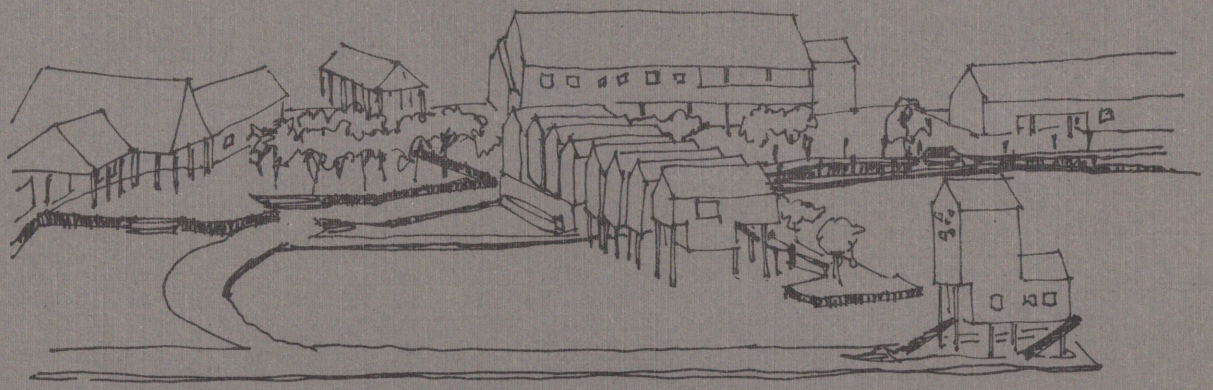
GRAND BEND HARBOR DEVELOPMENT



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Daniel A. Lajoie

GRAND BEND HARBOR DEVELOPMENT

"...the gradual improvement of the collective
and personal environment."

from Moshe Safdie: Reclaiming Human
Scale Planning Without Planners

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GRAND BEND HARBOR DEVELOPMENT

by

DANIEL A. LAJOIE

A thesis submitted in partial fulfillment
to the requirements for the degree

of

BACHELOR OF ARCHITECTURE

Montana State University
Bozeman, Montana
March 1985

Approved:

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Thesis Advisor

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Committee Person

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Director, School of Architecture

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Date: March 1985

Dedication

The struggle for excellence does not come without sacrifice. However, for me the love of this art form cannot be considered a hardship. What has made this degree possible for me has been the unending concern and love from my wife, Becky.

For this, I am forever grateful and dedicate this thesis to her.

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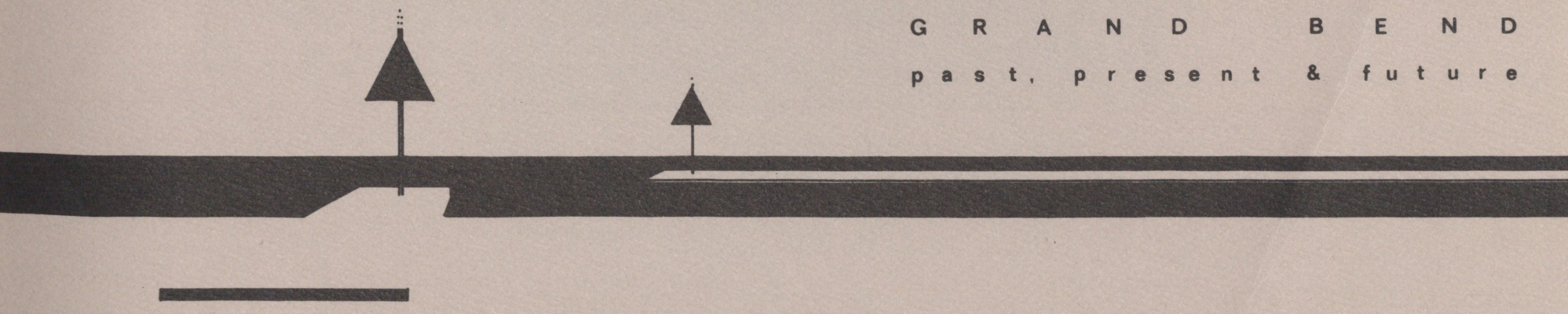
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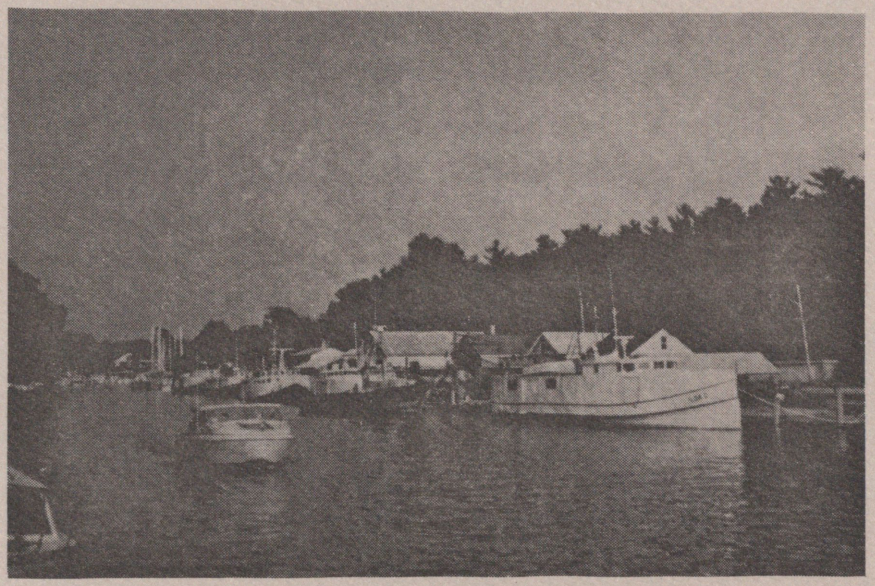


G R A N D B E N D

p a s t , p r e s e n t & f u t u r e

HISTORY OF GRAND BEND

Before the town of Grand Bend was established in 1872, the name of the village was Brewster. As early as 1832 in Brewster, the village focused itself on being a service center for the adjacent farming communities. The power that the Ausable River provided ran saw, planing, moulding, grist and oatmeal mills within the village. Even during its earliest settlement, Grand Bend was oriented toward the river, utilizing its natural capabilities. The mill industry was shortlived however. A 'cut' was made at Grand Bend to Lake Huron, to provide farm drainage for the farmers of Stephen County which eliminated the milling industry. The new harbor at the mouth of the Ausable River quickly supported a small fishing industry which continues today to be a part of Grand Bend's waterfront activity.



The Ausable River still provides protection for Grand Bend's existing fishing fleet.


GEORGIAN BAY
LAKE HURON
ONTARIO
TORONTO
LAKE ONTARIO
MICHIGAN
GRAND BEND
AUSABLE RIVER
LONDON
NIAGARA FALLS
BUFFALO
ST. CLAIR RIVER
LAKE ST. CLAIR
DETROIT
LAKE ERIE
NEW YORK
0 10 20 30 40 50MI.

Ironically, it was during this point in time when Grand Bend's regional shopping center suffered because of the cut and subsequent demise of its milling industry. Throughout the next one hundred years, Grand Bend gradually released its hold on the adjacent farming community until finally today it totally ignores the farmers. The town has prospered however, especially since the advent of the automobile, with tourism. Today tourism easily overshadows Grand Bend's other economic functions. The attraction to the natural features in the area like the lake, sandy beaches and dunes as well as the well protected harbor make Grand Bend one of southwestern Ontario's leading "cottage areas".

During the 1930's the cottage lands were quickly bought up along the most advantageous areas along the river. This can still be seen today. As recreation in the area grew rapidly between 1930-1950, the less desirable cottage lots were also purchased until during the 50's when camping became popular. The region today provides approximately 5500 campsites and 2300 seasonal residences/cottages. Because of the recent trend in the last 15 years for more recreation along with a shortage of desirable serviced sites in the Grand Bend area, the compromise of renting or leasing a serviced site away from the beach and town has greatly increased. Trailer/RV parks are located within easy driving distance to Grand Bend and recreational facilities.

AN INVENTORY OF GRAND BEND

A. Economic

The report prepared for the village of Grand Bend entitled Economic Development Opportunities in the Village of Grand Bend has indicated several startling facts. Grand Bend's past dependency primarily has been focused on the summer season only. The village's business community concentrates in the merchandising assortment and the retailing/service facilities on the smallest and most unpredictable of the 3 markets at its disposal, the transient tourists. Also, only limited growth in recent years in the transient tourist market has occurred primarily because the people in the baby boom era are moving into a new higher economic status. Numbers indicate too, that Grand Bend is capable of providing services to a wider range of people in a yearround capacity rather than summer only.

The imbalance that occurs in Grand Bend at present during the year is also due to the fact that many of the merchants who sell summer oriented merchandise leave Grand Bend during the off season and live in warmer climates. This imbalance in Grand Bend's economy has left Grand Bend in a situation where merchants are being rewarded financially by the people of the summer season but not giving anything back to Grand Bend.

If, as the study has suggested, Grand Bend is in the position of becoming a regional yearround service center, then more applicable retail space is needed. Presently about 15000 square feet of retail space is found in Grand Bend for yearround purposes. More than half of the yearround shopping is done outside of Grand Bend indicating that Grand Bend in its present state of non-focus on yearround shopping, is able to capture some of this market. These numbers only represent what is happening now in Grand Bend and do not take into account if Grand Bend were to become a yearround service center in addition to becoming a destination place for yearround purposes.

B. SOCIAL

Presently Grand Bend is made up of 3 major groups of users:

1. The yearround resident (which also includes the area in a 25 mile radius adjacent to it).
2. The seasonal resident (made up of seasonal workers, cottagers, mobile homes as cottages).
3. The visiting tourists.

Each of these groups use Grand Bend differently.

1. The Yearround Resident:

As pointed out previously, the yearround resident does not 'use' Grand Bend effectively. The local merchants have not provided goods for this group in the past. Occassional recreational facilities (ie: the yacht club, the beach) are used by this group as well as the few restaurants which are open yearround.

Because of the present structure of Grand Bend in an economic sense and the nature of the work of nearby farmers, a conflict between the two exists. While Grand Bend caters to summer users, the farmers nearby can't enjoy the benefits because the summer is their busiest time of the year. When the farmers are finally able to use Grand Bend, the season ends, closing most of its doors.

The Huron Country Playhouse, located 3 miles from Grand Bend maintains the same attitude towards the local people. It operates strictly during the summer catering to the summer tourists.

2. The Seasonal Resident:

The seasonal residents consist of 3 different types: the cottage resident, the seasonal workers, and the most recent trend of mobile home owners who rent or lease land for the summer near the Grand Bend area. This last group has been very popular in the past few years for a number of reasons. First, most of the prime beach front as well as other properties near enough to the beaches have already been purchased by cottagers. This leaves the only available land in locations that aren't as ideal, further from the beaches. The leasers

of these trailer park areas have provided however, all the necessary amenities in as natural a setting as possible. They are also located strategically to offer the trailer owner a convenient 5 to 10 minute drive to the public beach in Grand Bend.

The seasonal residents, similar to the yearround residents use Grand Bend in a similar manner. The shopping needs for this group are not provided once again. They too, must travel to other communities to obtain necessary food and entertainment. This group does differ from the yearround residents, in that they exist in Grand Bend because of the summer season. Recreational activities such as the beaches, boating and golfing create an atmosphere for retreat from big city hussle and bussle.

In addition to this however, yearround opportunities for recreation have already been established. Snowmobiling, snowshoeing, cross country skiing and downhill skiing are already operating successfully. New recreation like ice fishing and hockey among others could also be added if Grand Bend maintained a yearround service center attitude. Some seasonal residents probably don't use Grand Bend other seasons, because of the necessity to drive too far for necessary supplies.

3. The Visiting Tourists:

As previously pointed out, the village of Grand Bend caters mainly to this user group. This group consists of people varying in lengths of stay anywhere from 1 hour to a week. They vary too in socio-economic background including upper middle class people who either sail or power boat into Grand Bend, to teenagers who camp or come into Grand Bend to swim for the day. This younger group has for the last several years drastically diminished establishing the users to Grand Bend mainly from the middle and upper classes.

The reason that a harbor for the transient boater was chosen for this project was because the greatest number of boaters that use the Grand Bend harbor including the yacht club, cruising club and those boaters who use the boat launch was the transient boaters. They numbered over 1100 boats during 1983, most boats from 20-40 feet with

about 1/3 from the Detroit area, and the remainder from within a 150 mile radius[1].

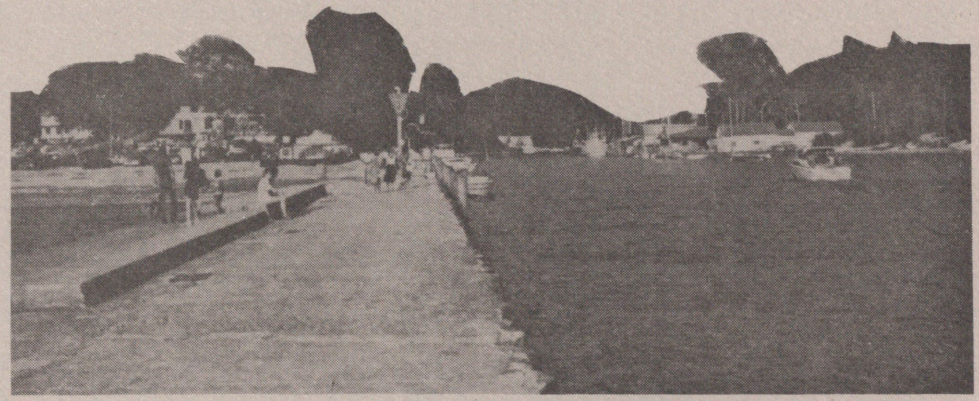
The close proximity of large urban centers near Grand Bend have made it a convenient retreat. Also the Ontario shoreline is dotted with quaint harbor towns, extending from the Windsor/Detroit area along Lake St. Clair to the St. Clair River and eventually along Lake Huron to the town of Goderich. The excursion from Detroit to the Grand Bend area takes about 6 hours and can be reached within appropriate time to still be able to spend a long weekend. The trip is popular to boaters because of the diversity in boating conditions ranging from river maneuvering in the Detroit and St. Clair Rivers, to the shallow waters of Lake St. Clair to the open waters of Lake Huron.

1. Economic Development Opportunities in the Village of Grand Bend

C. ENVIRONMENTAL CONTEXT

1. Natural Context:

As one approaches Grand Bend and especially from the lake, a very identifiable element of Grand Bend's character is immediately evident. A strong and dense growth of vegetation occurs along the shoreline and extends inland about 1-1/2 miles.



