DESIGN FOR THE RARITAN YACHT CLUB

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ABSTRACT

Design for the Raritan Yacht Club

J. Arthur Miller

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This thesis represents a challenge to the author to create space conceived for the prime purpose of recreation on and near the water: specifically, a new building and site development for the Raritan Yacht Club of Perth Amboy, New Jersey. It is hoped that my analysis of and solution to the problem may also be of some general interest to the reader in the matter of recreational facilities.

The Raritan Yacht Club is, for the purposes of this thesis, considered primarily as a vehicle for the author's expression of his general views, in design, of what the nature of such space should be. Because of the character of its site and the multiple purposes it must serve, however, it presents certain unique problems. These must be solved by, 1.) appropriate integration and use of a divided site, 2.) spatial relationships among seemingly conflicting activities and interests, and 3.) unification in a strong and meaningful way of the many small elements and functions which comprise an active Yacht Club.

These problems are treated herein as a basis for the development of a spatial solution with a quality appropriate to such recreational facilities in general, and to the unique site and program requirements of the Raritan Yacht Club in particular. The solution is contained in the resulting proposed design.

345 Westgate West
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November11, 1957

Pietro Belluschi, Dean
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Dear Dean Belluschi:

In partial fulfillment of the requirements for the degree of Master in Architecture, I hereby submit this thesis entitled, "Design for the Raritan Yacht Club.".

Respectfully,

J. Arthur Miller

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TABLE OF CONTENTS

I. R.Y.C. BACKGROUND

The city of Perth Amboy was, at mid-century, blessed with a proud history (having been the capital of East Jersey in Revolutionary War days) and a magnificent location at the sheltered west end of Raritan Bay, only thirty miles from New York City. As such, it was a popular vacation resort for well-to-do New Yorkers. The city's growth into the yachting hub of the Bay stimulated the organization of the Raritan Yacht Club in 1865 by a group of ardent sailors.

The original quarters of the club was a frame building on a narrow wooden pier on the east side of the Perth Amboy peninsula. This building, once destroyed by fire, rebuilt and expanded, served as headquarters for the club up through the first two decades of the twentieth century. These days saw the popularity of large sailing yachts on the bay ~~and~~ put such demands on the club's limited facilities that the present hilltop site was eventually acquired and a new pier was built at the base of the bluff. A larger clubhouse was also built, but this time it was erected on solid ground overlooking the bay site.

By the 1930's, the character of the city behind the club had changed greatly. With increased population in the New York area and the mobility provided by motor cars and new roads, the New Jersey resort center shifted farther south to Asbury Park. Perth Amboy,

being near the new metropolitan industrial center, became a crowded manufacturing city. The depression and the city's change from business to industry, with its concomitant influx of labor, brought about the decline in popularity of the large sailing yachts.

The Yacht Club, although it must certainly have suffered financially, survived by shifting the emphasis from the large yachts to smaller craft, and in fact expanded the overall program it offered to appeal to a broader group of interests. Two changes in particular occured which were to establish the character of today's Raritan Yacht Club. First, motorboating, increasing in popularity, entrenched itself at the club; perhaps this was not to the liking of the old sailors, but it did add new life and activity to the club at a critical time. And, second, the club began to take in members who were not boat owners. There were many people, not particularly interested in participating actively themselves, who simply enjoyed watching the functions and who were finding that the R.Y.C. was one of the few decent places left in the city to go on a sunny summer day.

On the one hand, then, the new interest in motor boats, particularly outboards in the 1940's and 50's, and the shift in sailing craft from large yachts to more small racing boats completely changed the boating picture at the club. More facilities were needed to handle all the little motor boats and increased yard space was necessary to

accomodate all the small racing sailing craft which began to come in on trailers for weekend regattas.

On the other hand, the influx of non-boating members created a demand for expanded shoreside facilities such as a bar and restaurant, swimming facilities,* and shower-dressing rooms.

Throughout this recent period of expansion and diversification of interests, the club has attempted to keep everyone happy with stopgap measures notably lacking in overall coordination and long-range planning.

The R.Y.C. is now, I feel, at a crossroads. The program has expanded and become considerably complicated. So far, spirit is still very strong and interest is running high.** This cannot continue however, unless some bold steps are taken in the way of broad planning and providing adequate facilities for the numerous interests now exhibited among the membership. It is the purpose of this thesis to provide just such a scheme.

* The bay waters were now thoroughly contaminated by all the industry which had grown up on both the Raritan River and the Arthur Kill.

** It is the opinion of the flag officers, of many members, and myself that the club has much to offer in this region. It is true that there are some more attractive places for swimming farther south on the New Jersey shore; but the shore highways are so overcrowded with people fleeing New York as to make driving on them on weekends a formidable proposition. A well-equipped yachting and swimming center in Perth Amboy, within minutes reach of a very large population, has tremendous potential appeal.


N
ANCHORAGE AREAS
TOTTENVILLE
UNITED STATES - EAST COAST
NEW YORK - NEW JERSEY
RARITAN BAY
AND
SOUTHERN PART OF ARTHUR KILL
SOUNDINGS IN FEET
AT MEAN LOW WATER
(Raritan Bay and Southern Part of Arthur Kill USC&GS 286

II. GEOGRAPHY OF THE REGION

Perth Amboy is a peninsula at the confluence of the two rivers which feed Raritan Bay, the Raritan River and the Arthur Kill. The Raritan is the larger of the two, running East from the western hills of New Jersey, and its south shore marks the northern limit of what is generally known as the New Jersey seashore. It is spanned, at Perth Amboy, by the Garden State Parkway, New Jersey Turnpike and two other bridges. The Arthur Kill, about a half mile wide at the city, separates Perth Amboy from Staten Island, a borough of New York City. Perth Amboy and the island are linked by a major bridge and ferry service.

Raritan Bay itself is really only the more sheltered western end of Lower New York Bay, the combined body of water measuring 14 miles long, eight miles at its widest point, and 2 miles at its narrowest. The bay gives directly onto the Atlantic Ocean, but the narrow spit of land called Sandy Hook protects its mouth from the mammoth seas of the ocean. Lower New York Bay is perhaps the finest body of water for all but the very largest pleasure craft on the Middle Atlantic Seaboard, and it was here that all the famous America's Cup Races were held. Its extension into Raritan Bay is even better suited to smaller boats because it is sheltered from the worst storms by the broad sweep of Staten Island. The whole body of water, right up to the two rivers provides deep water and comparatively negligible currents.

