A PROPOSAL FOR FUTURE OUTDOOR RECREATIONAL FACILITIES IN GRAND HAVEN, MICHIGAN

A Comprehensive Problem Report

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1963

A PROPOSAL FOR
FUTURE OUTDOOR RECREATIONAL FACILITIES
IN GRAND HAVEN, MICHIGAN

BY

HILLAR JOHN FALK

A COMPREHENSIVE PROBLEM REPORT

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1963

OUTLINE

FOREWORD

Recreation is of vital necessity today. Particularly in the last year, we have been urged over the television and radio to become more physically fit; to get out and build ourselves into stronger, healthier beings.

Our schools are now required to offer a sound recreation plan for physical fitness, and our children are being taught how to use their muscles to become agile, healthy and strong.

Adults are suddenly finding it important as well as enjoyable to hike. Some have even gone so far as to hike 50 miles in a single day to prove that they are physically fit.

With the automation and mechanization of industry, there has been a definite change in working trends. Today there are shorter work hours and longer vacation periods than ever before. Because of these changes, there is a great need for a sound recreational system to meet the pace of modern living. A recreational system must be designed to meet the demands of recreational activities for adults as well as children.

It is because of the timeliness and vital importance of this issue that I have chosen the subject of recreation. I have chosen the City of Grand Haven, Michigan in which to center this recreation issue because it is a city attracting more and more permanent residents and vacationers with its

ideal location on the Grand River and Lake Michigan, and its industrial, commercial, and economic value. Therefore, it must have adequate recreation facilities to accommodate this influx of people presently and in the future.

I. INTRODUCTION

"There was a time when life was rugged and hard. People did not expect leisure. First it was something high in the sky that seemed to be man's only respite from the rigors of life. Then people looked forward to a period of retirement, then to vacations, then to week ends, and finally to leisure hours within a day. If recreation is to make its complete contribution to life, it will need to consider the wholeistic approach to life and to help fill all of life with zest.

One is re-created through recreation. However, work too is often regenerative. Both are important functions in life. In various things we do, in both work and play, we experience regeneration of spirit and body and thus, find ourselves more capable for all of life. It is not enough to struggle through life for a happier existence by and by. What I wish for myself and believe others wish for themselves is an all-pervading zest for life--each task preparing for those to come--regenerative living."

The development of publicly owned and used parks and recreation areas is a relatively recent idea. In the early days of the Egyptians and Romans, the hunting preserve was what we would now compare to a park. But the setting aside of open spaces for the use of all people was a practice introduced

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Donald Howard, Dean of the College of Social Work, University of California at Los Angeles, Recreation Places, Wayne Williams.

during the industrialization period. The early parks and gardens in Europe were developed solely for the use of royalty. These parks were placed on a scale of axial relationships which consisted of clipped trees and shrubbery, and elaborate use of water displays.

By the latter half of the eighteenth century, England developed a park and garden character of its own which influenced the Continent of Europe. The English were more active than the people of southern countries and preferred greater spaces for exercise. The gardens took on the appearance of informal walks and plantings.

At the end of the eighteenth century, English estates were developed with an informal manner of natural landscapes and native shrubs and trees. At this period came the ascendancy of the common man and a transfer to informal living. The changes were even reflected in the design of gardens. The use of parks was now available to the poorer classes of people for leisure hours away from the daily strain of poorly lit and inadequately ventilated buildings in which they toiled most of their lives.

"With the increasing urbanization and industrialization particularly in America, the great masterpieces of idealized rural landscape created by Olmsted and other pioneers in park building had, in many instances, been transformed from places where city dwellers could secure the genuine recreation coming from the peaceful enjoyment of an idealized rural landscape to active recreation areas. Broad, open meadows had been appro-

priated for golf or baseball diamonds; the swift moving automobile had usurped the pleasant carriage driveway, destroying restful atmosphere of the area."

To accommodate the automobile traffic which began to dominate the urban scene, streets were constructed at a fast pace directly in front of dwellings and through forests and parks, destroying the natural beauty and creating hazards to pedestrians.

At this time, parkways and boulevards were introduced to separate pedestrians from traffic, and further, to divide congested streets from the homes. The parkway, an extension of a park, serves to attract passing motorists as well as provide safe pedestrian routes and divide traffic from housing units.

