percentage of attendance on weekends. Good weather will mean a high attendance and poor weather will probably mean a low attendance. When a club is in the planning stage it is highly improbable that a designer will be able to estimate how many people will use the various areas at certain times. Thus, it can be seen that quantities of waste space can easily

occur, and thereby indirectly present the members with additional expense due to unnecessary construction costs. The only solution to this problem is for the designer to create a flexible plan, one which possibly allows an overlapping of areas and one which, through the use of movable screens and other devices, will accommodate large or small groups with equal ease.

MANAGER'S OFFICE

The manager's office should be reasonably accessible to all the major elements of the club house as well as being located near the main entrance. Special consideration might be given to the relationship of the manager's office to the main kitchen because one of his responsibilities will be to oversee the chef's operations. A private office is necessary in which to conduct business undisturbed. Also, a public office which functions as a secretary-receptionist area should be included and located within easy sight of visitors.

DINING-BALL ROOM

One of the greatest obligations a club has towards the members is to provide efficient dining service. The dining-kitchen facilities are probably the most difficult areas for

which to plan because of their uncertain nature. Other elements, such as the docks are operated by proceeds from dues and other annual fees which may be adjusted if the need arises. However, the dining room does not have a constant income on which to depend. There are no rules which apply to all conditions and, unfortunate as it may seem, experience is the best teacher. The only means to overcome these disadvantages is to appoint a man to the planning committee who has had some hotel or restaurant experience. A person who understands methods of operating and planning kitchens would be of great benefit to the club as an adviser to the planning committee as well as to the architect.

The dining room should, of course, be located adjacent to the kitchen serving area and, be segregated from the kitchen noise. Also, it would be well to locate the dining room near the main entrance so that direct access can be had without passing through other areas of activity. All noisy areas should definitely be situated away from the dining room. The excellent view across Lake Ogleton to the Bay should be taken into consideration. This placement would also assure a cool room in the afternoon and evening by locating it on the east side of the building. Outdoor dining facilities should, of course, be located with reasonable

access to the kitchen and in the immediate vicinity of the main dining area.

KITCHEN

The detailed planning of a club kitchen should not be undertaken by the architect alone. A specialist in hotel or restaurant kitchen planning, if used as a consultant, will be able to analyze the overall space available and recommend an efficient placement of the various elements in order to coordinate them with other areas of the design, such as the dining room, the employee's dining area, and the service entrances. The kitchen should be large enough to provide adequately for weekend demands and special occasions, yet small enough to maintain efficiency when only one or two employees are needed for food preparation during the week. Since natural ventilation cannot always be depended upon to provide sufficient circulation of air in a kitchen, artificial ventilation systems should be considered.

The kitchen itself consists of four major elements; preparation area, cooking area, serving area, and dishwashing area. In general, these areas should be arranged so that circulation aisles do not conflict with work aisles. For example, access to the employee dining and dressing facilities must be gained without crossing a work aisle.

In addition to the kitchen, space must be provided for dry storage and, as already mentioned, for employee dining, dressing, and toilet facilities. The storage area should be capable of being locked to prevent pilferage. A separate outside entrance for employees, which leads directly to their dining area, is essential.

LIBRARY - CONFERENCE ROOM

The conference room may be categorized as one of the quieter elements in the design. Since this area may be used as a library and chart room when meetings are not being conducted, a complete segregation from noisy elements is preferable. An entry to the conference room from a quiet lounge could present a solution to this problem.

Furnishings may consist of a conference table and chairs for twelve persons, one or two lounge chairs for reading, a chart table, and a built-in rack for chart storage.

LOUNGE

The lounge should be near the main entrance so that it can function as a congregation point as well as a transition element for other areas of the club house. Seating should be placed in small groups around the edge of the lounge, allowing easy circulation. If possible, it should be

oriented for a view of the lake or the surrounding grounds. In order to provide flexibility, the lounge should be designed to accommodate party groups and receptions. A second lounge might be used as a quiet area.

RECREATION

The indoor recreation area should provide enough space for one or two ping-pong tables or a pool table. Small tables for other passive games might be included in this area. The recreation room, if properly designed, can provide an ideal place for small party groups, or for organized recreation during inclement weather. In order to avoid repetition of areas, the recreation room should be located near the teen room for the use of junior members. Direct access to an outdoor game area is recommended.

COCKTAIL LOUNGE

Although liquor lockers for men are planned for the dock house, a cocktail lounge should be included in the club house design. It should be an area where both sexes can congregate. In many existing clubs, facilities of this nature for women are neglected. Since one of the main purposes of this design is to promote a balanced social atmosphere, it is essential that the cocktail lounge be open to members of

both sexes. This element should be treated informally and provide reasonable access from the boating area so that persons in leisure attire may use the area without walking through a more formal element. If possible, the service to the cocktail lounge should be integrated with that of the snack bar so that one attendant can serve both areas on weekdays.

SNACK BAR

The snack bar should provide seating for a minimum of fifteen persons. In order to allow ample space for circulation, the use of counter seats and booths is recommended. Tables are more difficult to service than booths. Direct access to the boating area should be provided and indirect service must be available from the main kitchen for periodic replenishment of supplies.

TEEN ROOM

A separate entrance to the teen room is advisable so that the younger set will not interfere in any way with the senior members. It was mentioned earlier that the teen room should be located adjacent to the indoor recreation area so that the design will not require a separate play space for the junior members. In addition, it might be well to place

the outside entrance to the teen room in relation to the outdoor recreation area. Even though the junior members would play table tennis and pool in the recreation room, a small game storage closet should be provided in the teen room for passive games.

SUN DECKS

Outdoor lounging space is an important feature for every yacht club. Sun decks should be located to take full advantage of the sun, scenic views, and views of the boats. It might be well to locate one of the sun decks near the main dining room for outdoor dining and dancing as well as for lounge use. It should be emphasized that the furniture for the sun decks must be weather resistant and of durable construction.

RECREATION AREAS

The outdoor recreation facilities do not require the use of one concentrated area. Of course, the swimming pool and locker house must be closely related. However, if space is limited, other recreational facilities such as the tennis courts may be satisfactorily located in another area. The main outdoor recreational activities which will be considered in this problem are swimming, badminton, tennis, and

shuffleboard. It is felt that only the larger elements which require major design consideration need further discussion here.

SWIMMING POOL

The swimming pool is probably the most important recreational feature that can be included in a club design. In order to achieve the best architectural expression, the designer should plan the pool, not as a separate area, but as an integral part of the club house design. This does not necessarily mean that the pool must be surrounded by the club house. It does imply that the two elements should be tied together by the use of certain common materials, structural modules, or other medium at the architects command. Since the pool forms a focal point of activity and provides entertainment for the spectator and swimmer alike, it should be situated as foreground scenery for the sun decks as well as have a natural view of its own.

The pool does not have to be large enough for competition swimming, however, it should contain a deep area for diving. If a one meter board is used, a depth of nine feet will be satisfactory. However, a three meter diving board requires a depth of at least eleven feet. The shallow end

of the pool should be approximately three feet deep, and with a gradual incline, should increase in depth to seven feet at which point a sudden drop may occur. A small children's pool which is segregated somewhat from the main pool area traffic would be advantageous, in that supervision would be facilitated.

An expert on pool construction and design should be consulted before major decisions are made. However, it is reasonable to assume that the water supply could be easily obtained directly from the surrounding lake, thus eliminating the need for a complete filtration system. Also, this would permit salt water bathing.

Many devices can be used to add to the attractiveness of a pool area. Artificial lighting will allow the pool to be used at night. Carefully placed flood lamps and planting can create a beautiful effect at night. Shrubs and trees may also screen the area for privacy as well as offering shaded areas for spectators in the daytime.

LOCKER HOUSE

Light and ventilation are of utmost importance in the design of a locker house. The maximum number of vents should be provided. In order to simplify control of the locker

house, a central point should be designed for issuance of locker keys and towels to both sexes. A small first aid station which contains a bed, attendants table and chair, and oxygen apparatus may be located at the control point also. Storage space is necessary for towels. If the badminton and croquet areas are located adjacent to the locker rooms, participants in these games may use the pool lockers for dressing. Also, the locker attendant can issue and store the game equipment.

