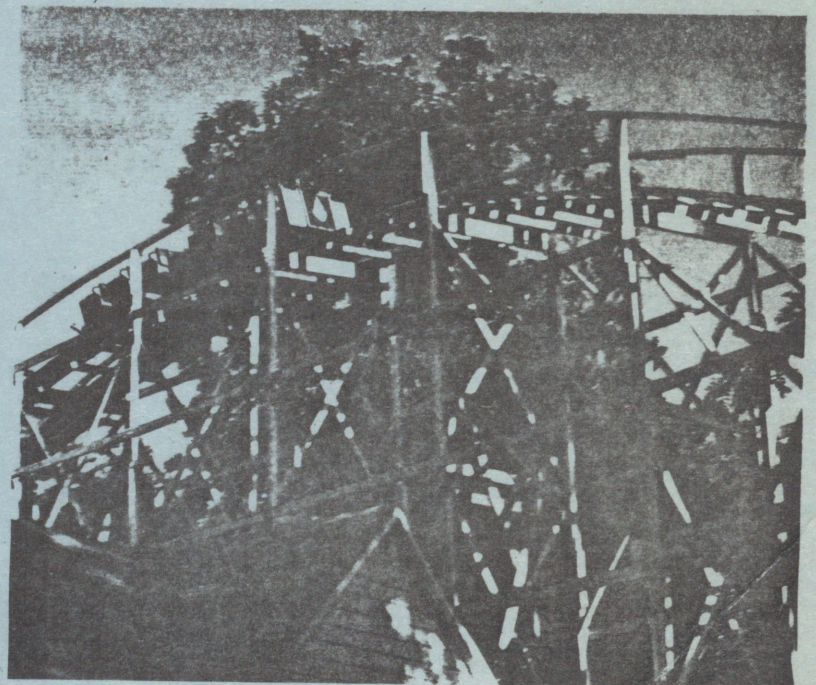


ARCHITECTURE PERCEIVED THROUGH MOVEMENT

AN AMUSEMENT PARK COMPLEX



JULIE CHLUPACH

THESIS II

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ARCHITECTURE PERCEIVED THROUGH MOVEMENT

AN AMUSEMENT PARK COMPLEX

by

JULIE K. CHLUPACH

A professional paper submitted in partial fulfillment
of the requirements for the degree

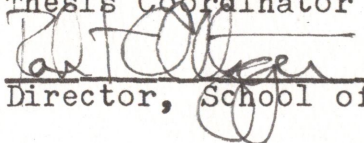
of

BACHELOR OF ARCHITECTURE

Approved:

Advisor

Thesis Coordinator



Director, School of Architecture

MONTANA STATE UNIVERSITY
Bozeman, Montana

March 14, 1983

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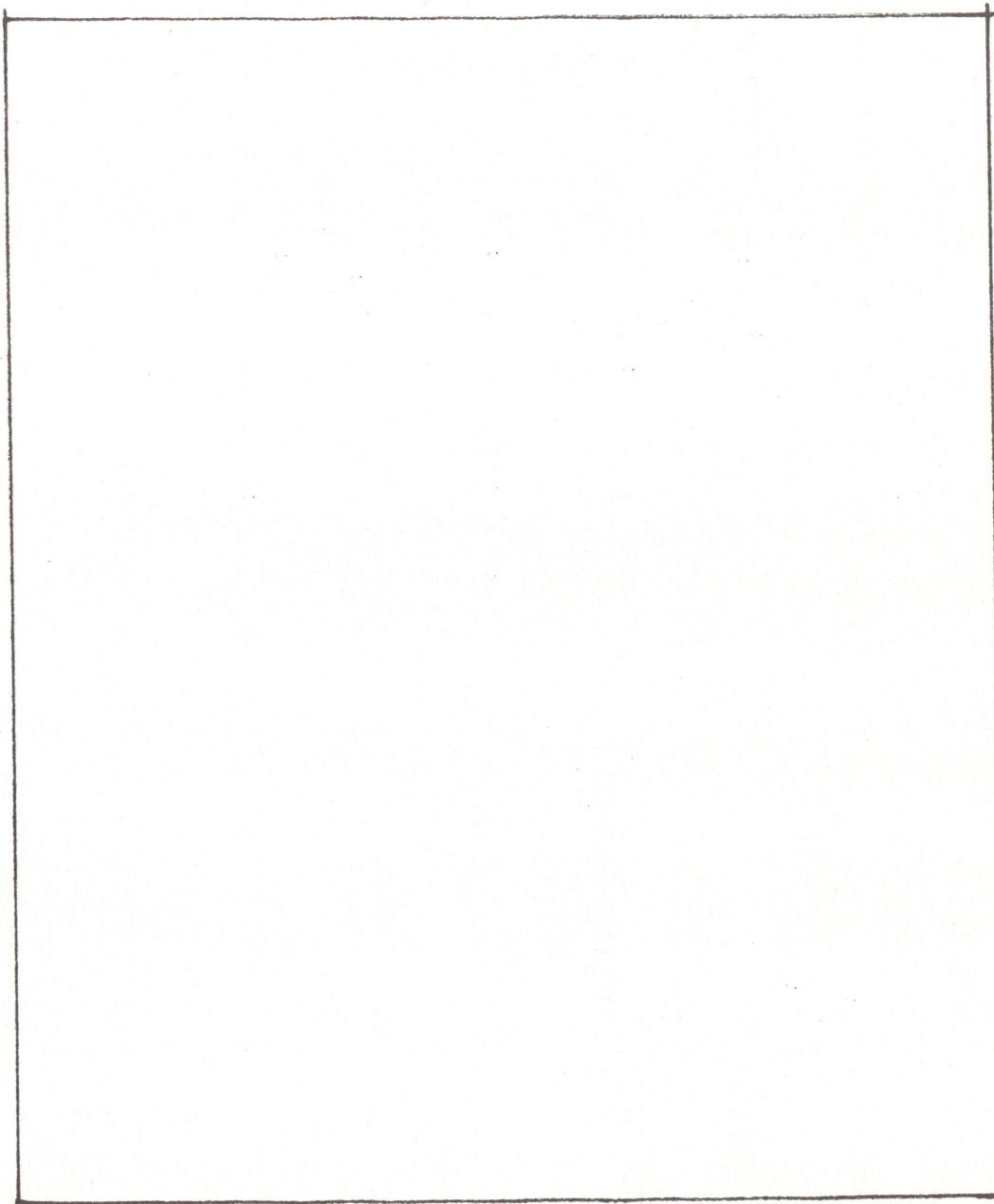
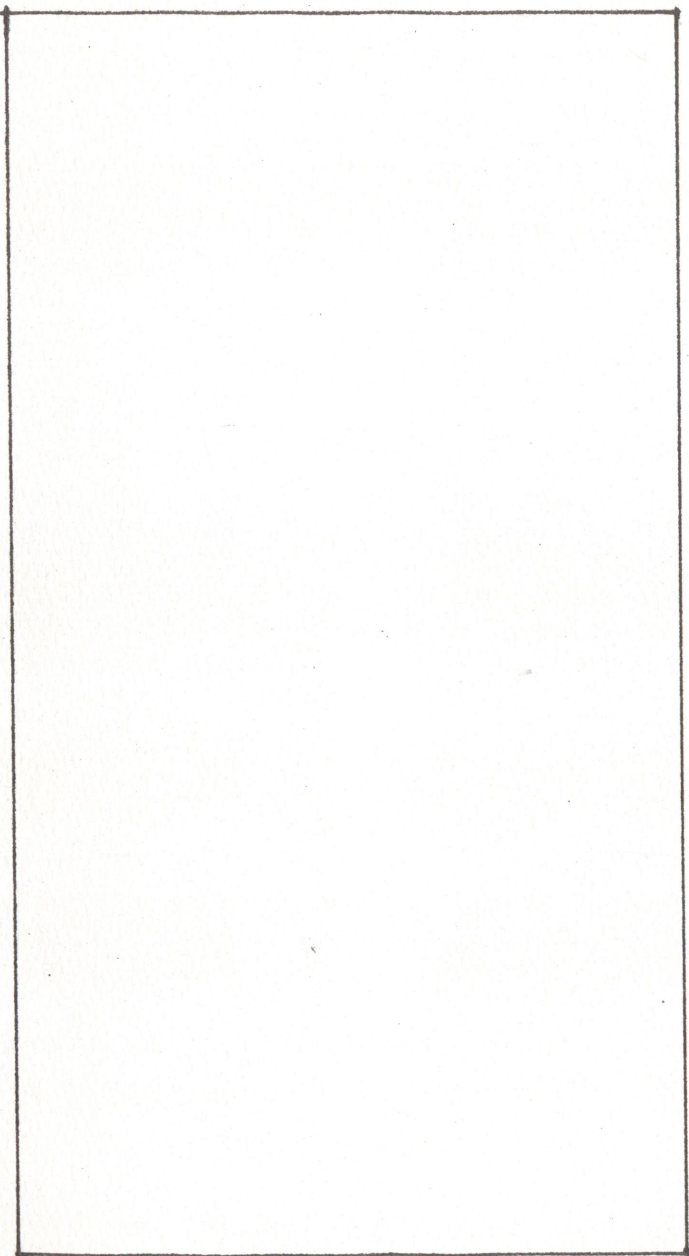
To my parents.

"Only when we walk around a
building, move through it, can
we share its life."

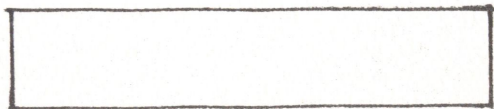
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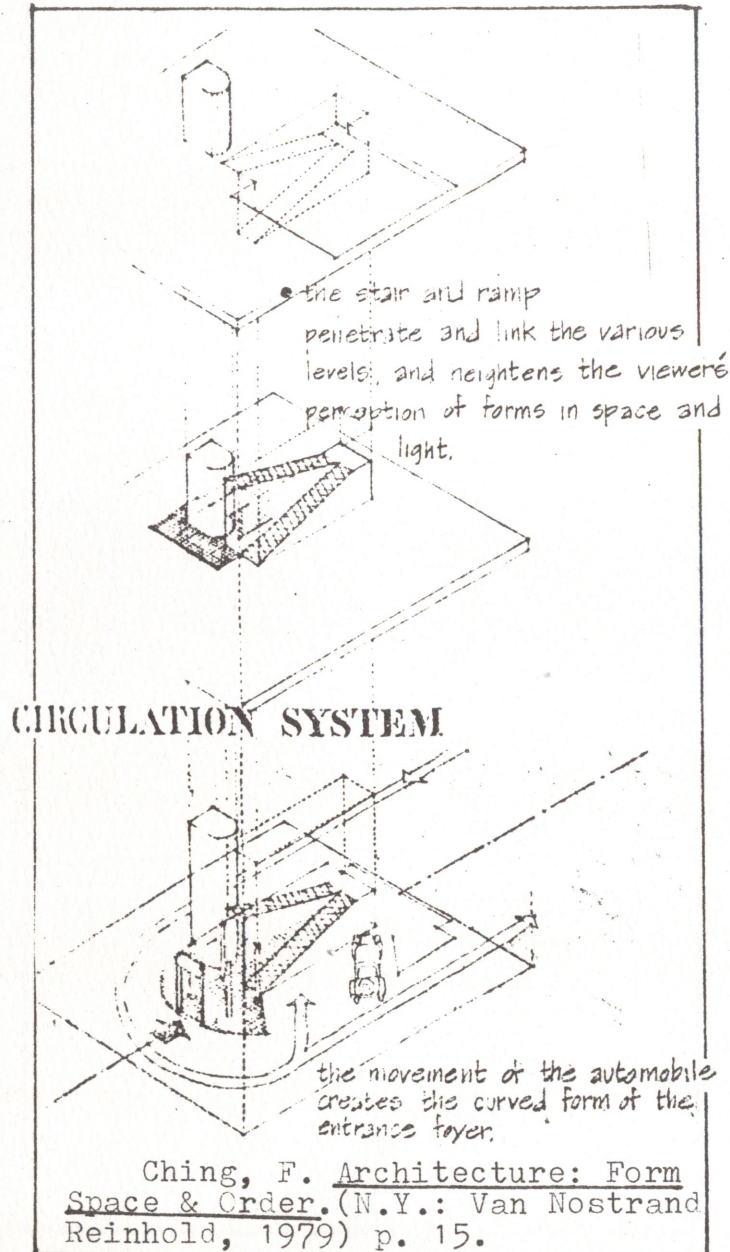
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1



INTRODUCTION



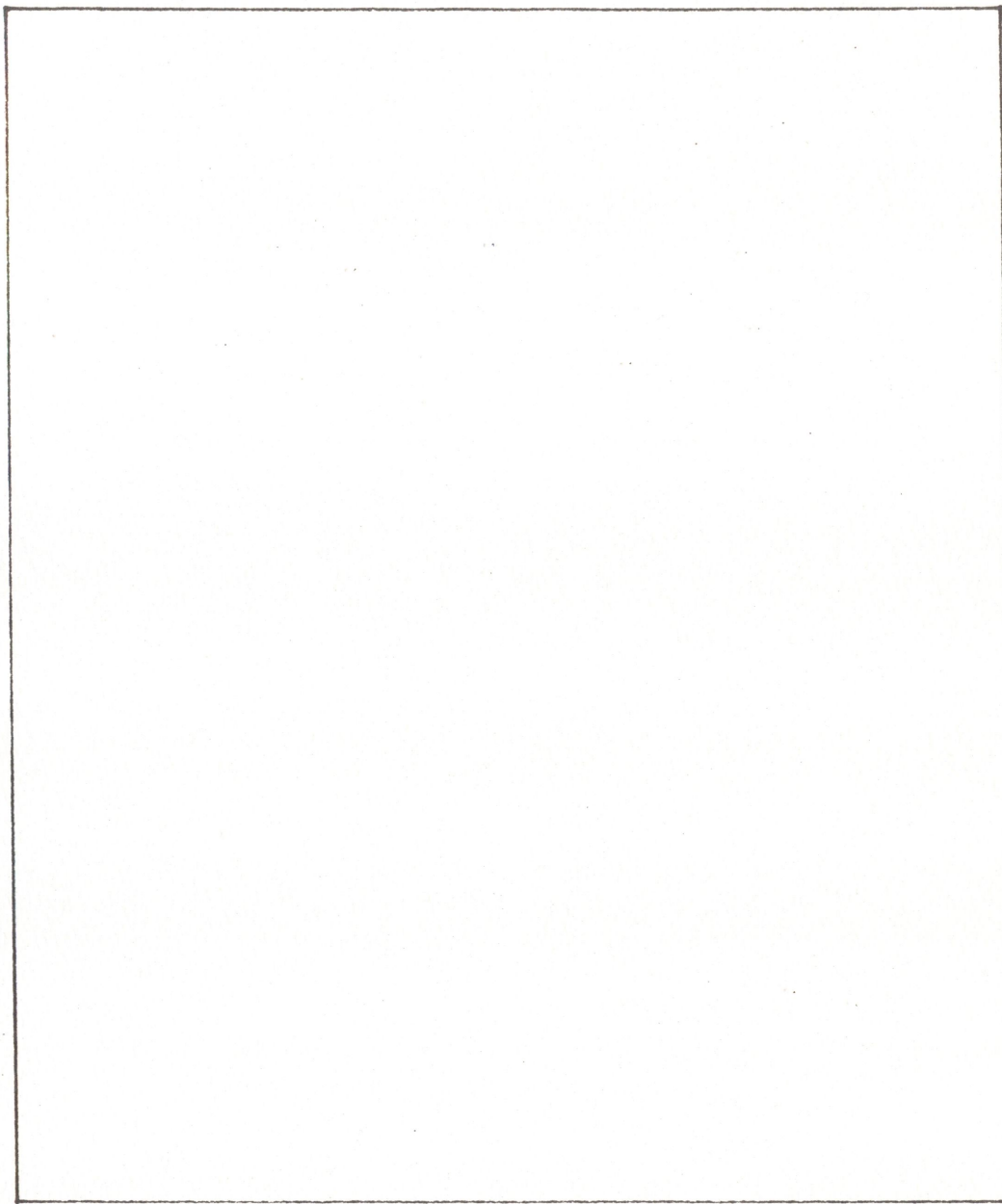
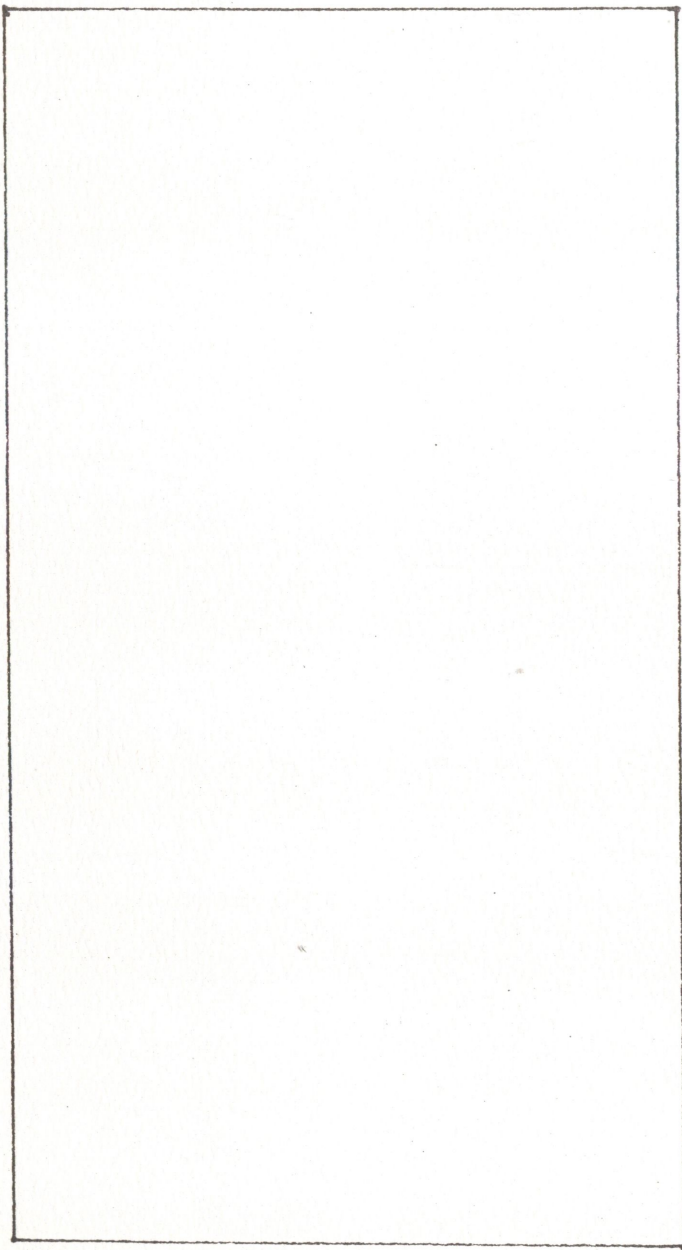
Architecture, expressed through a variety of means, is defined through the experiences of a participant through his kinesthetic, sequential movements through space. The spaces thus defined and delineated by one's movements are architecture.

My first, clear conceptual understanding of architecture occurred when I visited and 'experienced' Villa Savoye in Poissy, France. The moment I saw, walked up, down and around (especially through the curved stairway) I began to feel and understand that architecture is best expressed as an experience--a poetic process. Kinesthetic movement is part of the process of experience, i.e. a way to an end--architecture.

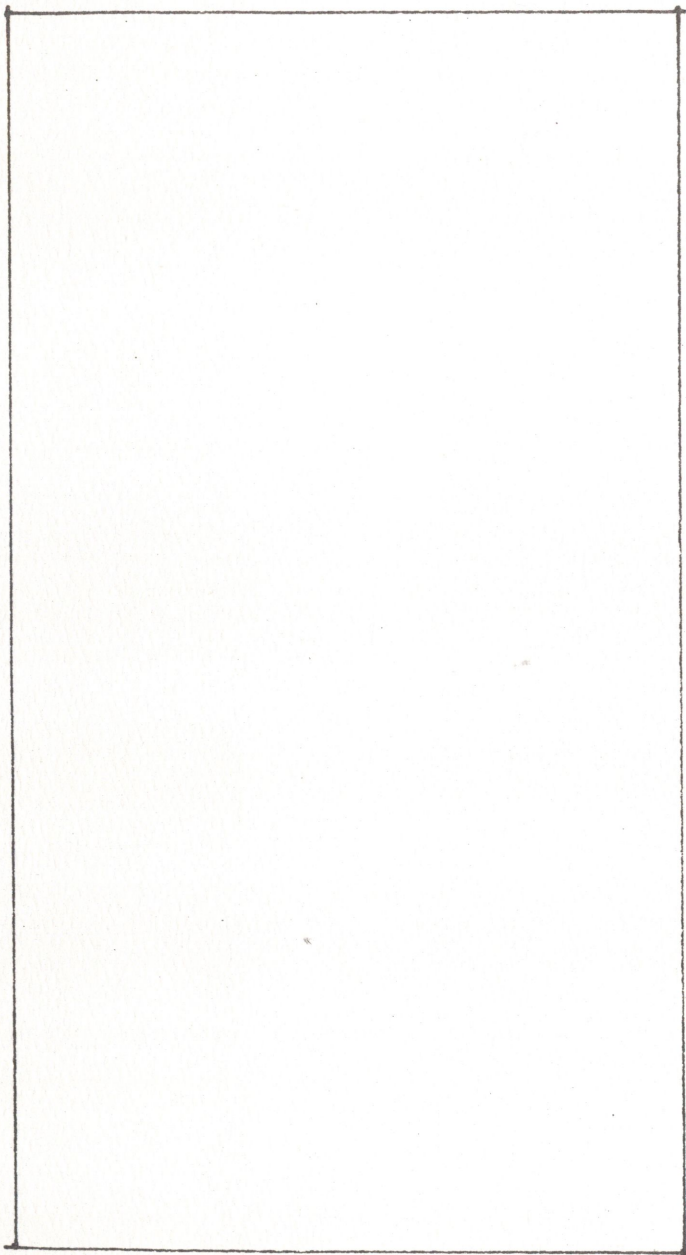
Movement has a dynamic quality; thus, architecture is comprised of dynamic quality. The dynamics of architecture can be experienced through movement, culminating in the feeling of excitement. This excitement is only part of the feelings and experiences of architecture, but one that exists because of the dynamics of movement.

As I was thinking about what I would do for my thesis project, I wanted to do a project that clearly emphasized my ideas on experiencing architecture. The project that I chose, is the redesign of a landmark amusement park on a lake in northwest

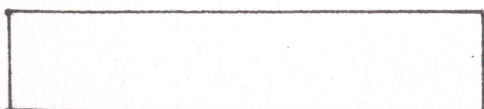
Iowa. The project deals with the existing excitement and dynamic qualities of the site. Through the study and progression of this project I hope to integrate the idea of experiencing architecture through kinesthetic, sequential movements(with the existing site conditions)as part of primary design considerations and focus.



- ▣ To work with the perceptualization of architecture through the process of movement; movement through a building, in/out of a building, and between buildings (spaces). To work with the dynamics of the movement.
- ▣ To make a "place for people". The tourists range from weekend regulators to once-a-year vacationers, including conventioners, summer residents, and all year residents.
- ▣ To maintain and reestablish a landmark (the site). The existing site consists of an old decrepit amusement park, a state pier, and a supplementary activity center (which includes a dance hall, arcade, retail-curio shop, two bars and a cafe). The site is a 'meeting place' for tourists. It is a focal point and major activity center for the 'lakes' area. To work with issues concerning context.
- ▣ To integrate the issues of movement in architecture in the design process and show how it can be expressed through the dynamics of architecture.
- ▣ To work out movement systems throughout the amusement park complex.