"Both Eliot and Olmsted recognized that the supreme functional use of parks was for the recreation of the people, but the type of recreation they advocated was of a passive and semi-active kind, the dominant ideal being peaceful enjoyment amid beautiful surroundings of a naturalistic kind. There can be no doubt that this conception was fundamentally sound then, especially as applied to city dwelling people. It is of even greater importance today as cities have grown larger and the stress and strain of living have become greater. The life needs of people which can be expressed in their leisure are far wider than those comprehended in early conception, and a wide range

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L. H. Weir, The Changing Concept of Parks, 1926.

of active forms of recreation have come to be included, such as areas devoted more or less exclusively to playgrounds, playfields, athletic fields, stadiums, neighborhood recreation parks, swimming and boating centers, golf courses, boulevards and parkways."

L. H. Weir, The Changing Concept of Parks, 1926.

II. SCOPE OF STUDY

The following pages consist of a comprehensive problem of developing a sound, justifiable, and accurate system of public open spaces for recreation in relation to the physical aspects of Grand Haven and its neighboring areas. The problem also includes a plan for a man made means of approach to the city which will better serve the growing population.

The study deals with the deficiency in the present outdoor recreation system and a proposal for future additional recreation facilities based on certain national and selected municipal standards in regard to their size, location and function for recreation activities. The standards are adjusted to meet Grand Haven's present and future residential needs and to attract more visitors to the area.

Further, this study is not solely based on needs for outdoor recreation, but it establishes a way in which recreation and modern progress in highway building can be coordinated into one useful and successful function, and if carried out, can benefit both needs.

With the increasing population demands for better and faster highways in Michigan, the Highway Commission is constantly faced with the problem of locating new highways which will accommodate the increasing population. In the case of Grand Haven, the highway department has presently prepared plans for an interstate highway along Lake Michigan through Holland and Grand Haven to Muskegon on presently existing U.S. 31, however,

it has yet to develop a successful way to serve Grand Haven.

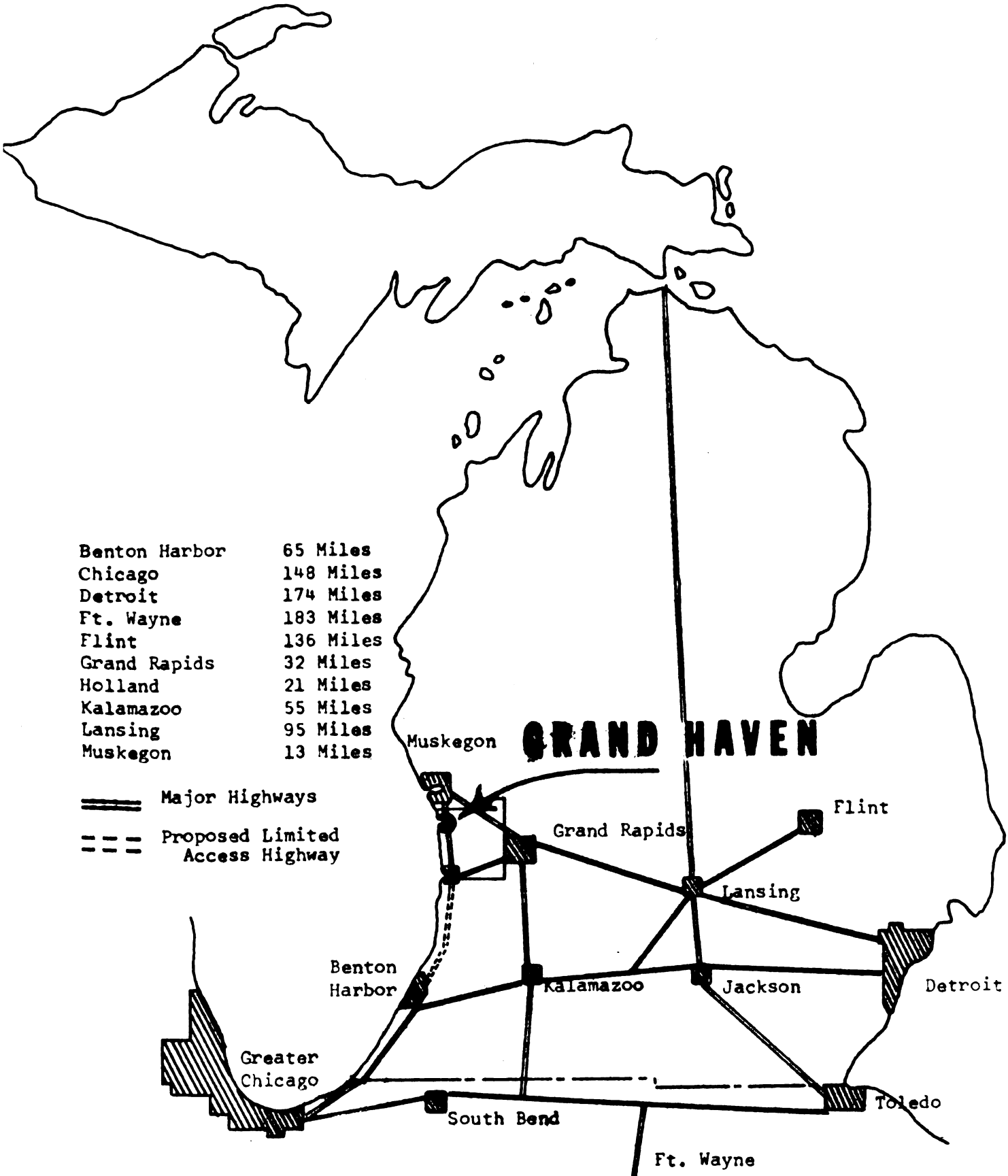
The study also reveals a successful plan by which the interstate highway and adjacent recreation land can be combined to benefit each other. The proposed highway is left at its present location on U.S. 31, but upon its entrance into the city, it is proposed to be elevated to allow the land under the highway to be used for recreation purposes. By establishing the recreation land adjacent to the highway, it will help to buffer the highway's appearance and provide unused right of way for recreation purposes.