Tides vary from about 4 feet to 5 feet.

Because of these physical amenities, the Bay has long been, and still is, the boating center of North Jersey. Many yacht clubs ring its shores and provide harbors to visit and good interclub competition in small sailing craft.

III. THE SITE

The site selected for the purposes of this thesis is essentially the same one on which the present R.Y.C. stands. I feel, that although it has some drawbacks, it is on the whole an excellent one. The property is on the eastern shore of Perth Amboy, at the highest point and terminus of a scenic road which skirts the bayward end of the peninsula. This end of Water Street has on it some of the finest and best maintained houses in the city.

The building site itself is actually two separate pieces of property; one small one on the brow of the bluff fronting on Water Street, and a larger piece of filled and bulkheaded land at the bottom of the hill directly below the Water Street property. The two pieces actually abut one another, except for a little-used eight foot wide right-of-way (city-owned) between them. This right-of way affords difficulties in tying the property together, but the two pieces have their peculiar merits. The bluff-top land provides an unimpeded view, from an elevation of 24 feet, 10 miles down the open bay or a half mile across the Arthur Kill to Staten Island's green shore. It is an exciting balcony onto the entire bay panorama. The land below provides opportunity for boating facilities at the water's edge, being, in addition, nicely in the lee of the island and therefore sheltered against the storm winds and high seas from the East.

The water-level property is accessible from Front Street, which dead-ends on the property abutting the club site on the north. On this adjoining filled land now stands a small, deteriorated commercial boat yard, with which the R.Y.C. is negotiating for its site. The price is estimated at a mere $17,000. Acquisition of this property is deemed absolutely necessary to the club for it would yield additional water frontage, yard space, and direct access to Front Street. I also recommend the acquisition of the piece of property adjoining the club on the south. There is no construction on it, it being merely a strip of private beach which is used very seldom. This property also has a piece of land atop the bluff, abutting the club's property there. If the club were to buy this strip of land (which is presently for sale), it would double its Water Street holdings and also add substantially to the water edge frontage.

Access to the new and enlarged club site, then, is from two places on two distinct levels: from Water Street, more convenient and exciting for "front door" approach, and from Front Street, a dead end which gives access at the water level for cars and boats on trailers. Front Street also offers opportunities for off-street parking which is not true of Water Street.

The chief problem of the site is the city-owned right-of-way which must be bridged in order to connect the two zones of the

building site. Building over this narrow strip is permissible: building on it is not.

A. General

The program for the R.Y.C. is complicated by two important factors: the dual nature of the functions for which it must provide (i.e., the purely social and the active sports), and the fact that the club operates all year long rather than just during the summer.

Adequate facilities for all aspects of boating must be provided, for the water is still the primary raison d'etre of the club. Suitable facilities are also necessary for comfort and delight in the strictly social aspects. Spaces must be allotted for casual lounging, dining, drinking and observing. Most important of all, however, is the relationship between the two. A certain balance must be struck in which these two aspects are each given the proper facilities without necessarily encroaching upon the other, but in which they are integrated to the extent that each may partake of the other and each may contribute to the other. It is basic that the social facilities should be oriented toward the boating: the spectacle of the sport is the primary appeal of the Yacht Club, as such, even for those who do not actively indulge in it. In the club plant as it exists now, these two aspects of club life, are, in places, badly overlapping so as to cause confusion between the two, in other places they are unfortunately isolated from each other.

A third function of the R.Y.C., which overlaps both the social and sporting aspects of the club, is the Junior group. This is a semi-independent organization, composed of members' children and others up to the age of 21, which is permitted the use of all boating facilities and some social facilities of the club. This age group enjoys a low dues rate, but is of course denied the use of the bar facilities. The Juniors are an important part of the R.Y.C in several respects. In general, the youngsters who grow up in the environment of the club become the future mainstays of the organization. The Junior R.Y.C. is, therefore, a kind of "farm" for new blood in the club membership. The R.Y.C. is important to the young people because it is one of the very few respectable recreation facilities in the area where they can spend their considerable leisure time. The Junior facilities are important, furthermore, to the parents, because they can guarantee a suitable means of occupying the children while the elders partake of the boating freely and without having to worry about what the youngsters are doing. Then,too, the boys and girls are developing along the lines in which their parents are interested, at least avocationally.

Thus, it can be seen to be important that the proper environment for all members of a family must be provided. The club has an active Junior program now, but the physical facilities are so limited as to make it difficult for the young people to find their own place at the

R.Y.C., and to make it almost impossible for parents to bring a very young child to the club for the whole day.

The fact that the club is open all year long requires that its construction be permanent, and that inviting spaces be created for the informal gathering of members, for weekly meeting, and for periodic banquets and dances through the cold winter months. This implies, I feel, that the club must have a warm inner heart, spatially, in addition to being open and oriented toward the water in summer weather. The very edge of the water can have a rather bleak and chilling aspect in the off-season.

B. Existing Facilities

The present physical plant at the R.Y.C. is inadequate at best. The yard facilities are perhaps not too bad, but the yard is accessible by car only from a narrow easement through the property to the north. Locker facilities are deteriorated and no longer large enough, housed as they are in a frame building on the edge of the seawall. Neither is there any off-street parking space available.

There are, at present, no facilities at all for swimming. The bay is rather too polluted for safe bathing, and it is generally felt that the addition of a swimming pool to the layout would greatly increase the club's appeal to all groups of prospective members.

The clubhouse, itself, is particularly unsuited to its function, being an old house-like shell of three and a half floors of small rooms. These small spaces are at present given over to the multitude of functions which the building must house in a manner which is more expedient than desirable. The top or attic floor of the building contains a steward's apartment, which has for light and air only three or four small dormers. The entire scheme is particularly frustrating in that from only one narrow porch can one view any of the activities on the shore below. To all extents and purposes, the building appears as just another large house on Water Street, and obviating any possibility of seeing the bay or yard from the high vantage point of the hilltop.

The only large space in the existing club is a bar and grill of more recent vintage than the main clubhouse. This space is a kind of dead-end off to the side, and it, too, is denied any contact with the water level. Its size and ceiling height are suited to large functions such as the club dances and banquets, and dinners occasionally held by groups not related to the club in any way. It is, however, also used as the dining room and bar for members only, and since the number of people involved in this kind of activity is small at any one time, the space usually feels like a big empty warehouse.