It is in this region that Grand Bend is located. From the lake, it can be seen that certain cuts through the dense forest take place in types of space only, either where natural forces have removed the forest (ie: where the Ausable River punctures through it) or where the public commercial spaces are located (ie: where Main Street cuts through the forest). The same observation of space can be seen when approaching Grand Bend from the highway, although it is not as distinctive as from the lake. The forest is therefore an obvious definer of space type. Open cuts through the forest define public orientated spaces. Its character is much more open with man-made environment defining its edges much of the time. Behind the architecture looms the forest creeping as close to the buildings as physically possible. The forested areas define much more private

areas, especially residential zones. Its character is closed with the scale of spaces becoming smaller than the Main Street area. The change in light is also different becoming somewhat darker as a result of the forest.

Because the natural vegetation around Grand Bend plays an important role in helping to define types of spaces it must be maintained in any proposal for the harbor area.

It must also be kept in mind that most of the forest is made up of deciduous trees. During the winter the spaces and edges are much weaker in their defining role.

Along the Ausable River the topography especially along the north bank also reinforces the public edge. Topography in Grand Bend varies mostly along the Ausable River's banks. Any substantial extraction of earth for redevelopment purposes will have to be carefully analyzed and executed, for environmental reasons as well as economic and esthetic.

The most significant feature of Grand Bend 's context is with its location itself. The point where the river spills into the lake makes a unique place along the shoreline. The formation of Grand Bend at this point is no accident. Once a fishing village and focused along the river, it has now lost most of its public space along the river. It has ignored the river, and because of this, to some degree, Grand Bend has not taken advantage of the unique character of where water meets land. As a result, Grand Bend's opportunity for development along the water has been missed.

2. Man-Made Context:

Presently, Grand Bend's context is similar to most tourist oriented towns throughout North America. Main Street is dotted with small simple efficient commercial buildings that have little architectural merit. Wood construction with wood siding is almost always the appearance. This is not necessarily bad in and of itself, but the result as portrayed in Grand Bend shows no concern for the

town's overall character. Lack of color, relief, and detailing have all led to the anonomous character of Grand Bend's buildings.

Probably the only concern for the architecture in Grand Bend takes place in the residential areas. Although simple, cottage style buildings mostly exist, they are much more sensitive to their environment and owners needs.

D. POLITICAL FORCES

The present monies available by the federal, provincial and local governments to 'upgrade' Grand Bend to becoming a yearround service center, are substantial enough to make the transition much easier. Because the dilemma confronting Grand Bend is not unique, but found throughout Ontario in other communities totally dependent on the natural environment for income, the federal government in conjunction with local government has established many programs to aid in transforming towns (to what particular degree of transformation is needed is unique to that particular town).

The harbor development for Grand Bend will be funded for this project by private money, for any facilities adjacent to the harbor, along with federal aid as in the case for the actual harbor itself.

The overall impact of the project to the residents of Grand Bend can not be over emphasized concerning the scope of the project. If a solution is presented that overwhelms the towns-people, then it will surely be rejected on the basis of the communities' feeling of lost identity in the town. Since the residents will ultimately approve or disapprove the proposal, a sensitive design that takes into account this issue must be applied.

AN ASSESSMENT OF GRAND BEND

A. ECONOMIC

In analyzing the economic report, it became apparent that the past economic dependency of Grand Bend on the summer season will not sufficiently sustain the village for very much longer. The unpredictability of natural forces like the weather, and the quality of water on the lake make the summer tourist-oriented emphasis an economic uncertainty.

The village of Port Stanley, Ontario on Lake Erie is a classic example of a town orienting its economic emphasis on the summer season only. Once a thriving community focused on the sandy beaches of Lake Erie, it during the early 1970's quickly became a ghost town because of the unpredictability of natural forces. Water polution on Lake Erie destroyed the town's major source of income by forcing the tourists to vacation at better quality beaches on the Great Lakes.

Also, recent studies of user groups to Grand Bend have indicated that the type of groups visiting Grand Bend have changed in their socio-economic background. Formerly, the primary user groups consisted of a younger age group where less discriminate spending is common. The commercial area along Main Street as well as other existing commercial areas, ie. along Highway 21 have focused their merchandise mainly to this market. Today, and in the future, more discriminate spenders that are older will use Grand Bend. The shoppers who were once part of the younger baby boom era have grown up, with most establishing families and careers. This discriminate shopper will force the village to cater to these new needs of the consumer. Yet very few initiatives have taken place to restructure Grand Bend in order to meet these needs. This project will be addressed in 2 parts;

a) to study the overall plan that Grand Bend should adopt as well as creating a theme addressing these new concerns and

b) to design the overall harbor area keeping in mind Grand Bend's overall plan and extending the theme.

The de-emphasis of Grand Bend as a one season village into a yearround regional service center is another reason for the transformation. Presently, the residents of Grand as well as the residents of the adjacent 25 mile radius around it, must all shop in other towns. The economic benefits of capturing this group of shoppers and providing them with the type of merchandising, entertainment and overall necessities that accompany any urban area can be beneficial for the entire community.

Presently, the existing retail space that occurs in Grand Bend is adverse to the present and future needs. A reconstruction of these existing businesses in a merchandising as well as a physical sense especially along Main Street, would begin to address the needs of the village. However, even if all existing commercial establishments were 'upgraded' the area of commercial space would still not be enough to effectively provide services for Grand Bend and adjacent areas.

Because of certain 'gaps' in the Main Street corridor, new developments in these areas could also respond to Grand Bend's problems as well as help rectify some of the village's esthetic quality. Even with the inclusion to Main Street with the previous 2 suggestions above, more retail space, entertainment, and office space is required. The main artery (Main Street) would allow most of this public oriented space to occur, but a secondary artery(s) at a smaller scale is needed. This public space can be very useful in accomplishing many of Grand Bend's other problems that presently confront it. The new commercial area can also be useful to the current merchants to use as a model to show that yearround merchandising can be profitable for them as well.

B. SOCIAL

As stated in the Inventory of Grand Bend, the present make-up of the user groups is divided into 3 groups; the yearround resident, the seasonal resident, and the visiting tourists. If Grand Bend becomes a yearround service center the numbers in each of the 3 groups will alter somewhat, especially in the yearround category. A de-emphasis of the tourism business must, to some degree, be evident in the harbor scheme to effectively portray Grand Bend's new role. The architecture for Main Street must also portray an image that is condusive for not only the summer season, but all seasons as well as reacting to a yearround user group. All these features in the man made context will respond to the new role Grand Bend will play in the future. In addition to this the new user group, the residents of Grand Bend, will feel comfortable with their environment and not foreign, as they must feel now.

C. ENVIRONMENTAL CONTEXT

1. Natural:

The overall character of Grand Bend must, to some extent, be maintained in a natural context. The definition of public vs. more private space, with the forest acting as definer, is an integral and esthetic ingredient of what Grand Bend is.

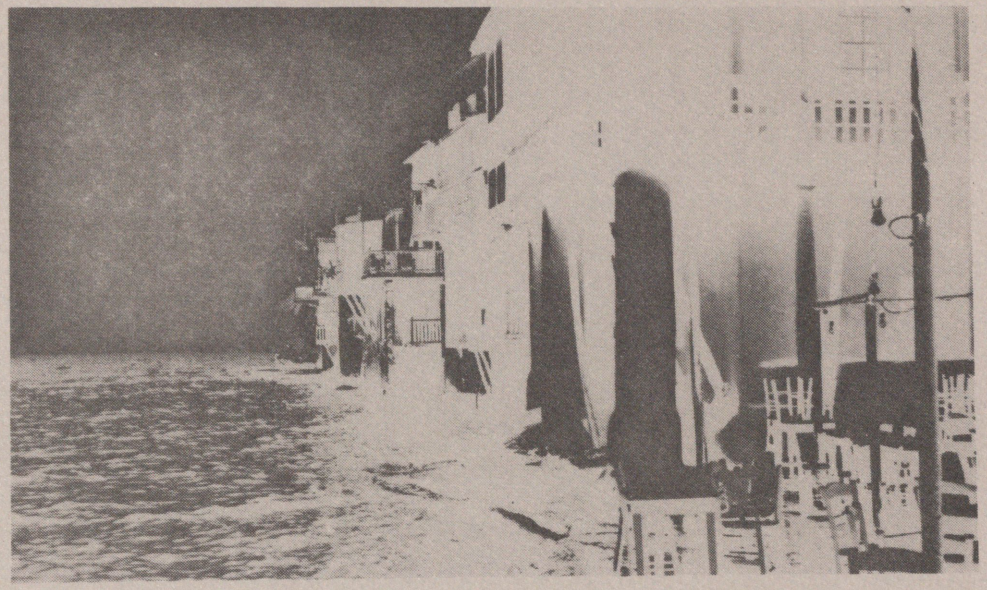
The success of Grand Bend as a unique place lies in the acceptance and eventual space planning to bring Grand Bend back to the river. Grand Bend needs to orientate itself once again to what initially brought its existence into being; the river. If one thinks of any Mediterranean village throughout Europe, the absolute orientation of town on the sea has made the place unique to its natural context.



A village on the island of Mykonos
in the Mediterranean Sea.

2. Man-Made Context:

Color, texture, activity, change of level and the juxtaposition of land and water have all meshed together to create a successful place in Mediterranean sea towns.



Building forms and the water's edge meet successfully in this village on the sea.

Many more contemporary examples located in the United States and Canada have used the Mediterranean village as a model. Granville Island in Vancouver, the Baltimore Harbor in Baltimore and Pike's Market in Seattle have all utilized the natural setting of where land meet water, in an effective manner to stimulate their economies.

PROFILE OF USERS FOR GRAND BEND (for present and future groups)

This section defines and describes the specific types of users for Grand Bend if a redefinition of Grand Bend is required. This redefinition would include the role that visiting tourists, the seasonal residents as well as the yearround residents would play in the village if it is to become a regional service center.

The Visiting Tourist:

As previously described in the Inventory of Grand Bend, the visiting tourist will still play an important role in Grand Bend, even though the makeup of this group is changing. Previously a younger generation occupied the village during the summer season. In Grand Bend's new role as regional service center, the visiting tourist is that same younger generation but now grown up. Their income and social background now affords them the 'leisure' items of yachts and generally more expensive items of taste.

The desire for this visiting tourist group to allow the possibility of providing more recreational facilities in the future would be supported by the yearround service center in Grand Bend. For these reasons a shift in merchandising must occur to reflect these new needs for this group.

The Seasonal Resident:

The Inventory of Grand Bend for its present context would also be applicable in the new role of Grand Bend. Seasonal residents would continue to play an important role for Grand Bend not only during the summer but now yearround. Similar to the visiting tourist the town would cater to them for their needs but now would extend the shopping season into yearround shopping.

The Yearround Resident:

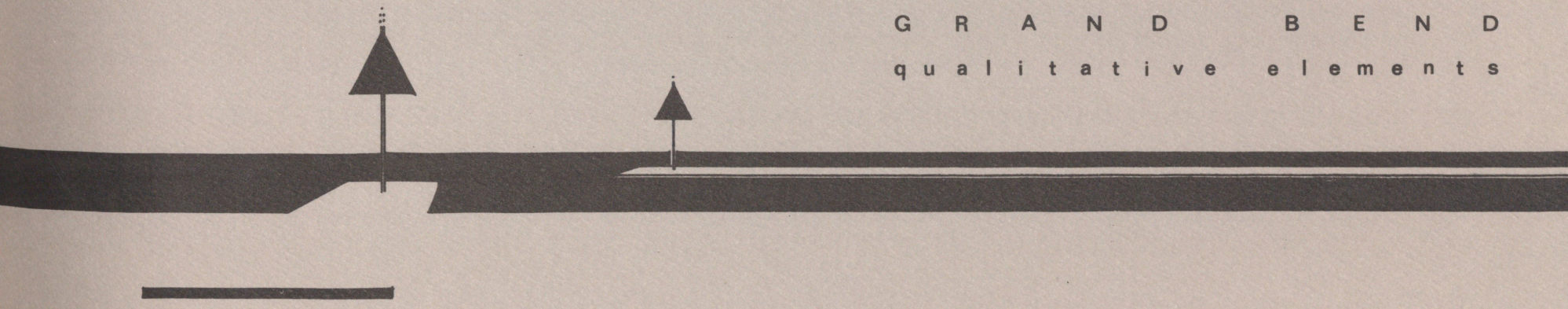
The greatest change in Grand Bend would affect the yearround resident in and around Grand Bend. The makeup of this group has not changed, like the visiting tourists to Grand Bend. The needs of users in this section would provide Grand Bend with necessary economic stability. Mainly farmers or related businesses, these people would utilize Grand Bend in the same manner that they now use neighboring towns. Food stores, department store merchandise, entertainment and other services are needed in a yearround sense.

IDENTIFICATION OF THE THEME

The re-orientation of a village to a role it played previously can give the identity that Grand Bend requires as well as providing a place that responds to need. Re-shaping Grand Bend and focusing its attention more to the natural qualities that gave it its initial reason for existence best exemplifies the theme. This idea, at the larger scale of urban planning, should reiterate the theme by carrying the Main Street corridor to the water's edge. Smaller design areas like planning and the actual architecture itself should also carry the theme through.

If a place could be created that accomplished these goals, the "idea" would act as the seed for further development that would occur. Eventually Grand Bend would resolve most of its fundamental problems in a functional as well as esthetic sense.

Because the theme alludes to returning nearer to the water, this project must take its stand in an absolute and understandable manner. The juxtaposition between built form and water must intertwine and mesh together to effectively re-create and reinforce Grand Bend's place by the water.



G R A N D B E N D

q u a l i t a t i v e e l e m e n t s

IDENTIFICATION AND DESCRIPTION OF SPACES NEEDED IN GRAND BEND

This section reflects the needs for Grand Bend to achieve an overall cohesive town place. It first identifies spaces that will occur in the village and then describes the space in terms of needed character, spatial relationships and quality of that space.

EXTERIOR SPACES

1. The Harbor:

Character: Since the harbor is one of many physical connnections between the water and land, its transition function from water to land must reflect the duality of both. The insertion of public oriented activity space around the harbor can also modify the natural qualities of the connection and the uniqueness of this place. The harbor must also project, to some extent a sense of protection from the lake, yet at the same time allow a visual connection from the harbor to the lake and visa-versa. Sensitivity between water and lake must be emphasized.

Proximity: The harbor area, because of the nature of the spaces adjacent to it (public oriented activity of different types) must have a connection between itself and the Main Street commercial area. Also, the harbor should at least have a connection to the fishermen's market area, to allow the public space to flow from one to the other. The selection of harbor must be easily identifiable by boat when approaching Grand Bend by water.

Orientation: The desire for natural sunlight for many of the public spaces around the harbor would create a place where people would wish to be. The harbor's task is not only to provide a docking place, but also to provide protection from lake winds.

Views: As previously suggested, views from the harbor to the lake as well as a visual notion from the lake as to the location of the harbor are important. The views from the harbor to the lake will reinforce the theme that is needed for Grand Bend. Although the activity in the harbor during the winter months will not exist because of the frozen

lake, the lake itself will, because of its frozen character, be a significant and legitimate focal point. The unpredictable character of the surface of the lake, because of its freeze/thaw action and winds will cause the surface to become an ever-changing artistic element.