III. BASIC GEOGRAPHICAL DATA

Location

Grand Haven and the surrounding area is located on the western side of the State of Michigan in Ottawa County, and is ideally situated next to Lake Michigan and the Grand River. It is easily accessible by varied means of transportation on water, air and land. It is particularly well situated for automotive transportation as it is located within a few miles of a major interstate highway which serves Detroit, Lansing, Grand Rapids and Muskegon. Because of its location on Lake Michigan and the Grand River, it is easily reached by boats for both in-state and out-state travelers. To meet the demands of those traveling by plane, Grand Haven serves its visitors and residents with a nearby airport.

REGIONAL LOCATION

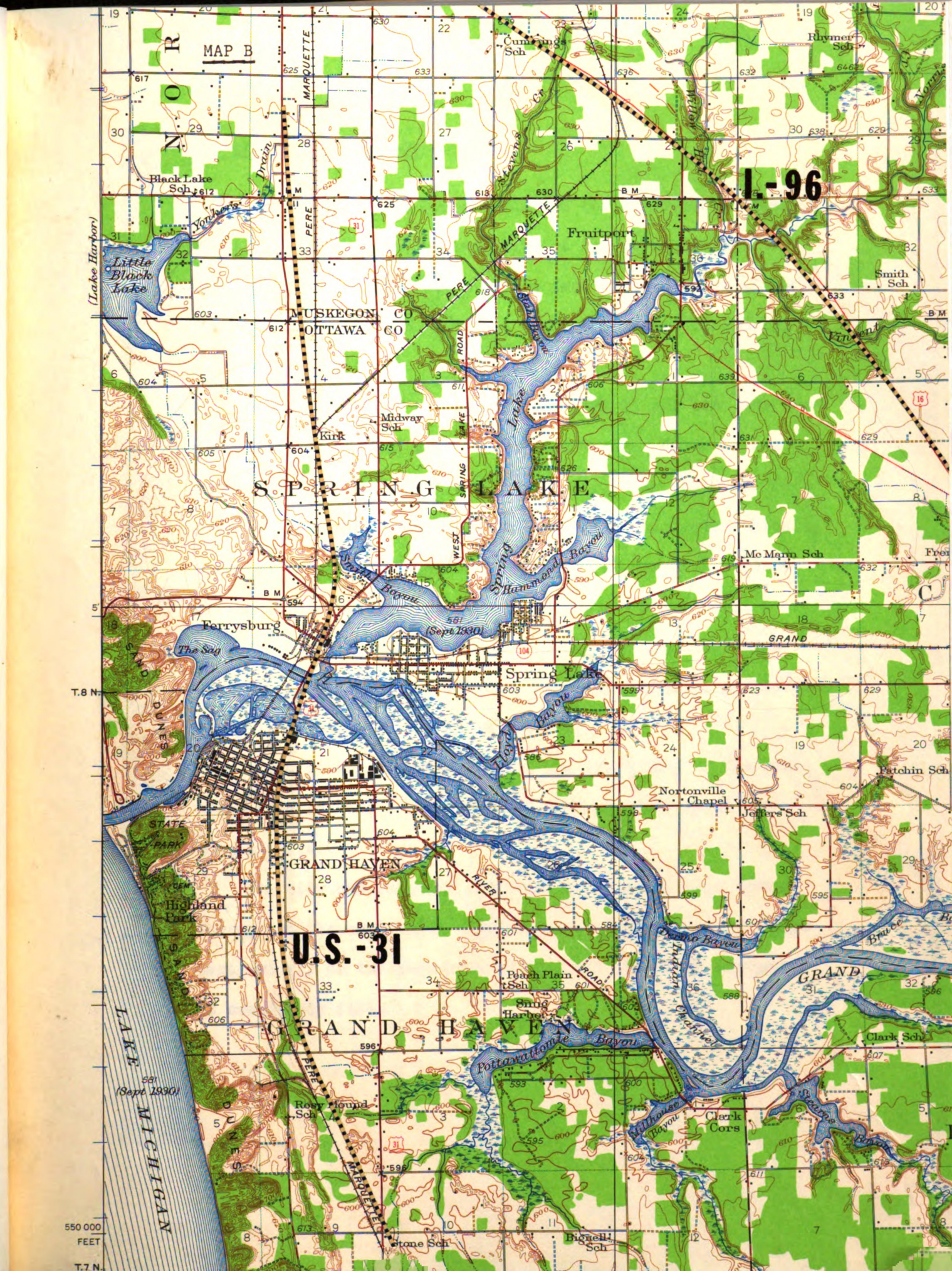


Tri-City Location

The Tri-City area, composed of Grand Haven and the villages of Spring Lake and Ferrysburg, form where the Grand River and Spring Lake meet. On the south side of Grand Haven is the incorporated village of Spring Lake, and on the northern side is the unincorporated community of Ferrysburg. The unique part of the Tri-City area is that the communities are marked by physical boundaries rather than the blending of one urban area into another. The Grand River is also the boundary line for Grand Haven Township. These areas are connected by bridges, and the land connection is relatively new.

The three urbanized communities of the Tri-City area are markedly different in land use patterns. The City of Grand Haven, consisting of approximately 5.5 square miles, of which 3,410 acres or 5.4 miles comprise land area and 35 acres or .05 miles comprise water area, has important industrial units and commercial development for the resort trade. Its residential section is middle class with the most expensive housing on the west side of the city, and the newer housing being built near its southern boundary. The Village of Spring Lake has some commercial establishments and considerably good residential development with many of the area's newer homes on its eastern boundary. The community of Ferrysburg is a mixture of land uses, many markedly incompatible with each other. As part of the township area, it has not been subject to building and zoning restrictions until just recently. It has a few bulk

storage facilities, some shops, and several small industries. On its fringes, are many summer cottages. To the west of the Ferrysburg community and north of Grand Haven is a small section known as North Grand Haven which is located on Lake Michigan. This was part of the original settlement in the area. It is now a small collection of well built summer houses with many year-round residents. These residents are a short distance by water from the city, but are five to six miles away from the city by automobile. As a result, although they pay city taxes, it is difficult to provide them with some of the city's services, such as fire protection, parks and schools.