Although the clubhouse is already poorly related to the boating

activities because of its bad orientation, this condition is aggrevated by the fact that the only physical connection to water level is a narrow wooden stair bridging the city-owned right-of-way. Needless to say, free circulation among the several centers of interest in the club is hampered both physically and visually by this weak link. This, I feel, further adds to the relative isolation of social members and their activities from the boating group. This, too, tends to discourage the sailors from coming to the upper level, where all the eating and lounging facilities are now located.

C. Specific Requirements

1. Boating Activities

A pier should be provided to perform several functions: to provide some shelter for a basin in which boats would be launched, to facilitate the permanent mooring of some large and small boats at dockside and temporary mooring for these, plus sailboats, at floats which ride with the tide levels. The closest observation of all boating activities and especially racing starts would be done from this pier.

An area out of the way of spectators and with clear visibility of the water in all directions is needed by the race committee. Sailboat races are most often started and finished on a line between the pierhead and a movable marker placed in the water.

A large, unobstructed area of flat ground at the water's edge is required for the storage and handling of boats on land. In winter, the larger boats are stored on cradles on this ground, and toward that end a reasonable open area should be allotted adjacent to some mechanical means of hauling these boats out of the water. In summer, when these larger boats are in the water, only their cradles are left on land, but a large area of the yard is required for the storage on trailors of other boats. These, generally, are of two types. One includes a few small outboard motor boats and rowboats. The other type is the most numerous group of boats in the club, the small racing sailboats. These are usually highly finished, expensive and delicate instruments, intended only to be put in water for the duration of a race. This means that the yard space in which they are to be stored must allow room for considerable moving about on small trailers, particularly to and from electric hoists which are used to affect the launching and hauling out, and occasionally to and from the street outside the yard. This "dry sailing", as it has come to be called, is a very important aspect of the club's activities. The movement and color in the yard on race days is perhaps almost as interesting a spectacle as the racing itself, particularly on weekends when regattas are sponsored by the club. At these times, as many as one hundred boats may arrive on trailers behind cars, all of which must be accomodated in the yard and at the floats before, after, and between races.

Individual lockers should be provided convenient to the boat storage areas for the stowing of such gear as sails, oars, and anchors.

Some covered space with workbenches is desirable to serve as a shop for minor repairs or painting of the smaller boats. This shop should be coupled with a large locker for the storage of the yard master's equipment, such as rakes, hoses, racing markers, and maintainence tools.

The surface of the yard may be only compacted fill, but a paved apron should be provided somewhere to facilitate the washing of the "dry sailed" boats upon haul out.

2. Other Outdoor Functions

It is felt that a swimming pool would provide an active center of interest for those not participating in boating. The pool should be so located as to be viewed readily from a perimeter area by spectators. The pool itself can provide a cool welcome retreat from the heat of the summer sun, and should therefore have generous shaded areas adjacent to it. Also in conjunction with the pool should be locker and shower facilities to be shared by bathers and sailors who need a place to change out of wet sailing togs and into clean, dry clothes. It is felt that if members had a place to wash up and change after a day of hard, wet boating, they would be more inclined to remain at the club for dinner, drinks, and evening festivities than if

they are forced to drive home to accomplish the same task. By the time one goes home for supper and a change of clothes, he is often too tired or it is too late to return to the club for more social activities.

A place should be provided for an occasional outdoor barbecue during the summer. Seating for such a function would be casual, but a permanent place for roasting is necessary.

A certain area of well-kept grass is desirable from several standpoints. The cool, green of the grass can afford a welcome visual relief from the hot dryness of the yard and the intense glare of the sun on the water. It might also serve as a place for bathers to lounge and sun themselves, and as a clean, smooth place to spread delicate sails to dry. The grass should be clearly separated from the yard to prevent the constant tracking across it of dust from the yard.

3. Social Activities

a. Lounging

Since this is a recreational project, perhaps the greatest area should be devoted to many forms of comfortable lounging. It is necessary that at least one fully enclosed area be provided for the general use of members throughout the year. This space should provide for conversation, reading, viewing television, and displaying

trophies in a sheltered quiet place. It should be large and flexible enough, too, for card parties and occasional use as a second meeting room.

Generous areas should be provided for lounging around the swimming pool, and so located that parents may keep a close watch on children bathing.

A large area, perhaps in the form of a raised deck, should be made readily accessible for people to sit and observe the boating and racing from a vantage point somewhat above the activity. Food and drink should be available not too far from this area.

Outdoor areas adjacent to most indoor spaces such as lounges, bar, and dining rooms are also desirable in order to enhance the possibilities of moving freely back and forth from the warm sunshine out of doors to cool shady indoor areas.

b. Dining

Dining facilities present a rather complex problem. Dining functions at the R.Y.C. are roughly of three distinct types: there is the informal eating of regular meals by members in very much a standard restaurant fashion. This kind of dining is most frequent on weekends, but also occurs during the week. The R.Y.C. has the opportunity of providing for its members one of the very few good small restaurants in Perth Amboy. Businessmen-members have

frequently stated the desire to bring clients and friends to lunch at the club, and all members would welcome a nice place to bring the family occasionally on a weekday evening and frequently on a weekend. The club, therefore, should have a specific space whose sole function is to serve as a relaxing and inviting restaurant overlooking the bay. In order to succeed financially, however, it should be relatively small.

Then there is the snack-bar kind of eating. The demand for such service during the week is practically non-existent, but on weekends it is heavy. It consists chiefly of youngsters (and oldsters) nibbling constantly at sodas and ice cream, and of a very concentrated rush for quick, take-away lunches such as hamburgers, sandwickes, and coffee between races on Saturdays and Sundays. It is my strong conviction that the regular dining described above, and the snack-bar rush should be separated, and that the snack bar can be closed except on weekends. In the existing club, one kitchen and staff must handle both aspects, and at the same place. As a result, neither can be satisfied quickly or efficiently. A snack bar should therefore be located away from the dining room and closer to the outdoor activities.