Many locker arrangements are acceptable. Probably the most widely used arrangement for men is to place full length lockers back to back providing bench space for each row of lockers. Small lockers in tiers of three may be provided for children. A single shower with drying area is sufficient since the anticipated maximum attendance is thirty per cent of the total membership, or sixty persons. These members will not be entering or leaving the pool area at one time. The men's toilet should be located so as to allow access from the pool area without walking through the locker area.

Women require individual dressing stalls for privacy. Individual showers for each dressing stall present the most convenient arrangement, but not the most economical one.

One shower with drying space is recommended. The lockers should be full length and located in or near the dressing areas. The toilet must have direct access to the pool area and include a small makeup area.

All materials used in the locker house should be water resistant and generally durable.

BOAT AREA

The boat area includes the steward's office and the workshop, as well as the boat docks. The former areas may be planned without consultation with a specialist. However, a detailed design of the docks requires the professional assistance of a specialist in dock design and construction methods. Therefore, only a suggested placement of the elements of which the dock area consists will be foreworded in this yacht club design.

DOCKS

It is recommended that only one pier be included in the original design. Since adequate shore space is available for individual slips, it would be unwise to clutter the design with several piers. Individual slips along the shore line are easy to maintain and provide direct access to each boat.

Electrical outlets with meter attachments should be provided for each slip. In this way, persons may be charged individually for the current they use. Water faucets with hose connections and dock lockers with approximately twenty-four cubic foot capacity are recommended for each slip which is designed for boats twenty feet or more in length. Joint water supply connections and twelve cubic foot lockers are sufficient for the smaller boats. Fuel pumps and an ice dispenser are necessary elements and should be located at a central point.

Provisions must be made for launching small craft from trailers. A system whereby trailers can be positioned under a hoist and the boats lifted and lowered over the sea wall would be the most satisfactory solution in this case because of the difference in the existing ground and water levels. A ramp requires more space and needless excavation.

DOCK HOUSE

It is the steward's responsibility to supervise all dock activities. Therefore, his office should be centrally located in relation to the docks. Also, the workshop must be easily accessible from the dock area. This suggests that the two elements be combined in one building.

The steward's position in a yacht club is similar to a golf professional's at a country club. The steward is the authority on boating matters and must be available to the members for advice. The marine supply shop is his concession and therefore his office should be located adjacent to the shop. A two way radio capable of contacting all boats in the fleet in addition to Bay rescue and storm warning centers should be included as a permanent furnishing in the steward's office. Also space must be provided for storage of fleet registration files.

The workshop, designed for minor repair operations, should have a separate entrance to facilitate the transporting of parts to and from the boats. A materials and equipment storage area is required, mainly for storage of water pumps and spare line. Located next to the workshop, the storage area can also house working materials for the members.

It was mentioned earlier that the male members of the club should have access to a lounge area similar in nature to the nineteenth hole of a country club. A private area in the dock house would provide the ideal location for this function. Liquor lockers and refrigeration space for setups, ice, and soft drinks should be included in this area. In addition, shower and toilet facilities would be located

adjacent to the lounge. For those who do not have facilities on their boat, a dressing area and minimum number of clothes lockers would offer a convenience. Of course, toilet, locker, and dressing facilities should be planned for women members also, but they should be located in another part of the building.

DINGHY STORAGE AREA

Many yacht owners own a dinghy but do not have a place to store it when it is not in use. Usually this type of boat is not required for use except when the mother craft is moored away from shore.

A simple but functional storage area could consist of a metal pipe frame with horizontal cross bars forming the floor of each tier. Three tiers in height would probably be sufficient; the width being determined by the need. A canvas canopy could form the roof, or other materials could be used if a more permanent covering were desired. An elaborate design is not necessary because the main purpose of the storage element is to save maintenance time and money by providing a covered area which protects small boats from the weather.

GUEST UNITS

Guest accommodations provide a convenience to non-resident members and yachtsmen using the inland waterway who desire land quarters in the evening. There is no means of anticipating the number of units required. Therefore, it must be assumed that a basic unit designed for duplication or expansion would be the wisest solution. This suggests use of the motel principle. Economy then will determine the minimum number of units to provide.

It has been found that the minimum number of motel units which will show a profit is ten, assuming seventy per cent occupancy. However, the building planned for this club does not necessarily have to be designed for profit, merely designed to support itself.

It is not necessary to design the individual rooms on a luxury basis; however, informality, comfort, and convenience must be considered. Since the site offers excellent views, individual outdoor sitting areas oriented for these views might be incorporated in the design.

STEWARD'S RESIDENCE

Since the steward may be on call at any hour of the day or night, his residence should be located on the club premises. The best location would be where the steward can control visitors to the club during off season periods. This is a very important factor in the design of a yacht club because thousands of dollars worth of boats are entrusted to the steward during the winter. Tampering and pilferage must be prevented.

Although the detailed design of the steward's residence will not be considered a part of this study, it might be well to suggest that the site chosen for him afford privacy and pleasant informal surroundings.

PARKING

One of the objectives of this thesis is to develop an overall site plan which preserves as much of the natural landscape as possible. When automobiles are found in large numbers on a natural site, a quiet harmony is destroyed. The car becomes only a reminder of the congestion which is found in a city.

However, parking must be provided for approximately forty cars, plus employee parking facilities. The problem then becomes one of furnishing paved areas which are unobtrusive. If space allows, small parking areas for three or four cars, each separated by planting and green areas, would provide the best solution. The existing site may not permit this plan because it would require too much space. Another more practical method would be to choose an area which is not densely populated with trees and locate one or two large parking areas, screening the surrounding area with plants so that only the entrances to the paved areas are visible from the road.

SPACE REQUIREMENTS

An estimate of the area required for each element of the design is listed below:

I. Club House

A. Entry

B. Manager 200 sq. ft.

1. Private office

2. Outer office for secretary

C. Dining-Ball room, provision for indoor and outdoor dining-dancing 75 people @ 15 sq. ft./person = 1125 sq. ft.

- D. Galley (kitchen) 75% of dining area = 850 sq.ft.
1. Serving area
 2. Food preparation
 3. Refrigeration
 4. Storage
 5. Washing
 6. Employee dining
 7. Lavatories and lockers
- E. Snack Bar and Cocktail Lounge
35 persons @ 12 sq. ft./person = 420 sq. ft.
- F. Recreation area, suitable for table tennis, pool,
and party games 600 sq ft
- G. Conference room for fifteen people to include:
350 sq. ft.
1. Chart storage and layout
 2. Small reference library
- H. Teen room, for meetings, lounging, and passive
games 25 persons @ 15 sq. ft./person = 375 sq.
ft.
- I. Lounge area
1. Indoor lounge
 2. Sun Deck
- J. Mechanical equipment 150 sq. ft.
- K. Storage for club supplies, janatorial, etc. 75
sq. ft.

L. Public toilets

M. Parking 40 cars @ 200 sq. ft. = 8,000 sq. ft.

II Outdoor Recreation

A. Swimming pools (Adult and children, separate)

3000 sq. ft.

1. Pump area 25 sq. ft.

2. Clothes lockers and showers 900 sq. ft.

B. Active game areas

(Shuffleboard, horseshoes, tennis, badminton)

C. First aid room 75 sq. ft.

D. Equipment storage 50 sq. ft.

III Boat Area

A. Docks

1. Dock lockers - one/slip

2. Fuel pump

3. Hoist

4. Provision for water and electricity

B. Workshop 250 sq. ft.

1. Bench area

2. Tool and material storage

C. Dinghy storage (20 boats)

D. Marine supply shop 150 sq. ft.

E. Steward's office 150 sq. ft.

1. Files

2. Radio

F. General storage 100 sq. ft.

1. Cleaning materials

2. Pumps, hose, line, etc.

G. Men's Lounge 200 sq. ft.

H. Toilet and Locker Facilities

IV. Guest Units 260 sq. ft./room

SECTION FOUR

Design

STRUCTURAL SYSTEM

First, it should be mentioned that it is not advisable to select a definite structural system until certain architectural design decisions have been made. This may be pointed out by the fact that a desirable span is influenced by the plan of the building, the module, and the limits of the material used. Although final decisions are premature at this point, certain general principles should be discussed.

Regardless of the materials used, some consideration should be given to the use of a modular structural system. Some of the outstanding advantages offered by a modular system are flexibility, simplification of construction, and the basis for a more orderly plan.