6

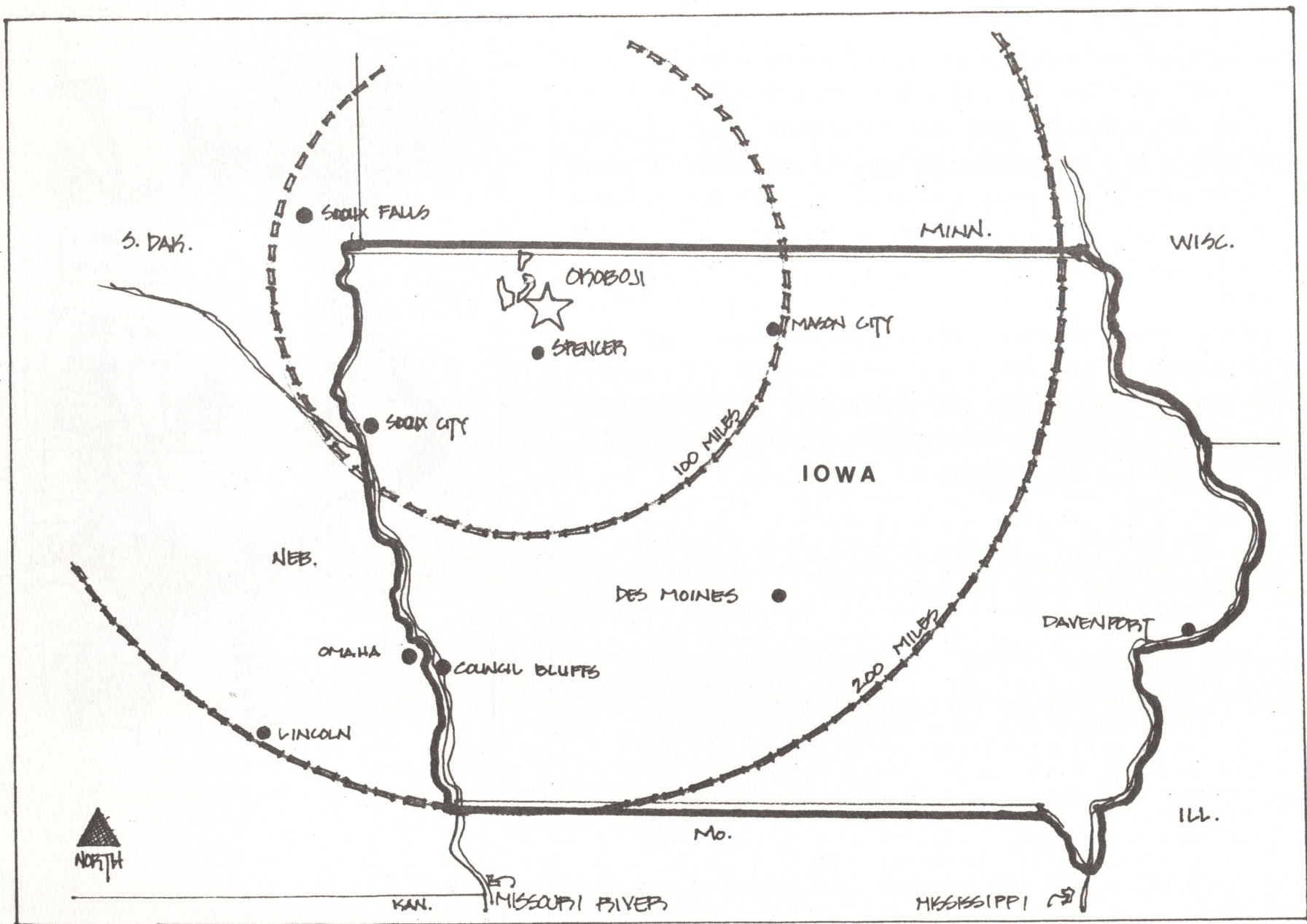


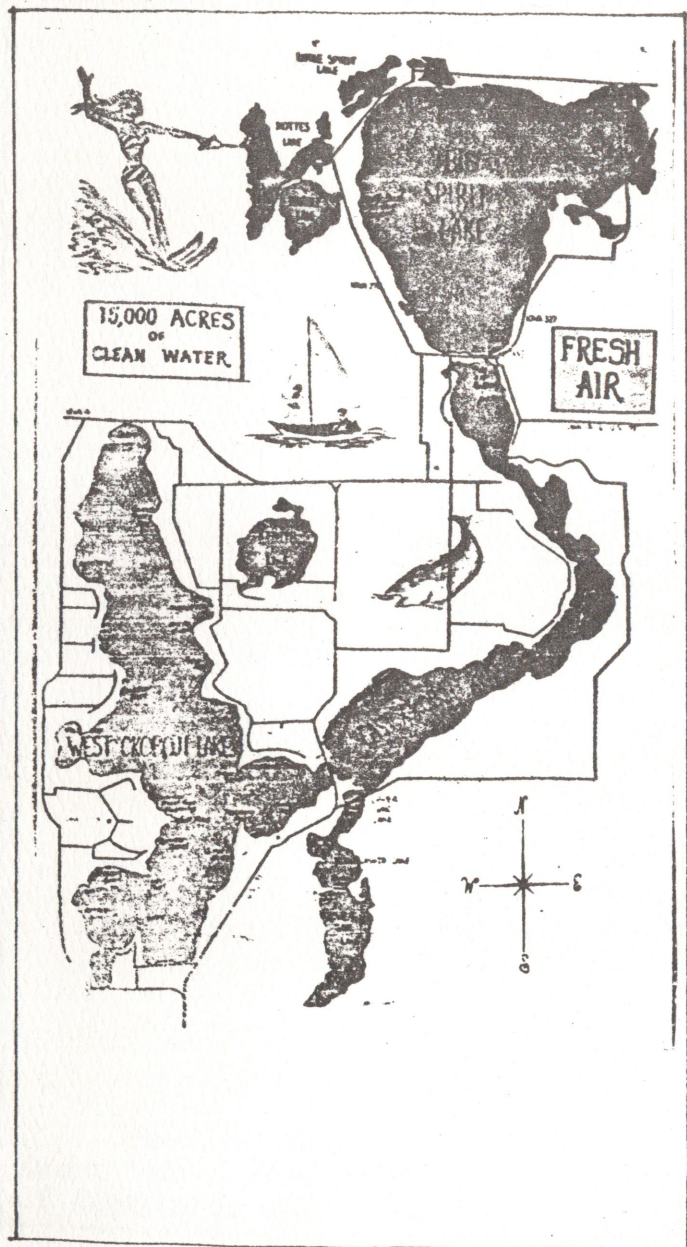
BACKGROUND

The site chosen for this project is a dynamic landmark on West Okoboji Lake, of the Iowa Great Lakes in northwestern Iowa. Iowa, known for its rolling hills, farms, and temperate climate, is also known for its lakes and recreational areas. Vacationers from Sioux Falls, Des Moines, Omaha, and Minneapolis frequent Lake Okoboji, making it a popular resort of the Midwest.

I specifically chose this site because I, too, have vacationed at Lake Okoboji. In fact, I have lived an entire summer on the lake while frequently visiting the 'Lakes' on weekends during the rest of the year. (The home I grew up in, is approximately 190 miles away.) I feel I have a good understanding of the region and of the 'Lakes' area. The actual site is less than a mile from my summer home.

The site is Arnolds Amusement Park, including the 'amusements' (existing) and the adjacent supplementary activities.





The Iowa Great Lakes consist of ten lakes; five, of which, are interconnected. The site on West Okoboji, the largest of the five is connected to East Okoboji, Upper Gar, Minnewashta, and Lower Gar lakes. Consisting of 15,000 acres of spring fed water, the entire 'Lakes' area is surrounded by a deciduous timber. The 'Lakes' were glacially formed 12,500 years ago.

West Okoboji Lake is the largest "blue" water lake in the United States. It is one of three blue water lakes in the world, including Lake Geneva in Switzerland and Lake Louise in Canada.

A geological characteristic, unknown to other lakes, is the fact that West Okoboji 'turns over' twice annually, adding to its quality and oxygen content. Research by some of the nation's best limnologists reveals that the water in Lake West Okoboji is maintained at three levels; the high and the low, and a central area known as the 'thermocline seal' which separates the other two.

A water temperature in the thirty degree range prevails at the lower level and is protected by the thermocline seal from the high level, which is subject to climatic and atmospheric changes in temperature. When the divergence of temperatures between the two extreme levels is greatest, the thermocline deepens. As season to season changes, narrows the temperature

divergences, the thermocline becomes shallow to a depth of inches. When the warm spring winds blow, the thermocline is broken and the water is circulated from the lake bed to the surface. As temperatures rise with the approach of summer, the thermocline forms again and protects the lower level from temperature rises. The same phenomenon occurs in autumn when summer temperatures subside and the fall winds blow.¹

A rare form of algae aids in the deep blue color seen when looking at West Okoboji Lake. The extraordinary blueness of the water, as part of the excitement of the environment, will be used as contextual design criteria.

West Okoboji Lake has a surface area of 8,500 acres. It is 135 feet deep at its deepest point (in the north central part of the lake). Sitting at the elevation of 1396 feet above seal level, West Okoboji has numerous bays, sand beaches, and points. The lake runs seven miles north and south, while is only one and a half miles east to west. The lake fluctuates two feet on the average, with a maximum fluctuation of eight feet. The state of Iowa owns all service and access areas of the lake. Nine state parks are scattered throughout the lakes area.

¹Arnold, Vinton C. "Iowa Great Lakes Area History". Chamber of Commerce.

The site is located at latitude-north 43'-22" and longitude-west 95'-07". The elevation of the site is approximately 1400 feet above sea level. Most of the climatological data was taken from the Milford airport four miles directly south of the site.

The temperatures are seasonal and of a temperate quality, ranging from -25° F. in January to 103° F. in July (these, of which, are the extremes). The yearly average is 45.4° F. (See the Temperature illustration.) The humidity can get quite high in the summer months making the outdoors sometimes unbearable. The moisture in the air affects the way a person feels the temperature. The hot (and muggy) weather can feel very uncomfortable, while cool air with moisture can feel colder (brisker).

Winds come from the northwest most of the year, though they are stronger in the winter months. In the summer months winds come from the southeast. These winds are strongest in the afternoon. High winds are usually around forty miles per hour. Average hourly winds are around ten mile per hour.

Precipitation comes to Iowa in the form of rain and snow. Rains come in the form of short summer storms, violent at times. Annually, the

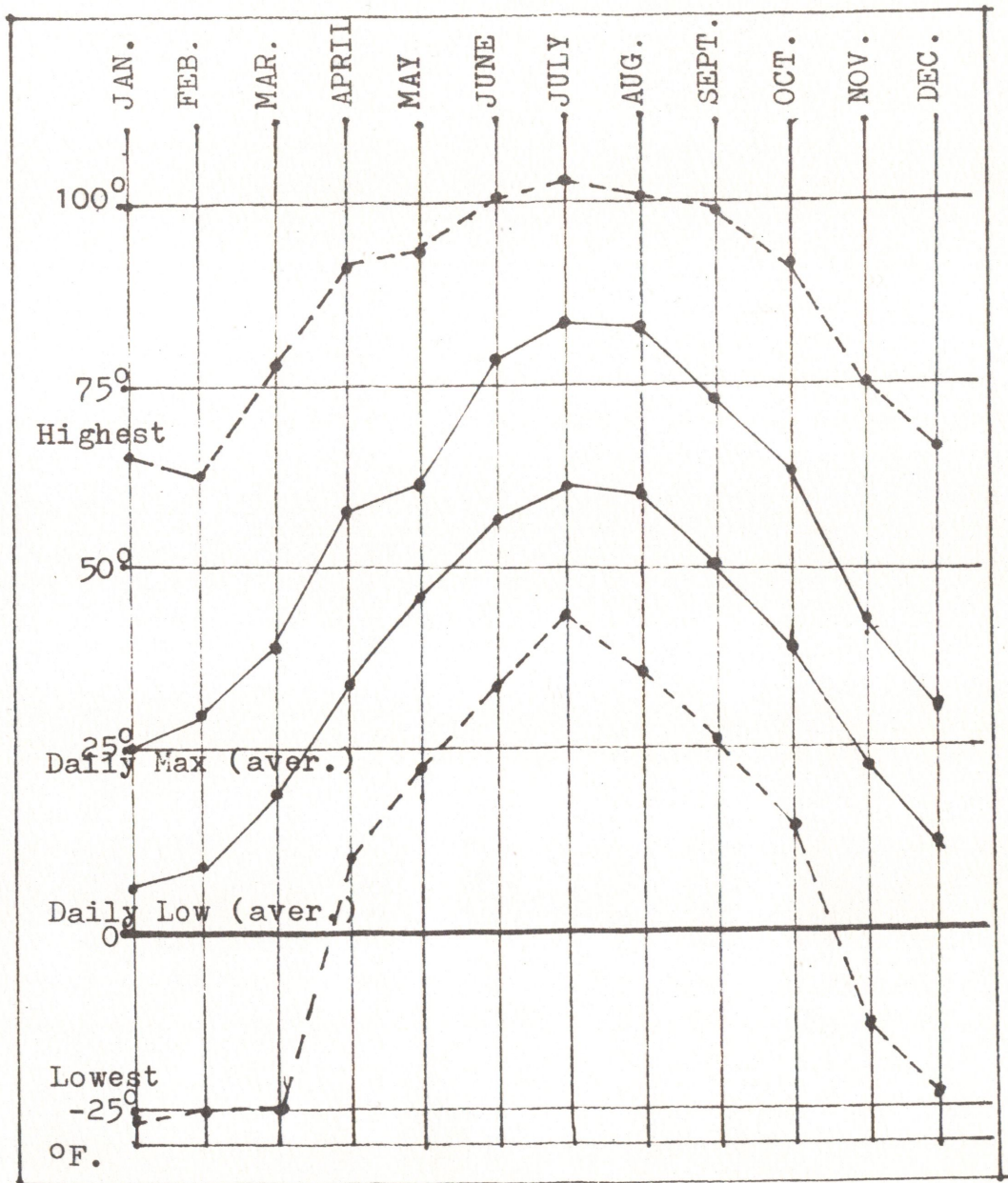
area receives precipitation fifty-one days of the year. This is about twenty-six inches a year. Snow falls, on the average, thirty days of the year. This snow visually remains for long periods...Only 123 days of the year have clear skies, 100 days have partly cloudy skies, and 142 days are cloudy.

The sun rises in June at 4:12 a.m. and at 7:31 a.m. in December. The sun sets at 7:48 p.m. in June and 4:19 p.m. in December.¹

The immediate climate is of great concern to the tourist of Okoboji. The weather controls most of the activities; thus, the tourist is more aware of what is going on around him.

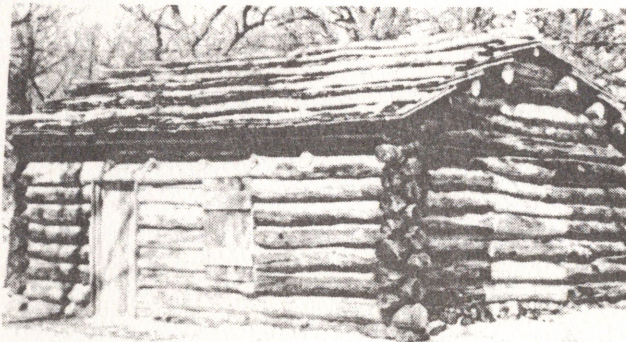
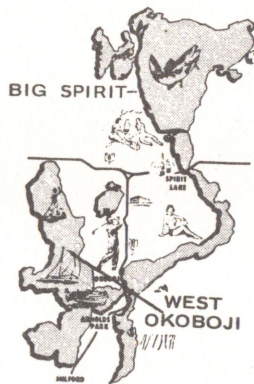
¹ A.I.A. Regional Climate
Analysis. "Twin City Area".
(Wash., D.C.: A.I.A., Nov., 1950).

Climatography of the U.S.
no. 86-11, Ia. (Washington D.C.:
U.S. Gov. Printing, 1964).



	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	ANNUAL
PRECIP. (inches)	.43	.99	1.5	2.2	4.0	5.0	3.3	4.0	2.4	1.3	1.1	.60	26.81
PRECIP. (days over .10 inches)	1	2	4	4	7	7	5	7	5	5	3	1	51
SNOWFALL (days)	5.7	7.9	12	2.4	-	-	-	-	-	-	4.9	6.3	30
WIND MAX (direction in mph)	N 42	NE 43	NE 47	N 41	NW 44	NW 59	NW 62	NW 64	NW 43	NW 46	NW 41	NW 40	NW 65
WIND AVER. HOURLY (direction in mph)	NW 13	NW 11	NW 12	NW 11	S 11	S 9.3	S 8.3	S 7.1	S 8.9	S 10	NW 11	NW 11	NW 10.2

A.I.A. Regional Climate Analysis.
 "Twin City Area". (Washington D.C.: A.I.A.,
 November, 1950.)



GARDNER CABIN

Arnold, Vinton C. "Iowa
Great Lakes Area History".
Chamber of Commerce.

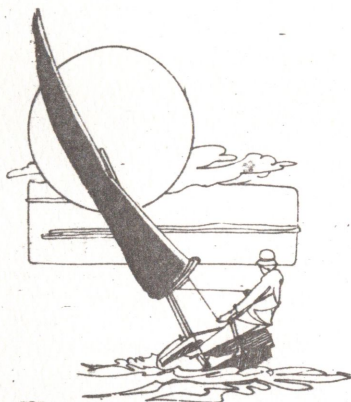
Historically the area is quite interesting. Big Spirit Lake, the largest natural lake in Iowa, is one of the earliest known spots in Iowa. It was ruled by the "Ioway", a warlike Indian tribe. It was on the early maps of Louisiana (1703) and referred to in the Lewis and Clark expedition of 1803. Indians regarded the lake as sacred, believing that evil spirits ruled its waters. High winds frequent big Spirit Lake forming the highest white caps of the region.

Just three blocks (less than one half of a mile) from the site is the setting of the Spirit Lake Massacre of 1857. Thirtytwo people were killed at the 'Gardner Cabin'. The Indians were avenging the death of Chief Inkpauta (Scarlet Point)'s brother. One survivor, who was captured at the age of thirteen later returned to the cabin, restored it, and opened it up as a museum. The museum and a state monument still exist.

Tourists came to the lake area as early as 1874. When the Milwaukee railroad came through the area in 1882, the first hotel was soon built. The 'Orleans Hotel' was built on East Okoboji and became a very popular resort area. It had nine towers, boating excursions (as early as 1884), and

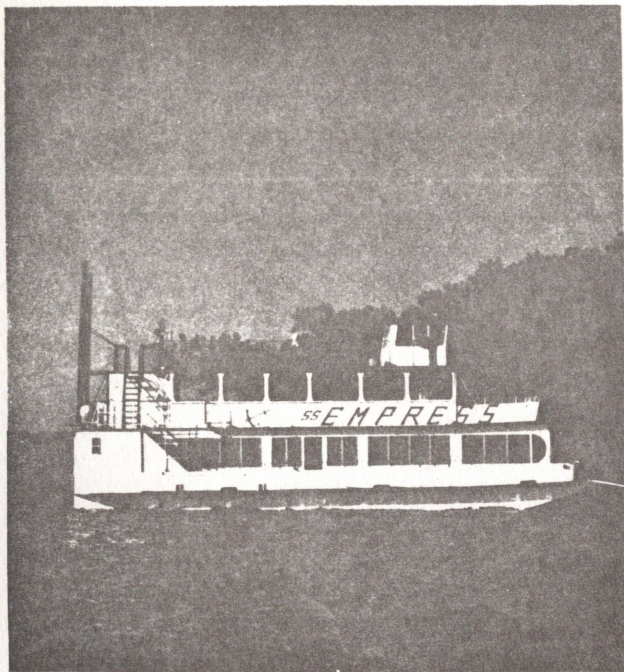
a roller rink (during the roller skating craze of the 1880's). The boat excursions went up the 'narrows' of East Okoboji Lake when the water level was high during the 1880's. Then, during the 1890's the water level lowered back to normal, eleviating the excursions through the narrows. The Orleans Hotel suffered somewhat as it structurally was further away from shore.

Today, tourists are the major source of the population. The normal, all-year population of the 'Lakes' area is approximately 5,500 people. In the summer, when the tourist season hits its peak, the area's population is approximately 55,000. These people are summer residents, weekenders, and one week a year tourists.



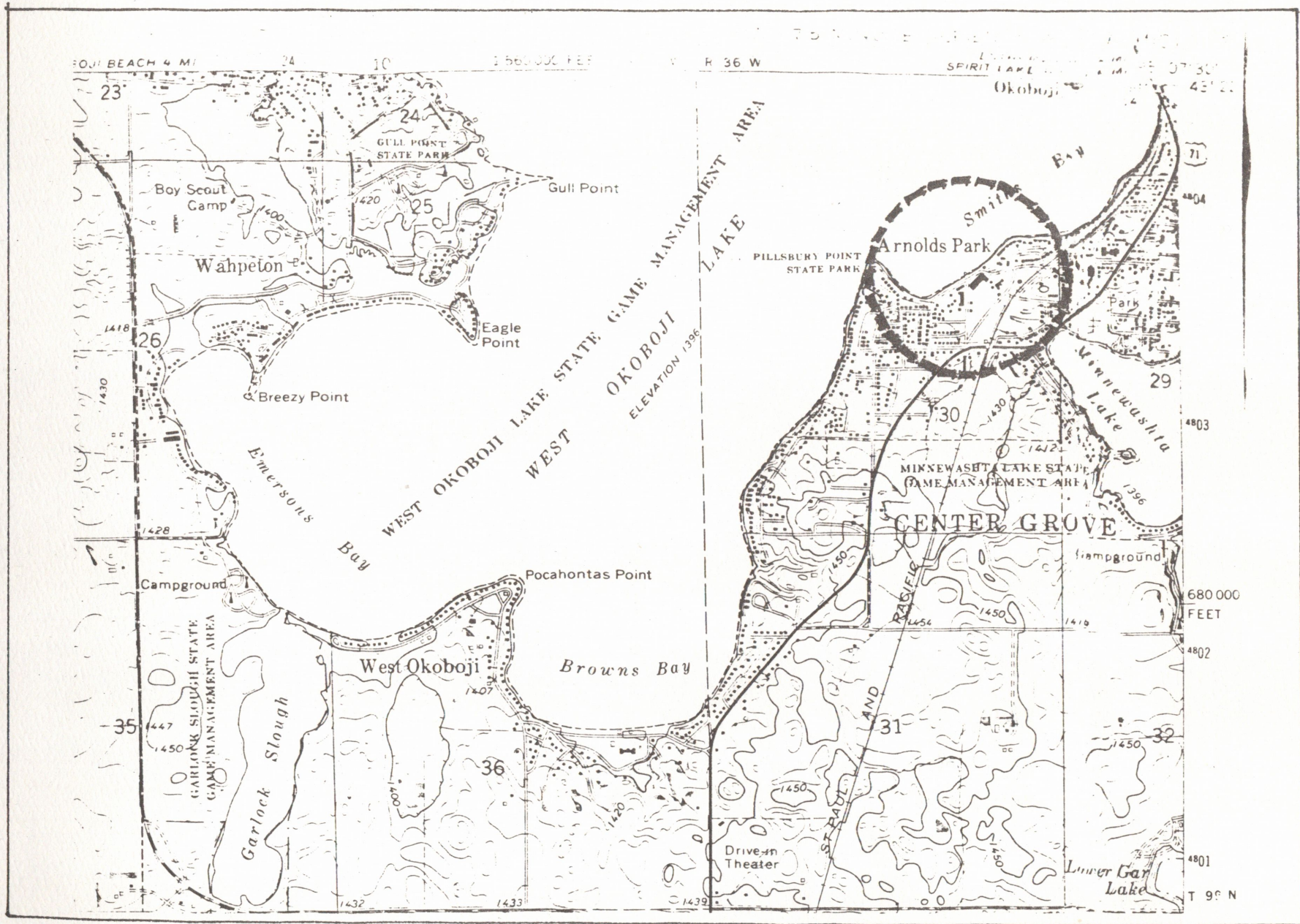
The actual site of the project is on the southeast shore of West Okoboji Lake. In the town of Arnolds Park, the site is visible from several areas of the lake. The most important viewpoint, from Smith's Bay, is a place of great water activity. The bridge and water connection to East Okoboji Lake and three other lakes is prominent. The water connection is obviously a busy spot, where boats must slow down and go under designated points of the bridge--which connects the towns of Okoboji and Arnolds Park.