Last, and probably most problematical, is the dining done by large groups at certain specific times. This is of two distinct types: periodic banquets for members only, and sporadic banquets and parties held on the premises by outside groups. The latter would

usually be lunches and dinners for local business or manufacturing groups. Both kinds require a much larger space than would be comfortable or efficient for the regular and constant members-only dining. For this reason, I feel that a separate, large space should be devoted to such functions, and that this space should have its own small serving kitchen from which hired caterers would manage the dinners. Such an arrangement would solve many administrative problems such as having to make the awesome preparations for a large banquet, having to keep a full-time kitchen staff which would either be too large for the daily dining requirements or too small to handle a banquet, and having to use a space, even for half-a-dozen people that is large enough to accomodate a big ball. I feel, however, that this one large space in the scheme should not be an isolated room, to be completely closed off when not "in use". In the first place, even outsiders who may be using the ballroom occasionally should be made to feel that they may enjoy, at least visually, the other amenities of the yacht club. And, secondly, this large space can be used indirectly to add a certain dimension and spatial excitement to the other club rooms which are limited by function to much smaller proportions. The problems of access, circulation and privacy when these activities overlap must be solved in a suitable way too.

c. Dances and Parties

The above-described space for banquets must be suitable for perhaps more frequent use for dances and parties during both summer

and winter. As such, it should have a bandstand which can serve as a speaker's platform for other functions. This space must be comfortably enclosed for pleasant winter gatherings, but should provide immediately adjacent areas outside for dancing, or just sitting on summer evenings. The large outdoor dancing floor may overlap areas for other uses, inasmuch as it would be used almost exclusively at night.

d. Drinking

Two kinds of provisions must be made for this activity. A generous bar is necessary to serve the ballroom, but another smaller bar for members only must provide a refuge for members when other functions occur in the big space. A bar of this size would be more inviting than the big hall for the casual weekday and weekend gatherings, and it should be located so as to serve conveniently certain outddor lounging and observation areas. It should, however, be separate from the snack bar or regular dining facilities to avoid any confusion or embarassment with Juniors.

e. Junior activities

All of the previous facilities, except the bars, may be shared by the under 21 group, but they also need a place which is their own, essentially inviolate by Senior members. It must provide suitable

space and equipment for general lounging, periodic meetings of the official organization, and games. Ping-pong tables would be a welcome asset.

f. Meetings

One private room is required for the holding of meetings. Meetings of the general membership are rare and can be held in the ballroom, but the meeting room must be large enough to accomodate the Board of Governors on the Lady Skippers, and a few people who may be inclined to attend these meetings occasionally on an unofficial basis. The room should, therefore, have a large conference table and also some chairs around the perimeter of the space for visitors.

There should also be a general office adjacent to the meeting room, for storage of records, for general management of the club, and for the use of certain officers of the organization.

4. Miscellaneous

In addition to all the spaces described in the preceding 3 sections, certain supporting utilitarian facilities are necessary.

A small apartment should be provided for the steward of the club. This would most logically be located near the service areas, such as:

Kitchen; necessary to serve the private dining room, and perhaps to prepare food for distribution from the snack bar. Food and liquor storage should be in its vicinity and convenient to a delivery entrance.

Mechanical space; adequate space for the customary mechanical equipment for a plant of this size. It should be accessible from a service entrance and convenient to the steward's apartment.

Toilets should be located convenient to the three basic areas of the total club scheme: private club rooms, the ballroom, and outdoor areas. The latter may be combined with shower facilities for the pool.

A coat room is necessary for the ballroom, but not so for all the smaller function spaces.

As much offstreet parking for cars and empty trailers as possible should be provided at the level of the boat yard. This should not however, be gotten at the sacrifice of much needed space for boat storage. Overflow parking can be accomodated on either Front or Water Street.

Vehicular access to the property is, of course, necessary from Front St. Pedestrian access from Water Street is more desirable and is of roughly 3 kinds: service entrance, entrance into the club building, and direct access to the yard without having to enter the building.

Briefly, the structural system and materials have been selected on the basis of the following:

Storms; generally they are not a serious problem as the waters adjacent to the site are sheltered by Staten Island. The occasional hurricane can, however, wreak havoc with its high tides and winds, particularly on flimsy piers and bulkheads. It was decided therefore to support the plane surface of the pier on relatively few, but heavy concrete columns. Since Ice is not a problem, it was felt that the cost of concrete over wood was justified in view of the cost of periodic replacement of light wooden piers necessitated by heavy storms and constant erosion. Since the supports beneath the pier are few, the brunt of heavy seas will pass them and be absorbed by a heavy concrete bulkhead, buttressing, and buttressed by the earth behind it. Having few supports for the pier will also serve to prevent any interruption of the natural currents through the anchorage.

Floats are of light construction, as they will be removed from the water for storage and repairs after the summer season is over.

Corrosion; Raritan Bay is, of course, as salty as the ocean, and none but the costliest of metals can resist rapid corrosion. Since concrete is generally inert in the face of corrosive elements

such as salt, it will be used almost exclusively for the structure. The reinforcing steel will be buried deep in heavy columns and retaining walls to protect it from the ravages of the sea air. Glass, too, is highly resistant to corrosion, and it is here used liberally as weather screens and to permit the whole space between floors and roofs to open to the view and the light.

Shelter: this is most important for a sense of overhead protection from the hot summer sun. This, too, can be achieved by using few concrete columns supporting large, spreading tops. The columns will be heavy, affording a sense of visual and structural strength and protection for the reinforcement within them.

Poured concrete will also be used for retaining walls.

The two principal challenges of the site were, to me, preserving the top of the bluff as a kind of balcony, and bridging the city right of way powerfully so that the two distinct pieces of club property become one. This I have tackled by creating two broad planes, a square one above a longer rectangular one reaching seaward. The big square plane, forming a roof over part of the great platform lies in the same plane as, and extends, the brow of the hill, affording a sweeping view of the bay right over the roof level. By thus getting all enclosed functions below the level of the upper ground and out from the brink of the hill, a great measure of privacy below is gained without impeding a longer view to what lies beyond. The lower platform provides the private balcony from which the members may enjoy the whole panorama of the Bay and the busy activities in the yard below. It also reaches out over the narrow municipal strip becoming a bridge of which one is never consciously or uncomfortably aware.

This broad platform also provides generous shade to the activities which occur beneath it, and it is the unifying element which clearly delimits all the spaces and functions which do not properly belong mixed in with the yard activities. A large opening is let into this upper deck, giving sunlight to the pool below, and enabling one to walk or sit all around the perimeter of the upper platform,

acting as privacy and wind screens from the private property next door and from the open boat yard on the other side.