The use of columns as the vertical element of support for the roof structure would allow a free placement of interior walls. These walls would become light, non-supporting, movable screens. This is significant, in that additional flexibility is made possible.

For structural bays of between twenty and twenty-five feet, any of the three major materials; concrete, steel, or timber; may be employed with reasonable success. Timber

beams would require lamination in order to produce sections of reasonable size and, eliminate a quantity of lateral supports. Large quantities of steel would require protection against corrosion, especially in the presence of salt water. Both timber and steel, by themselves, are unprotected against fire. Concrete does not require additional fireproofing, nor does it require as deep a section as steel or wood. Also, wide overhangs may easily be expressed with concrete construction. Steel is not so easily adapted without injecting a degree of continuity, a property which is inherent with concrete.

MECHANICAL EQUIPMENT

An open plan with adequate natural ventilation will eliminate the need for air conditioning. Breezes in the Bay area are found to be sufficient for cooling during the summer. The forced ventilation required in the club house kitchen may be supplied by unit fans.

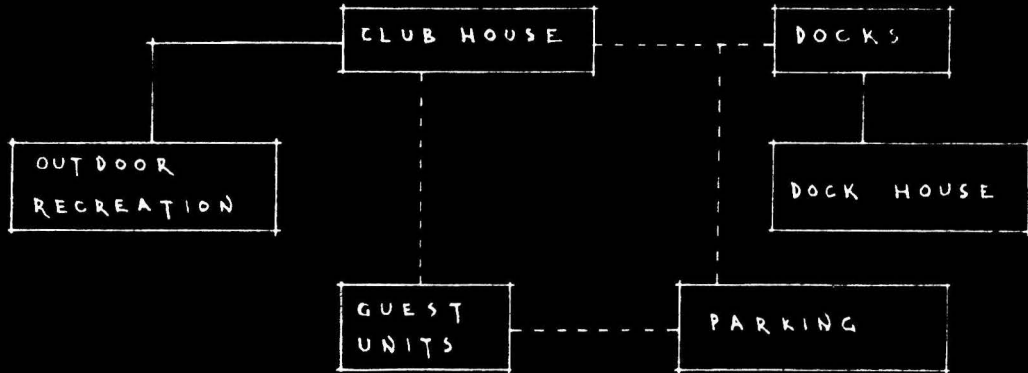
Since the yachting season is closed during several of the winter months, club activities would necessarily be restricted to the spring, summer, and fall. This suggests that a heating system should be selected which will provide immediate, individually controlled heat for periods of short

duration. Electric heating systems offer low installation and maintenance costs in addition to satisfying the requirements stated above. Electric coils may be incorporated in the ceiling or the floor of a building, the controls for which occupy very little space.

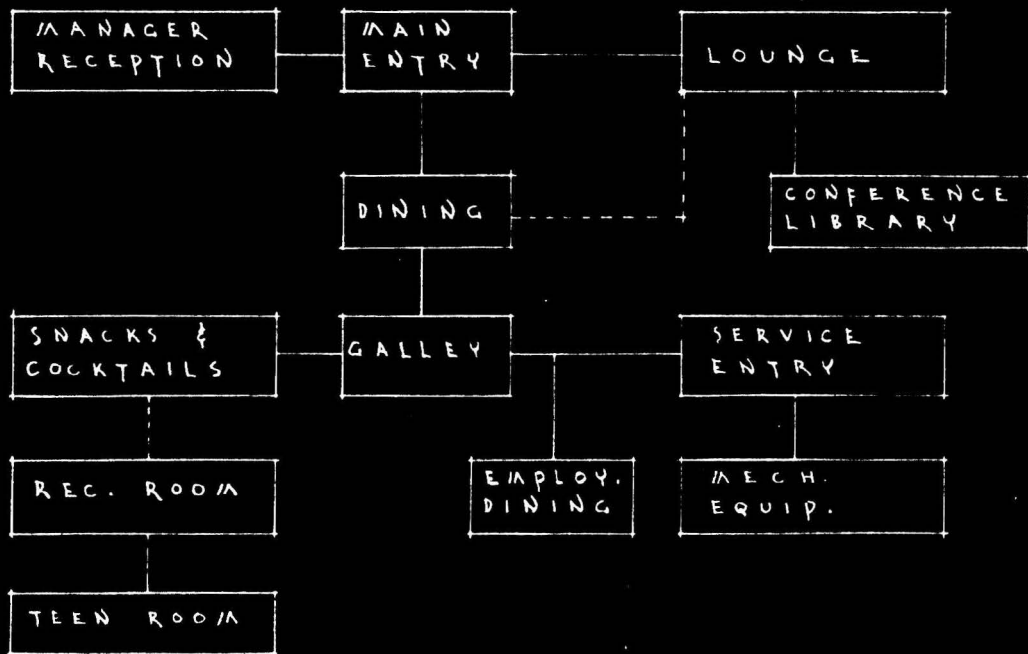
RELATIONSHIP :