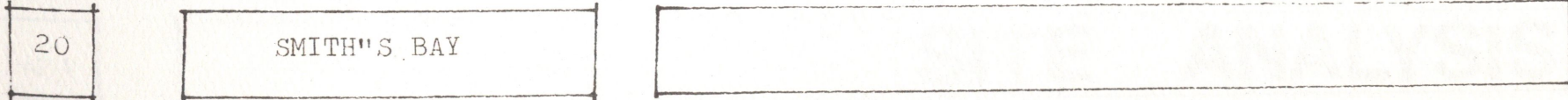
The site, itself, is dynamic because of its' existing and historical qualities, as a visual and active (exciting) landmark. The existing site is an amusement park. Dr. A. L. Peck built up Arnolds Amusement Park around 1915. (Peck is the grandson-in-law of W.B. Arnold who bought the land in 1864.) The earliest structure on the site was a dance pavillion in the late 19th century. The first 'Roof Garden' was built in 1923, and was the largest ballroom in Iowa. Also, an state pier exists just east of the amusements and in the front of the existing 'Roof Gardens'. The pier was built about fifty years ago as a parking place for boats and water access to the ballroom, food,

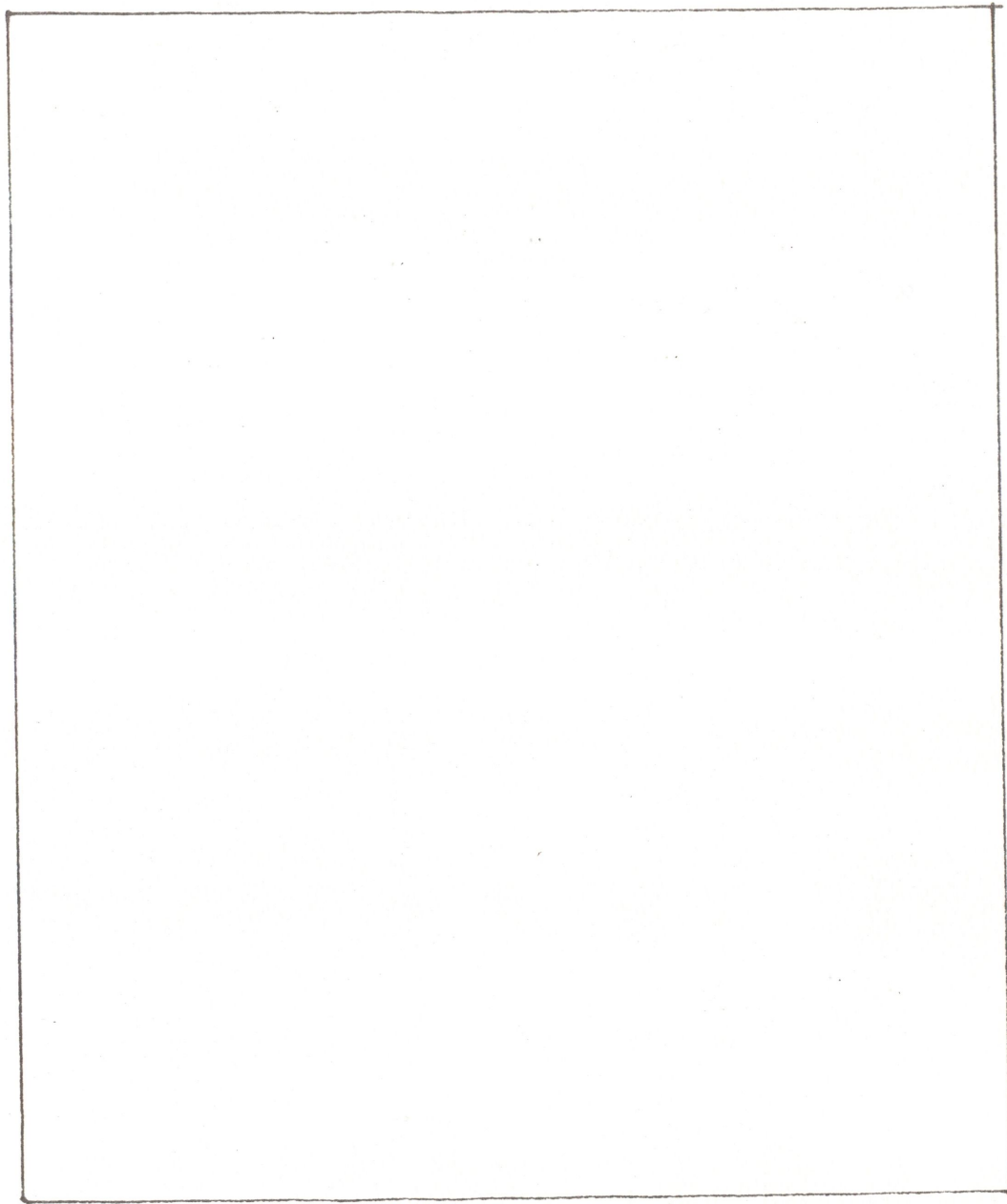
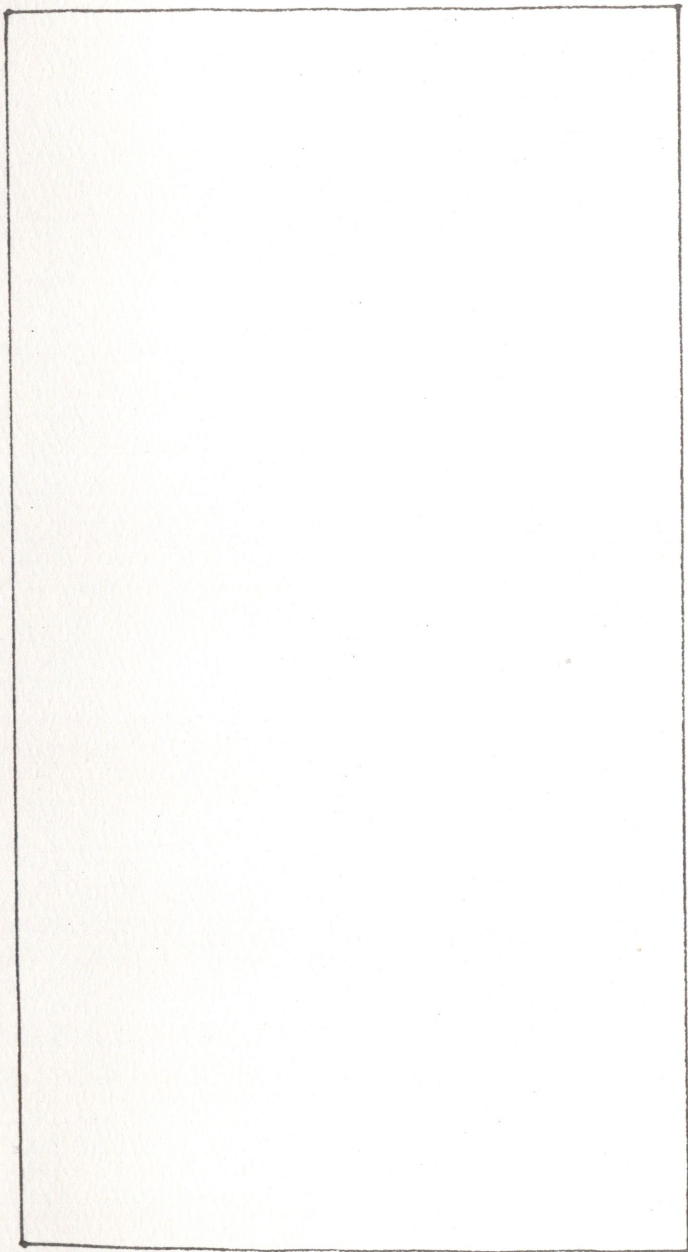


and drink. A political controversy brought about the construction of the pier. Finally, through legislation, the pier was built (and owned by the state). The S.S. Empress docks nearby. This excursion boat is sixtyfive feet long and used for dances, daily trips, and special occasions.

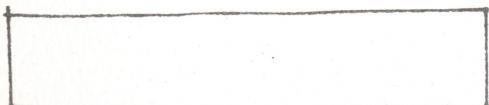
The site has several dynamic qualities, just in its placement and relationship to the connection of West and East Okoboji Lakes. Arnolds Amusement Park has been a landmark in the midwest for many years. Throughout the years it has changed minimally; though, it has aged a great deal. The site needs organization and a renewal of the past excitement with its dynamic qualities. This thesis will deal with these issues and attempt an edifying solution.







62.1



SITE ANALYSIS



The 'Lakes' area is known for its great all-seasonal sports activities. Boating, sailboating, and water skiing are major summer attractions with competitions held weekly. Seven golf courses are in the 'Lakes' region. Fishing is an all-seasonal sport (for fish like muskie and perch). Fishermen can be seen in boats, along the shore, and in ice houses. Ice skating on the lake and cross country skiing are frequent sports activities in the winter.

The 'Lakes area has become very commercial, where most of the shoreline, especially on West Okoboji Lake, has been built on. The shores of West Okoboji are lined with numerous resorts, cabins, and beautiful summer homes. There are four small towns on West Okoboji.

The site of the amusement park, on the south-east shores of West Okoboji Lake, is set in a dynamic context. The dynamics arise out of the movements and activities on both the water and land. Smith's Bay is a very active aquatic spot and a place of transition from lake to lake. Also, because of the boats' reduced speed, congestion and choppy waters result and are normal for the bay. A marina is directly across the bay adding to boat activity. A sailboating course is usually set up

west of the bay.

Across the bay one sees nice summer homes and the water tower of Okoboji (a landmark from the lake). To the northwest the blue waters of West Okoboji extend beyond. Directly west of the site Pillsbury Point extends out into the water, defining an edge of Smith's bay. To the northeast, the bridge is an important landmark. It is the point of transition for the pedestrian, boat, and automobile. Boats slow down and go below the bridge at two designated points. Cars go across the bridge on Highway 71 between the towns of Okoboji and Arnolds Park. Cars often stop on the bridge to park, rest, or to meet others. People also use this bridge to get to Okoboji and Arnolds Park on foot. An abandoned railroad bridge was rebuilt as a pedestrian bridge. Several fishermen can usually be seen in this area at all times of the day. Less than one half of a mile away the historical marker and museum of the Spirit Lake Massacre exist. To the west, this is easily in walking distance from the park.

The amusement park is surrounded by summer residential areas. To the direct west, along the shore, thirty to forty year old homes exist. The



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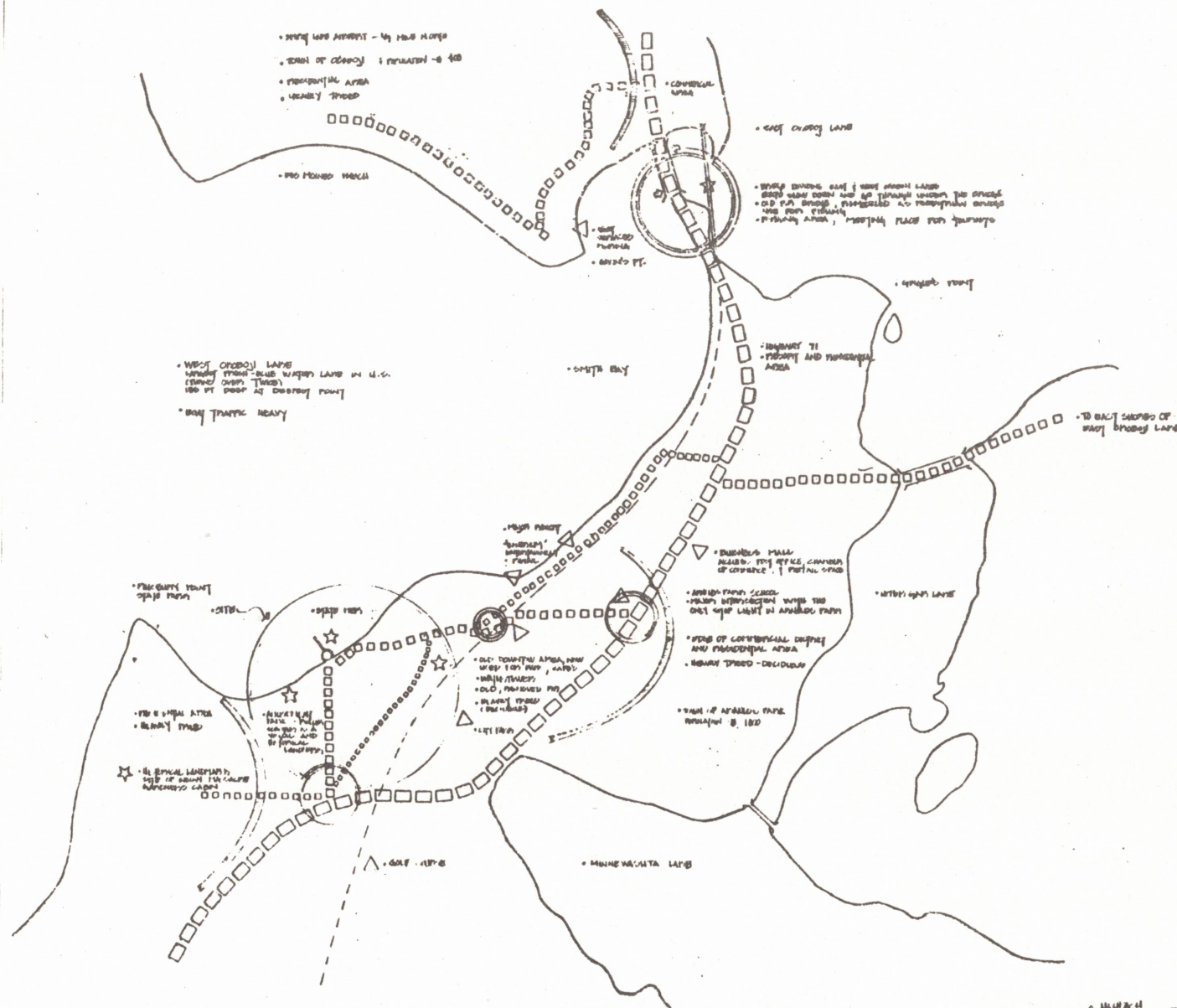
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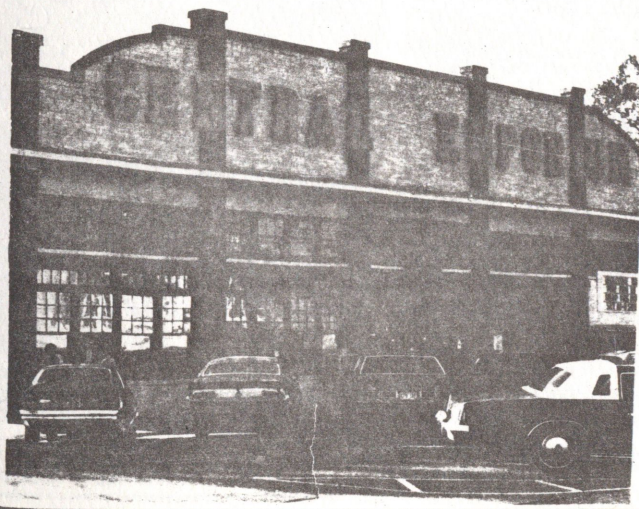
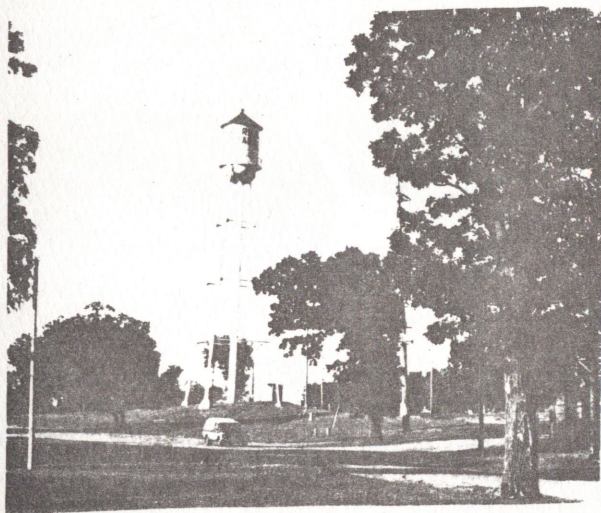
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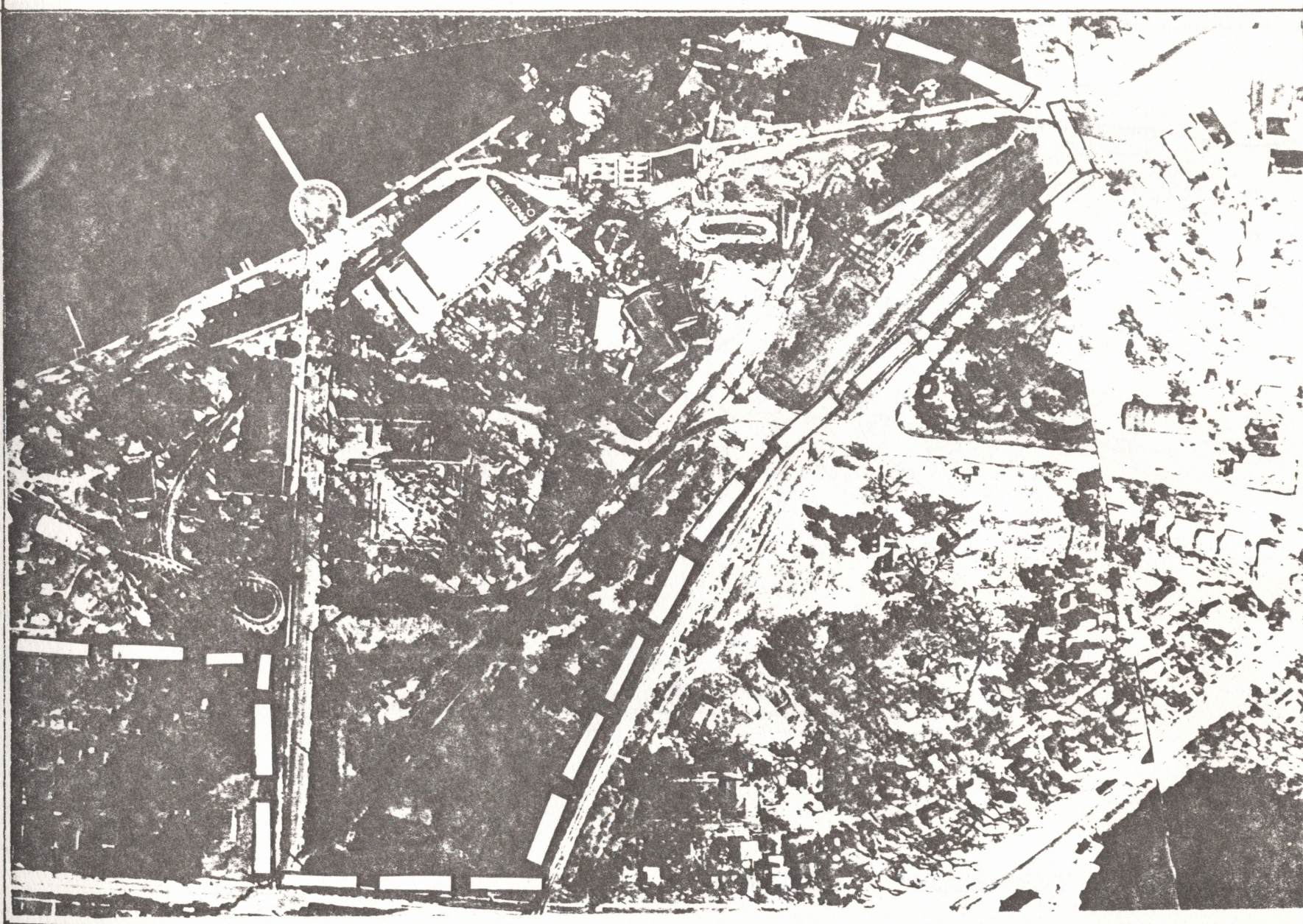
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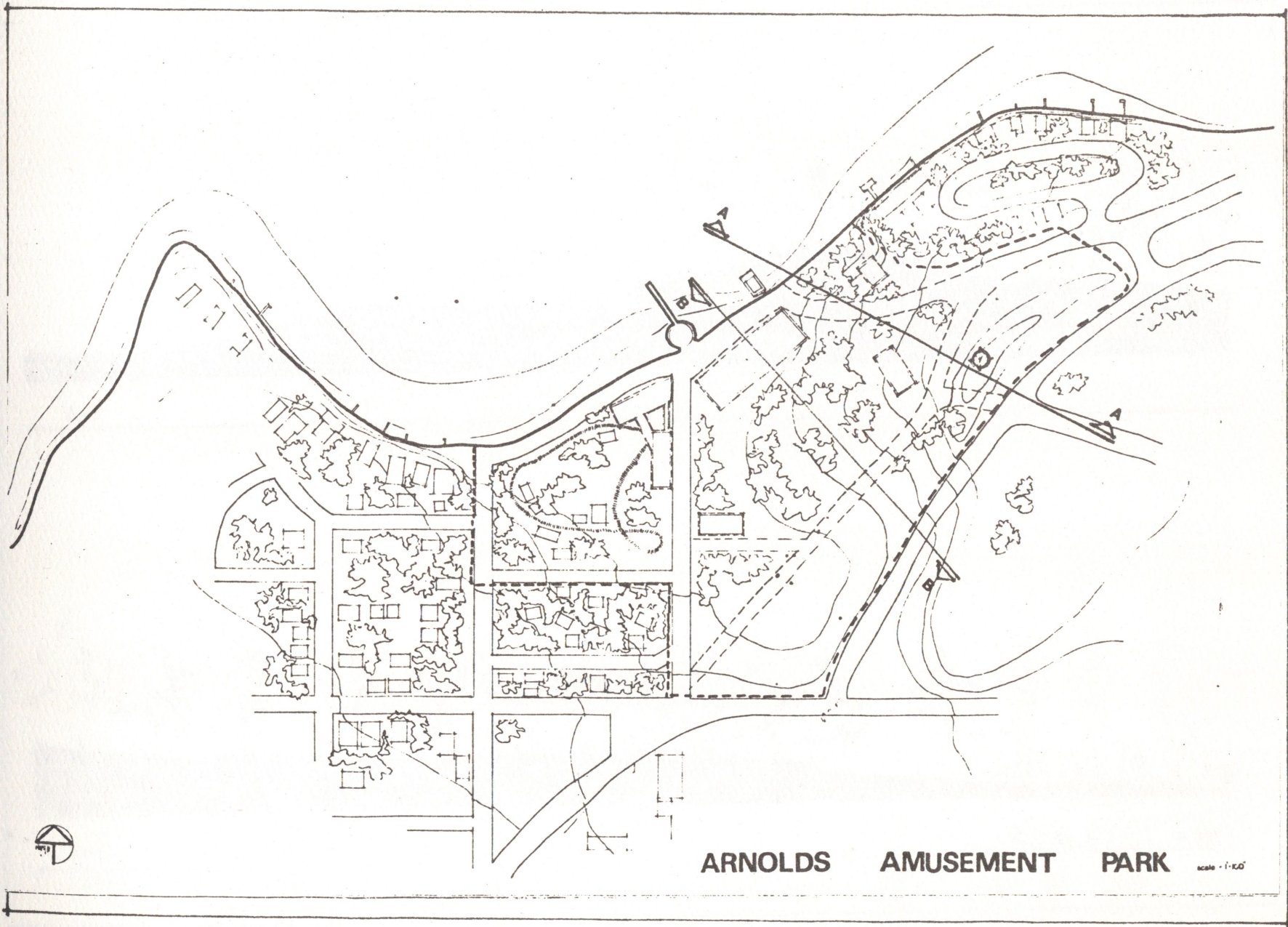




edge of this district meets directly with the amusements of the park. Just to the southwest small cabins bound the edge of the park. Highway 71 runs across the south edge of the area. It is a major arterial of the 'Lakes' area--a very busy road. Directly off of this highway is the major access to the park, going straight (north) through it, culminating at a state pier. To the southeast there is the site of an abandoned railroad, now used as a street. At the southeast corner of the site, the contours rise gradually to the highest point of the immediate area--135 feet above water level (of the lake). On this spot, another landmark, is the Arnolds Park water tower. Another access to the park begins here. Normally it is used only as a means of egress. Beyond the water tower exists a strip of bars, cafes, etc. Across the street of this strip and along the shoreline is the Emporium, a summer entertainment center and shopping mall. Here begins the entertainment district from the eastern edge of the site. Beyond the Emporium there are more summer cottages.