A grass terrace, raised slightly above the yard level, provides a transition from the semi enclosed, hard-surfaced area around the pool, to the dirt floor of the yard. One's movement through the successive spaces outside goes like this: one arrives at the club on Water Street above, where the roof soars out from the bluff, not impeding the grand view of the whole bay, but witholding for the moment the immediate excitement of what lies directly below. Then down the stairs, enclosed on one side by the masonry wall which buttresses the hill, under the roof, and along the side of the club rooms at balcony level where again a view of the bay is available. When the end of the building is reached, one can see down to the pool, then continues out to the broad end of the platform where all activity below is visible. Then down the stairs into the shade of the big balcony, out across the grass terrace to yard level and eventually out onto the pier, terminated with an open, but covered, viewing deck. Above this is the race committee stand, a visual punctuation for the whole complex.

The pier itself, wraps around a basin, thus strongly defined visually, framing a space full of movement and color in addition to providing mooring for the boats.

The big platform, which defines the club building, is built over to the south side of the property so that it is approached gradually from the Front Street entrance, and so that the yard is not halved by its form. The yard is enclosed on the side against the hill by a masonry wall and a ceiling of trees, giving it privacy from strollers on the walk behind and from the houses on the hill above.

The yard is entered by car from Front Street through a large gateway and into the parking area. The cars are screened to view from the club deck by a long, low roof. This roof serves also as a cover for a row of lockers, and as a kind of entrance canopy to the inner area of the club. The big deck at the end of the walk from the parking area leads one strongly toward the center of interest.

In this design, yard allocations for large and small boats are distinct from one another. It should be born in mind that the large boats are on land only during the winter. In summer, only their empty cradles need be stored in the yard. We can therefore use yard space more effeciently by locating the large boat area next to the parking zone. Now, in winter, when there are few cars in the yard the large boats can overflow into the parking area. In summer, when more parking space is needed and the big boats are overboard, cradles can be stacked along the north wall, yeilding a considerable increase in area for parking. By their sharing the end of the yard

most remote from the clubhouse, the two least attractive elements, a lot full of autos and an inactive storage area, are made most unobtrusive.

The yard area right next to the big pavilion and in front of it is reserved for the small boats, the few outboards, and many racing sailing craft. This group of boats is the center of most activity and color during summer, and it is therefore rightly located adjacent to the big observation deck. These boats, parked in rows on their own trailers, have lockers, shop, and electric hoists for launching, convenient to them.

When cars are allowed to pull boat trailers into the heart of the yard, the owners are usually very slow to remove the cars. The temptation is to rig the boat before detaching the trailer from car. As soon as a few more come in behind and do this, exit for the first cars is blocked, and the yard becomes hopelessly congested with autos. As this thesis is designed, cars can enter only as far as the parking area. There trailers are detached on the right and cars swing off to the left. Once detached, trailers are wheeled under the entrance"archway" and into the small boat area. The car is either parked in the yard or driven right around the loop and out again onto Front Street, thus keeping the yard free for the movement and parking of boats.

The big ballroom, like the pool, is on the lower level, in a

sort of opening in the main platform. Because it is so located, dancing can be carried right out onto the terrace at pool side. The pool, lit from underwater, would be exciting at night. Various perimeter spaces, such as bar and lounging areas which belong to the dance floor, ring it on a level slightly higher. These spaces, being under the balcony now, have a much more intimate scale and atmosphere than the dance floor, which is a kind of center bowl. The low spaces around the dance floor have direct access to small terraces for relaxation between dances or between drinks.

All the private spaces, i.e., for members only, are located at the upper level, all around the ballroom. They are accessible from a balcony inside, or from the big raised platform on the outside.

With this plan, (the club rooms all around the ballroom at the upper level) a high, skylighted ceiling is gained for the ballroom, and all the little rooms become integral parts of the larger space when this is desirable, or they can be closed off from it when isolation is necessary. The ballroom, then, is not dead when not "in use", but always has movement around and through it - yet one need never actually cross the ballroom floor to pass to a club room. The reverse is also true. One enters the ballroom from Water Street at balcony level, but moves directly down to its floor level from a lobby space after gaining an exciting glimpse of the dance floor from above. The lobby, then, is a neutral zone through which one can pass to any specific area without entering another.

The club rooms form a "U" at balcony level. The utilities, (apartment, toilets, storage, kitchen) are grouped along the side with the least desirable view, while the dining room, bar, lounge, Junior's room, meeting room, and office line the two sides with the seaward view and best orientation. The fourth side of the square plan forms the main entrance foyer indoors. Outside this wall, retaining walls and planting are so arranged as to create a pleasant stair run down from street level, a separate service entrance with access to all utilities, and a small private court for the steward's quarters.

The aspect of the building from the public viewpoint on Water Street is of a broad shelf ∫the big roof visually extending the brow of the bluff. Only the dome over the ballroom arches above this level. Planting and trees are so arranged that one can neither actually walk on the roof, nor come close enough to the edge of the bluff to perceive the sharp drop.

The entire scheme is conceived as providing a succession of expanding views, not without an element of surprise, and closely interrelated spaces, all of which enhance, not only permit the full enjoyment of the view, the site, and the activities it supports.