Heirarchy: The heirarchy that the harbor area will play in Grand Bend's reorientation role is very significant. It is important that the harbor area not dominate and compete in becoming the most important space in Grand Bend. As one of several 'nodes' in Grand Bend linking it to the river and lake shore areas, it should be treated as "an extension to" the Main Street commercial district. A total dominant role over the existing Main Street commercial district would be detrimental to the overall good of Grand Bend.

2. The Public Area Around The Harbor:

Character: A place intended for public interaction between the lake and land, the character should be one of activity, color, textures, level change, and generally interesting to all senses. Several images of harbor villages in Europe conjure up models of desired imagery.

Proximities: In addition to fronting the harbor, this public area should be easily accessible to parking. A link, as previously described should connect the 'Main Street' and the harbor region. A link to the fish market should also exist reaffirming the importance that the fishing industry has previously played in Grand Bend's history as well as its position today.

Views: As well as fronting the harbor itself, it should also provide views to the lake and/or river. It is necessity to once again establish Grand Bend as a village in this strong juxtaposition of the lake and river.

Edges: Because residential areas presently creep up to the river's banks on each side a sensitive treatment of public/private space must be explored between the harbor area and the residential zone.

3. Public Connection(s) to the Ausable River and Across It

Character: The development of the theme that Grand Bend will take on is one that brings Grand Bend back to its original orientation; where the river meets with the lake. For this reason, a plan must be devised that effectively focuses on the river. The area(s) should differ in activity and degrees of publicness, allowing several areas of access to the river. Ideally, if public spaces can be created on both sides of the river, the efficient utilization of river bank area would result, for the betterment of the entire community. A `public' type space is needed to penetrate through the residential area presently separating the 2 areas.

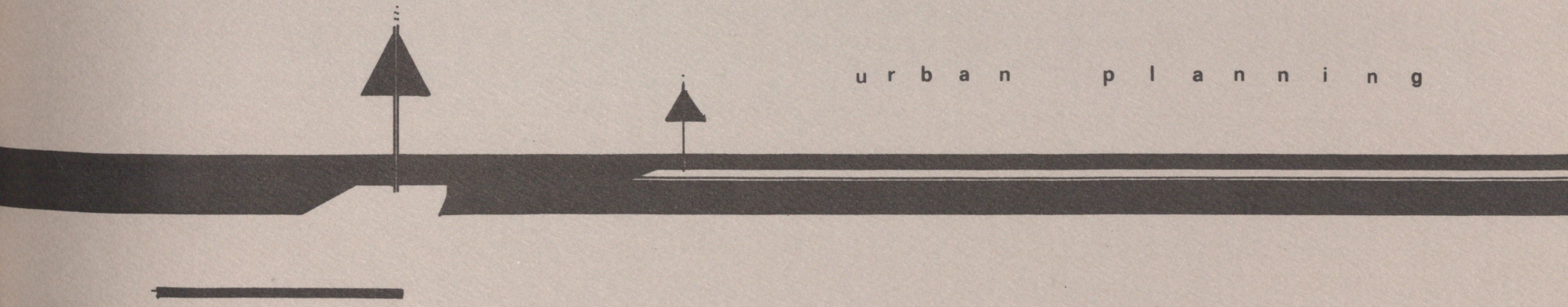
Proximities: Connection from the Main Street commercial area to the river bank and lake shore areas is needed. It is therefore necessary to select appropriate locations to connect the 2 areas.

Edges: The necessity to effectively define the edges between the residential and connecting space is required to be explored in order to achieve a continuity between the 2 spaces that presently occurs elsewhere throughout Grand Bend.

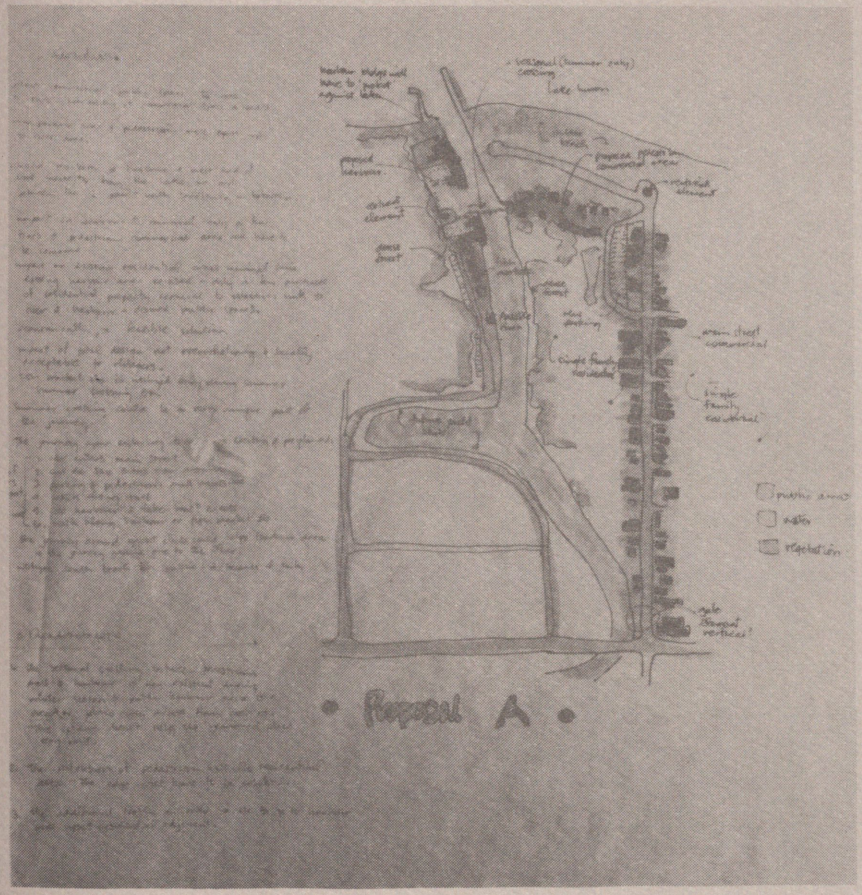
4. Main Street Commercial Zone:

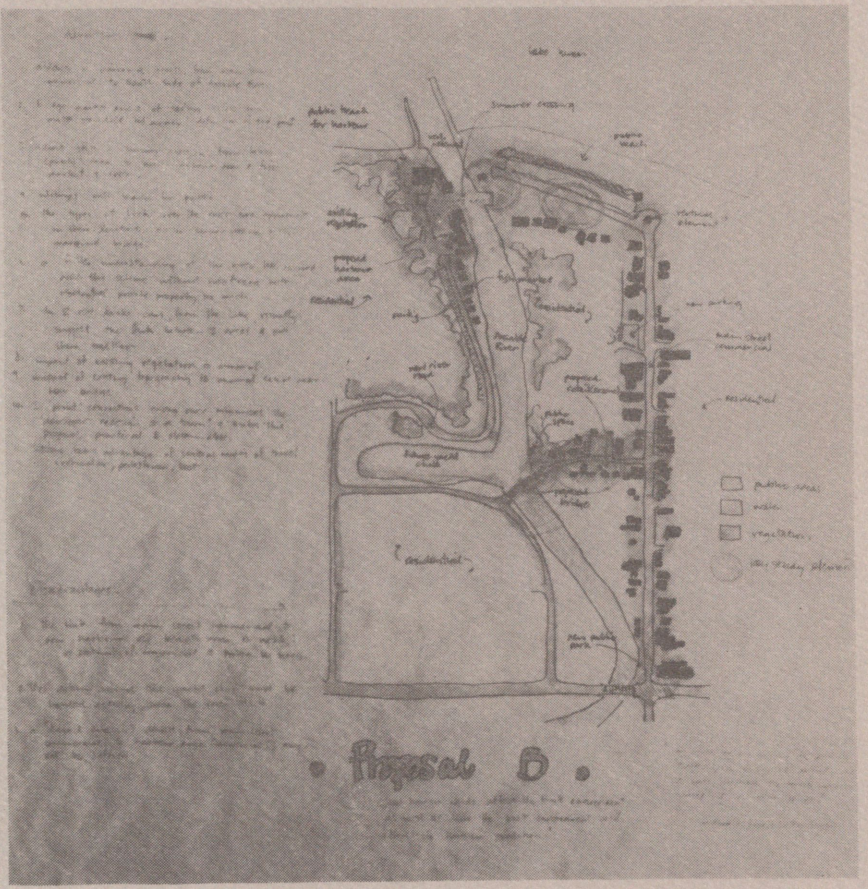
Character: Upgrading the physical aspect of the buildings as well as the shopping itself into an informal and charming space, would allow a character unique to Grand Bend to emerge. This character could then flow into other proposed commercial areas establishing a continuity throughout.

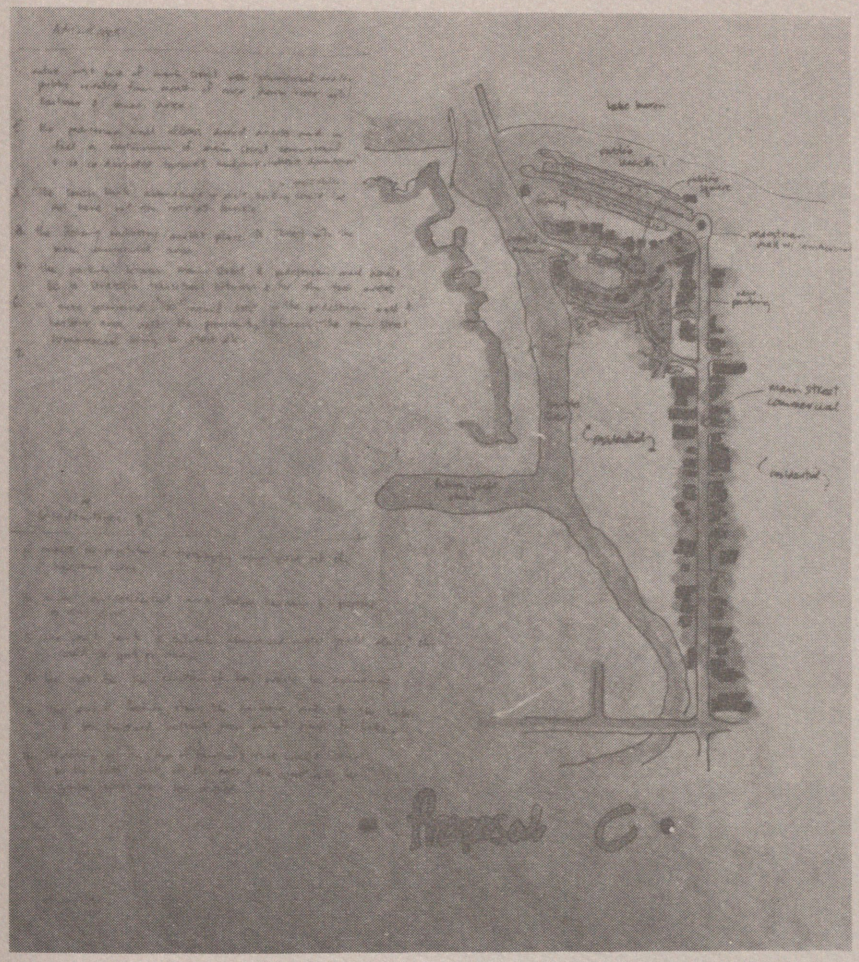
Heirarchy: The importance of the Main Street commercial zone cannot be over emphasized. Although other `new' commercial and/or public areas are needed, they must be treated so that they only play `a part of' the downtown fabric and not dominating.