_____ DIRECT
 - - - - - INDIRECT

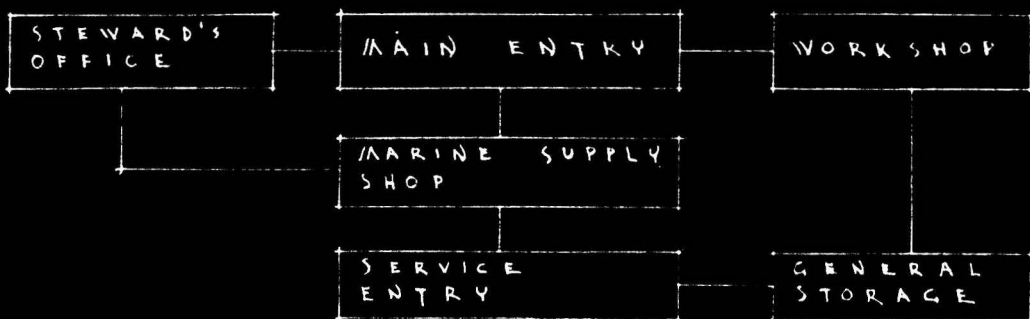
OVERALL LAYOUT



CLUB HOUSE



DOCK HOUSE

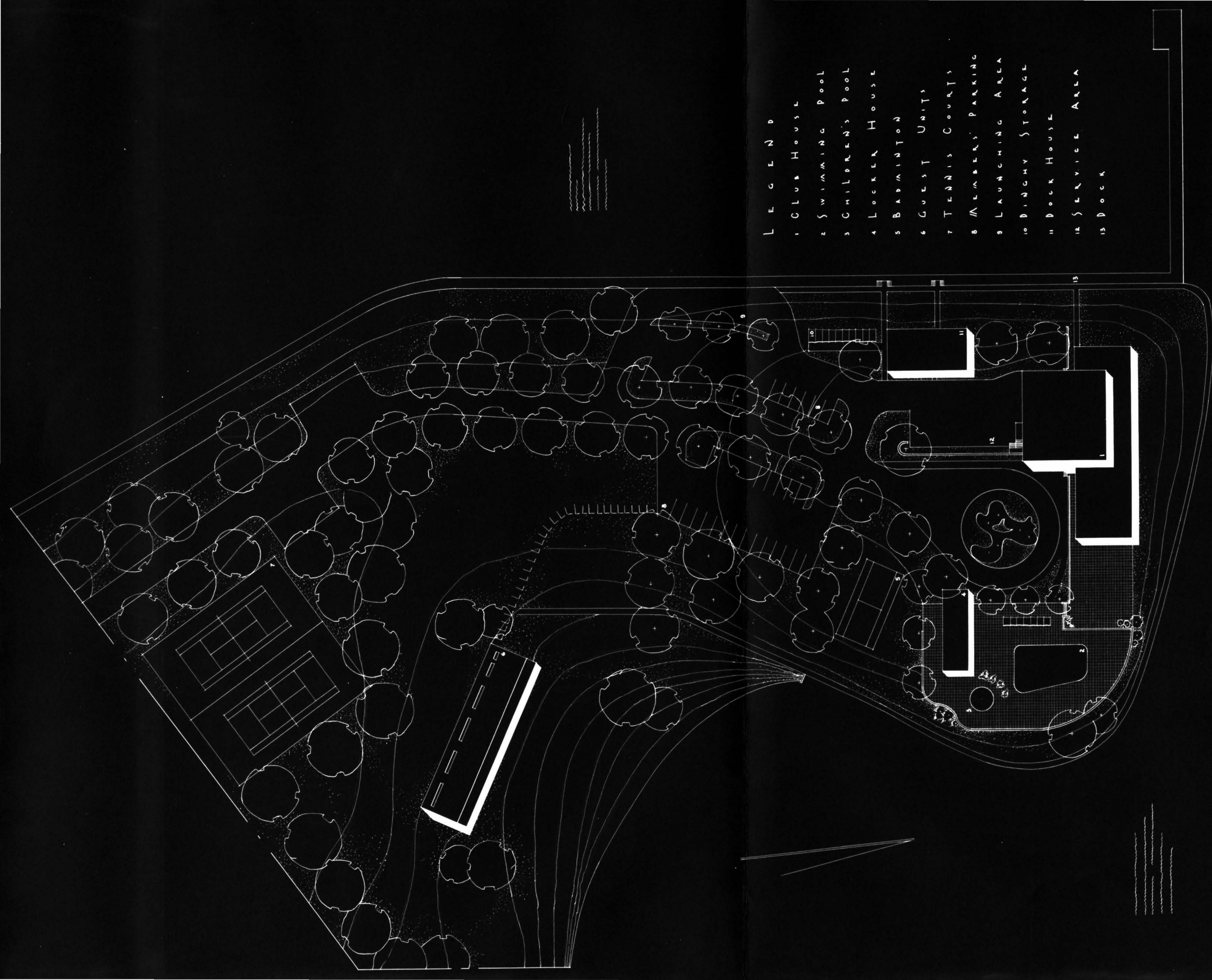


PRESENTATION



LOCATION
No SCALE

MAP

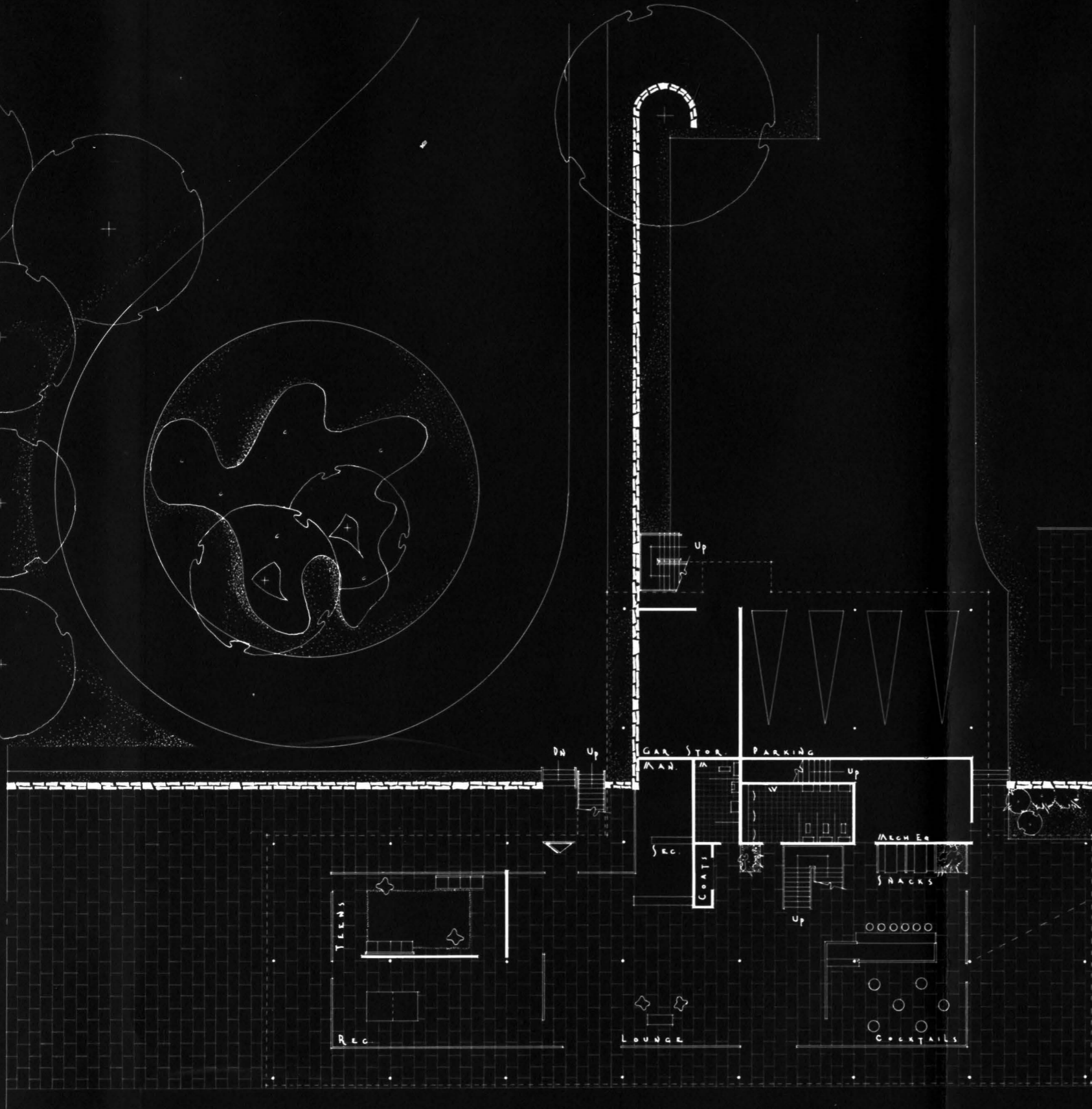


L E G E N D

- 1 CLUB HOUSE
- 2 SWIMMING POOL
- 3 CHILDREN'S POOL
- 4 LOCKER HOUSE
- 5 BADMINION
- 6 GUEST UNITS
- 7 TENNIS COURTS
- 8 MEMBERS' PARKING
- 9 LAUNCHING AREA
- 10 DINGHY STORAGE
- 11 DOCK HOUSE
- 12 SERVICE AREA
- 13 DOCK



S I T E P L A N



FIRST FLOOR PLAN



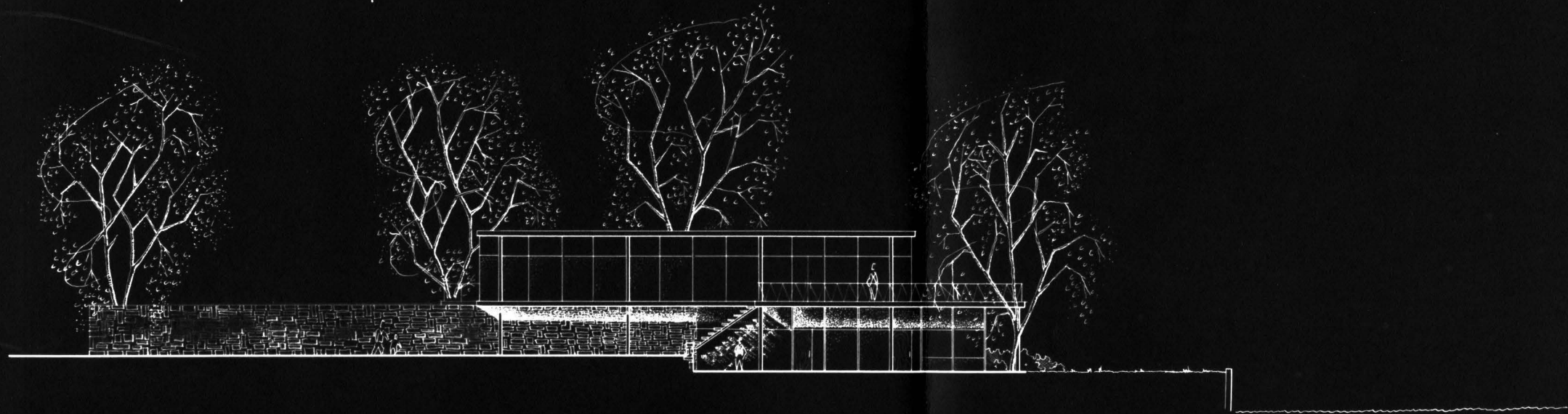
SECOND FLOOR PLAN

3/32 SCALE

CLUB HOUSE
SCALE 0' 5' 10' 15' 20'