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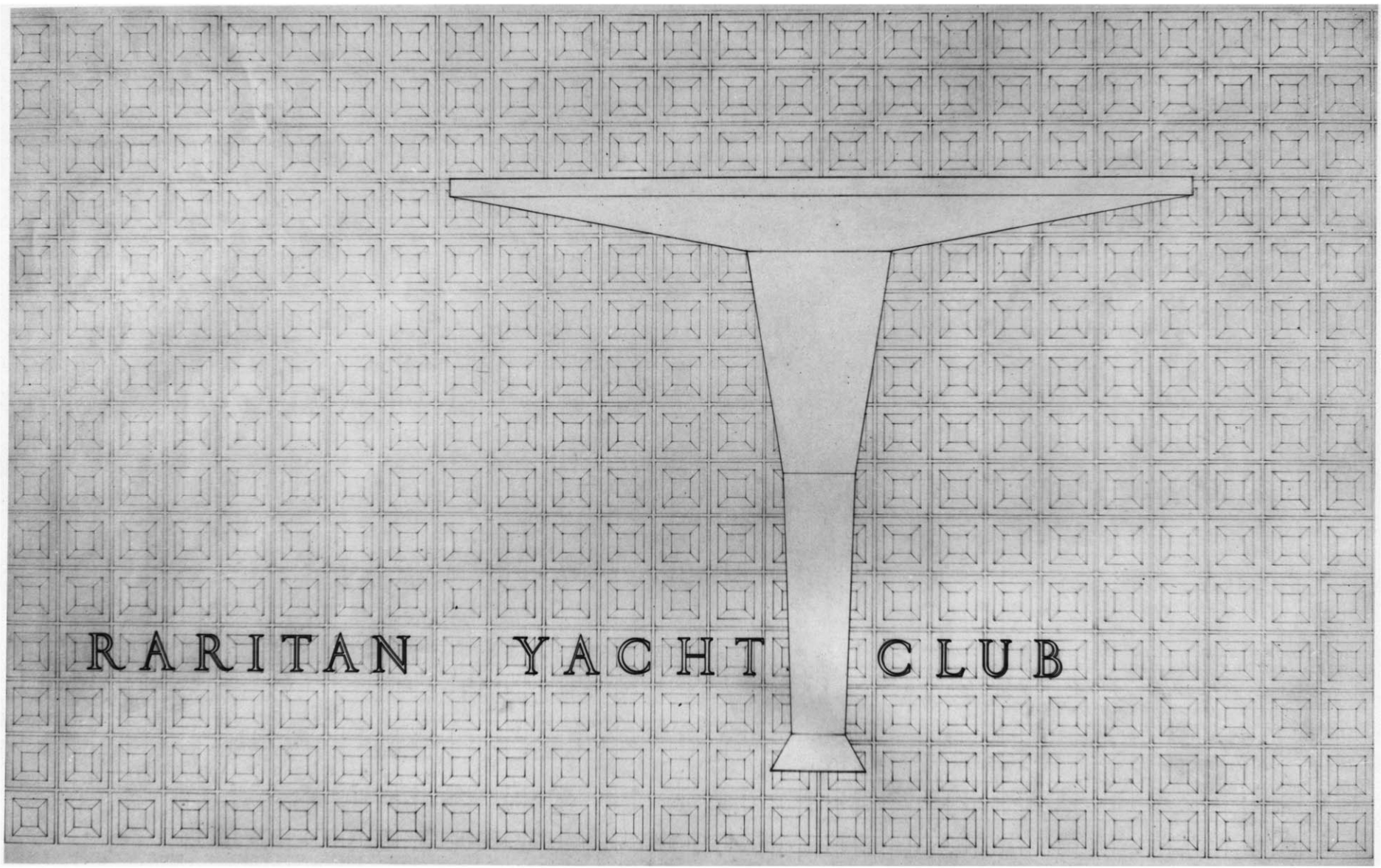
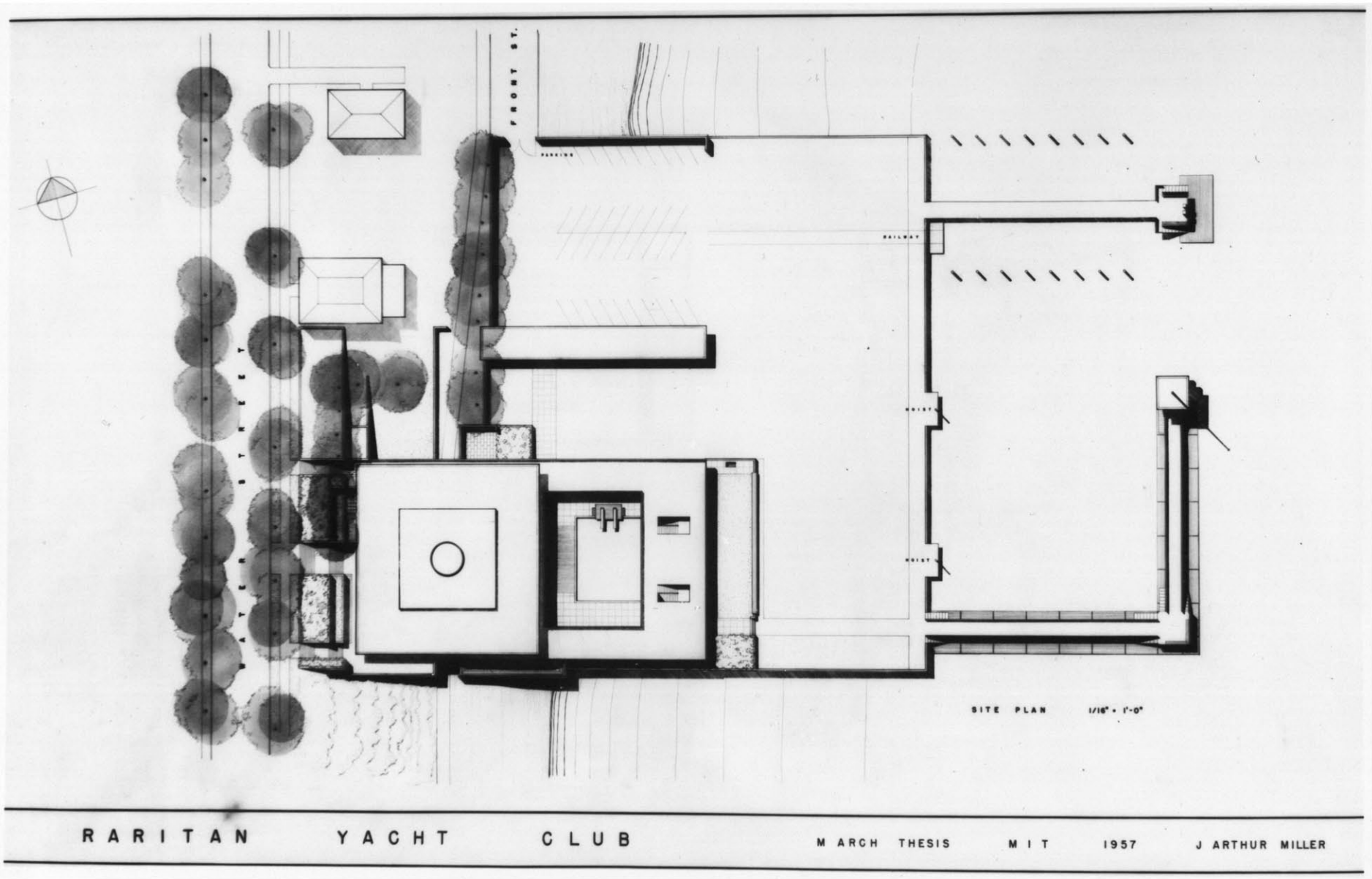
APPROXIMATE AREAS TABULATED