MAP B
I-96
U.S.-31
MUSKEGON CO
OTTAWA CO
SPRING LAKE
GRAND HAVEN
Fruitport
Ferrysburg
Spring Lake
Grand Haven
Nortonville Chapel
Jeffers Sch
Patchin Sch
Mc Mann Sch
Smith Sch
Rhymer Sch
Cummings Sch
Black Lake Sch
Midway Sch
Kirk
Peach Plain Sch
Smug Harbor
Rosy Mound Sch
Stone Sch
Bignell Sch
Clark Sch
Clark Cors
Highland Park
STATE PARK
Little Black Lake
(Lake Harbor)
LAKE MICHIGAN
(Sept 1990)
The Sag
Spring Lake
Hammond Bayou
Grand River
Pottawattomie Bayou
Mill Channel
Mill Channel Bayou
Mill Creek
Bayou
Stevens Cr
Mill Creek
Norris Drain
Black Lake Drain
Youker's Drain
MARQUETTE
PERE
WEST SPRING LAKE ROAD
T.8 N.
T.7 N.
550 000 FEET

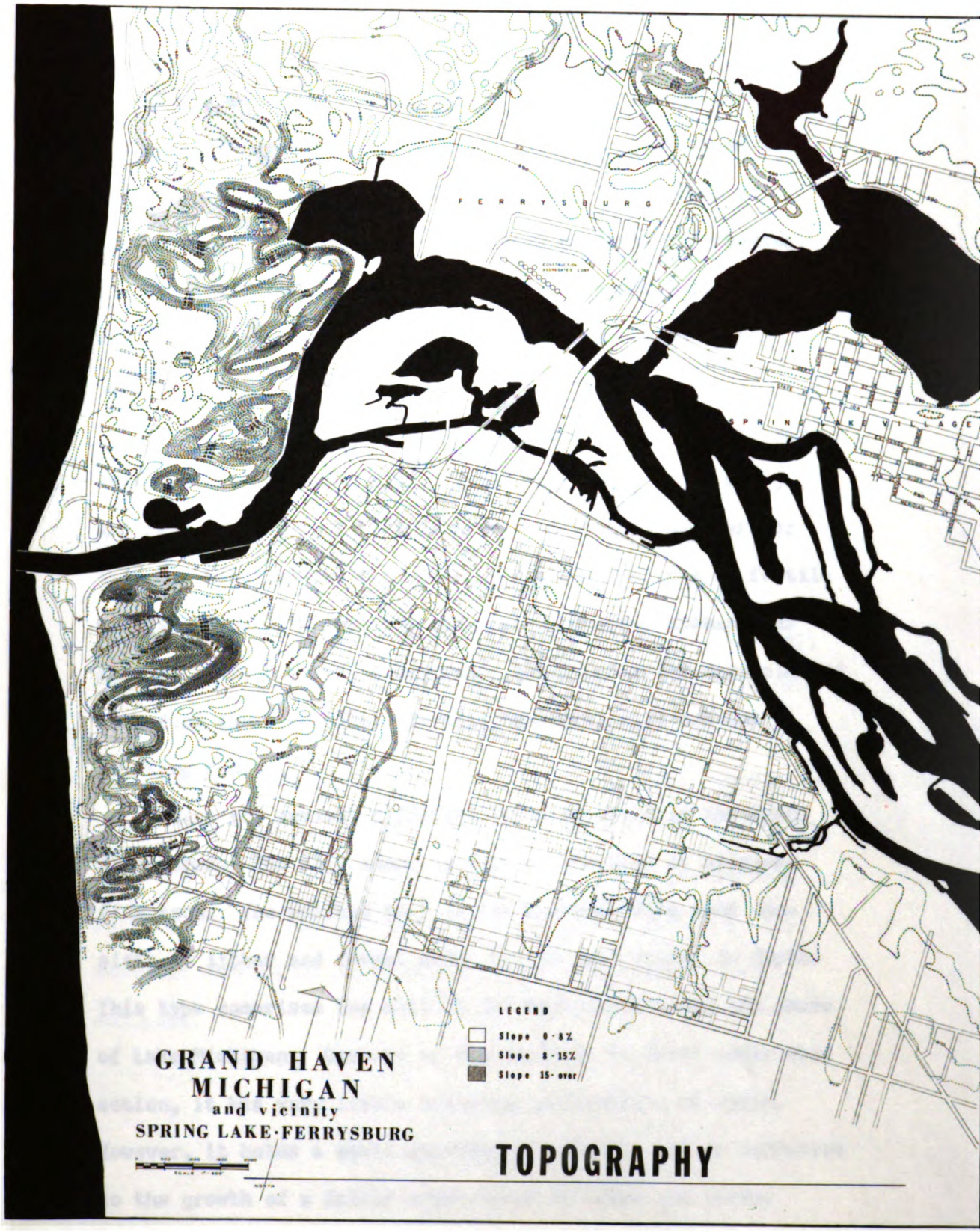
Topography and Drainage

The topography of Grand Haven and its surrounding areas is essentially flat with the exception of the west side of town where the vertical elevation varies from the elevation of the shore of Lake Michigan (580 feet above sea level) to 100-150 feet above lake level.

Lands which have a slope of less than 15 per cent are considered desirable for most building purposes. Areas having slopes of less than 8 per cent are particularly desirable for residential areas, commercial and industrial purposes. Sloping areas of more than 15 per cent and up to 20 per cent present difficulties in building, although there are a few small structures present on the land. Any areas which slope more than 20 per cent are not used for building purposes, particularly if such slopes are on sand dunes.

Areas of any elevation at all are found only on the west side of Grand Haven, and these are made up entirely of sand dune material.

The city has recently completed a storm drainage system throughout the area which eliminates any accumulation of water particularly on the east side of the city where the topography is completely flat.


FERRYSBURG
LEGEND
Slope 0 - 8%
Slope 8 - 15%
Slope 15- over
GRAND HAVEN
MICHIGAN
and vicinity
SPRING LAKE·FERRYSBURG
TOPOGRAPHY

Soil and Subsoil

Between 1850 and 1890, most of the best timber land was stripped off by timber industries. As soon as the land was cleared, settlers invaded and removed the last traces of brush and tree stumps to make the land suitable for farming. The shallow layer of organic material which was built up by the forest cover, soon was lost by oxidation, blowing or washing away.

By the early 1930's, the western part of the county was being ruined by moving sand. Crops were being blown away, and sand was covering fertile farm land farther and farther inland. Methods were attempted to control the loss of fertile soil and growing crops, and the most successful attempt was made when beach grass, evergreens, and blueberries were planted as ground cover to shield fertile land from wind and the drifting sand.