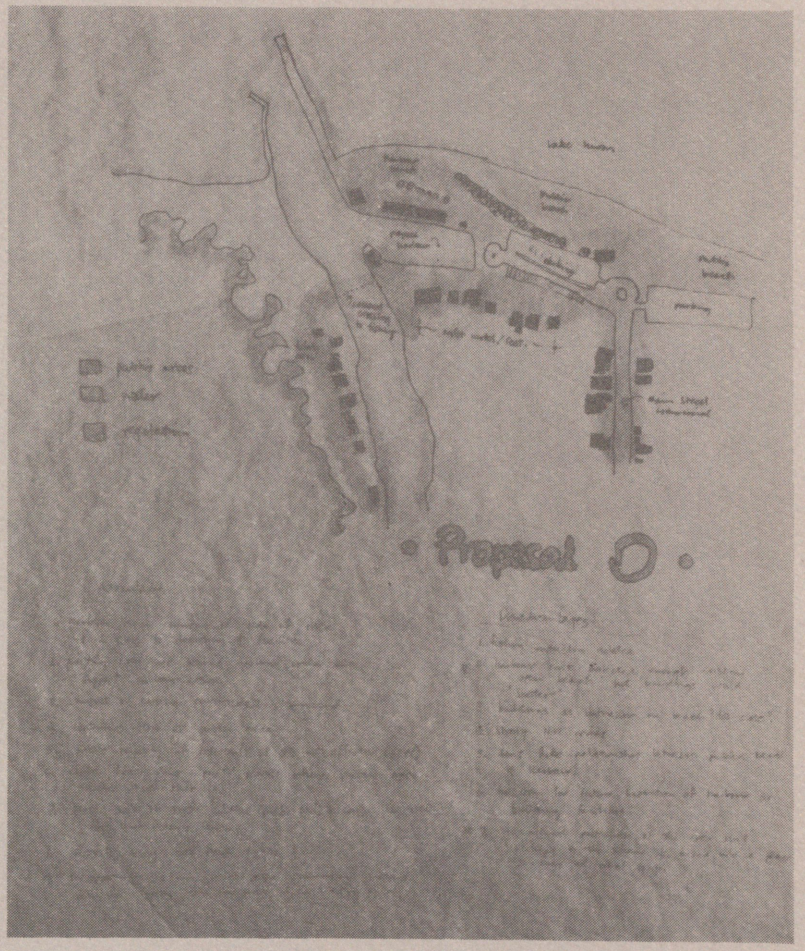


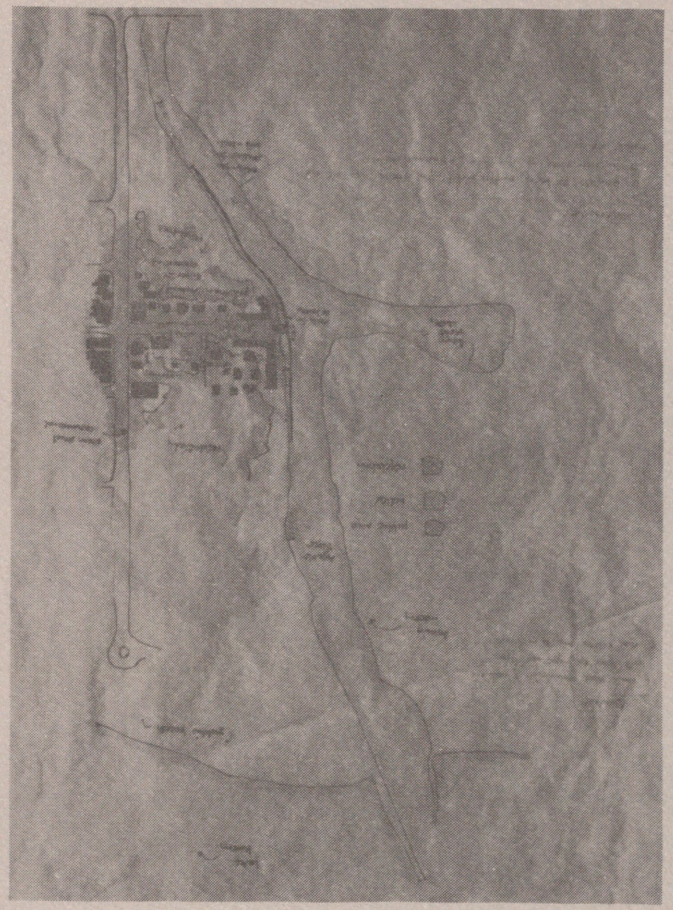
urban planning

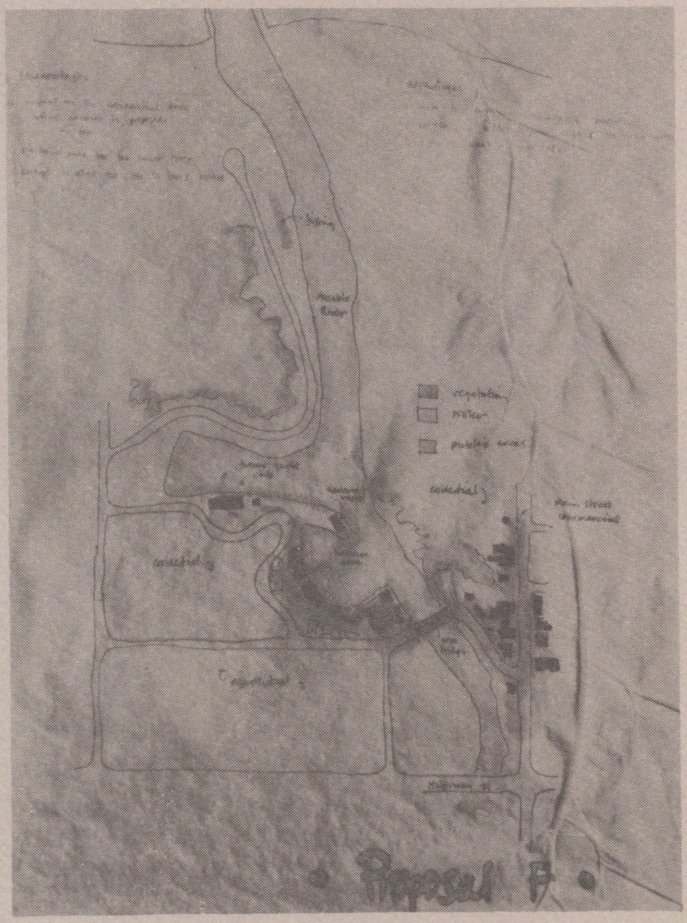

• Proposal A •


• Proposal B •


Proposal C


Proposal D






Project 6

KEY STUDY ELEMENTS

In chosing Proposal G for Grand Bend, it must be emphasized that certain 'key points' must be studied and developed further to accomplish the total goal.

1. The Intersection of Main Street and Highway #21

Since this point marks the entrance to Grand Bend, it must be architecturally treated as an 'Entry'. There must be no question that this point does indeed, indicate that Grand Bend takes place down Main Street. This is important because traffic is generally north/south on highway #21 and in order to capture that traffic and reroute it, at least temporarily into Grand Bend, the demarkation must be absolute.

Presently, the entry is generally adequate. Traffic lights are located here, slowing traffic down with signage on the southwest corner stating "Welcome to Grand Bend".

A stronger entry could however, take place. The land between Main Street and the Ausable River could be integrated into a total scheme very effectively. The total plan idea is to link the public spaces along Main Street with the activity on the River. As it turns out, only point nodes can be utilized because of the private residential property along the north bank of the Ausable River. The entry place can begin to dictate the nature of the journey through Grand Bend. Allowing the land between the river and Main Street to become public would effectively satisfy this. A public park overlooking the river would be a pleasant place. Bank stabilization is needed along this area and could be integrated to modify this idea. The edge of the park between Main Street and the park itself would have to be carefully designed to mark Grand Bend's entry.

2. The Intersection of Main Street and Eilber Road

The intersection of Main Street and Eilber Road typlifies the many residential intersections along Main Street. Narrow and understated, it is simply a void in the facades along Main Street. The commercial facade simply ends at this void with the heavy darkened forest (representing the residential areas of Grand Bend) creeping out from along the adjacent street.

If Eilber Road is to become a commercial extension to Main Street, the corner intersection must be modified. The distance between the two buildings presently framing the intersection is too narrow. One of these buildings must be removed to sufficiently allow the proper amount of space to flow into Eilber Road. The new scheme should emphasize this commercial corner by turning the commercial facades around onto Eilber Road. A study of the actual intersection should be done to strengthen the new commercial street.

3. Eilber Road Commercial Zone:

The densely forested areas take place in residential areas in Grand Bend. Much of the vegetation along Eilber Road must be removed to open up the space to spatially symbolize a commercial region. In addition to the type of space it represents a more pragmatic reason for their removal is evident. Eilber Road presently is too narrow for 2 way traffic to pass through and will as a result have to be widened.

The vocabulary of the architecture along Eilber Road is presently residential in nature. Simple, gabled cottages are dotted along the street. This vocabulary is adequate if boutique type shops are located here. If a more common type of merchandising is established here, of which Grand Bend is in desperate need, the vocabulary of the architecture will have to be altered to respond to this new type of shopping. The 2 narrow residential streets presently running perpendicular to Eilber Road must retain the quality of space that currently defines the edges which have previously been described.

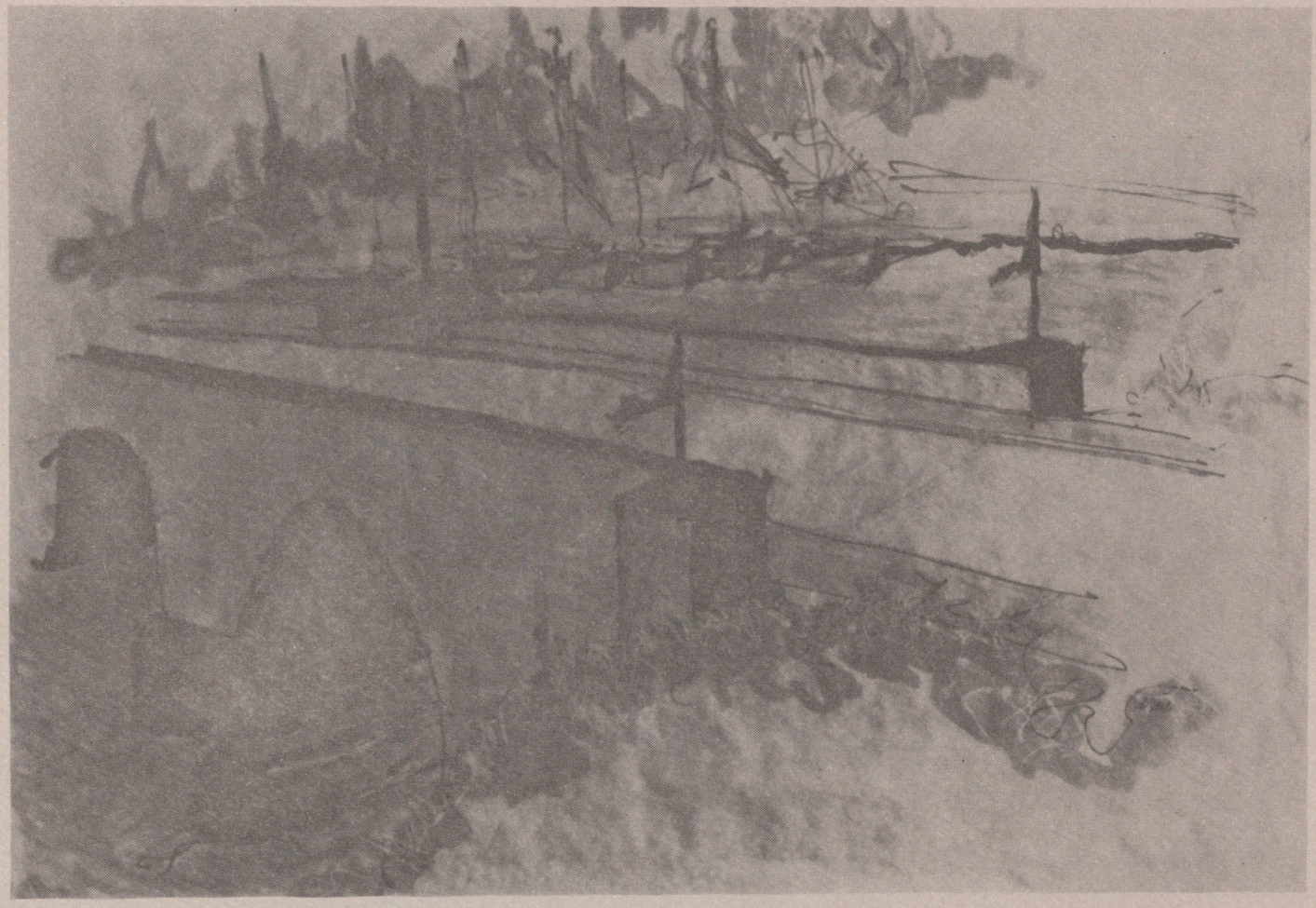
The opportunity to allow the bank on the north side of the river to become a public space would once again modify the overall goal for Grand Bend. This place would be strategic in its placement since it would provide an exciting view along the south bank and to the activity that would take place there. The yacht club, and the fishing area would allow a diverse and ever changing scene.

4. The Pedestrian/Vehicular Bridge:

The bridge, because of its maximum possible height off the river, would only allow power boats to pass under it. The bridge effectively defines the extent that taller boats and sail boats can travel along the river as well as defining a certain space between itself and the river's mouth.

The bridge in the travel sequence, is a transitional element between the commercial downtown and the recreational activity which takes place along the river. From the bridge, a total comperhension of this area of Grand Bend can be understood in its organization. The viewing from the bridge should allow this organization to take place visually.

Because the downtown of Grand Bend is to a great extent, dependent on pedestrian travel, the opportunity to allow the pedestrian to discover the village by foot can occur from Main Street onto Eilber Road, across the bridge, around the Yacht Club and eventually to the fishing area at the mouth of the river. The bridge should allow the pedestrian to use it effectively. A small "viewing platform" could cantilever from the bridge providing the pedestrian with an interesting view along the river.

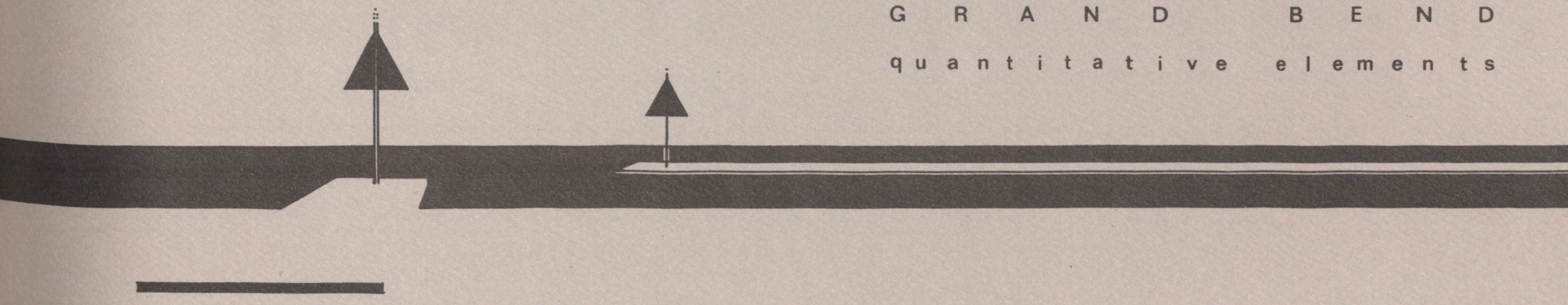


The possibility of a bridge linking Main Street to the south side of the river would unify the two regions.

5. The Termination at the Beach end of Main Street

The importance of further study at the west end of Main Street must be studied to accomplish several important tasks. The descent down Main Street towards the beach allows in a perceptual sense, the space to escape. It doesn't hold the Main Street corridor but allows the corridor to be undefined at the beach terminus. An element that would 'end' the corridor would solve this problem. Because of the proportions of the space combined with the topography, a more or less vertical element is needed. Partial framing of the lake would modify the importance of the lake, therefore the study should focus most of its attention on the east side of the structure. Presently, a public washroom facility is the only structure near the area, and could possibly be incorporated in the scheme.

As well as providing 'ending' to the Main Street axis, the element would serve as a transitional piece between the 2 public areas, the commercial downtown core and the recreational zone along the lake front.



G R A N D B E N D

q u a n t i t a t i v e e l e m e n t s

PROJECTED PROGRAMMING FOR GRAND BEND (within 10-15 years)

		Existing	Needed	Total
A. SEASONAL RESIDENTS				
* (p. 34)	Food Stores: (Grand Bend)	50000 s.f.	50000 s.f.	100000 s.f.
* (p. 35)	Department Store Style Shopping: (Grand Bend)	71000 s.f.	71000 s.f.	142000 s.f.
B. YEARROUND RESIDENTS				
* (p. 44)	Food Stores: (Grand Bend)	10000 s.f.	15000 s.f.	25000 s.f.
	Food Stores: (nearby region)	40000 s.f.		

* (p. 43) Department Store Retail:

	Presently Open Yearround	Spent Outside of Region (55%)	Grand Bend wants all of this Market	Total Exist. in Grand Bend	Total New Req'd in Grand Bend
Grand Bend	15000 s.f.		120000 s.f.	**+45000 s.f.	75000 s.f.
Other Nearby Towns	85000 s.f.	120000 s.f.			
	100000 s.f. represents 45% of total retail dollar				

* Data Extracted from Economic Development Opportunities in the Village of Grand Bend, November, 1983.

** Assume Main Street Commercial District = 50 businesses x 700 s.f. each = 35000 s.f., plus Highway 21 Commercial District = 10000 s.f.
Total Existing = 45000 s.f.

General Conclusions for Grand Bend Development:

1. Existing: Retail in Grand Bend to be redeveloped

   a) Food - 50000 s.f. + 10000 s.f. = 60000 s.f.
   b) Department Stores - 71000 s.f. + 45000 s.f. = 116000 s.f.