FUNCTION	SQUARE FEET
BOATING	
Race Committee stand	300–400
Open yard storage space	–
Railway or lift for large boats	–
Electric hoists for small boats (2)	–
Floats at pier for temporary mooring	–
Lockers for boat equipment	700
Storage for spars	–
Yard master's storage locker	100
Shop	250
OTHER OUTDOOR FUNCTIONS	
Swimming pool	1500–2000
Diving platform	–
Dressing rooms w/lockers, showers, toilets	600–800
Grass terrace	2000–3000
Observation–sun deck	2000–3000
Snack bar	200
Dance Terrace	1200
SOCIAL FUNCTIONS	
Dance Floor	1600
Supporting areas (bars, etc.,)	–
Bandstand	200
Members dining room	600
Members bar	600
General Lounge	800
Junior lounge and game room	800
Meeting room	400
Office	300
UTILITARIAN	
Mechanical	600
Toilets, 4 @ 200	800
Coat room	250
Kitchen	250
Food and Liquor Storage	100
Steward's apartment	600–800
Caterer's kitchen	200

LIST OF PRESENT BOATS

TYPE	NUMBER	APPROXIMATE SIZE
Cruising sail	10	20' - 60'
Motor cruisers	4	20' - 35'
Miscellaneous small craft	10	6' - 10'
Outboard Motor Boats	10	10' - 20'
Rowboats	15	6' - 12'
Small Racing sailboats		
Penguins	5	11'
Blue Jays	15	14'
Thistles	5	17'
Lightnings	15	19'
Highlanders	6	20'
Stars	3	22'
Total	98	--
Estimated visiting boats for regatta	60	11' - 22'
Grand Total possible at any one time	160	


RARITAN YACHT CLUB



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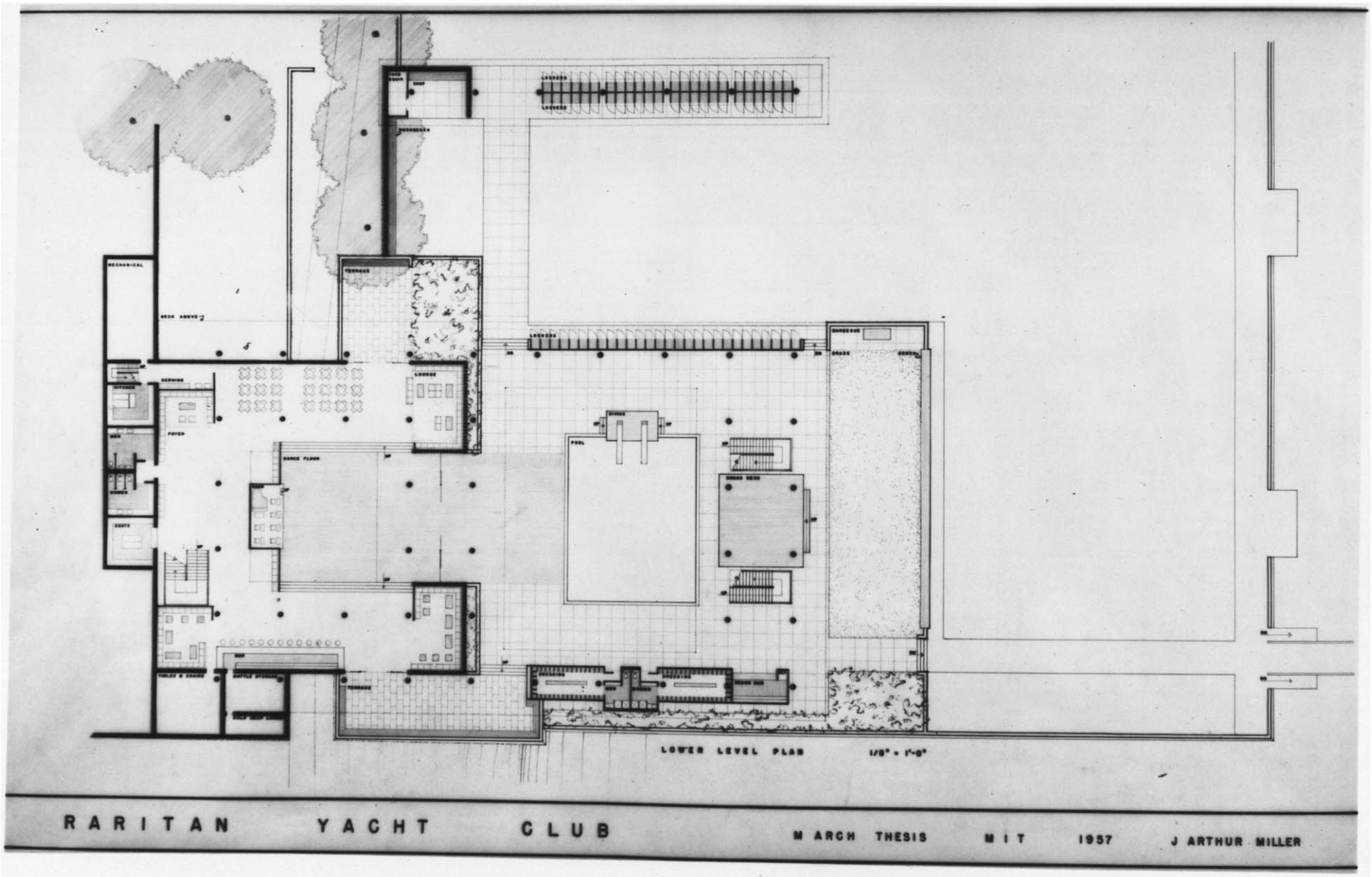