NORTH ELEVATION



EAST ELEVATION

5 PLY BUILT-UP ROOF

PIPE RAILING
PROMENADE TILE
SETTING BED
4 PLY ROOF
CEMENT FILL
FLASHING

HEAD
PROJECTING VENT
THERMOPLANE
SILL
ROOF DRAIN

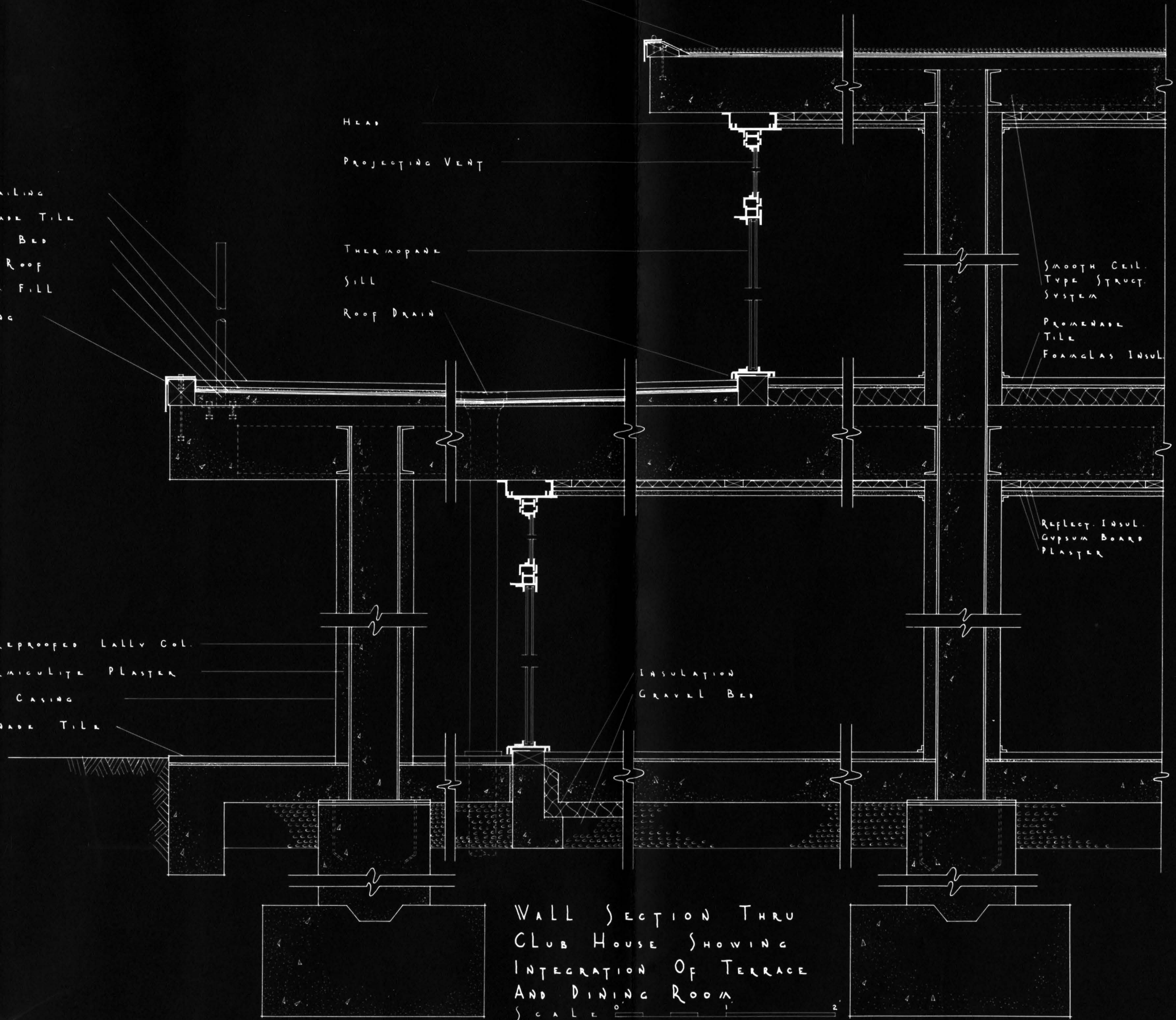
SMOOTH CEIL.
TYPE STRUCT.
SYSTEM
PROMENADE
TILE
FOAMGLAS INSUL.

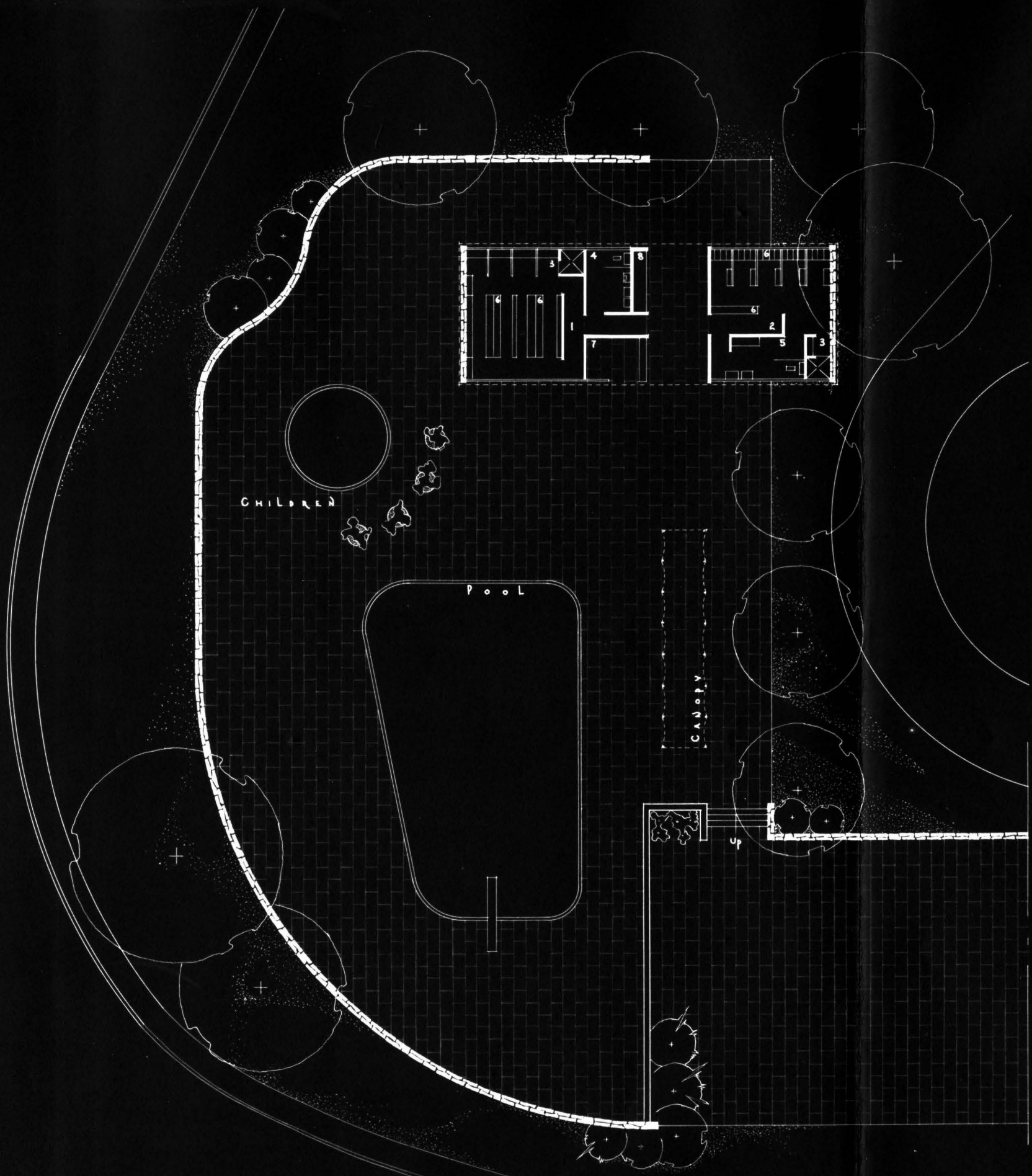
REFLECT. INSUL.
GYPSUM BOARD
PLASTER

5 1/2" FIREPROOFED LALLY COL.
1 1/2" VERMICULITE PLASTER
STEEL CASING
PROMENADE TILE

INSULATION
GRAVEL BED

WALL SECTION THRU
CLUB HOUSE SHOWING
INTEGRATION OF TERRACE
AND DINING ROOM
SCALE 0 1 2





- LOCKER HOUSE LEGEND
- 1 MEN'S LOCKER ROOM
 - 2 WOMEN'S LOCKER ROOM
 - 3 SHOWER & DRYING
 - 4 MEN'S TOILET
 - 5 WOMEN'S TOILET
 - 6 LOCKERS
 - 7 FIRST AID & CONTROL
 - 8 STORAGE