2. New: Retail Development in Grand Bend

   a) Food - 50000 s.f. + 15000 s.f. = 65000 s.f.
   b) Department Stores - 71000 s.f. + 75000 s.f. = 146000 s.f.

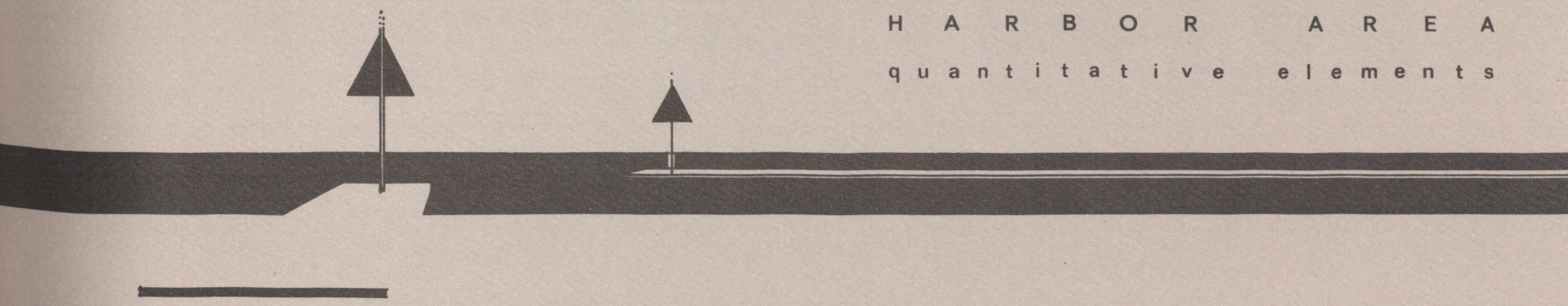
3. Total: Retail Development in Grand Bend

   a) Food - 100000 s.f. + 25000 s.f. = 125000 s.f.
   b) Department Stores - 142000 s.f. + 120000 s.f. = 262000 s.f.

Since these projections for Grand Bend were established ideally for the next 10-15 years, the numbers reflect the eventual number that could possibly exist. It must be also pointed out that the certainty of the method by which the figures were established can be scrutinized. For these reasons, the actual scope for all areas concerned in Grand Bend will be in ratios of eventual figures.

Breakdown of Projected Programming:

	Food	Department Store Retail
Main Street:		
Existing Renovated	5000 s.f.	35000 s.f.
Newly Built	30000 s.f.	75000 s.f.
Total	35000 s.f.	110000 s.f.
Eilber Road:		
Newly Built	5000 s.f.	15000 s.f.
Total	5000 s.f.	15000 s.f.
Highway 21:		
Existing	10000 s.f.	10000 s.f.
New	10000 s.f.	45000 s.f.
Total	20000 s.f.	55000 s.f.
Harbor Site:		
New	0 s.f.	20000 s.f.
Total	0 s.f.	20000 s.f.
Adjacent Downtown Infill:		
New	65000 s.f.	62000 s.f.
Total	65000 s.f.	62000 s.f.
Projected Totals	125000 s.f.	262000 s.f.



HARBOR AREA

quantitative elements

HARBOR AREA PROGRAMMING

All areas are approximate and to be used only for a guideline.

1. HARBOR AREA

   A. Dock Space to accomodate 40 yachts
      - 10 berths for up to 25 foot boats
      - 15 berths for 30 foot boats
      - 15 berths for 30 foot to 40 foot boats
      - small storage areas for each berth

   B. Laundry, shower and bathroom facilites (for docks)
      - 200 sq.ft.

   C. Harbor-Master Building
      - 300 ft. dock space adjacent to building
      - 200 sq.ft. office space (counters, etc.)
      - 100 sq.ft. storage (office supplies,etc.)
      - 200 sq.ft. overnight accomodations for 2 people
        (bed, bathroom, kitchen)
      - 100 sq.ft. storage (equipment)

   D. Boat dock for Transit to Fish Market
      - seating for 20 people waiting for boat
      - 20 ft. dock for 1 boat

The breakdown of spaces in this section for the commercial spaces around the harbor region is a ratio from "Projected Programming for Grand Bend" in the next decade. The amount of space programmed for this first phase of the project is approximately 1/5 of the total projected figures.

A. RESTAURANTS

1 - 2000 sq.ft. higher priced restaurant adjacent to hotel facility
- 1500 sq.ft. seating
- 600 sq.ft. cafe seating
- 500 sq.ft. food prep and storage
- delivery access

1 - 3000 sq.ft. moderately priced restaurant
- 2500 sq.ft. seating
- 1000 sq.ft. cafe seating
- 500 sq.ft. food prep and storage
- delivery access

- space for kiosk type (fast food) areas and seating

B. HOTEL

- 400 sq.ft. lobby space
- 14 rooms each 800 sq.ft.
- 400 sq.ft. for maintenance room, housekeeping
- 100 sq.ft. for electrical, mechanical, telephone rooms, etc.
- parking for 20 cars

C. RETAIL STORES (Yearround Shopping)

- 20 stores each 1000 sq.ft.= 20,000
- delivery access for each
- nearby parking for 100 cars

D. AREA FOR ARTISTIC PERFORMANCES (Huron Country Playhouse)

- Can vary from formal stage/seating arrangement, ie. amphitheater and stage to a more informal arrangement, ie. where the space opens up enough to allow this to occur.

E. OFFICE SPACE

- 6000 sq.ft. of office space
- 75 parking spaces for employees
- 25 parking spaces for visitors
- 500 sq.ft. mechanical, electrical rooms, bathrooms, circulation

2. OTHER FACILITIES IN GRAND BEND

A. FISH MARKET (Existing, Renovations and Upgrading)

- existing docks for fishermen
- existing fishing buildings
- new "market and restaurant area" (to be determined later)
- new docking facility for seasonal crossing from main harbor
- parking (to be determined later)

B. RESTAURANTS (space required will be determined later)

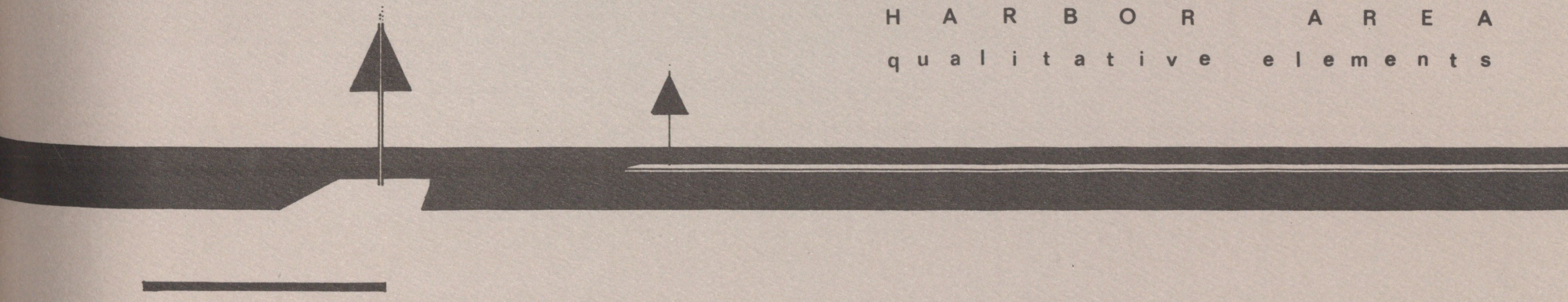
- restaurant space
- parking
- delivery access

C. FOOD SHOPPING

- 110,000 sq.ft. of new food shopping
- parking
- delivery access

D. GENERAL MERCHANDISE SHOPPING

- 217,000 sq.ft. of new general merchandise style shopping
- parking
- delivery access



HARBOR AREA
qualitative elements

ARCHITECTURAL IMAGERY

Comparative Analysis Between Main Street and the Harbor

The extension of Main Street terminated by the harbor region suggests somewhat of a continuation of architectural vocabulary onto the harbor site. Several characteristics, unique to each, exist however which would dictate vocabularies that differ because of site.

Main Street, characterized by small, simple wood structures will not be able to undergo the transformation from a summer season useage to a yearround useage without altering the architecture to some degree. The exact character cannot be determined. But an overall character of the entire street can be found that will not alter significantly. The volume of space created by the street in its linear manner will not change. The dense forest of deciduous trees bordering the public zone will also, not change. The fact that Main Street is protected from the Lake by its location as related to the lake will not alter.

The harbor site portrays a distinct opposite to the Main Street corridor. On an open beach site without the protection of the dense forest from the winds and blowing sands, the harbor cannot assume the exact vocabulary of architecture that exists on Main Street.

The Harbor

The importance of where water meets land indicates an architecture of unique character. This combined with the strategic natural positioning of where the river flows into the lake justifies this unique character as well. Because the level of the Great Lakes cannot always be determined from year to year because of the amount of precipitation that occurs annually, the need to "lift" the complex up from the sand is required. This level change can be a significant architectural element if a "deck" vocabulary is used. The deck can be useful for space defining of differing spaces by level change. If altered appropriately, a continuation of the existing vocabulary of architecture that exists presently along Main Street would help unify the two spaces.

CHARACTERS OF INTERIOR SPACE WITHIN THE HARBOR AREA

A. RESTAURANTS

The 2 major restaurants proposed for the harbor area, one with moderately priced food and the other with a higher price food value, will each display different characters, adjacencies, views, and overall general qualities relating to the intended user.

Restaurant #1 - Higher Priced Establishment:

The overall character for this restaurant is one intended for the anticipated user to the Grand Bend area from a higher income bracket. This could include the transient boaters who stay in Grand Bend for the night as well as regional residents from Grand Bend or nearby areas who simply wish to dine at a restaurant of a higher quality that presently does not exist in the village. Because the theme for Grand Bend relates to the idea of returning to the waterfronts within the village, the restaurant should emphasise this idea through orientation, views and general interior character of space. For this reason, the exterior cafe seating can be an extension of the interior space and focus its views on the waterfronts. Its location could be in a situation where the restaurant overlooks the harbor-front activity, yet is not really a part of the activity.

Restaurant #2 - Moderately Priced Establishment:

The intention for this restaurant is to provide services to the general public using the harbor front facilities. Its focus therefore will be directed towards this activity. Users range from shoppers, workers, sightseers, boaters or general public who wish to eat at a quality but moderately priced restaurant. The outdoor cafe can extend the interior space outdoors allowing a visual participation to take place between the restaurant and activity and visa-versa. The food smells from the restaurant's cafe also adds another sensory characteristic for the adjacent harbor front activity.

A Number of Small Cafe Style Restaurants:

Small but quaint, these restauranting establishments can also offer services for the users of the harbor front activity. The model of "deli-restaurants", projects the intent of character for these. Exotic smells, tastes, colors and vocabulary for each add to the sensoral activity of the harbor area.

Kiosk Style Food Stands:

Provision for kiosk-style fast food stands bordering the harbor front activity is also needed. Smell, color, texture and unique distinction of place provide a memorable experience as well as providing the harbor front and adjacent beachfront with a necessary service.

B. BAR/LOUNGE

A place where alcoholic beverages can be served is also needed. Users will range from the area's employees, office workers, shoppers, people using the public beach, to the yachtsmen discussing his sailing experiences with other yachtsmen. Several focuses should be established, each relating to different areas adjacent to the tavern; the harbor front activity, the boaters, the beach front area. Therefore, many characters of space within the bar should exist for each individual focus, yet still maintain a continuity in character throughout. Live music during the evenings can provide a reason for using the harbor front after hours. This facility could possibly be integrated into the moderately prices restaurants.

C. HOTEL

Grand Bend's intention for becoming a place of yearround destination should be reflected in the harborfront's hotel facility. Focused on the activity of the harbor as well as the lake, each room should take advantage of such a diversification of spaces. The proximity of several necessary ancillary spaces helps to define the harbor area (and thus Grand Bend) as a place of destination with easy

access to recreation, shopping, office, space, restaurants and the remainder of Grand Bend.

D. RETAIL STORES

Yearround shopping along the harbor front not only provides the necessary retail space needed for Grand Bend, but also allows the retail space from Main Street to extend to the lake shore. Because of strong winter winds off of Lake Huron, an indoor mall should organize the separate stores, allowing convenience from the inclement weather. The sense of exterior space adjacent to the mall should however, be strongly evident. The possibility of a "removable" interior mall that could be dismantled during the summer leaving only a covered arcade used for summer expansion of merchandise should be considered. The type of merchandise sold in the stores may vary from specialty boutiques to more practical everyday items.

E. AREA FOR ARTISTIC PERFORMANCES

Intended to bring necessary cultural activity found in any town the same size of Grand Bend, the area will be used primarily by the 'Huron Country Playhouse' as a promotional 'stage' for the main playhouse. Any group can however, utilize the space for entertainment purposes. Located adjacent to the main pedestrian corridor around the harbor, it adds to the variety of activity, present on the harbor. Simple seating, in an amphitheater fashion, can help define the space from the main pedestrian path. This area can vary from an impromptu stage that could occur anywhere to a designated place, like an amphitheater.

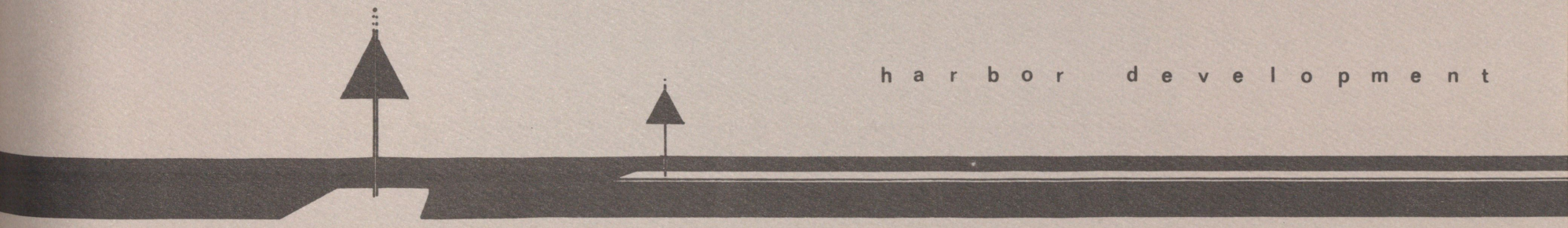
F. OFFICE SPACE

The need to provide Grand Bend with adequate office space as well as bringing another type of user to the harbor makes the area useable in a yearround sense. Flexible office arrangements with a well defined and articulated entry to the lobby/circulation space must be easily identifiable and accessible to the clients of leasors of the spaces. A variety of visual links from individual office spaces to

the adjacent beach area, harbor area and the lake would allow the utmost flexibility in preference of exterior views from the offices.