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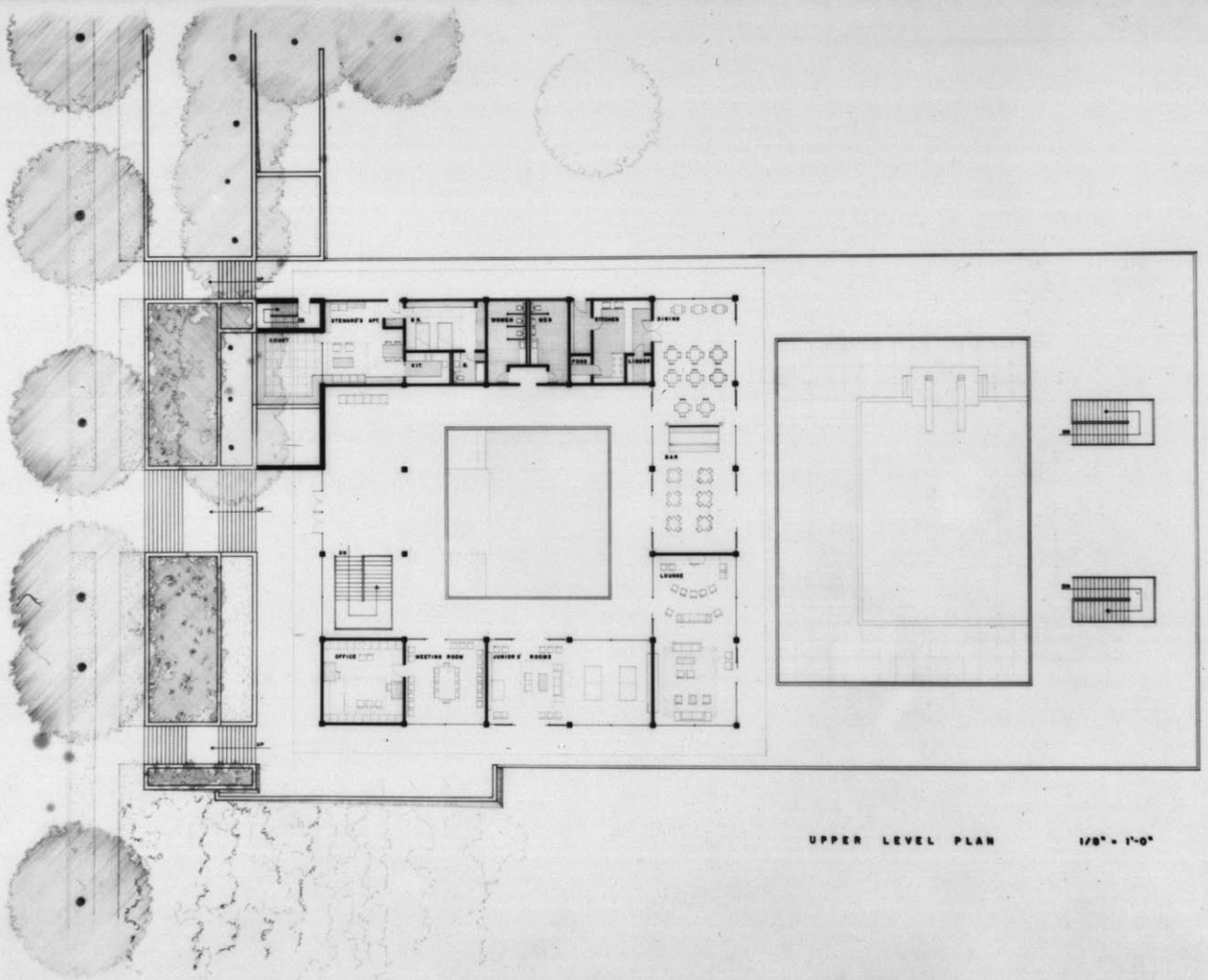
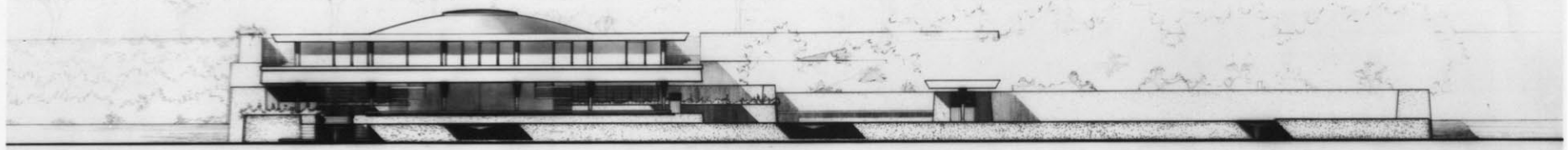


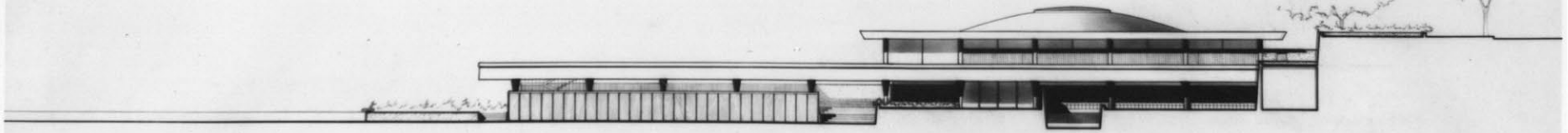
UPPER LEVEL PLAN 1/8" = 1'-0"

RARITAN YACHT CLUB

M. ARCH THESIS M I T 1957 J ARTHUR MILLER



EAST ELEVATION 1/8"= 1'-0"



NORTH ELEVATION 1/8"= 1'-0"

RARITAN YACHT CLUB

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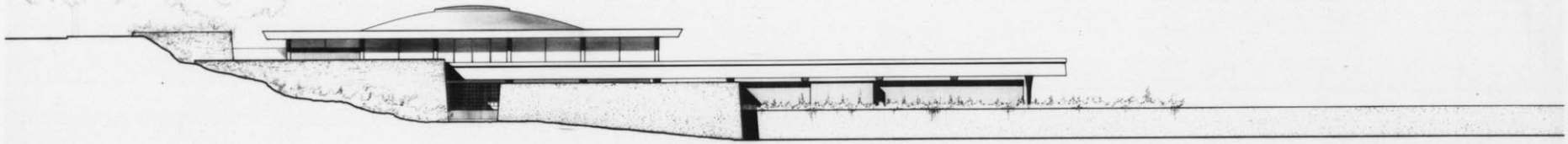
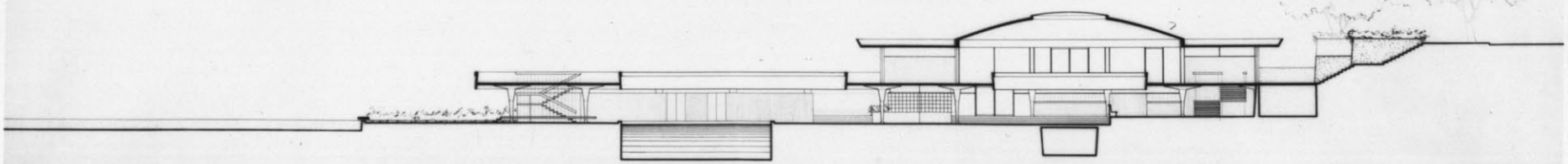


SOUTH ELEVATION 1/8"= 1'-0"



EAST - WEST SECTION 1/8"= 1'-0"

RARITAN YACHT CLUB

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