SWIMMING AREA

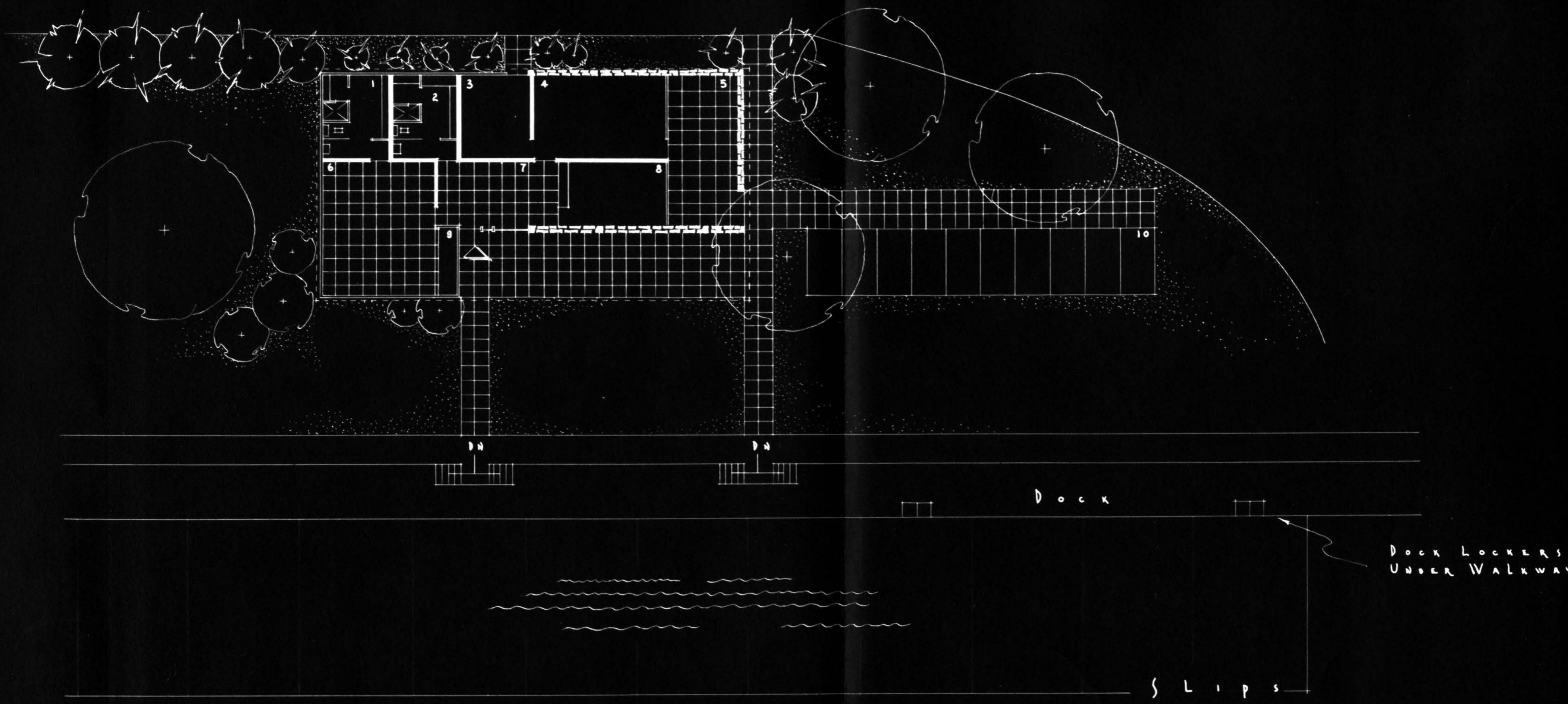
SCALE

0' 5' 10' 15' 20'

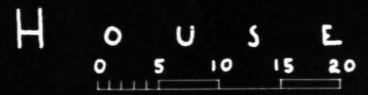
SERVICE COURT

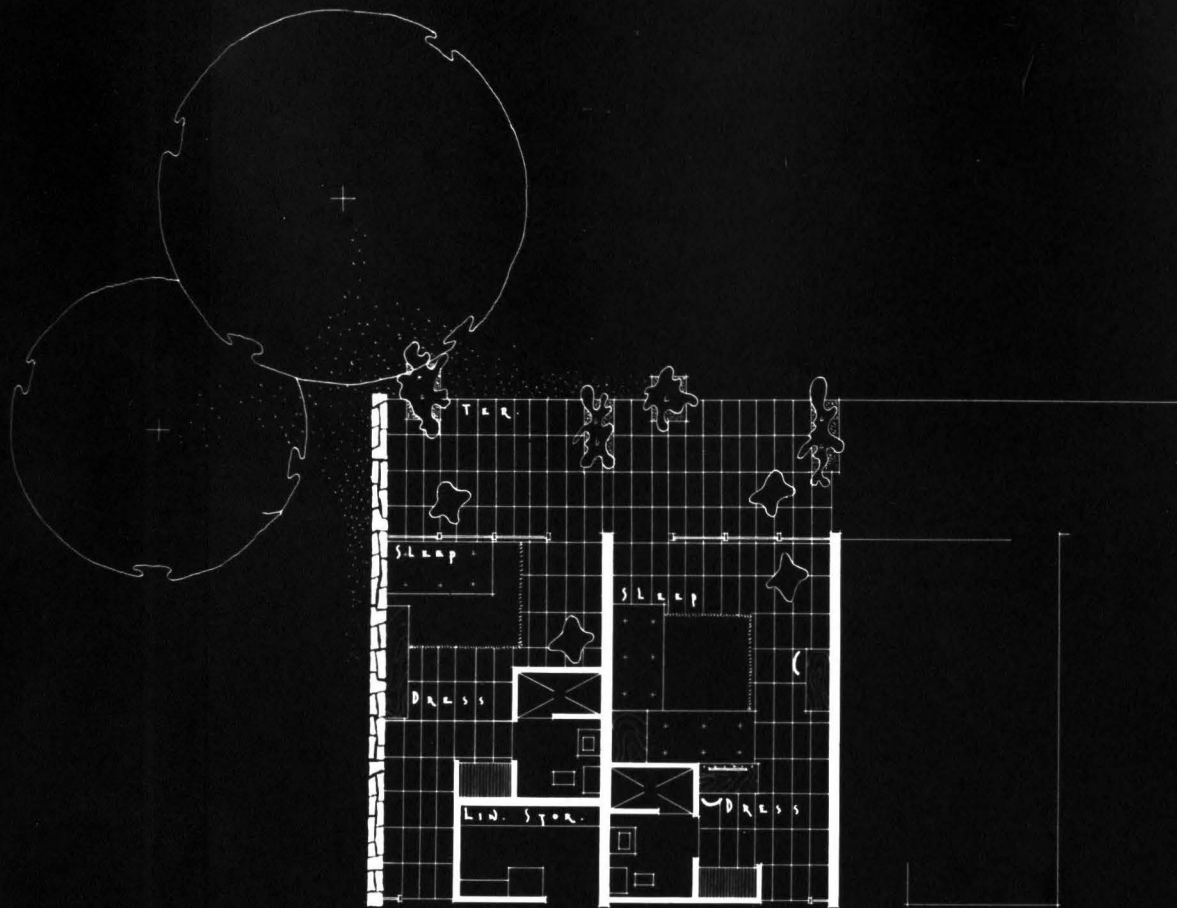
LEGEND

- 1 MEN'S LOCKER, DRESS, & TOILET
- 2 WOMEN'S LOCKER, DRESS, & TOILET
- 3 STORAGE & MECH. EQUIP.
- 4 WORKSHOP
- 5 OUTDOOR WORK
- 6 MEN'S LOUNGE
- 7 MARINE SALES
- 8 STEWARDS OFFICE
- 9 REFRIG., LIQUOR LOCKERS, & SOFT DRINKS
- 10 DINGHY STORAGE AREA