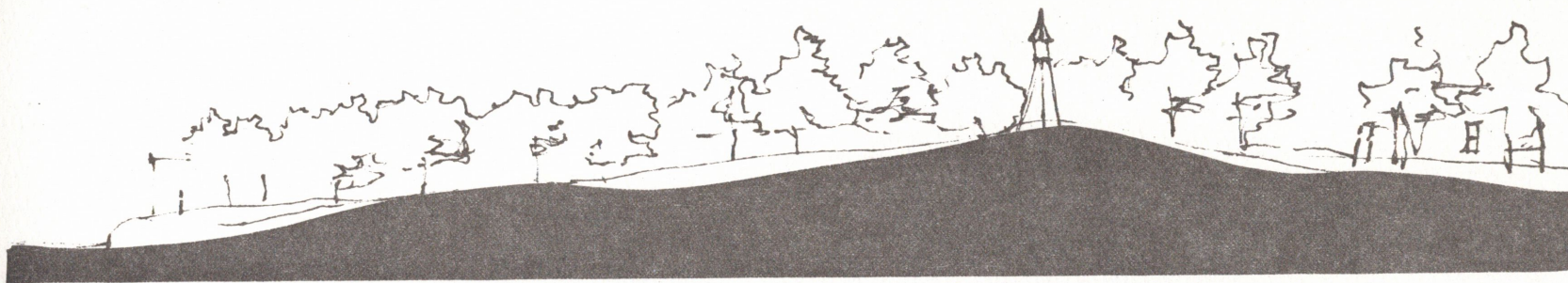
The entire area is covered with forty foot high deciduous trees. The area is almost flat, with a slight slope down to the lake (drainage).



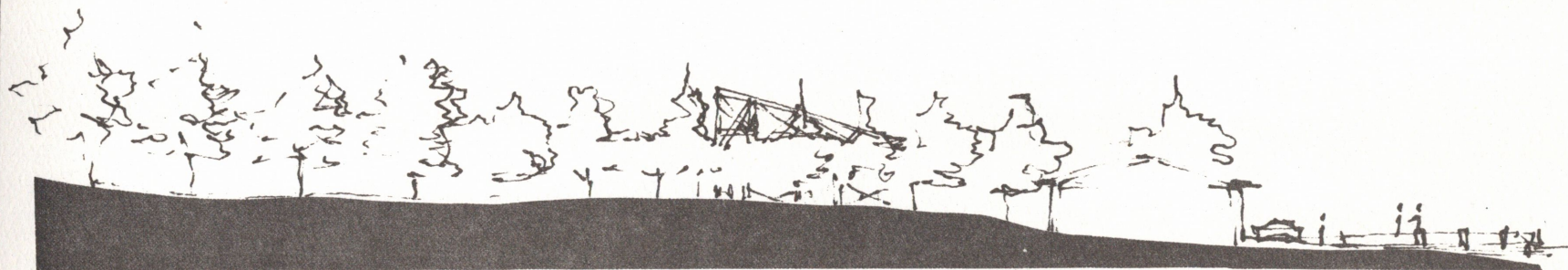


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EXISTING SITE

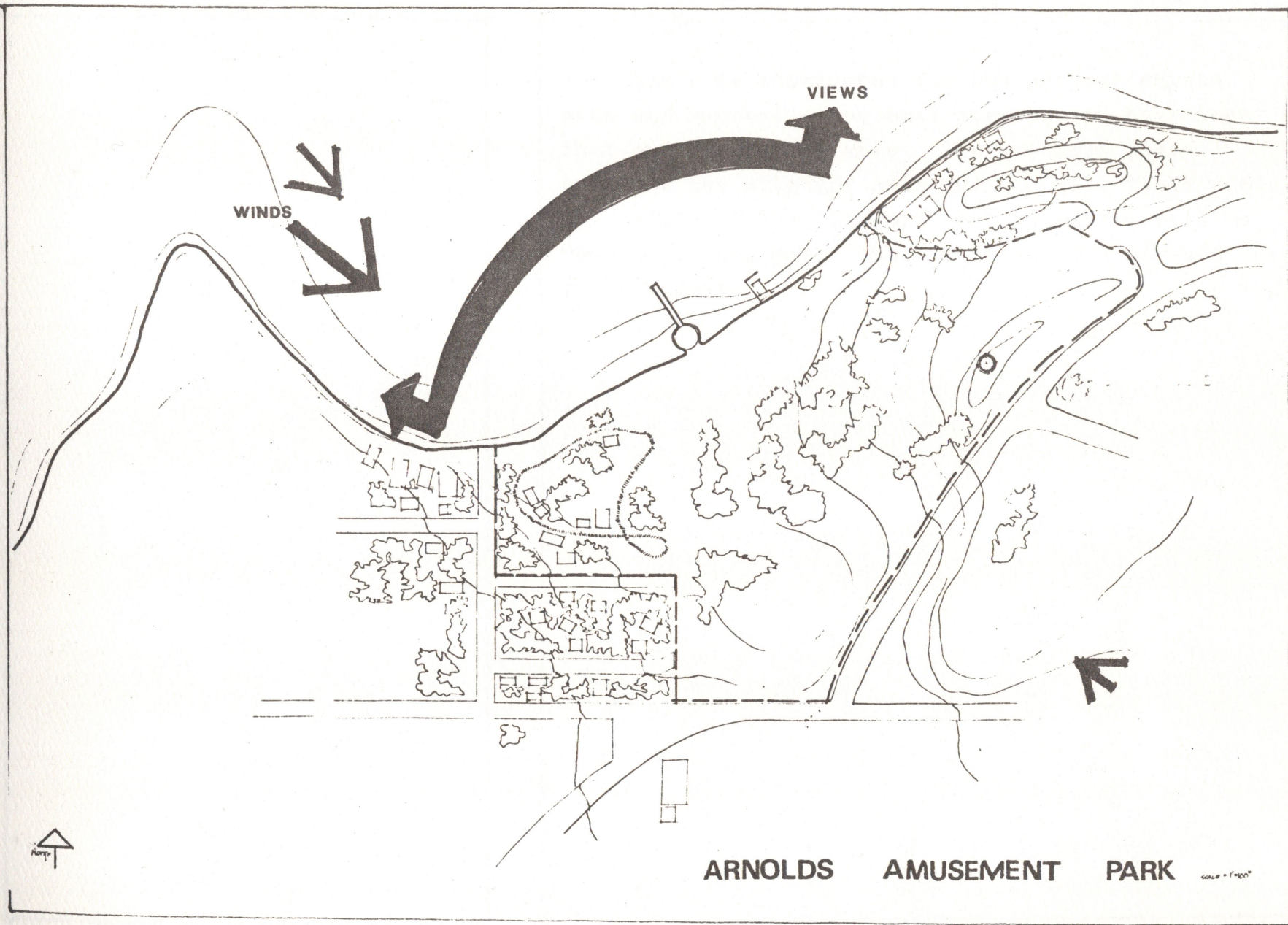


A-A



B-B

SCALE: 1" = 100'



The site considered for the project exists with the removal of several streets and buildings that are now on the site. The previous pages indicate the existing site and the site to be used and assumed. The pier and the amusements will remain as they are. The amusements are assumed to be updated.

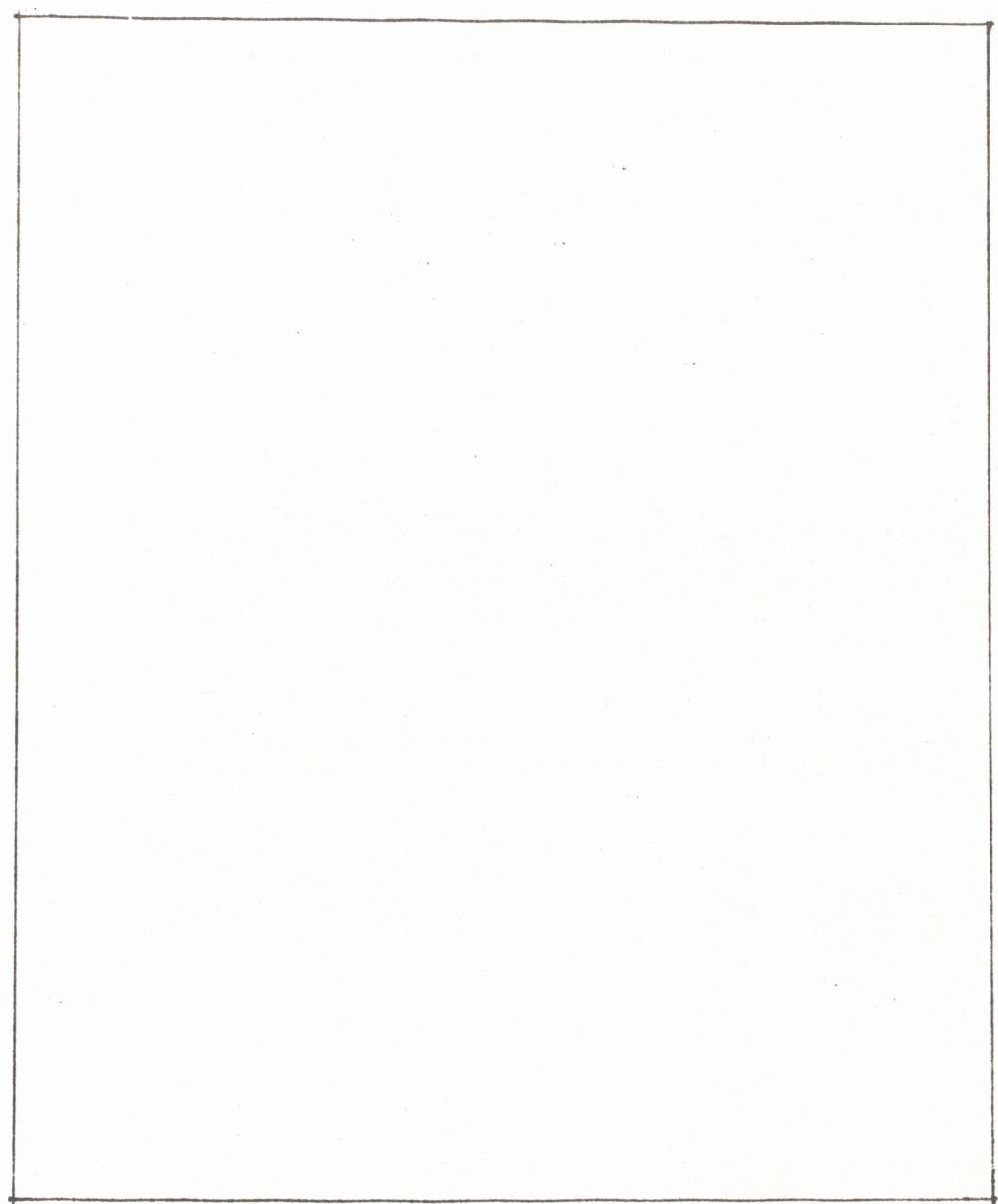
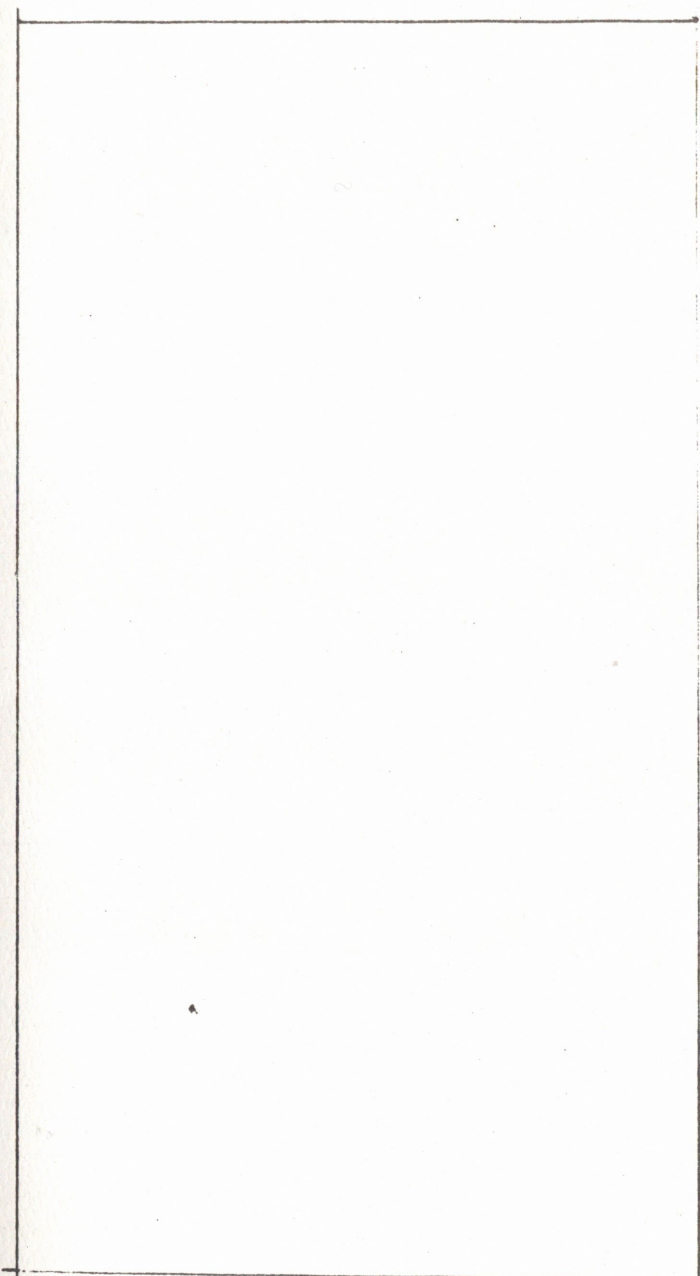
Circulation around and to the site is in the form of pedestrian movement, vehicular movement, and aquatic movement. Many people walk to the amusement park from nearby cabins, summer homes, or resorts. If they arrive by car, they park at the park, along the road entering the site from the east, or in front of the Emporium. On the site people walk along the shore, to the state pier, and through the amusement park. (There is no charge entering the park.) As an activity, people stroll along the shore to be involved in the excitement of the place, to see, and to be seen. This occurs in the daytime and in the nighttime, the age groups of the people tend to differ. During the day, until the park closes at 10 pm. the people tend to be family groups. Later, in the evening the people tend to be older, single adults, including teenagers. The area between the Emporium and amusements becomes an important path.

Vehicals enter from Highway 71. A couple of turnoffs lead to haphazard parking areas. To the west, directly south of the amusements, service is obtained. Vehicular ciruclation is in need of organization and definition.

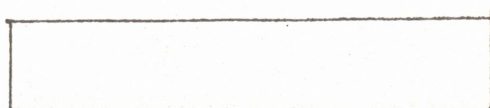
Aquatic movement; boating, skiing, swimming,

etc., is visually dynamic. Boats dock at the pier, though more parking space for boats is needed. The S.S. Empress, a sixty-five foot excursion boat docks here. It takes daily cruises along with dance cruises in the evenings. It is occasionally rented out for special occasions. Because the shores of the park are designated as a public beach, swimming does occur.

Movement to, on, and around the site creates a visual excitement and dynamic feeling. A person at the site definitely has a feeling for the area and what is going on around him. He experiences the site through his kinesthetic movements and by visually excepting the activities around him. Development of the site and of the architectural implications can enhance these experiences.



33.



AN ESSAY

ARCHITECTURE PERCEIVED THROUGH MOVEMENT.....

As one approaches the site of the amusement park complex and moves through it, one uses all of his senses in experiencing the park and the buildings of the park. John Portman said,

If a building is to meet the needs of all people, the architect must look for some common ground of understanding and experience. The need for this common ground led me back to people as creatures of nature, perceiving their environment through the five senses.

When perceiving the architecture of the amusement park, the participant can hear the various outdoor activities (sounds from the amusements, lake, etc.), smell the foods being cooked, taste these foods, see (and be seen) people, activities, the lake, and feel the movements associated getting to and from places. Walter Gropius said,

If we can understand the nature of what we see and the way we perceive it, then we will know more about the potential influence of man-made design on human feeling and thinking.²

In designing the amusement park complex, this understanding of perception will be the conceptual base. This perceptual foundation is realized as

¹Brennan, John. The Asthetic Difference. (Bozeman: Montana State University, 1977.) p. 9.

²IBID. p.9.

¹Goethe (quoted in)
Arnheim, Rudolf. Dynamics of
Architectural Form. (L.A.:
Univ. of Calif. Press, 1977)
p. 182.

²Lynch, Kevin Image of the
City. (Cambridge: MIT, 1960)
p. 107.

a participant experiences a place.

Visual experiences are encounters of awareness. These experiences begin as a sensation which leads to perception and ultimately--conception. Goethe reveals,

One would think that architecture as a fine art works solely for the eyes. Instead, it should work primarily for the sense of mechanical motion in the human body--something to which scant attention is paid. When in dance we move accordingly to definite rules, we experience a pleasant sensation. A similar sensation should be aroused in someone who is led blindfolded through a well-built house. This involves the difficult and complicated doctrine of proportions, which gives the building and its various parts their character.

This character articulates a poetic feeling of architecture. These feelings are developed through the progressions induced with movement. Movement, is implied as a 'persistence of vision', when experiencing a building.

Motion awareness is defined by Kevin Lynch as, The qualities which make sensible to the observer, through both the visual and the kinesthetic senses, his own actual or potential motion.²

The kinesthetic sense of body movement occurs with man on foot; such as, strolling, walking, stepping,

¹Le Corbusier, Et Pierre Jeanneret. (Zurich, Erlenbach, 1935) p. 24.

²Bacon, Ed. Design of Cities. (N.Y.: Penguin, 1974) p. 34.

³Appleyard, D. "Motion, Sequence, and the City", Nature and the Art of Motion. (N.Y.: George Brazillier, 1965) p. 182.

hopping, running, and climbing. Architecture is experienced through these kinesthetic movements. Corbu said it well,

It is appreciated in the walking, with the foot. It is in the walking, in moving that one sees develop the arrangements of architecture.

Kinesthetic movement is man's movements to a man's scale. Scale and proportion, therefore, are essential factors in the process of experiencing architecture through movement.

Movement, itself is the act of moving, the tendency, trend, and series of organized activities working toward an objective, rhythm, etc. Movement systems depict a continuity of experience, define the relationships between mass and space, and suggest simultaneous continuities.² The organized activities of a movement system connote a sequence of events--a constant gradual transformation.

The pattern of expectation, desire, satisfaction, and disappointment is the rhythmical basis of sequential form. As a succession of events, each event set against the remembered past, will affect the travellers attitude,³ response, and perception of the future.

Thus, sequential movement, as part of a system, is an integral part of design--experiencing architecture.

¹Thiel, Philip. "ProceSSIONal Architecture", AIA Journal. (Wash. D.C.: AIA, 1964) p. 28.

²"Movement Systems as Generators of Built Form," Arch. Record. (N.Y.: McGraw-Hill, 1975) p.105.

³Garrett, L. Visual Design. (Huntington: R.E. Krieger, 1975) p. 104.

Movement forms the context of our spatial experience, and the challenge of the art of architecture lies in the structuring of this time-based pattern of experience so that it will be of value and significance to all those who will perceive it in their own time and way.

As one arrives and experiences the amusement park complex, the sequential encounters will be part of a conceptual, rhythmic, movement system. Linking spaces and their functions as a part of the whole system is just a segment of the amusement park experience. Moving from 'place to place' is an event, transitionally as well as sequentially. Changes occur in function, mood, and character; sequential movements will aid in defining these changes.

Inevitably, buildings for public use are structures of the model of cities-- movement spaces become indoor streets, serving blocks of 'real estate' of a changeable, indeterminate nature, while the routes and the public spaces created by their intersections are the points of fix.²

Spaces become defined by the movements and experiences of approach and progression through the space. "A spatial experience is a movement in space."³

Spatial perception is an integration of kinesthetic movement systems and the participants'

¹Garrett, L. Visual Design.
(Huntington: R.E. Krieger, 1975)
p. 100.

²IBID.

³Bacon, Ed. Design of Cities.
(N.Y.: Penguin, 1974) p. 21.

⁴Tuan, YiFu. Space & Place.
(St. Paul: Univ. of Minn., 1977)
p. 161.

understanding of these experiences.

Some of the factors that cause certain spatial effects are the same factors, that cause the perception of movement.¹

Some of these factors are order, frequency, duration, rate, interval, and density.² If the participant recognizes these factors, usually from a past experience, an identity of space will occur.

Architecture is the articulation of space so as to produce in the participator a definite space experience in relation to previous and anticipated space experiences.³

The concept of space implies inside and outside relationships through a sequence of direction--and movement. Space also implies freedom, while 'place' implies security. Architecture acknowledges the spatial qualities of place, where "place is whatever stable object catches our attention."⁴ A 'place' in the amusement park complex would be a nodal point or recognizable event on the sequential movement system. This place could or could not be a structure, though the movement experience would be an identifying factor.

The movement system defining places and nodes consists of the 'path'.

The goal already contains the path as its point of reference,

¹Frey, D. Grundlegung. (Zu Einer Vergitichendon Kunstswissenschaft, 1946) p. 6.

²Norberg-Schulz, Christian. Existence, Space, and Architecture. (N.Y.: Praeger, 1971) p. 51.

³Grillo, Paul. Form, Function, and Design. (N.Y.: Dover Pub., 1960) p. 217.

directional indicator, and ultimate end; and movement may be directed towards the goal or path. Every house is an architecturally structured "path". The specific possibilities of movement as one process from the entrance through the sequence of spatial entities have been predetermined by the architectural structuring of that space and one experiences the space accordingly. But at the same time in its relation to the surrounding space it is a "goal" and we either advance towards this goal or depart from it.