G. THE HARBOR MASTER BUILDING

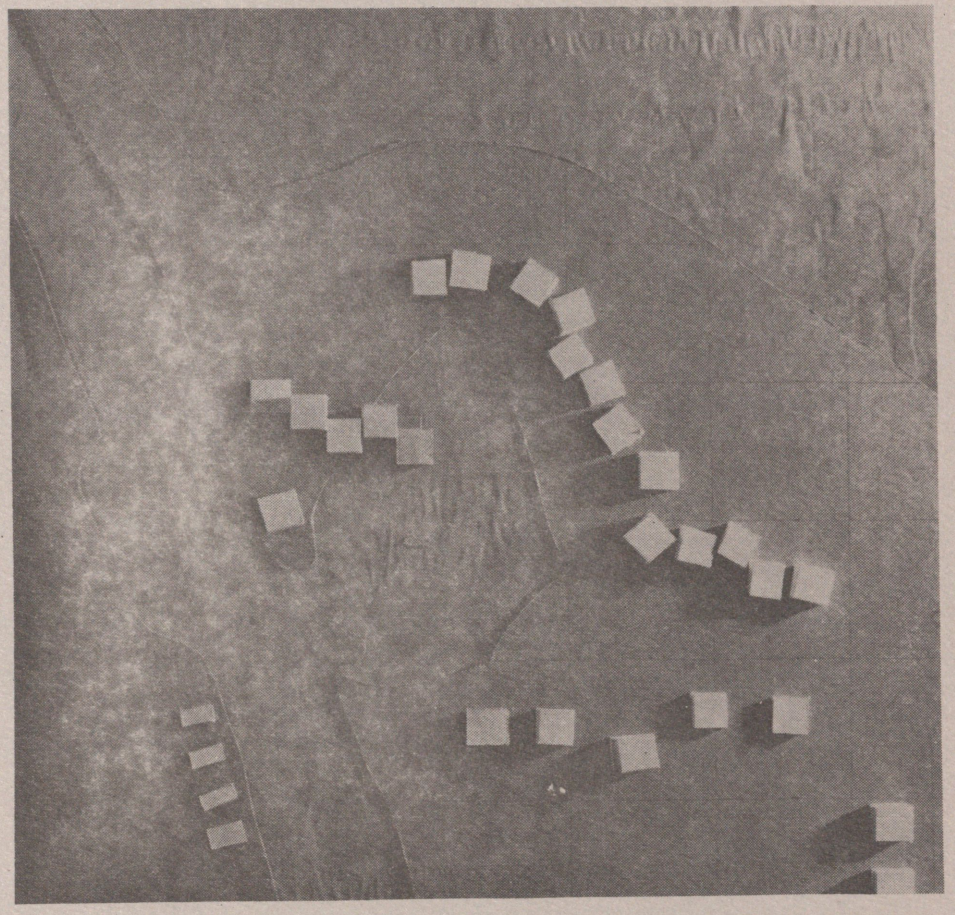
Visually, a prominent feature along the shore from the lake, the harbor building helps to identify the entry point to Grand Bend. Public interior spaces should reflect Grand Bend's intention to welcome visitors, with information about Grand Bend easily accessible to the visitor.



harbor development

PRELIMINARY SITE INVESTIGATION

The initial concept of the building forms huddled around a bay configuration was explored. Imagery of the planning from Mediterranean villages was utilized.

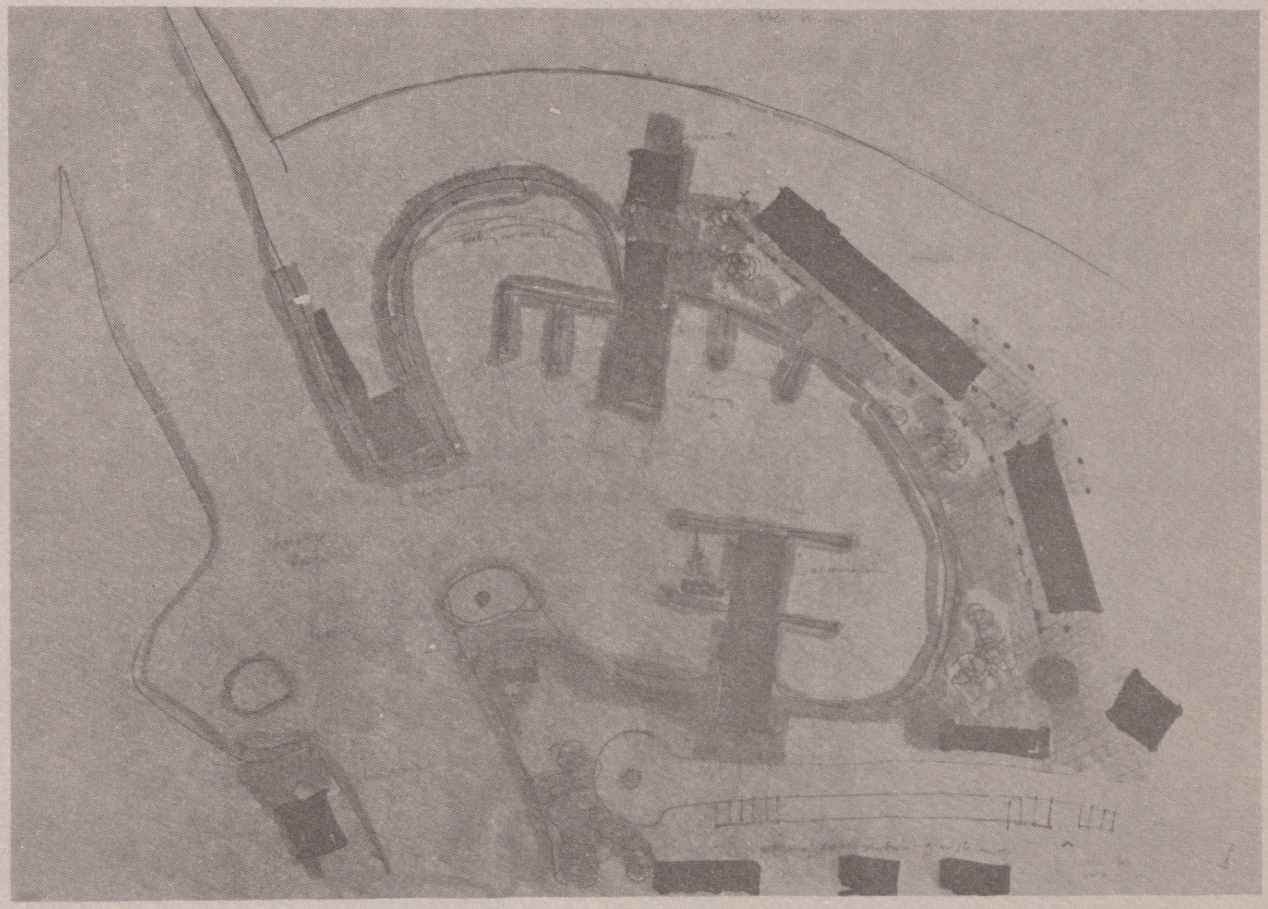


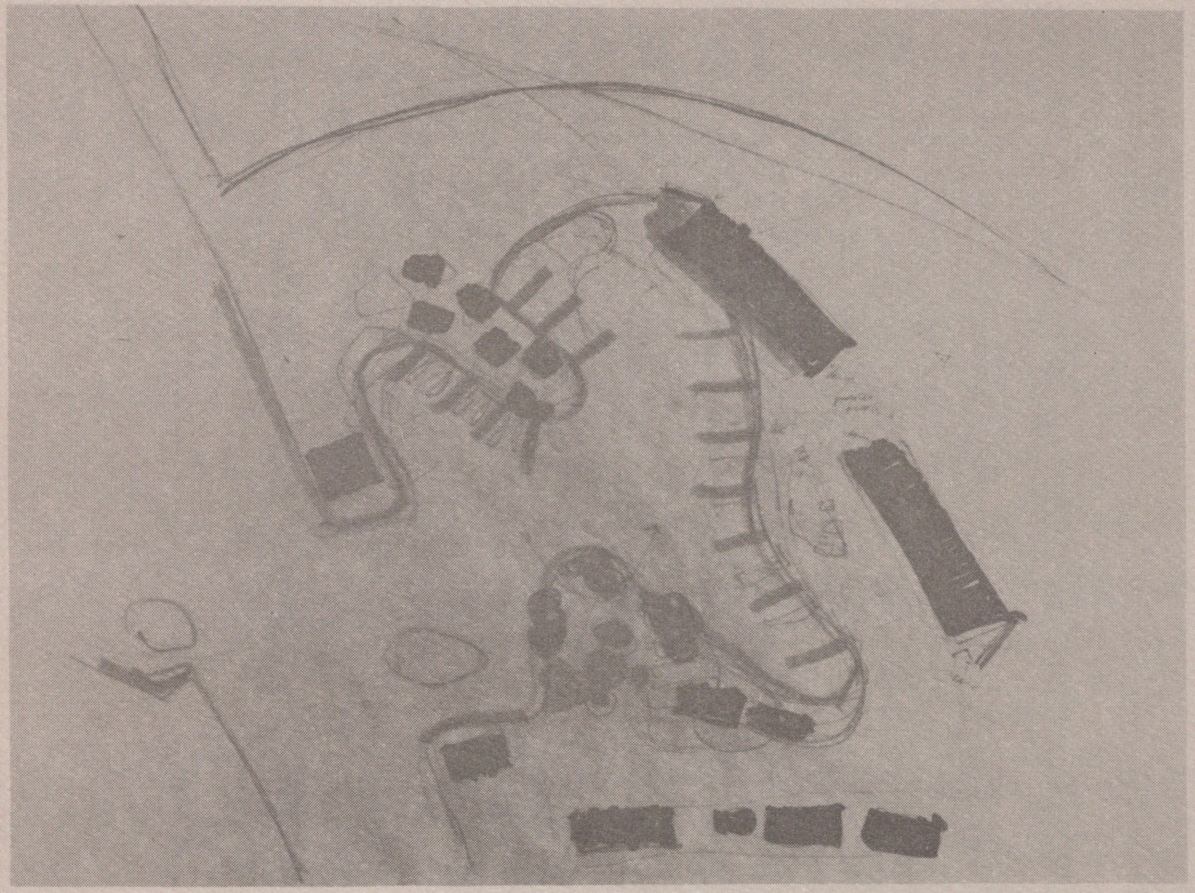
HARBOR/BUILDING FORM DEVELOPMENT

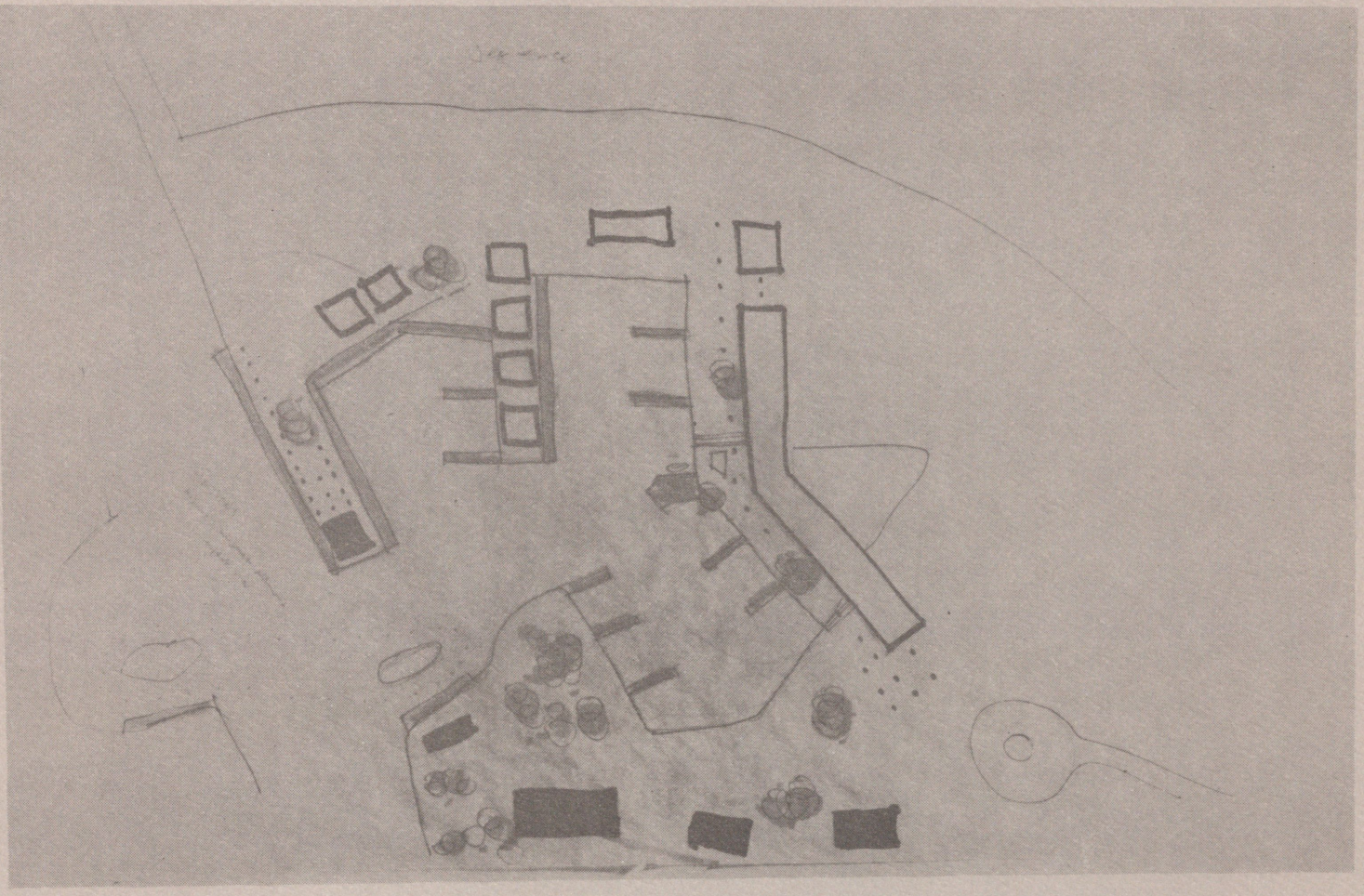
Initial strategies of site development attempted to design the harbor in a very natural manner with irregular curves and shapes. The building structures were placed in a more regular grid fashion responding to the dual grids created by the village and the minor axis created by the north pier. The axis and eventual development of a cartisian grid from it created patterns of space that continually changed when juxtaposed against the irrigular harbor form.