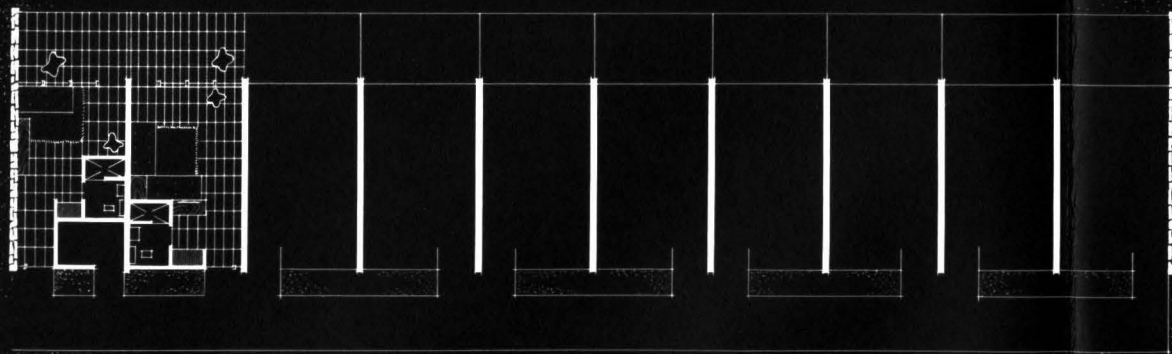
DOCK
SCALE



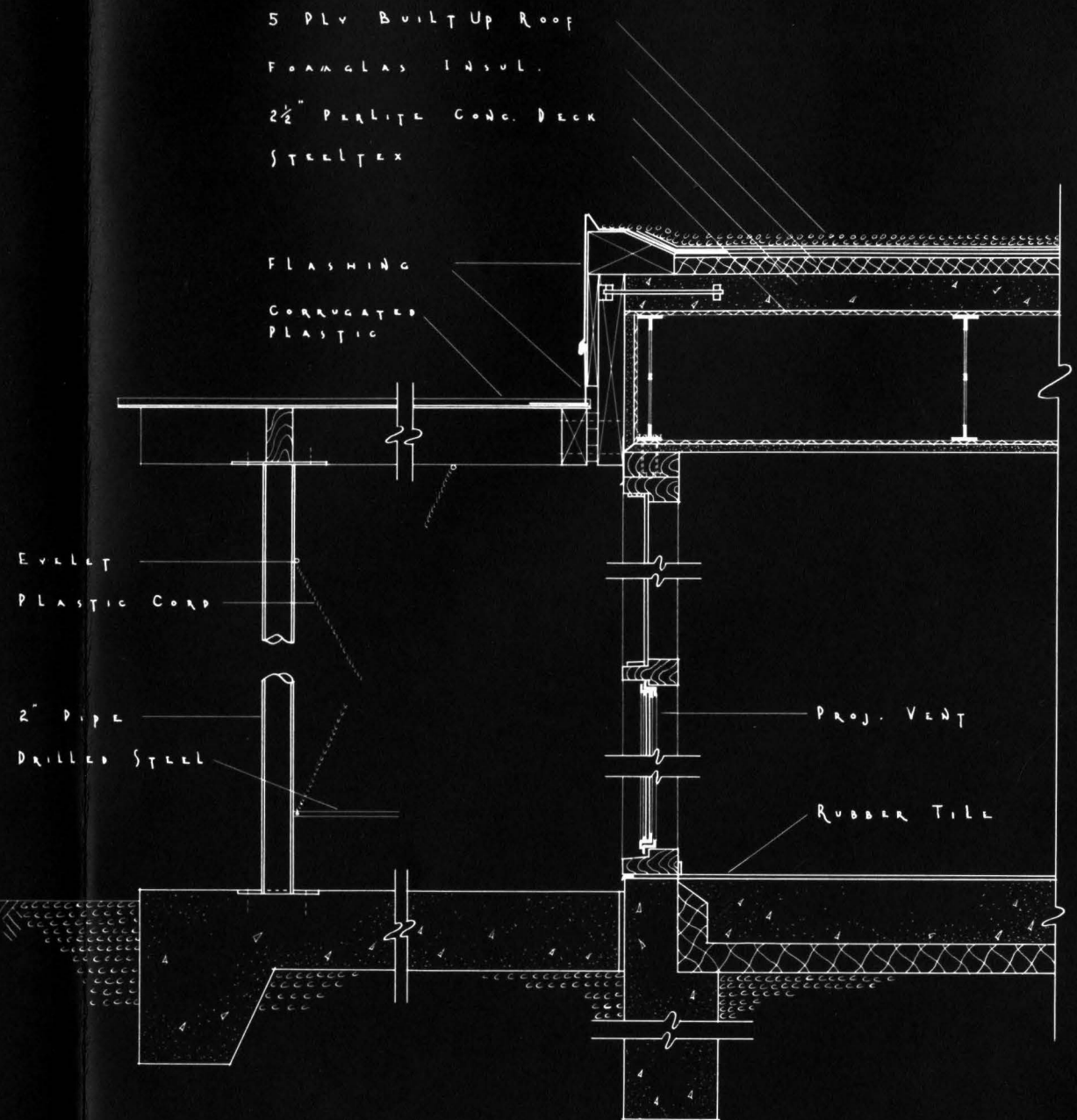


SINGLE RM DOUBLE RM

TYPICAL ROOMS
SCALE 0 4 8 12'