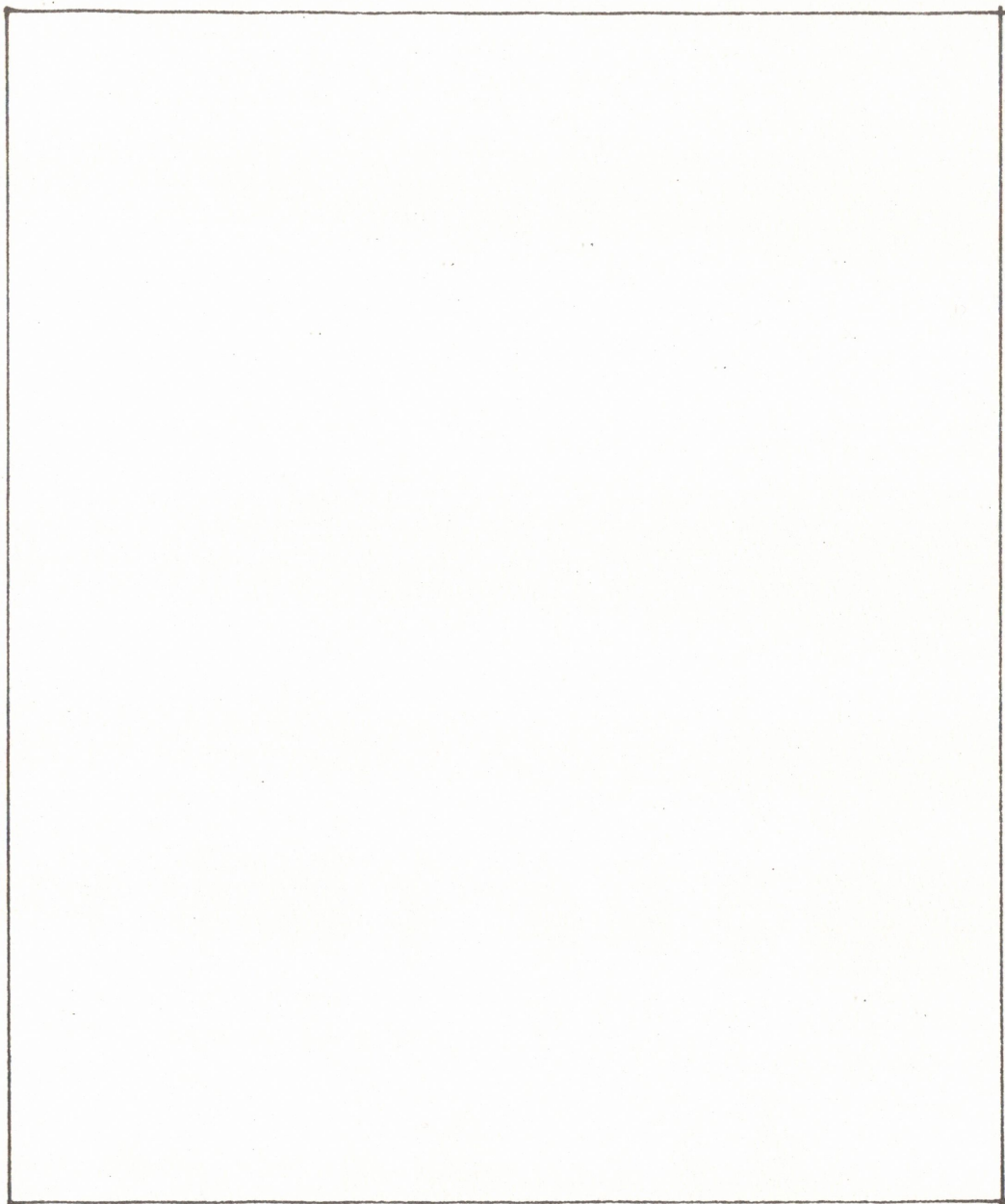
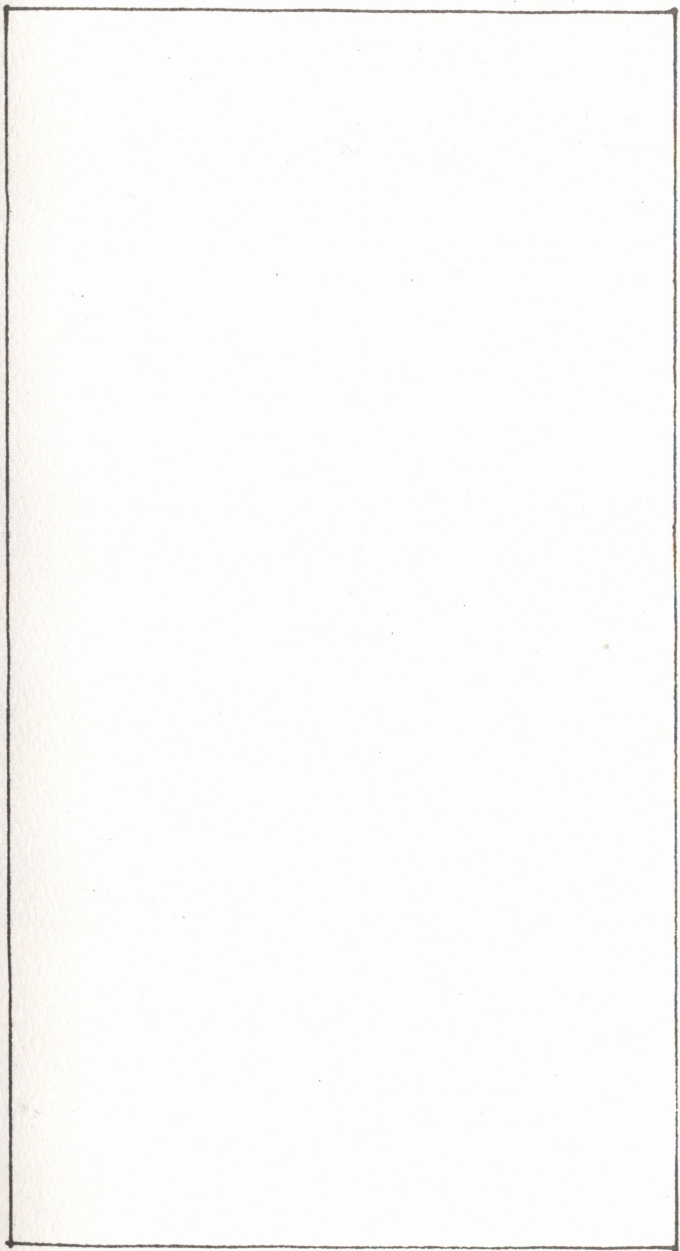
The circulation path, then, becomes a defining element. "The character of the path is determined by its relation to places."²

The 'places' of the amusement park are characterized by the mood set by the participant's experiences. Conceptually, mystery of time and place, anticipation, excitement, fantasy, formalism, confusion, tension, link to place, and the difference between active and static are some of the moods set with the integration of path and place. Paul Grillo sums it up with,

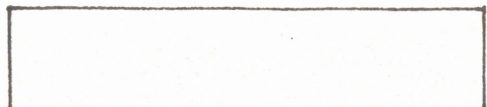
The way a good story is told is a great part of its success, and we know that keeping his audience in suspense is the mark of a great storyteller.³

The experiences and events that take place in the amusement park complex are part of a rhythmic,

sequential movement system. The experiences define the architectural events, the mood and character of the place...



4 1



PROGRAMMING

THE CLIENT.....

The amusement park complex is owned entirely by one owner/corporation. Each part of the complex is to be treated as a separate business; under separate managements. Each business (space) will be restricted by the owner to its specific use.

THE USER.....

The user is in a variety of forms; different age groups and different income groups. The user is a tourist, a summer resident, conventioneer, and resident (in that order of popularity). The tourist is a family group, any age couple, and young singles' groups. The tourist and other types of users are from a variety of income groups. These range from middle-income groups to higher income groups. The middle-income groups are usually people who come to the lakes area one week of the summer, or those who live close enough to come to the lakes every weekend. The high income groups include those who are summer residents or those who fly private aircrafts to the 'Lakes' most weekends, summer and winter. The user of the amusement park complex is to be for all types of users, an integration of all ages. The restaurant is for everyone, but more formal than the amusements of the park. The ballroom is transitional and used for a variety of purposes; the user varying from teenage groups to high class conventioners. The complex is to serve the needs of the assortment. The day-time user will be younger and family

orientated. The early evening will consist of an integration of family groups and couples in the restaurant. Later in the evening teenagers, young adults, and couples will make use of the ballroom, restaurant, and lounges. Pedestrian activity, especially along the shore, will occur throughout the day and night.

Winter activities will be less inclined to be for the family group, but for those weekenders and residents who have a second home (or first home) on the lake, or in the area. These people will use the restaurant and ballroom in the evening. Day activities of the area will include ice-skating, snow-mobiling, and ice-fishing. A resting spot at the tackle and bait shop--recreational club--will serve as a meeting place for these activities.

	RESTAURANT	AMUSEMENTS	ROLLER RINK	BAR	ARCADE	RETAIL	PARKING	PIER	LAKE	TACKLE/BAIT	BALLROOM	SERVICE
RESTAURANT		-	-	*	-	-	!	#	!	#	*	!
AMUSEMENTS	-		!	*	!	*	*	#	#	-	#	#
ROLLER RINK	-	!		-	*	#	*	-	-	-	-	#
BAR	*	*	-		-	-	*	#	!	#	*	*
ARCADE	-	!	*	-		*	*	#	*	#	-	-
RETAIL	-	*	#	-	*		*	-	#	*	-	!
PARKING	!	*	*	*	*	*		*	-	*	*	*
PIER	#	#	-	#	#	-	*		!	*	-	-
LAKE	!	#	-	!	*	#	-	!		!	#	-
TACKLE/BAIT	#	-	-	#	#	*	*	*	!		-	!
BALLROOM	*	#	-	*	-	-	*	-	#	-		*
SERVICE	!	#	#	*	-	!	*	-	-	!	*	

! most important

*

#

- not necessary

ADJACENCIES

SPACE:

ROLLER SKATING RINK

FUNCTION: all year roller skating

CAPACITY:

USER: children, teens, families

ADJACENCY: amusements, drive-up

AREA:

roller rink	-2600 ft. ²
lobby	- 300
spectators	- 320
seating	- 650
desk	- 150
storage	- 50
office	- 100
restrooms(2)	-150

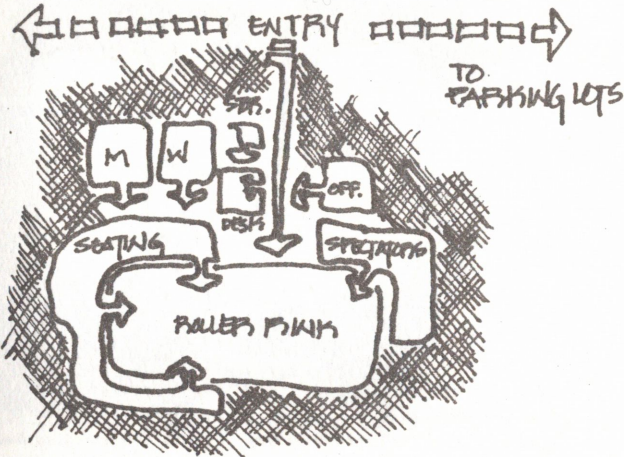
total -4320 ft.²

ILLUMINATION: variety

EQUIPMENT:

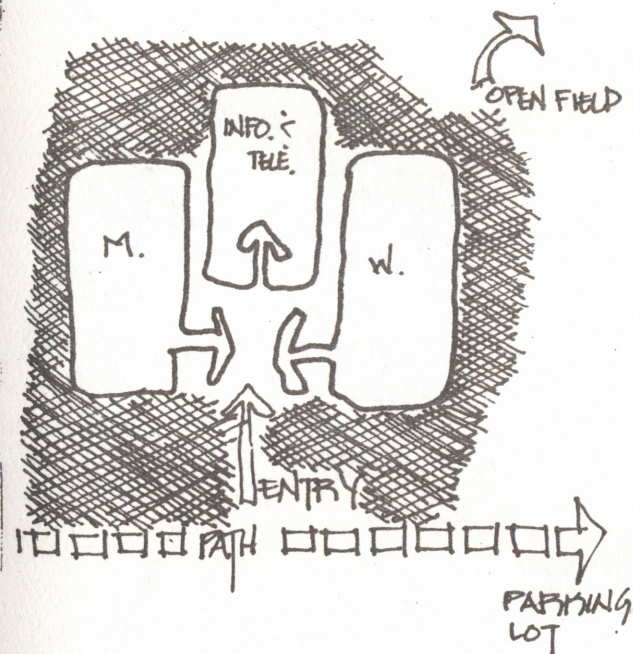
MOOD: place of fun, activity, busy

COMMENTS:



CONCEPTS:

transitional to area and amusements, part of gateway to complex



CONCEPTS:

part of gateway to the complex

SPACE:

PUBLIC FACILITIES

FUNCTION: information, restrooms, & telephones

CAPACITY: 30 people

USER: all

ADJACENCY: parking lot, open field

AREA:

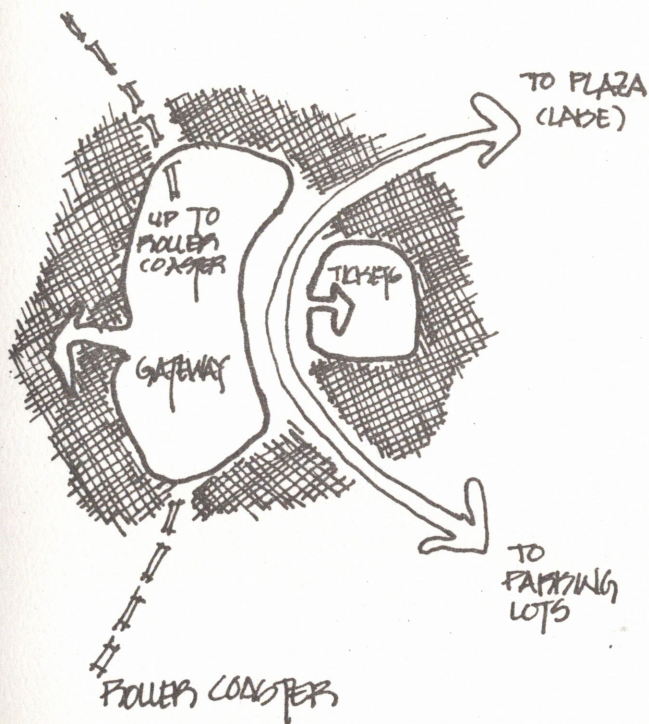
restrooms (2)- 250 ft.²
info./telephones- 200 ft.²

ILLUMINATION: 30 fc.

EQUIPMENT: telephones

MOOD:

COMMENTS: functional all year



CONCEPTS:

access from parking, main circulation, plaza, water, etc.

SPACE:

AMUSEMENTS' ENTRY

FUNCTION: entry to amusements

CAPACITY: 5 people inside ticket area

USER: family groups, children, all

ADJACENCY: roller coaster, amusements, plaza

AREA:

tickets- 200 ft.²

access to roller coaster- 150 ft.²

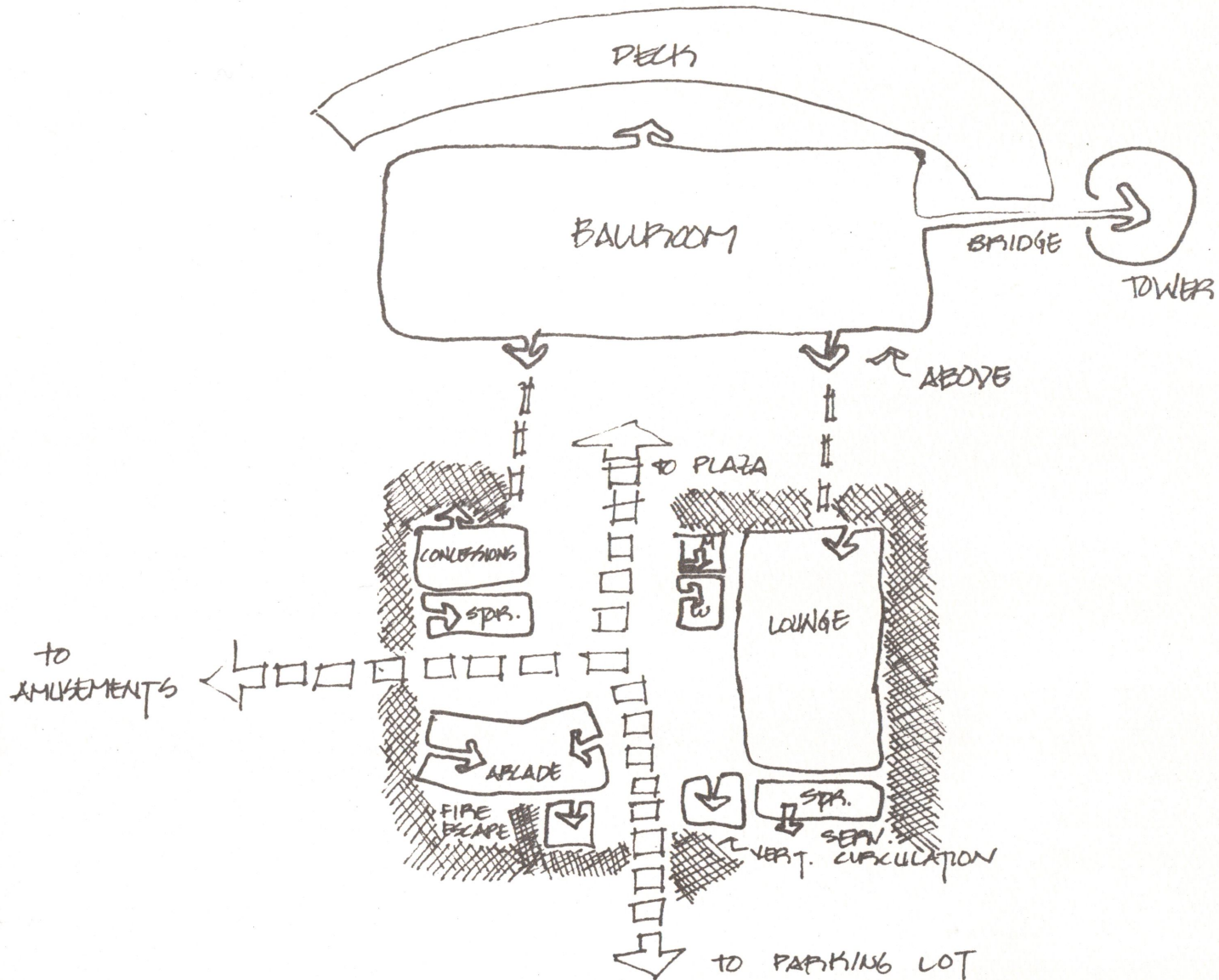
gateway to amusements, seating

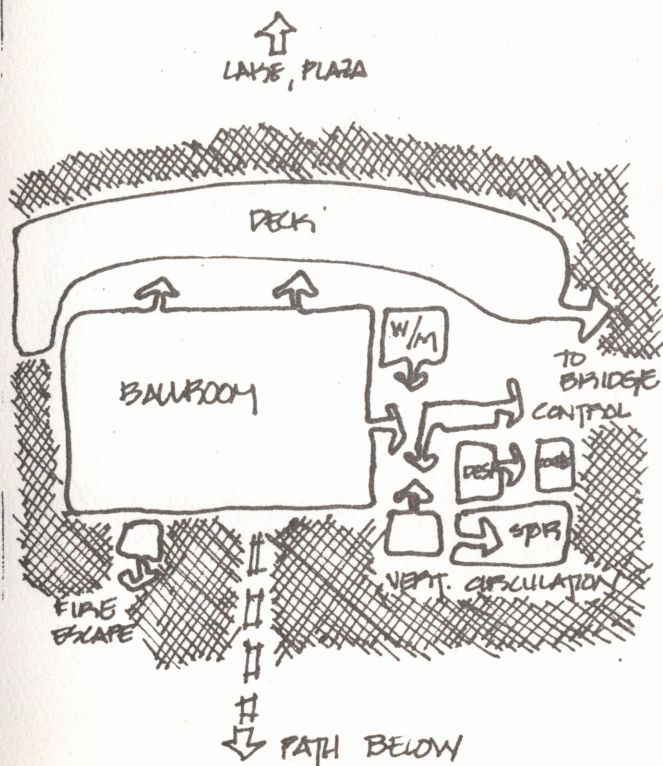
ILLUMINATION:

EQUIPMENT:

MOOD: fun, excitement

COMMENTS:





CONCEPTS:

transitional between users
 transitional between lake/shore
 transitional between functions
 of the park
 reestablished landmark, visually

SPACE:

BALLROOM

FUNCTION: mixed-use, dance hall, conventions

CAPACITY: 400 people

USER: mixed, teens, tourist, conventioners

ADJACENCY: plaza, amusements, pier, lake

AREA:

ballroom - 3800 ft.²

restrooms- 150

concessions- 90

control/coats-250

stor./serv.-350

total -4550 ft.²

deck - 750 ft.²

ILLUMINATION: 5 fc. maintained

EQUIPMENT: speaker system

MOOD: mixed, night use

COMMENTS: rented out, exhibits can be divided

SPACE:

CONCESSIONS & PUBLIC RESTROOMS

FUNCTION: to serve plaza

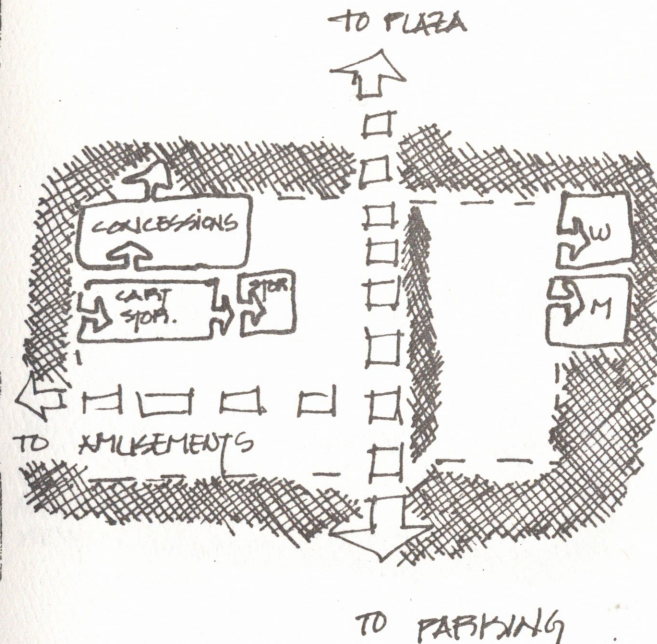
CAPACITY: 5 people

USER: all users of complex

ADJACENCY: plaza, amusements, ballroom, lake

AREA:

concessions-475 ft.²
storage(for carts)-250
restrooms(2)-100



CONCEPTS:

under ballroom, directly on main path leading to plaza

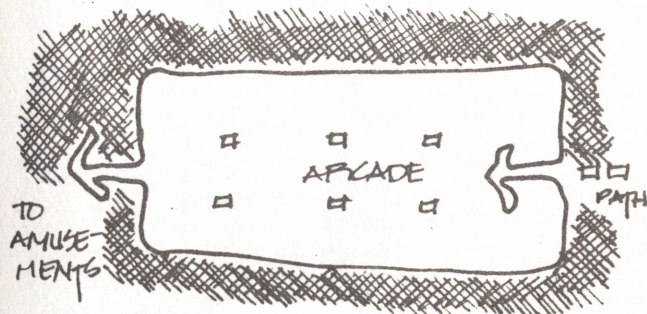
ILLUMINATION: 30 fc.