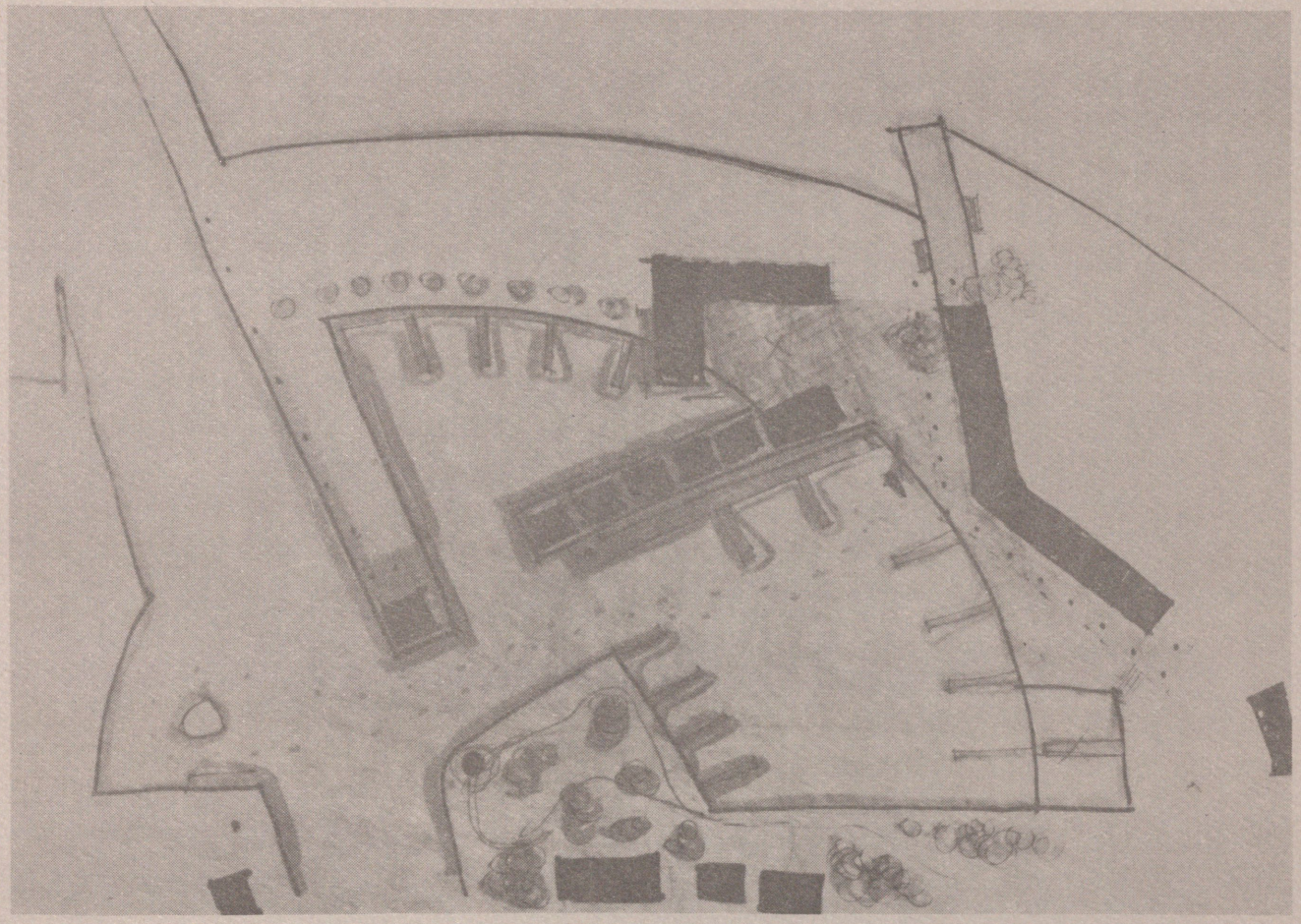
Further development of the harbor/building form required a harbor configuration that was less erratic and had more meaning. A mild arc was established from a point near the entry of the harbor. This point, along with the harbor-master building on the opposite side of the entry created a more understandable solution to the spaces. A very strong axis from the harbor-master building, though the complex and out towards the lake divided the complex into 2 major spaces.

An architectural vocabulary was derived that could accomplish resolving many issues. The architecture would respond to the existing building vocabulary presently in Grand Bend. Simple gabled, wood structures with vertical wood siding and white trimmed windows and mullions defines the existing vocabulary. This simple gesture would allow the "familiarity" of Main Street Grand Bend to continue at the harbor site. But the exact replication of existing building forms is not significant nor is it necessarily a contribution to architecture. Detailing with each structure would then have to be explored to develop a unique and appropriate architecture.









RATIONALE IN DETAILING

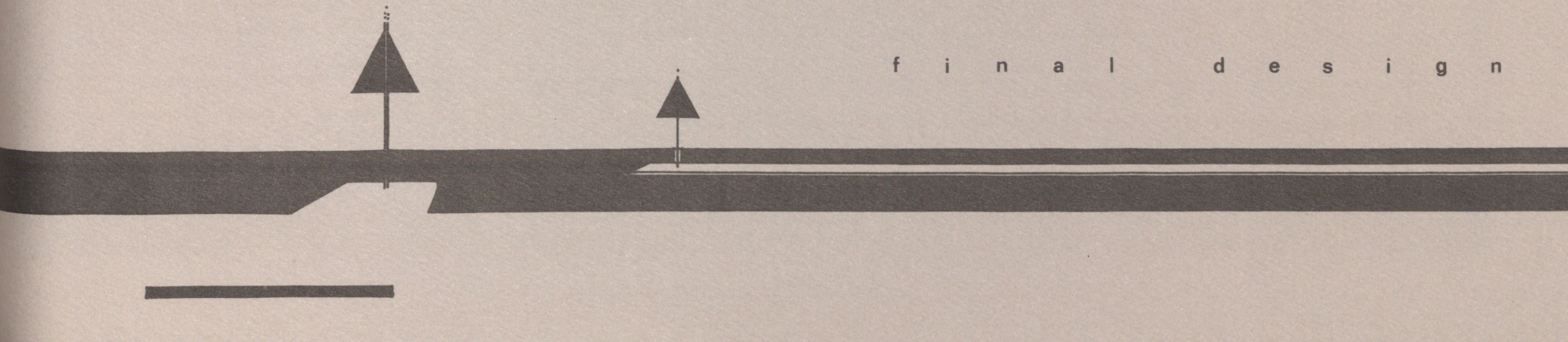
An analogy of two major forces that have shaped the complex was established, based on the original theme.

The first dealt with the force created by the arc or wave in the harbor. This force was then allowed to make its presence felt periodically within the complex by utilizing the same radius point, but altering the radius.

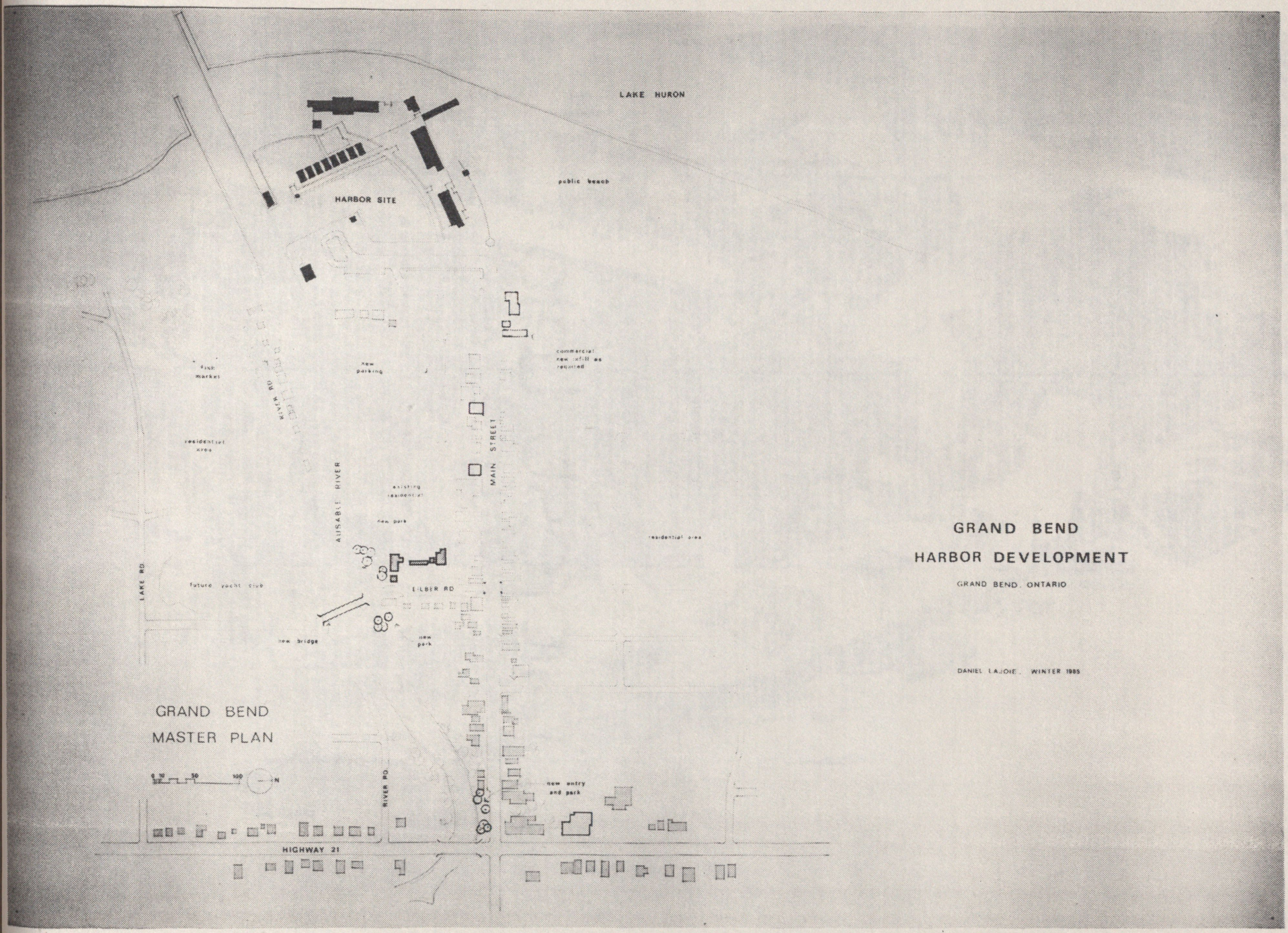
The second was created by the force of the lake's edge as well as the prevailing winds from the lake. It's character differs also in form from the previous force. A straight line stands up to these forces. It also is allowed to be felt on the architecture within but with more caution.

Both forces have architectural significance in that they define major circulation within the complex as well as in the buildings themselves. The altering of wood siding from vertical to horizontal, color change, and enlarged white clad windows are the tools used to acknowledge these forces on the architecture.

The "simple" architecture described previously has now been transformed to become a unique statement in a unique context.



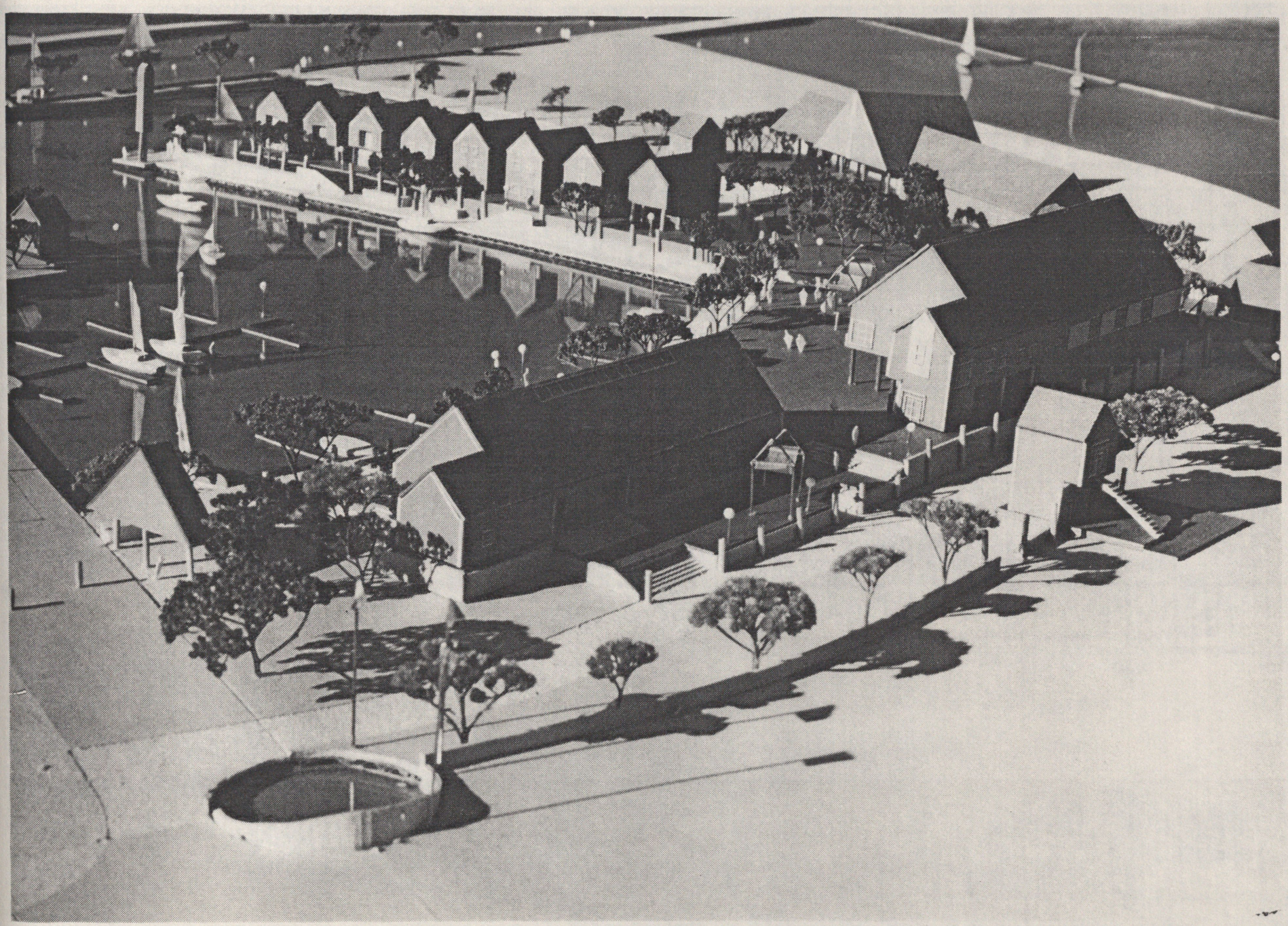
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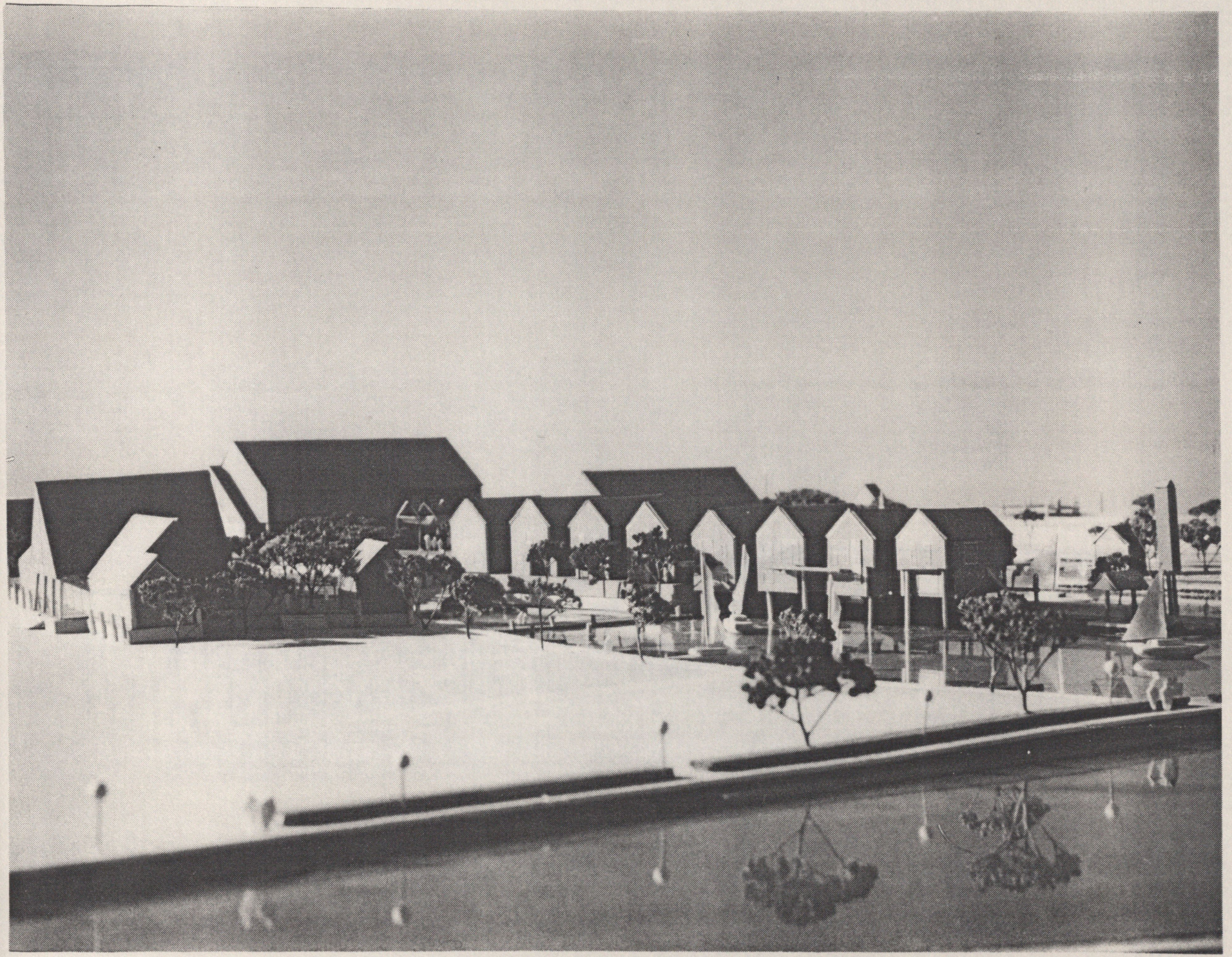
GRAND BEND
HARBOR DEVELOPMENT