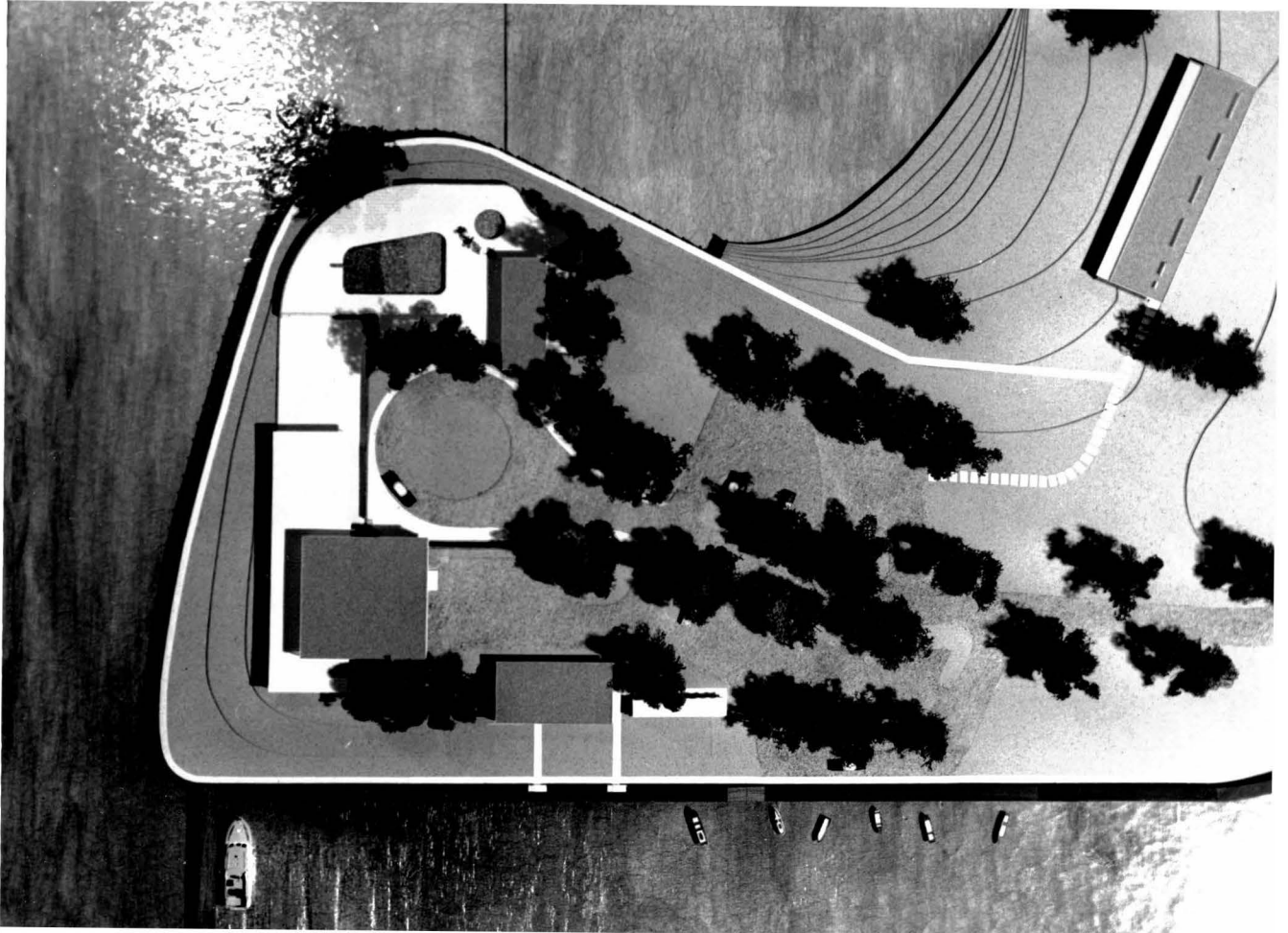


TEN ROOM UNIT
SCALE 0 5 10 15 20'

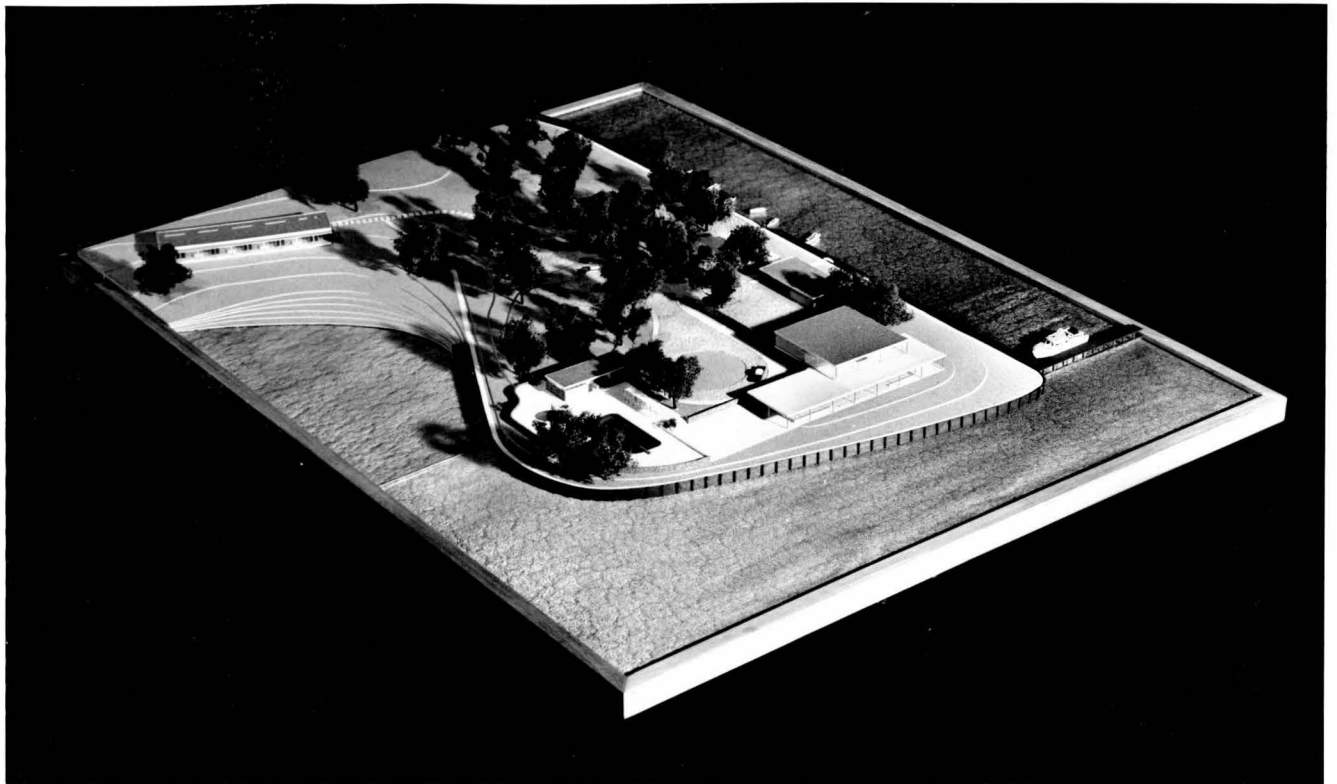


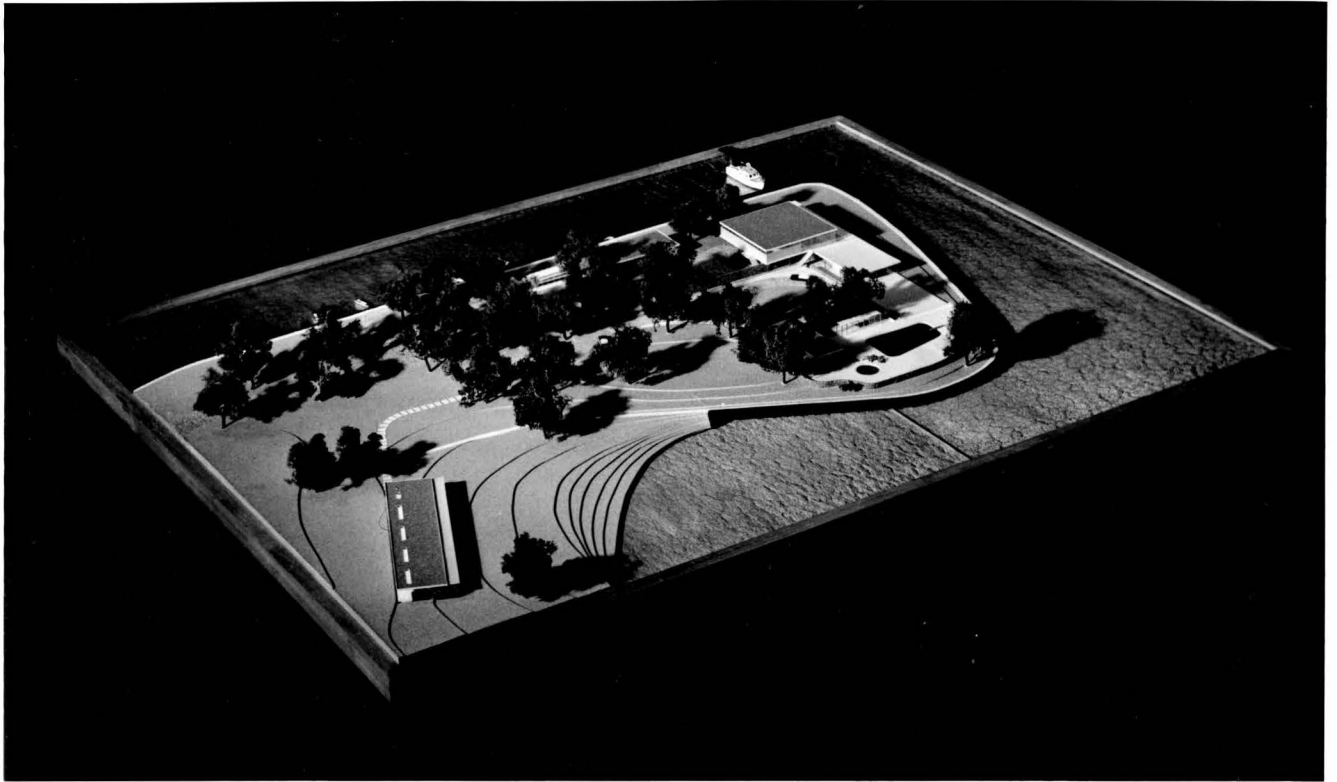
TYPICAL WALL SECTION
SHOWING TERRACE ROOF CONNECTION
SCALE 0 2'

GUEST UNITS









SECTION FIVE

Conclusions

There will be no attempt to justify the design.

The conclusions reached in the development of a design for a Yacht Club for Bay Ridge, Maryland, are graphically represented by the drawings in the preceding section.

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VITA

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