EQUIPMENT: small kitchen, refrigerator

MOOD: food and fun

COMMENTS:

summer use only



SPACE:

ARCADE

FUNCTION: gameroom

CAPACITY: 100 people

USER: children, adults

ADJACENCY: amusements, plaza, concession,

AREA: 1000 ft.²

CONCEPTS:

circulation through arcade from
main path to amusements

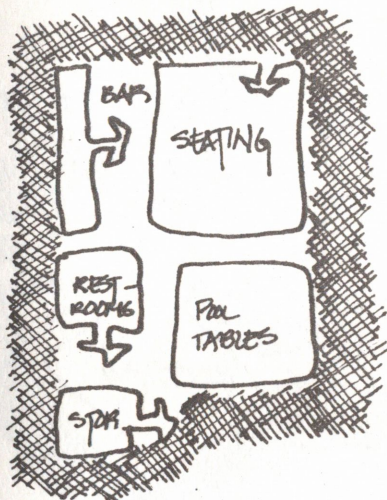
ILLUMINATION: subdued

EQUIPMENT: games

MOOD: noisy, active

COMMENTS: summer use only

↑ PLAZA



SPACE:

BAR/LOUNGE

FUNCTION: for drinking, lounging

CAPACITY: 150 people

USER: young adults, adults, singles

ADJACENCY: ballroom, plaza, lake

AREA:

bar	-220	ft. ²
seating	-850	ft. ²
pool tables	-600	ft. ²
restrooms(2)	-150	ft. ²
stor./serv.	-150	ft. ²
total	-1970	ft. ²

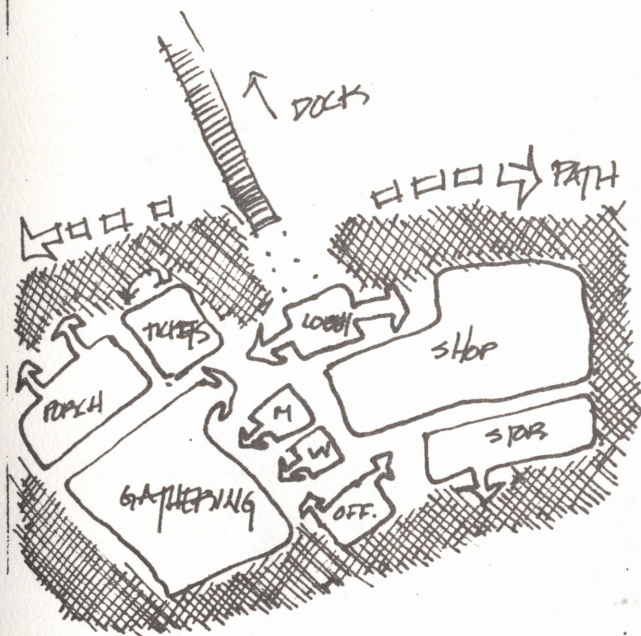
CONCEPTS:

ILLUMINATION: 5 fc.

EQUIPMENT:

MOOD: night life, noisy

COMMENTS:



CONCEPTS:

directly off of pier
defines edge of plaza

SPACE: RECREATIONAL SHOP

FUNCTION: rental equipment, bait/tackle shop, Express tickets, gathering place

CAPACITY: 150 people

USER: athletic people, boaters, family, all

ADJACENCY: dock, water, boardwalk, plaza

AREA:

gathering space	-1500 ft. ²
shop	-1800 ft. ²
tickets	-2180
seasonal stor.	-1100
storage/serv.	- 700
office	- 300
restrooms (2)	- 100
porch	- 500
total	-6380 ft. ²

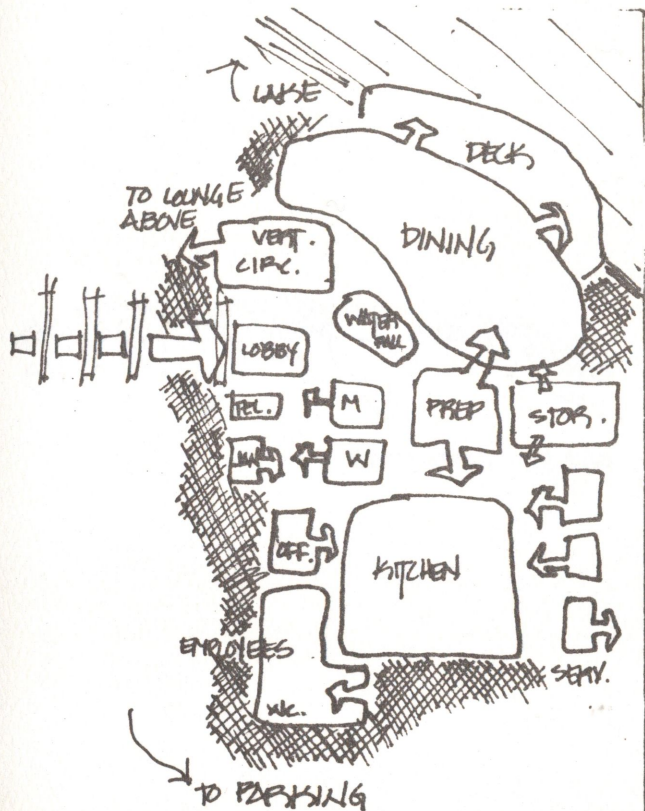
ILLUMINATION:

EQUIPMENT: cooler for bait

MOOD: public, active

COMMENTS:

clears off lake in front for ice skating
all seasonal



CONCEPTS:

edge of complex and boardwalk
 water dynamics, waterfall inside
 visually seen from board-
 walk
 waterfall as visual termination

SPACE: RESTAURANT/LOUNGE

FUNCTION: formal dining, lounging

CAPACITY: 120 dining (inside), 75 outside

USER: 100 lounge
 adults, families, older crowd

ADJACENCY: lake, parking

AREA:

dining - 2000 ft.²
 stor. - 700
 lounge - 1000
 kitchen - 1200
 coolers - 460
 freezer - 100
 dry stor. - 300
 table st. - 190
 service - 120
 empl. lg. - 360
 w.c. - 50
 office - 160
 restrooms - 180

jan. - 80
 tele. - 50
 lobby - 850
 desk - 120

total - 10,120 ft.²

decks - 1800 ft.²

ILLUMINATION: kitchen - 70 fc., lounge - 30 fc., rest-

EQUIPMENT: rooms - 30 fc., dining - 10 fc.
 kitchen

MOOD: formal, relaxing

COMMENTS: all year

SPACE:

RETAIL

FUNCTION: temporary souvineer shops

CAPACITY:

USER: all on site

ADJACENCY: plaza, main site circulation

AREA:

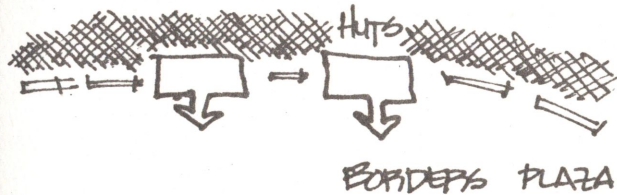
temporary huts-100-200 ft.²

ILLUMINATION:

EQUIPMENT:

MOOD: fun

COMMENTS: temporary, summer use only



CONCEPTS:

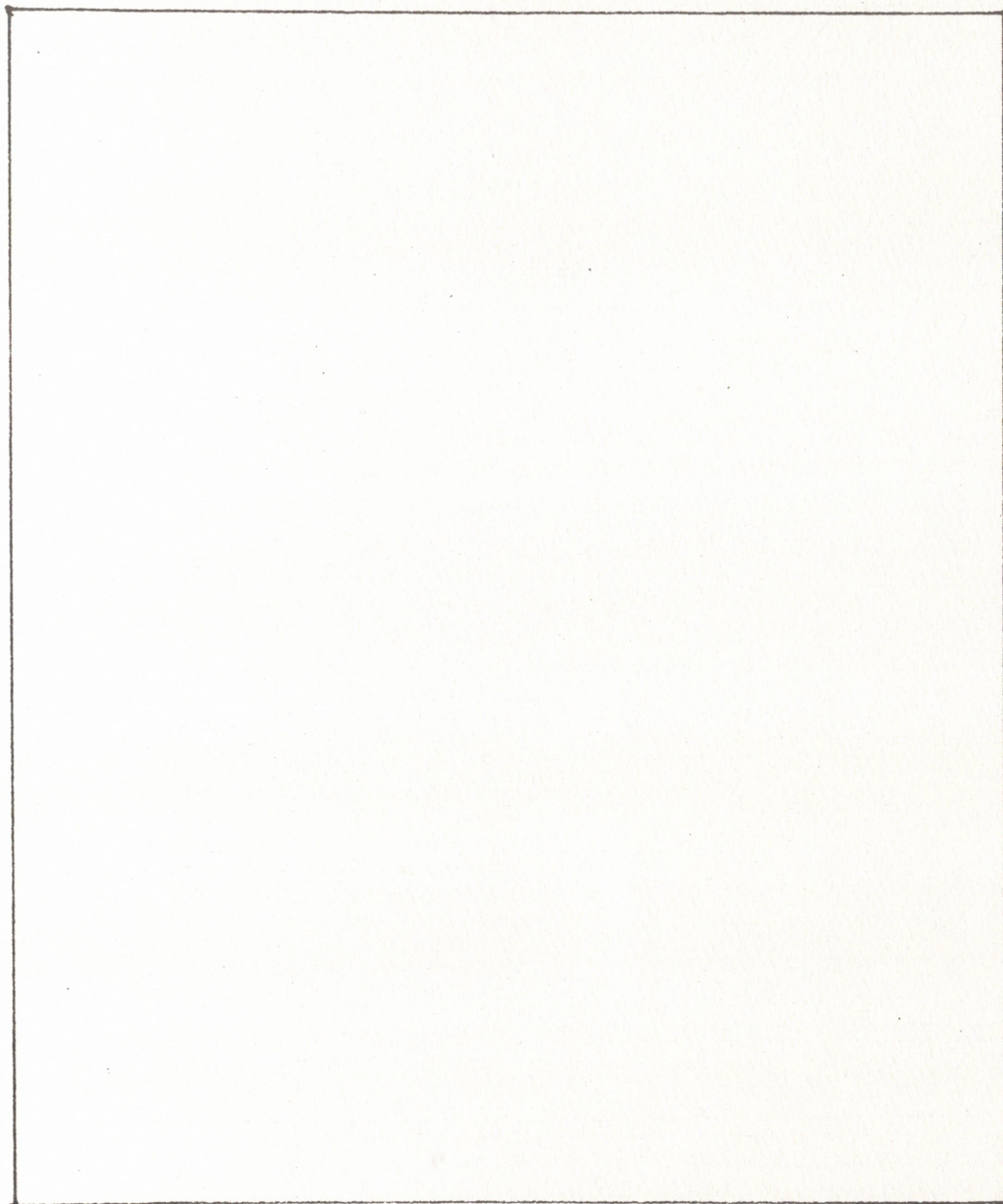
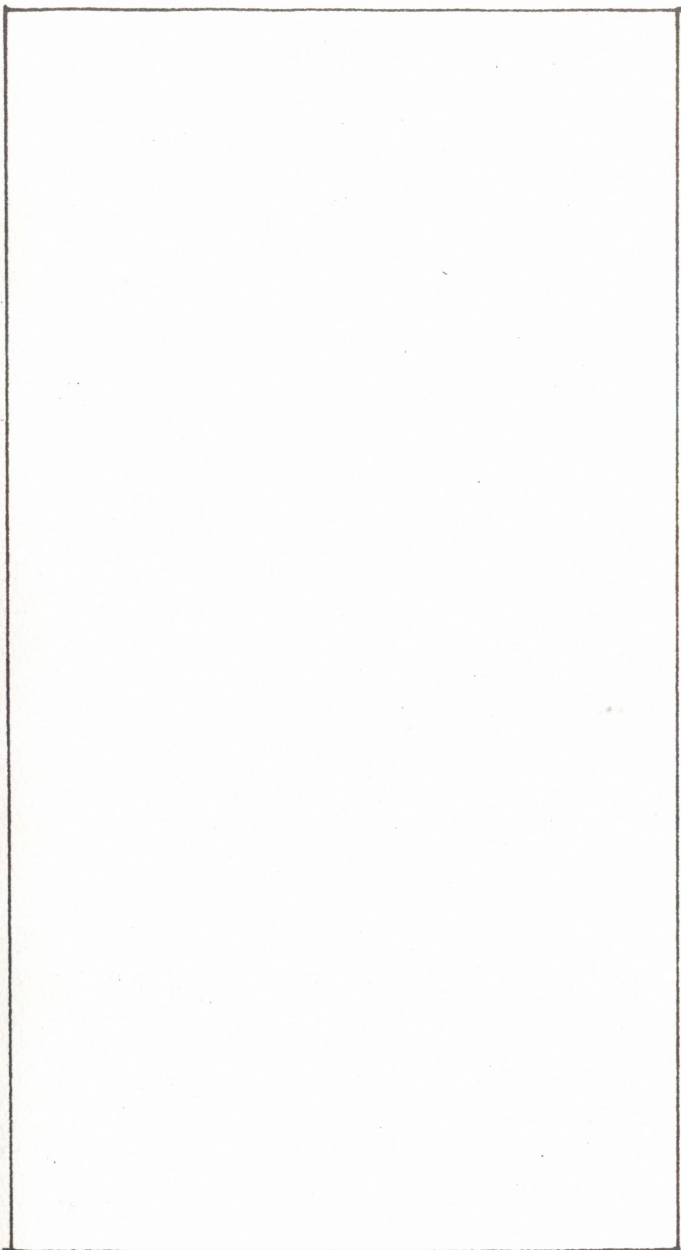
defines edge of plaza

PARKING

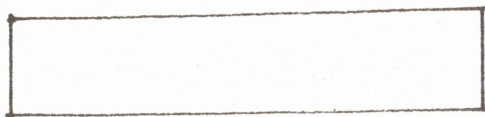
Vehicular:	no. of stalls
for amusements.....	50
restaurant.....	100
bar.....	40
ballroom.....	100
recreation shop.....	20
roller skating rink.....	20
total.....	330

Boats:

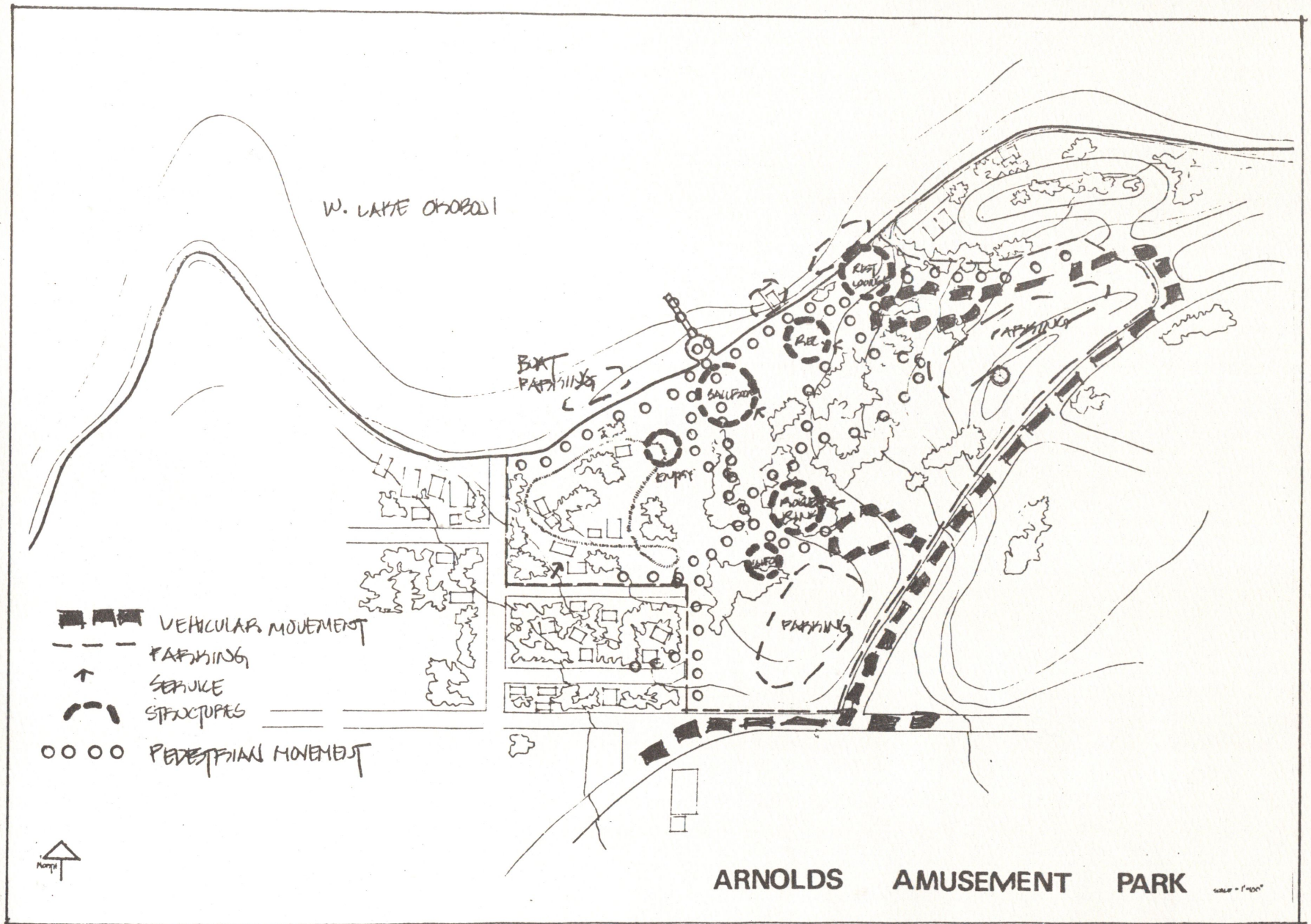
Empress.....	1
rentals.....	10
parking.....	40
total.....	51



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DESIGN



The site of this project involves the transition and integration of flamboyancy, excitement, and formalism. The transition showing the integration of the different user groups. The western side of the site is the existing amusement park proper, including the amusements. This area is defined by the roller coaster with the amusements being inside. The eastern edge is terminated with the most formal building and activity of the complex--the restaurant and lounge. The state pier is a landmark and visually acts as a central point along the shoreline. Pinpointing the entire site, the pier is an important point of transition.

Besides acting as a transitional area for user groups the pier is the transitional area between land and water. The area of shore in front of the pier becomes an important focusing point of activity. The activities become defined and centered in a public plaza. Places to sit, eat, and relax are placed in this plaza. The plaza is bordered by buildings, temporary souvineer shops, the lake, and the pier. The pier acts as an ordering device. Walkways are directed through and off of the plaza, with the main walkway along the shore--a transition between the water and shore.

Approaching the site by automobile, usually from Highway 71, one glimpses this plaza and pier on the drive around. The plaza can be seen past and through the ballroom and its connecting tower. After parking one's car a family group would approach the main sidewalk, walking between two buildings which act as a gateway to the park complex. These are the roller skating rink (showing its express dynamics with overlapping curves) and the much smaller public facilities building. The roller skating rink relates to the amusement and flamboyant side of the path. Because of the frequent use of the open land beyond the public facilities become of use.

Straight ahead one sees the roller coaster, amusements, and the amusement's entry. But before the amusements are reached there is a "Y" in the path, clearly defined with benches for seating and a change in material. The same material of the original path turns directed towards the ballroom, under it and to the pier (lake). At the "Y" a decision must be made. Going straight, on a change of material, the family could go to the amusements. Instead, they turn and go towards the ballroom viewing the plaza, water, and pier beyond. The

ballroom acts as a gateway to the main circulation and its activities.

The ballroom is above the path, resting on other buildings. The gateway, under the ballroom is also defined by two tower structures, resembling silos, and functioning as vertical circulation. One is a fire escape and opaque, while the other is translucent (made of glass block) and a main entry to the ballroom. The ballroom is transitional to the site between the water and the entire complex, and between the flamboyancy of the amusements and the formalness of the restaurant, lounge, and recreational shop. The transition to the water is made with a deck opening up towards the water and pier (ordered around the pier). The lines of the deck line up with the change of materials of the plaza below. The dynamics of the structure, being able to walk under and through the building, relates to the dynamics of the amusements. The functions of the building are used by all user groups. The arcade and concessions directly relate to the summer use of the amusements. The lounge and ballroom relate to an older crowd. The image of the ballroom is captured through the idea of a barn. The roof structure and openings resemble the

barn, though some of these are changed or exaggerated to express the flamboyant dynamics of the amusements.

The ballroom as seen from the water expresses the importance of the site, pinpointing it and aiding in the definition of the pier--a landmark. Also pinning down the site is an attached (via bridge) tower to the deck off of the ballroom. Besides acting as another vertical access to the ballroom, a lookout above views out over the water and site. Directionally this tower leads the eye to the other buildings along the shore.

As one approaches the plaza and its activities, passes through it, and reaches the pier and boardwalk moves both ways along the shore. To the left and east the amusements and supplementary activities can be reached. A swimming area is defined along the shore with diving platforms and seating areas extended off of the boardwalk over the water. At the end of the boardwalk, western shore edge, a waterslide goes directly into the lake. Arches at the end signify access in or out of the park.

Back at the pier, one might walk out to the pier or go right (northeast) along the shore. Along the water edge, one sees the marina stretch-

ing out into the blue waters of West Okoboji lake. At the end of the pier the S.S. Empress docks. Rental boats and regular boat parking is found here. The wood of the dock extends onto the boardwalk. Lighting and beams stretch above, going across the path leading to the recreational shop building which is abutted right next to the boardwalk. This connection along with the marina and building acts as an edge for the plaza.

The recreational shop, an extension of the marina houses the ticket booth for the S.S. Empress, which juts out direcionally toward the water. Across the boardwalk here, the surface material again goes out over the water's edge tieing in a closer relationwhip and allowing a waiting space for S.S. Empress passengers. A covered porch is attached to the building along the plaza edge for variety in seating. During the winter months the docks are pulled out of the water making space for ice skating. The recreational shop is used as a gathering spot all year long.