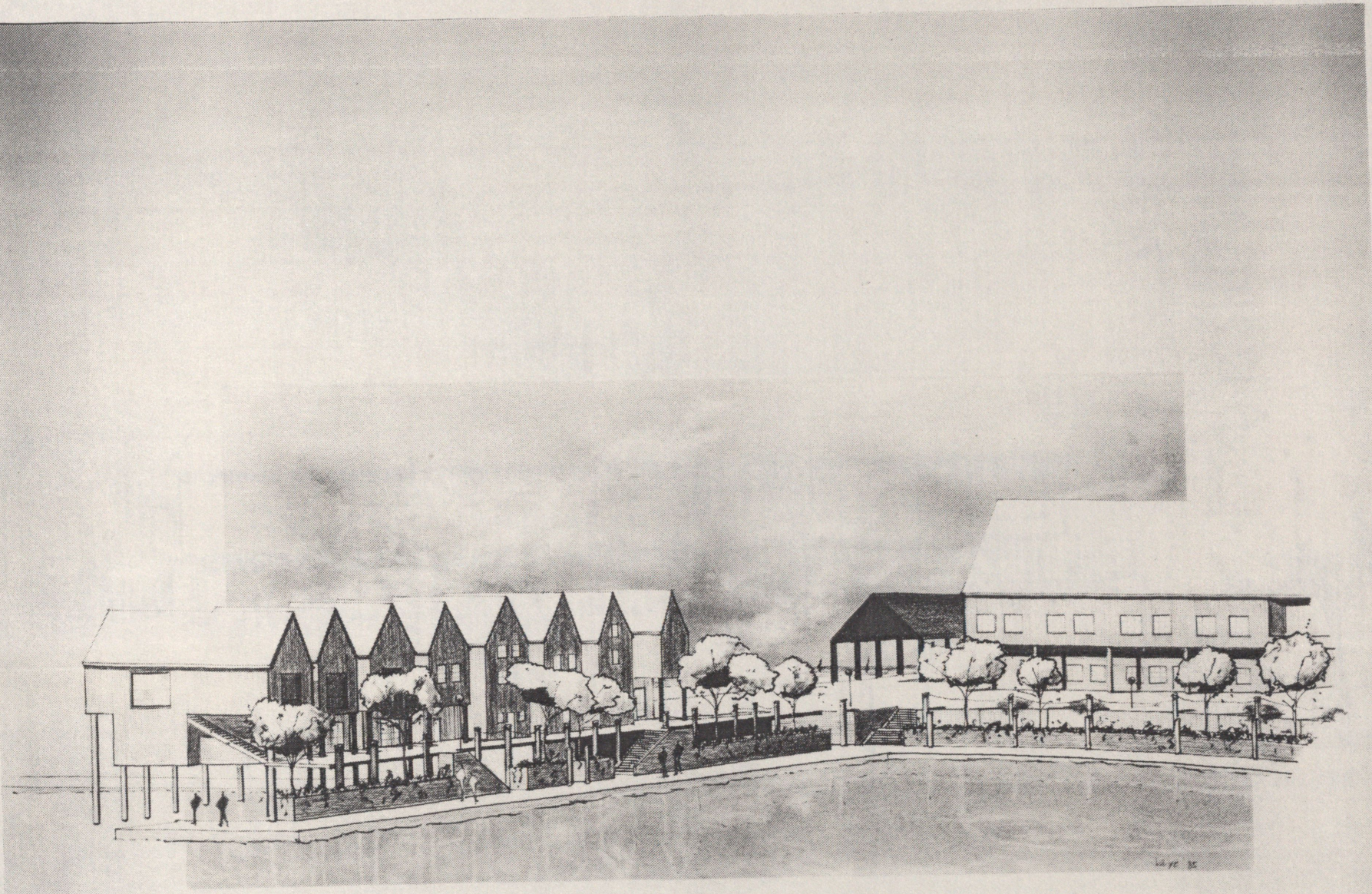
GRAND BEND, ONTARIO

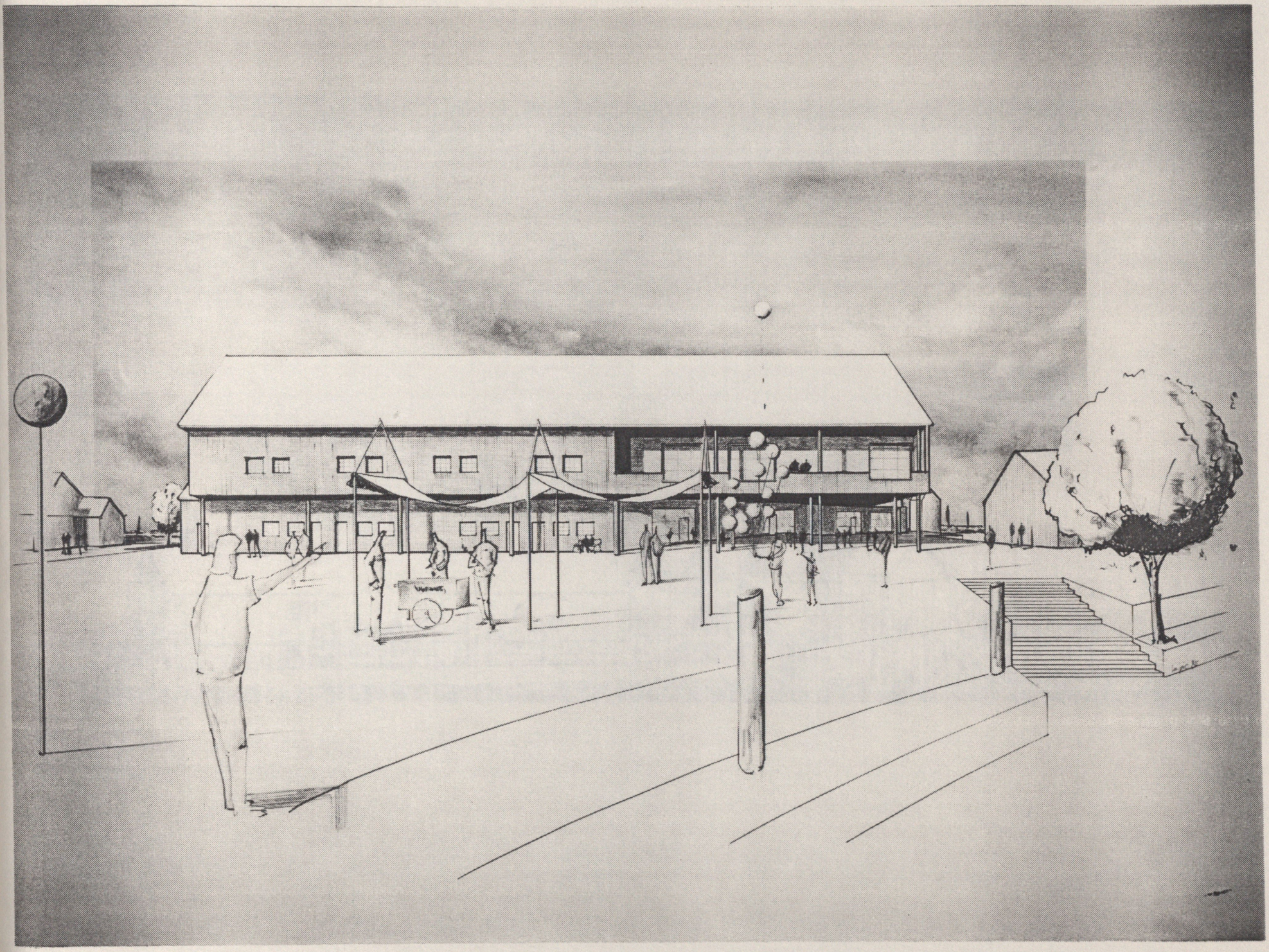
DANIEL LAJOIE, WINTER 1985

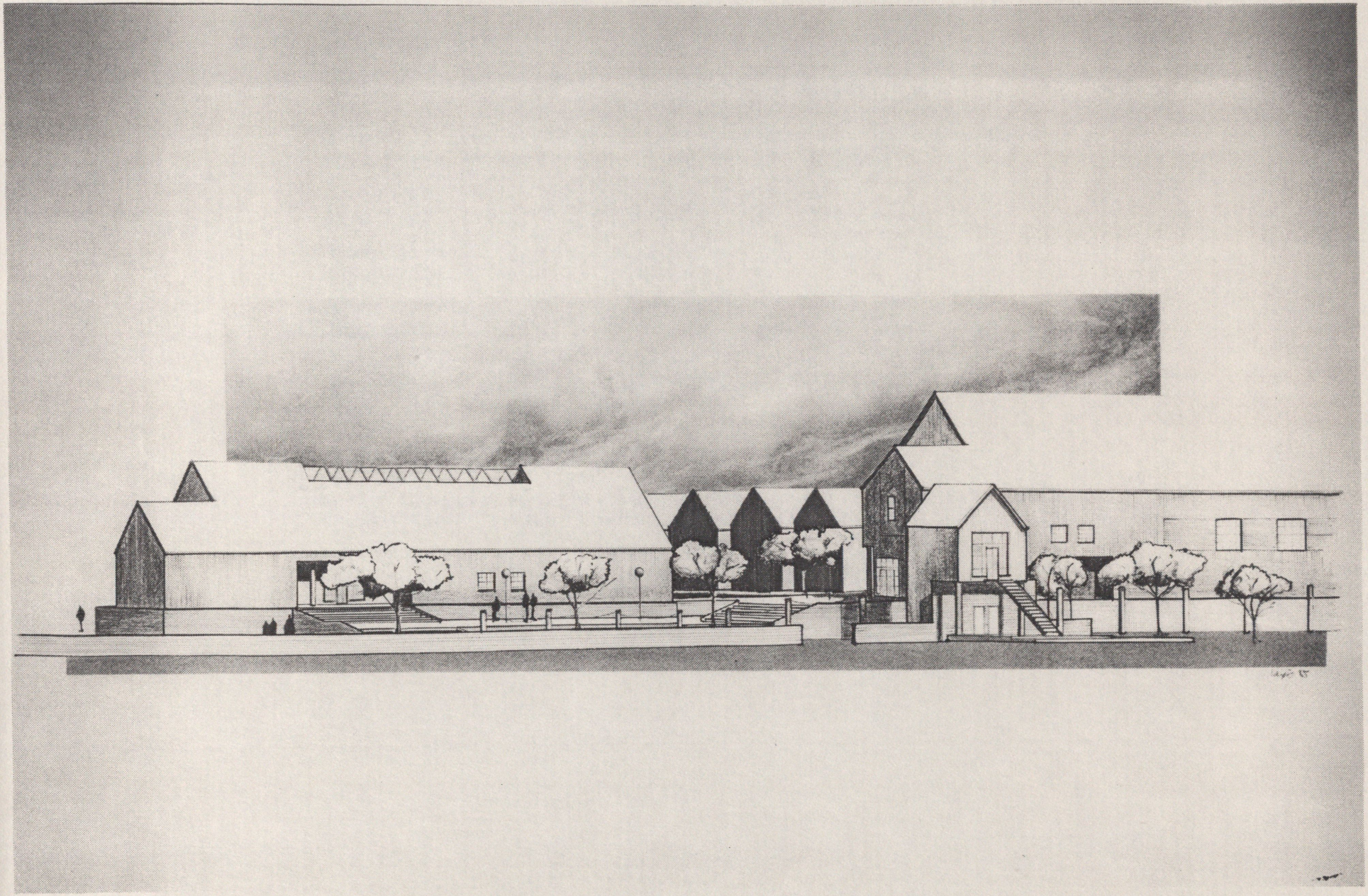












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