Going further along the boardwalk one approaches another path and a bridge with the terminous of the path being another building, the restaurant/ lounge. The path just before the bridge leads

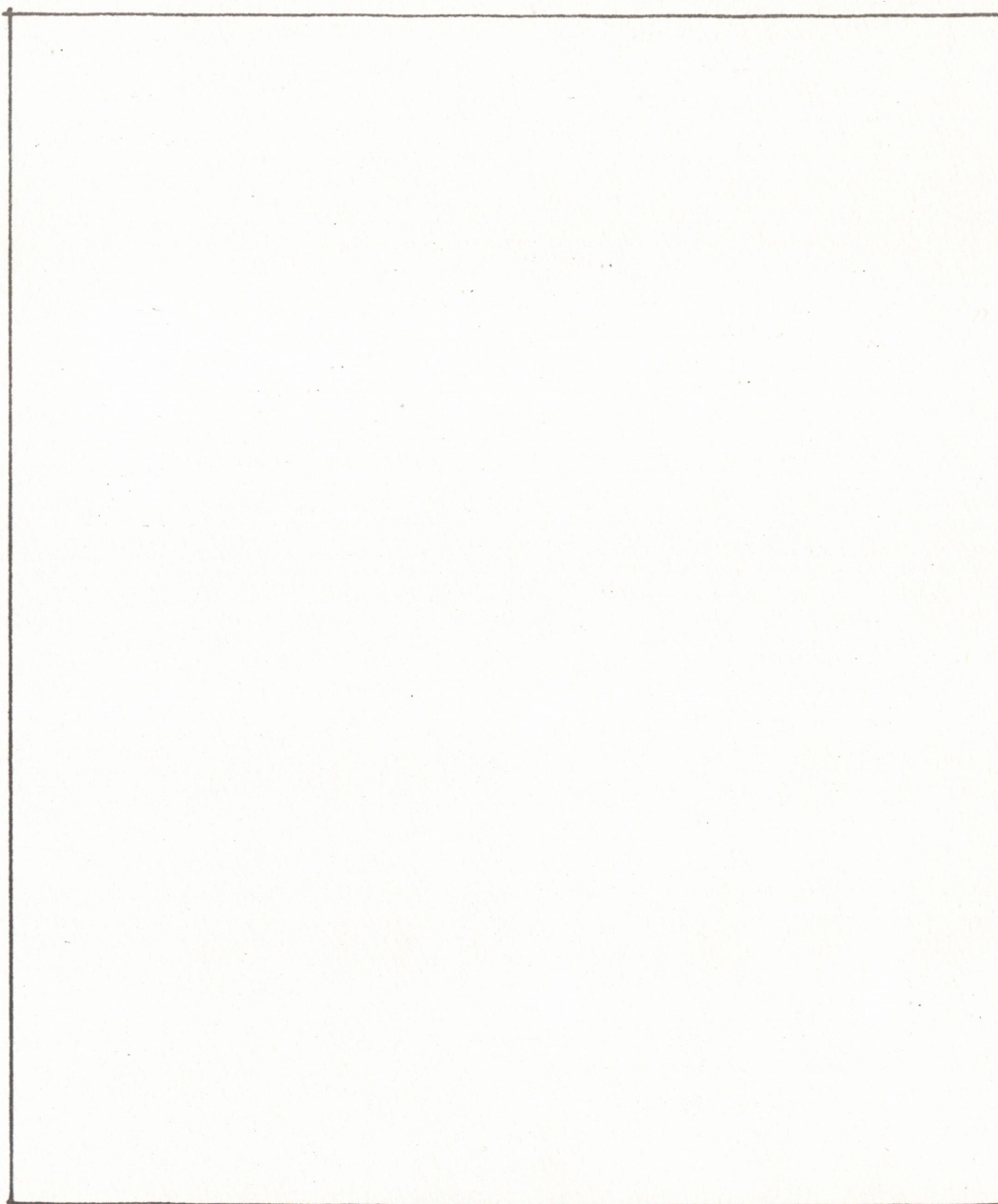
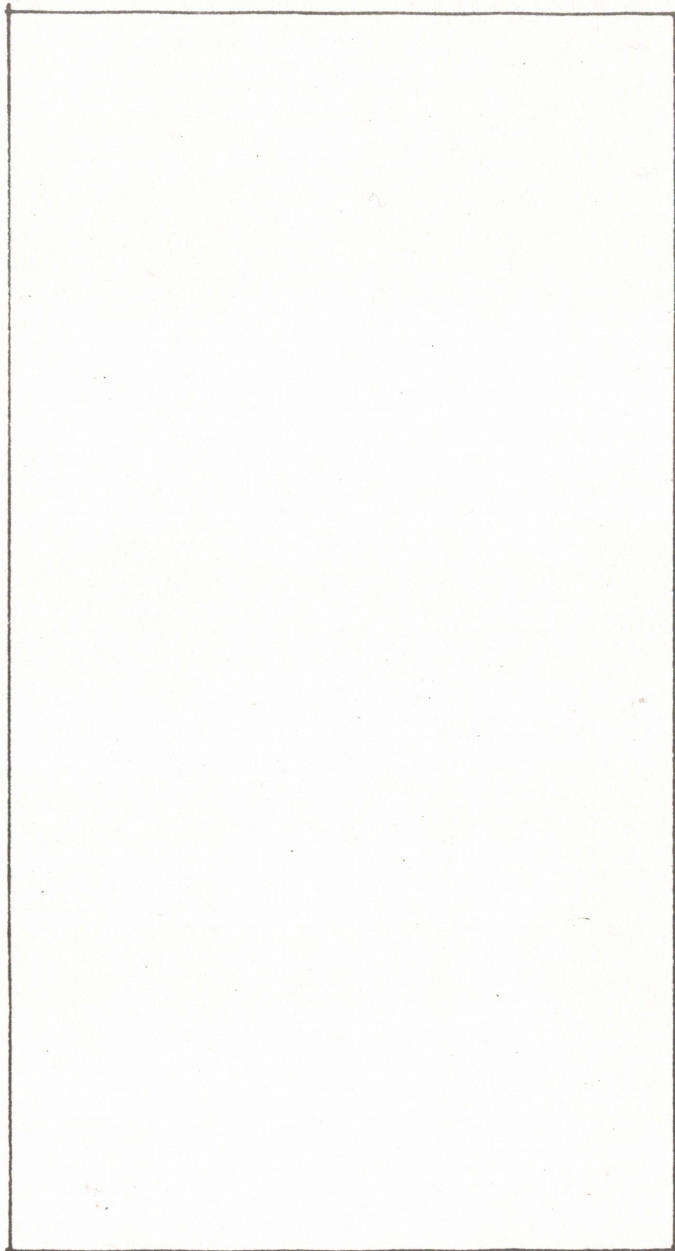
away from the marina (directionally) to the other parking lot and corner of the site. The bridge crosses over water brought in from the lake forming a water fountain. This is a pause before the most formal entities of the site. One can walk across the bridge, walk around the fountain, and be back at the boardwalk going towards the plaza. It is a resting place.

Progressing on towards the restaurant, one passes under a series of arches. Especially at night one sees the terminous of this boardwalk ending in the dynamics of an interior waterfall--the final arch. Entering the restaurant, one sees the waterfall with the dining areas and vast view of the lake beyond. (This view includes Smiths bay and link to East Lake Okoboji:) The building, too slightly resembles a waterfall with the lound, its deck, the dining area, and its deck stepping down to the lake from the highest part of the waterfall. The kitchen steps down, also turned to focus the building towards the core area, the pier and plaza.

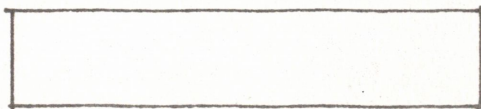
Parking and service is directly available to this edge of the site. Service to the entire site is along the pathways.

Lighting and materials are carried throughout the site. Neon lighting is expressed across the site showing the excitement and character of the park. Wood and tile are used extensively on the buildings and as surface materials. The wood is showing the character of the amusements, especially the structure of the roller coaster. The tile is showing a relationship to water.

The entire project deals with the ordering of many functions and dynamics through the experiences of the user.



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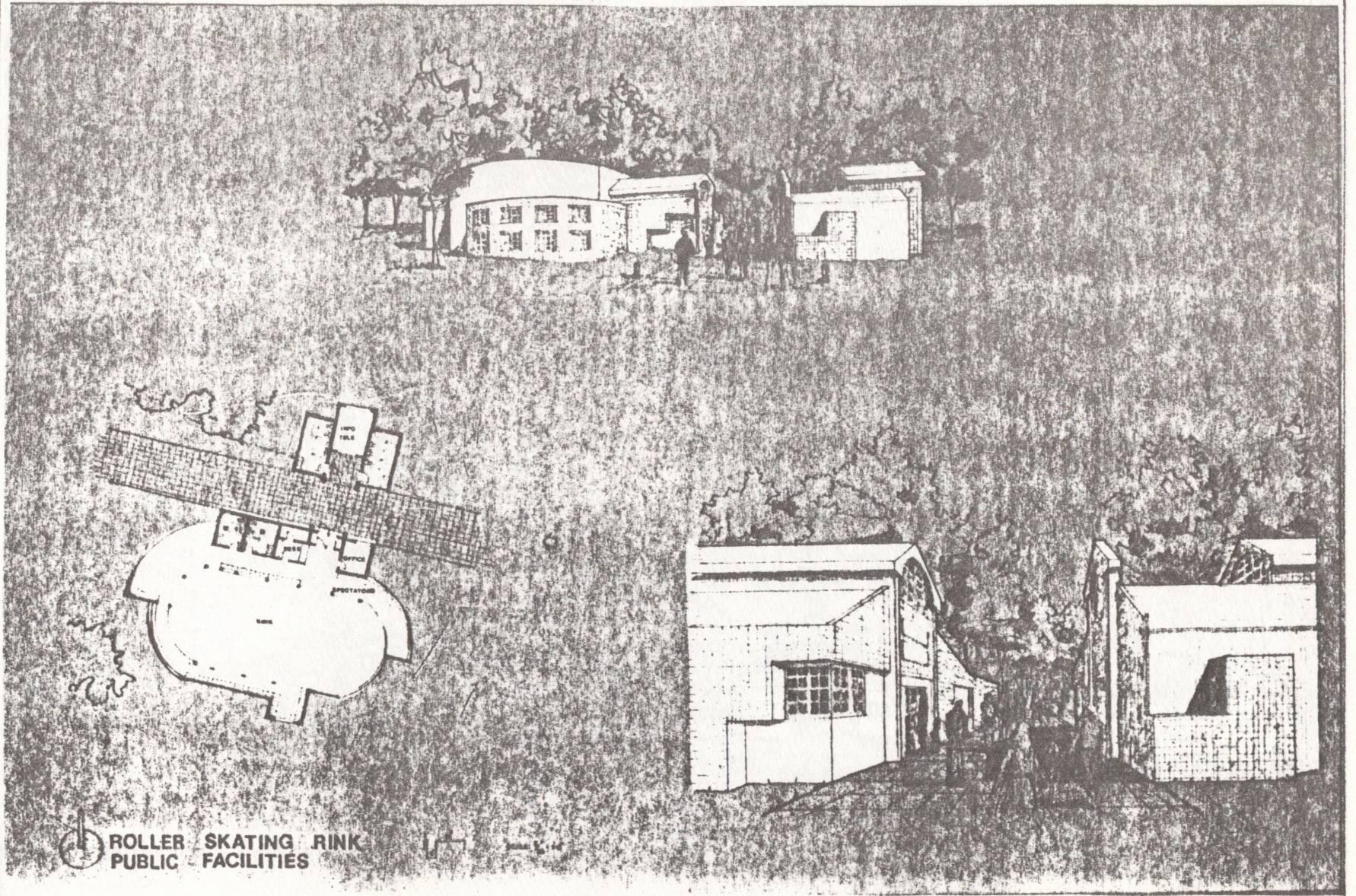


THE PROJECT

AN AMUSEMENT PARK COMPLEX

WEST OKOBOJI LAKE, IOWA

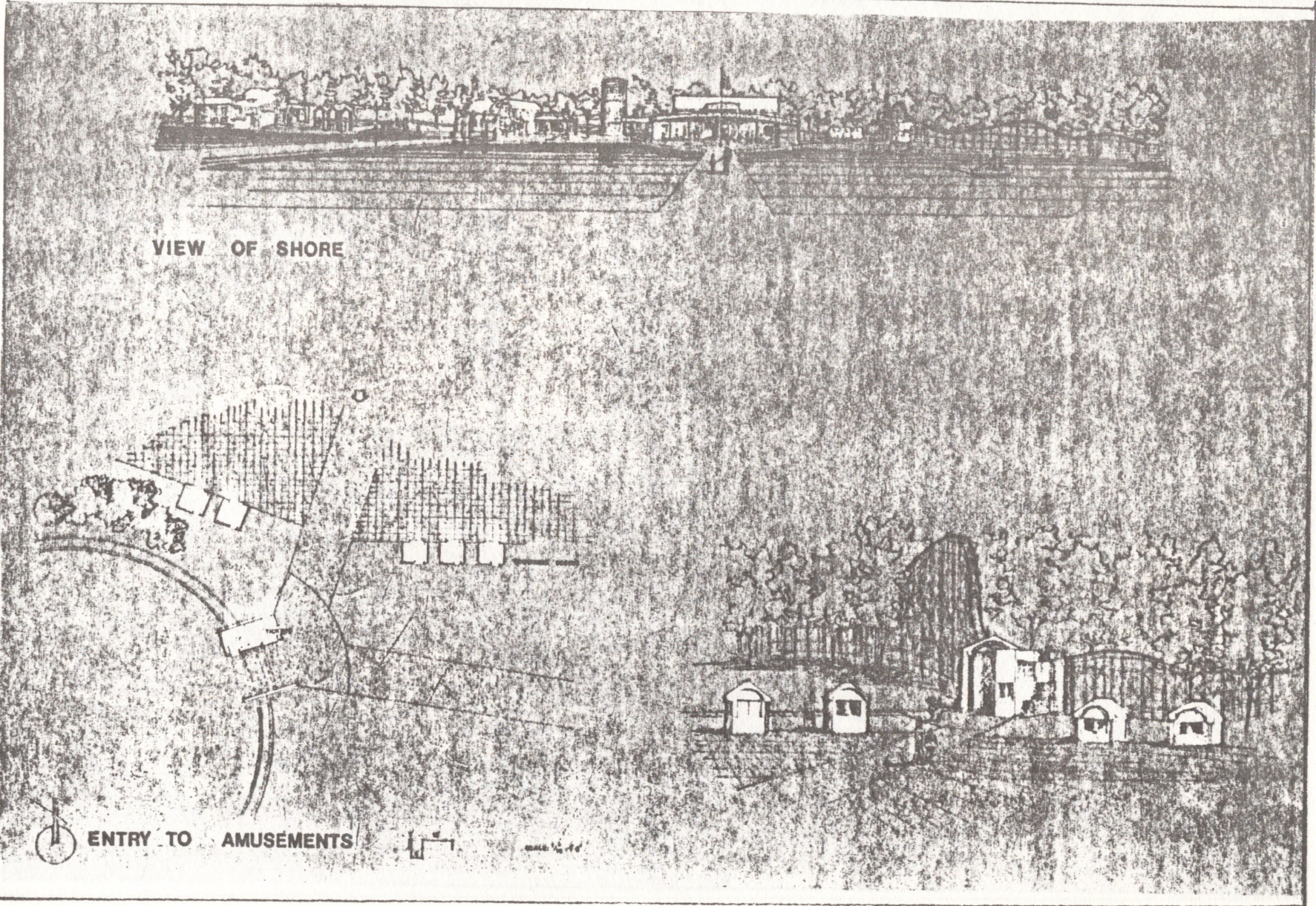
SITE PLAN



ROLLER SKATING RINK
PUBLIC FACILITIES

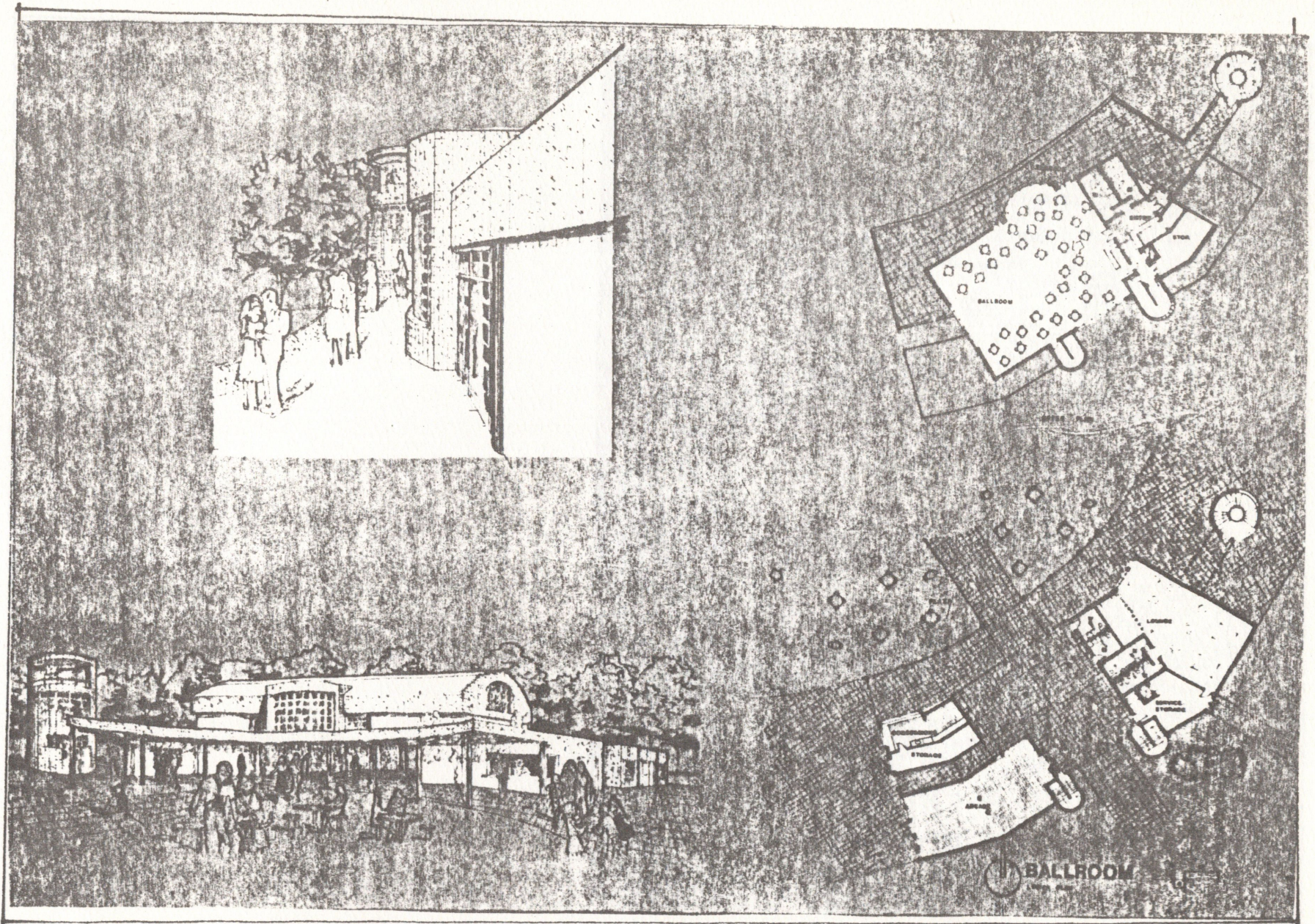


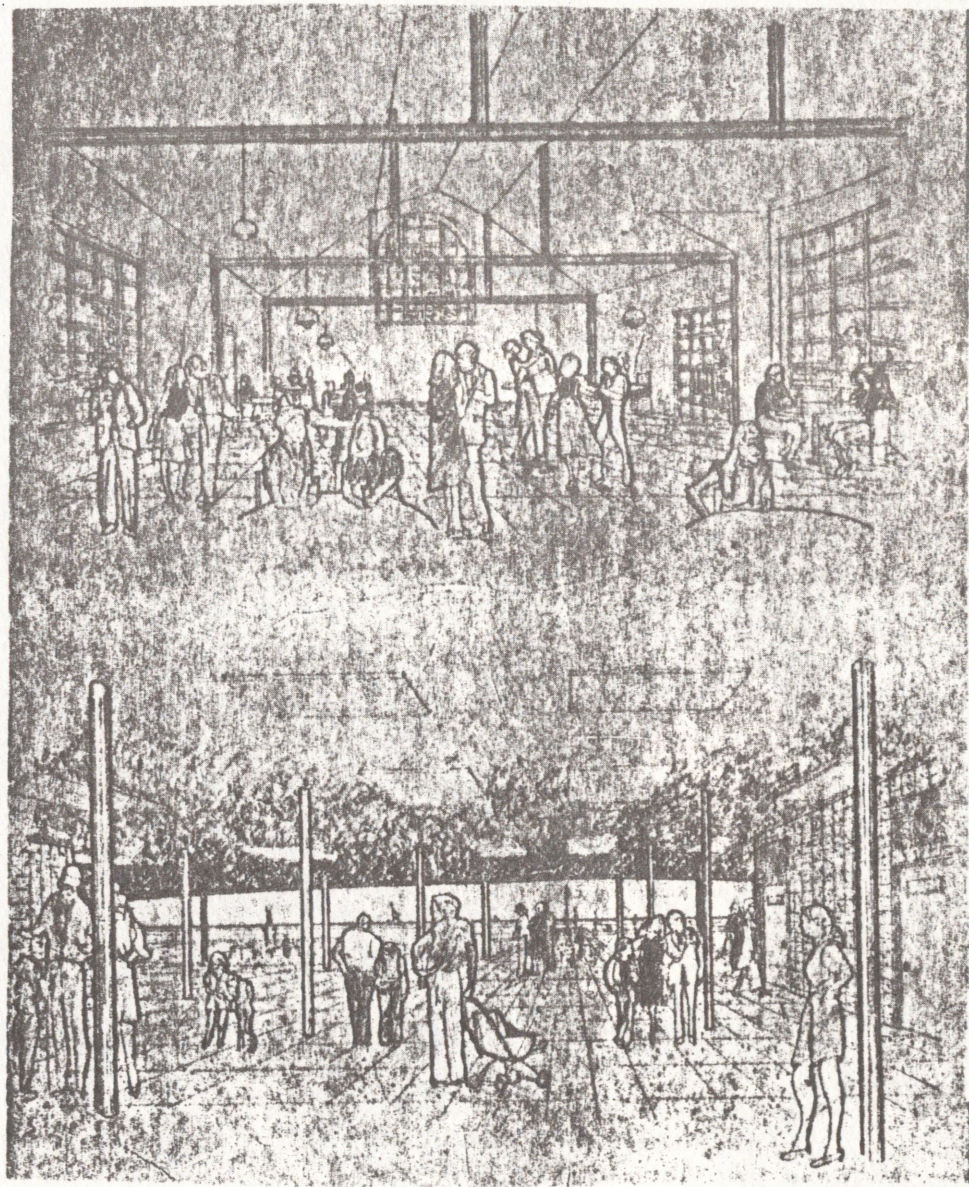
Scale 1/4" = 1'-0"

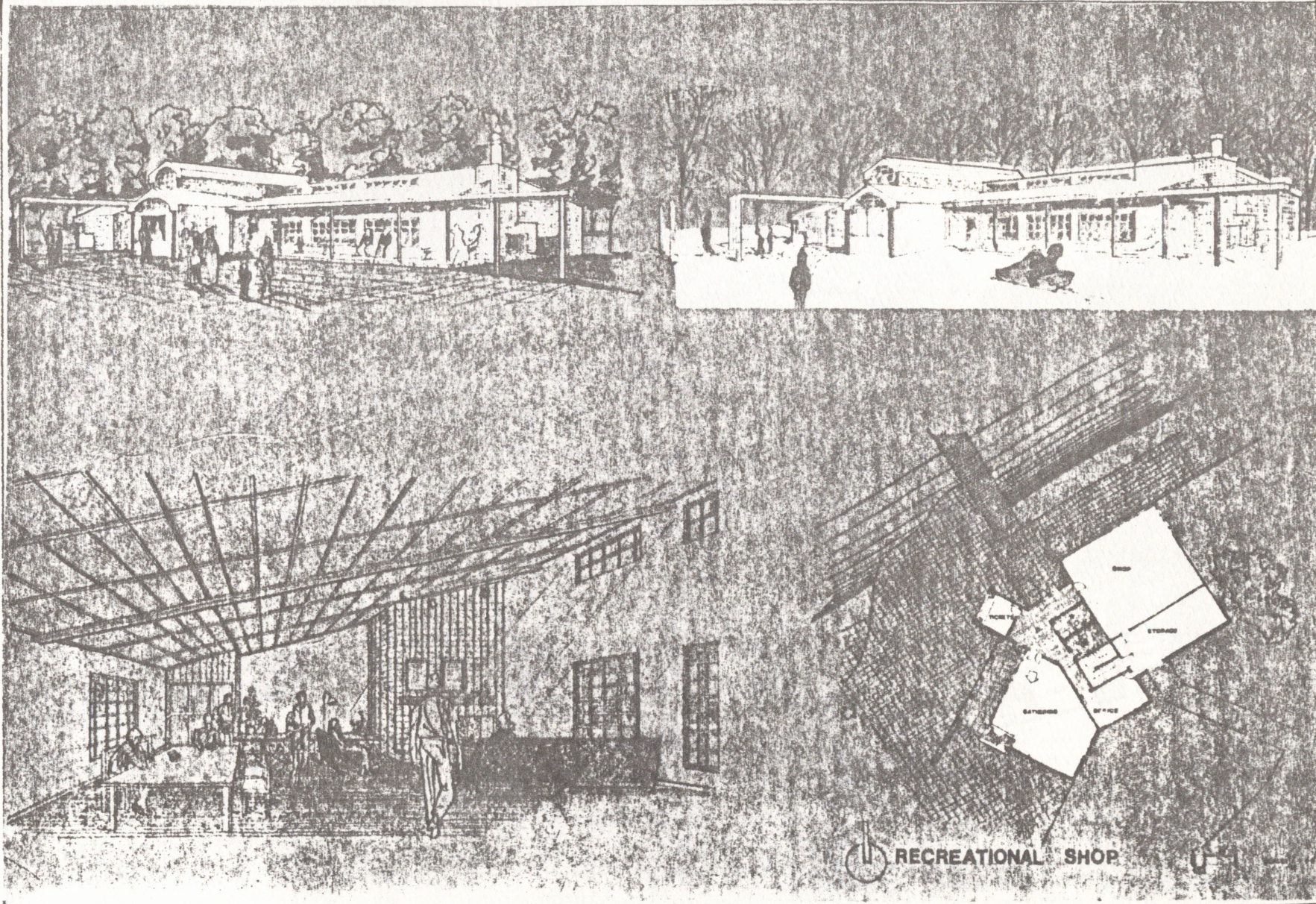


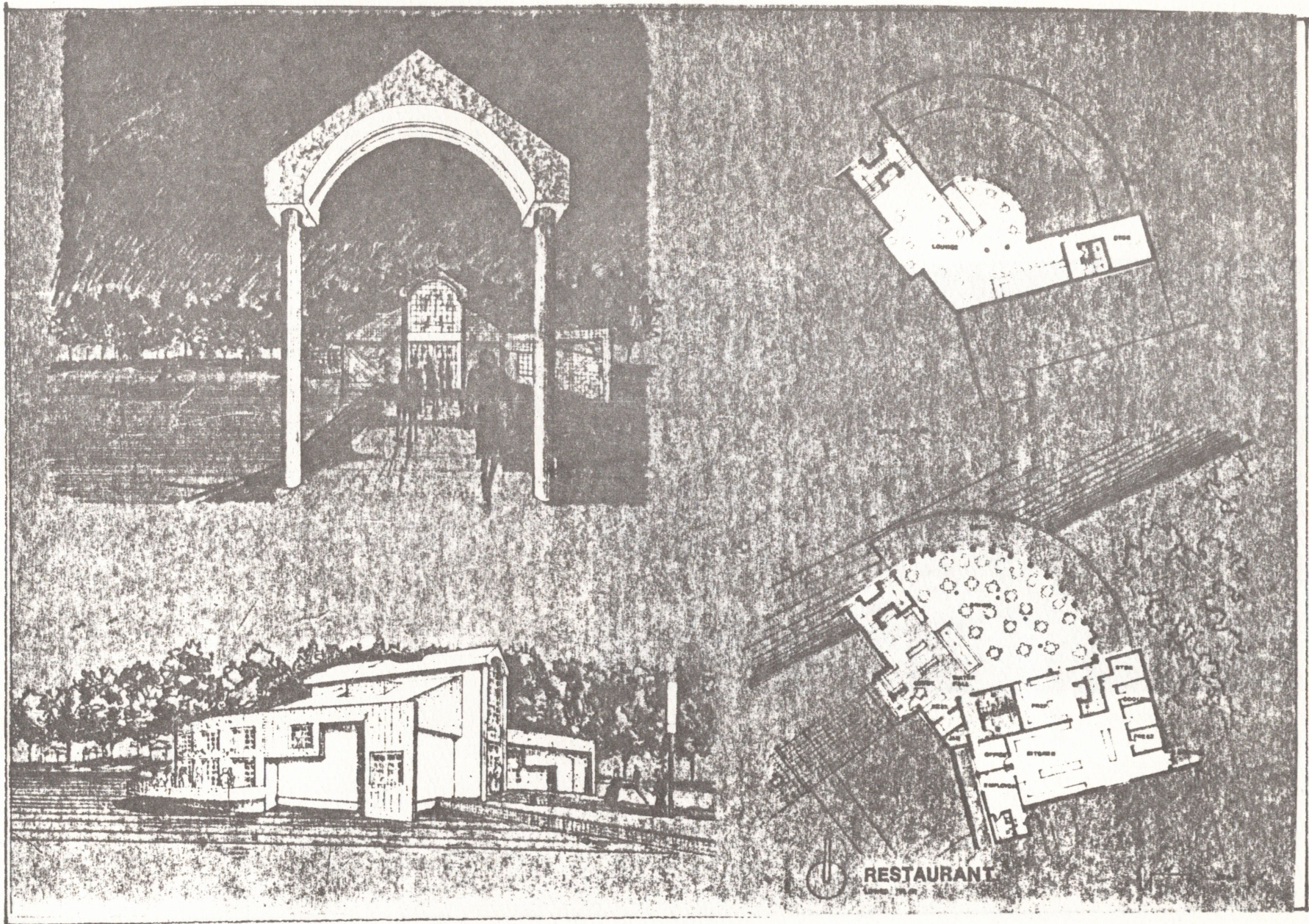
VIEW OF SHORE

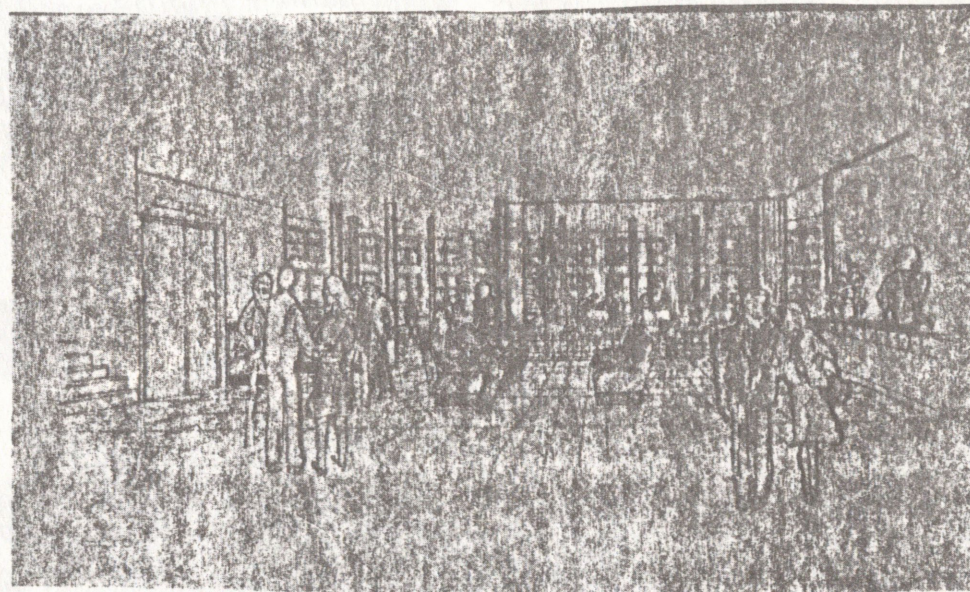
ENTRY TO AMUSEMENTS

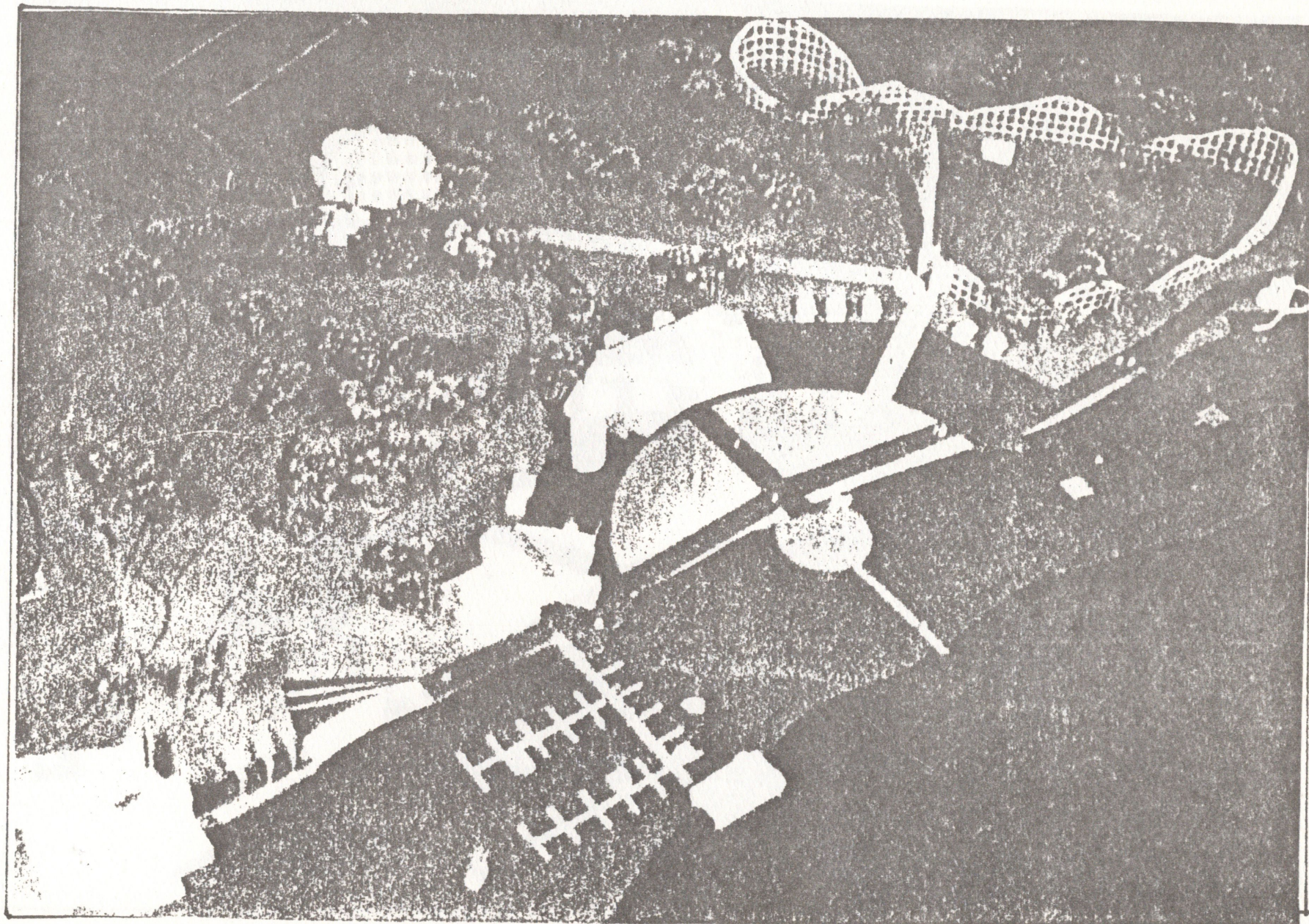


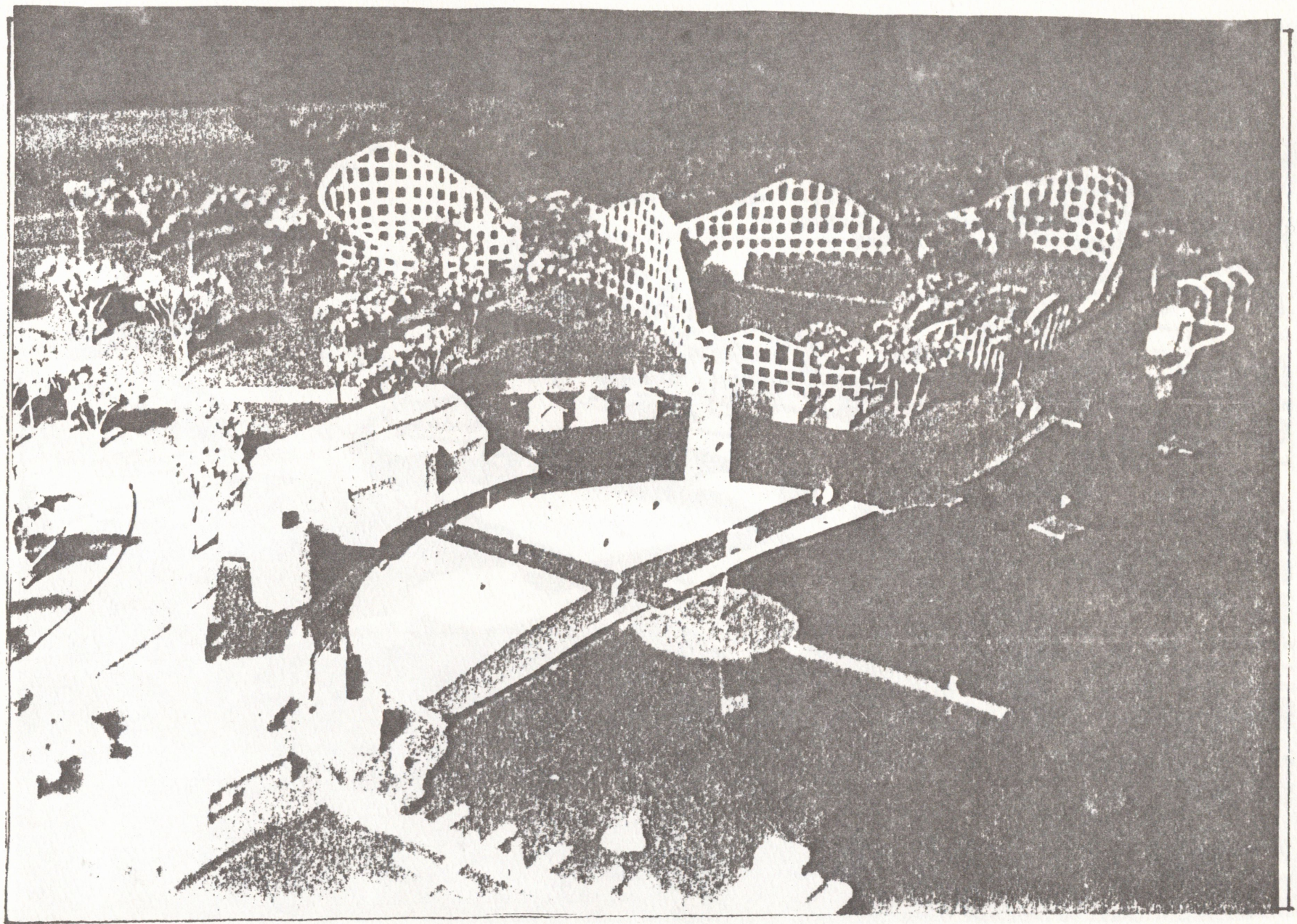


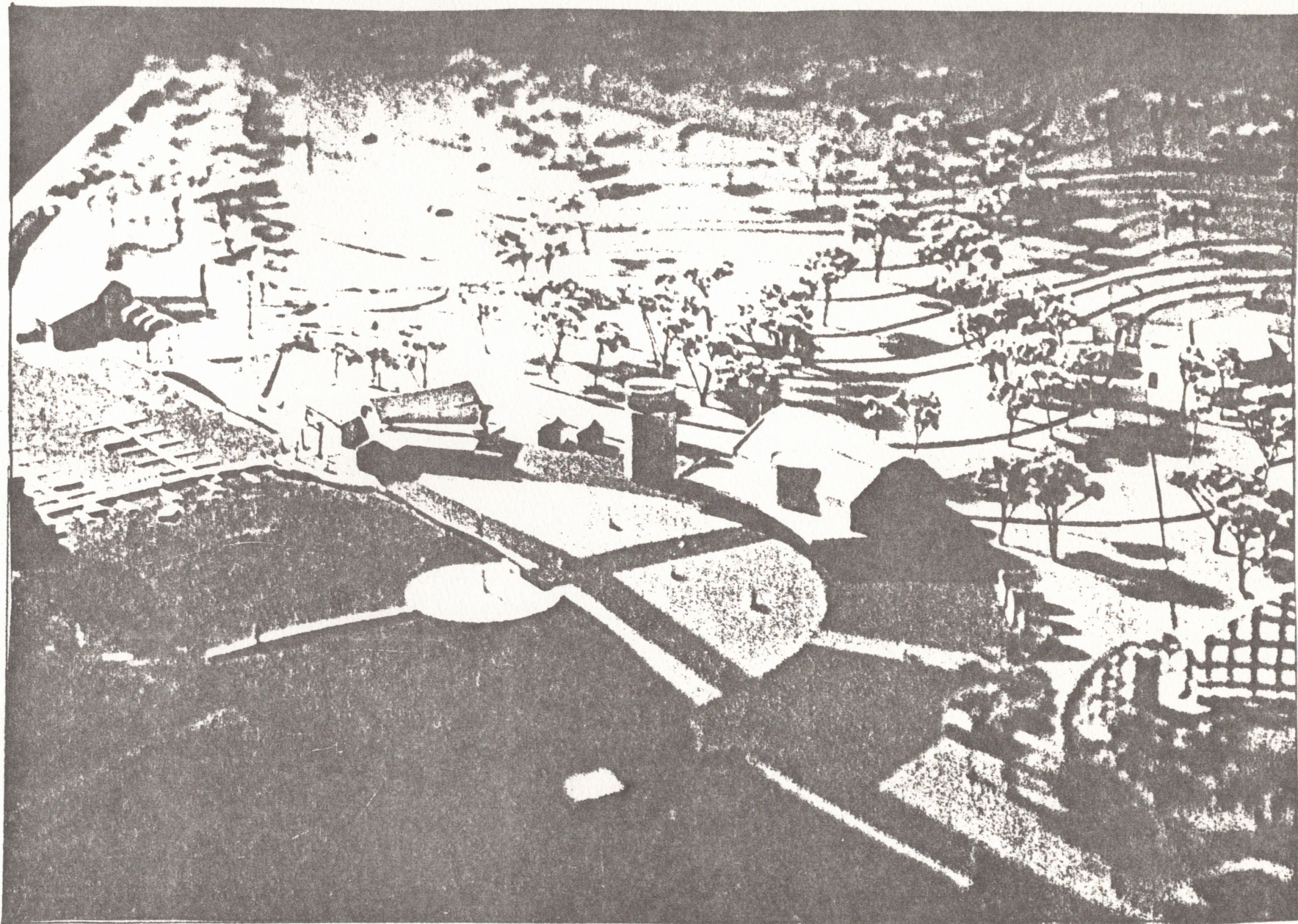


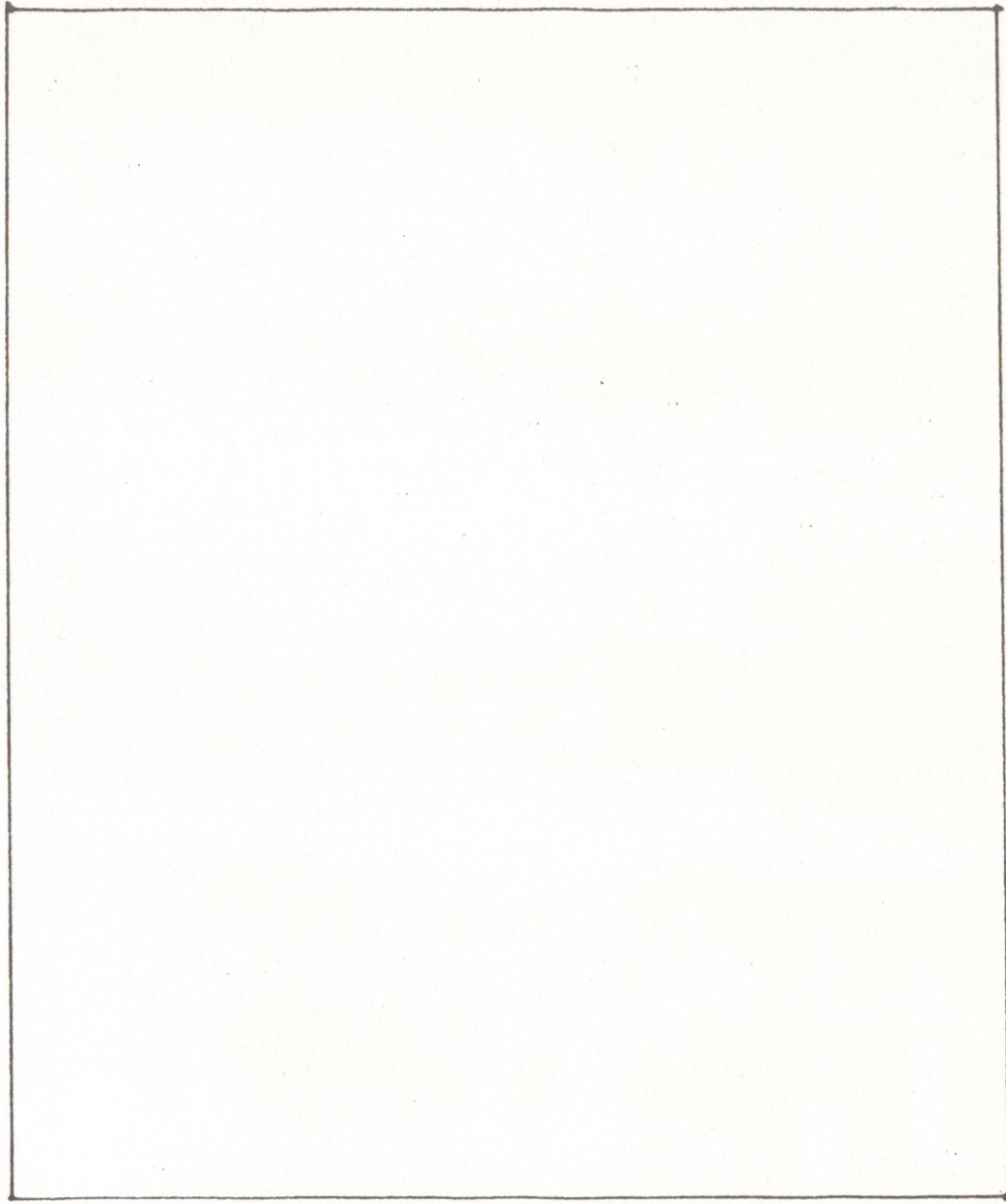
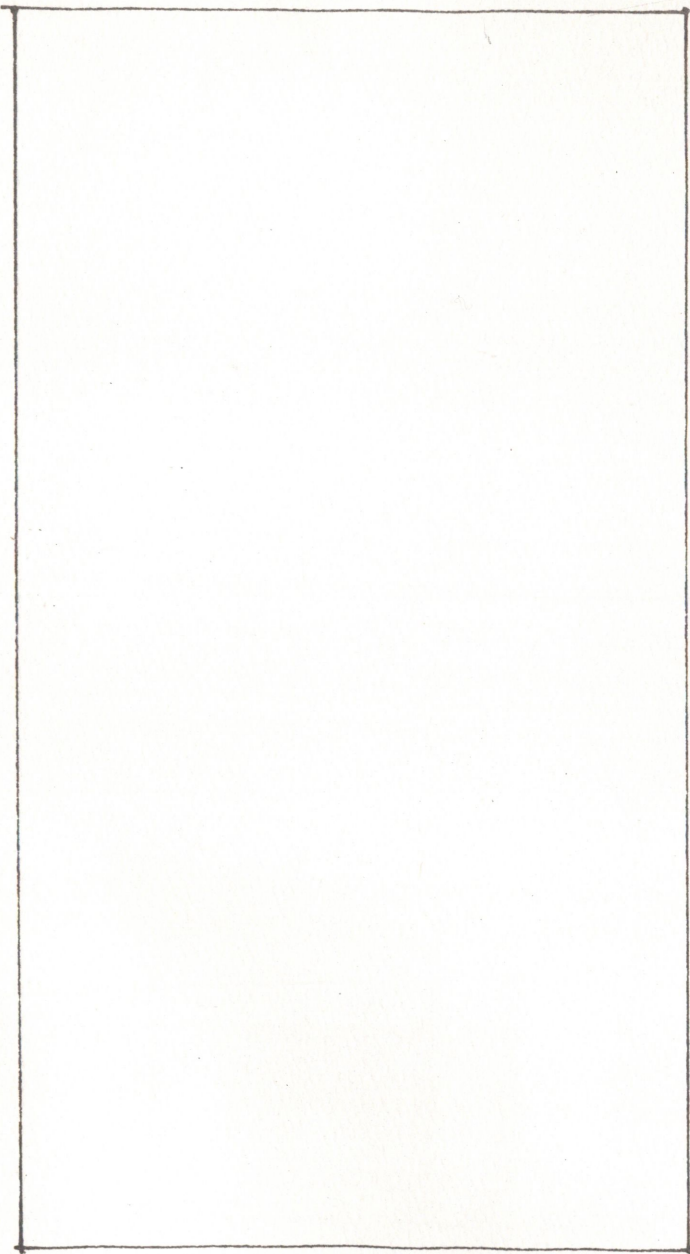




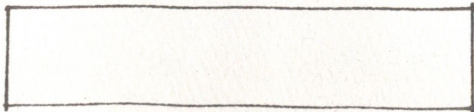








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