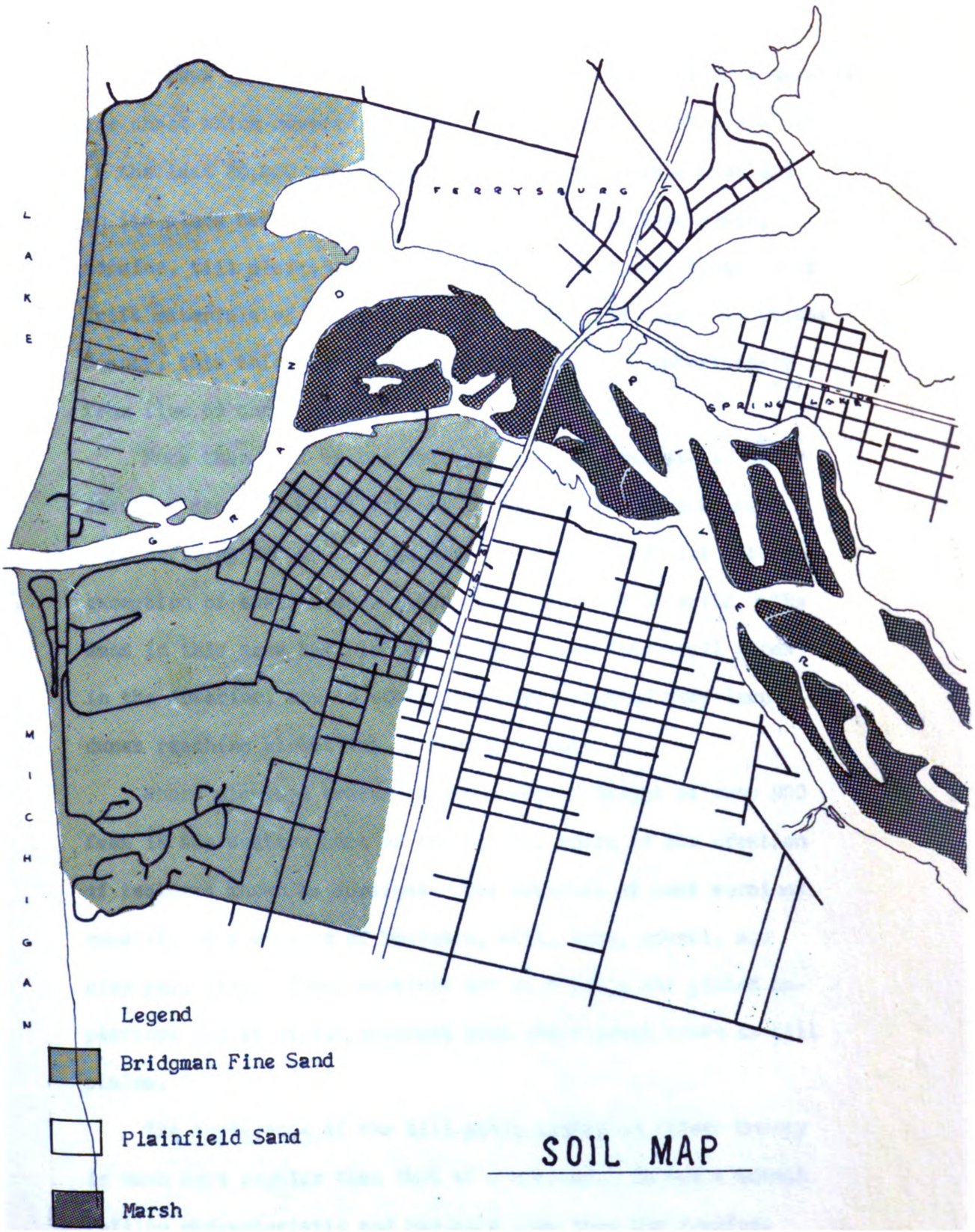
There are several different types of soils in the Grand Haven area. The soil covering most of the area is bridgman fine sand. The surface soil of the bridgman fine sand consists of litter and forest mold, two to four inches in depth. This type comprises the soil of the high dunes along the shore of Lake Michigan. Because of its tendency to shift under wind action, it has very little value for cultivation of crops. However, it holds a small quantity of moisture and is conducive to the growth of a fairly dense cover of trees and shrubs

including hardwoods and conifers. In some instances, it has proved successful in the growth of vineyards and orchards.

Another type of soil found in Grand Haven is plainfield sand. This type of soil is widely distributed and found in large amounts in the western half of the county. Found in orchards and vineyards, it is one of the more important types of aggregate acreage since it comprises over 20 per cent of the total areas of the county.

The plainfield soil is loose and incoherent in structure throughout its depth. On the surface, it is a light brown humus soil, 4 to 6 inches in depth. The subsoil is cream colored sand from 10 to 15 inches thick. Its water-holding capacity is low, and this is the reason for its limited success in plant growth. Its fertility is also low, however, this can be improved with the use of commercial fertilizers.

Marsh land is found to a great extent along the islands of the Grand River. The land is covered with water throughout the greater part of the year, and is therefore referred to as permanent marsh. Vegetation consists of sedges and various water grasses. The soil contains a small proportion of the sediment carried by the river and consists mainly of muck and peat.


LAKE
MICHIGAN
GRAND
FERRYSBURG
SPRING LAKE
Legend
Bridgman Fine Sand
Plainfield Sand
Marsh

SOIL MAP

Geology

Ottawa County's surface features are the result of a massive ice sheet which covered the entire state millions of years ago. In the last 20,000 years, this ice sheet has disappeared and in its place has left such glacial features as lake plain, moraine, till plain, and outwash plain formed from deposits of drift materials of gravel, sand, boulders, and clay. In Ottawa County, this thickness of glacial drift varies approximately from five to three hundred feet.

More than half of the county's surface consists of sandy lake bed deposits which settled in the glacial Lake Chicago once covering the area. The area is essentially flat with the exception of small mounds which were lake bars of spits. The sand in this area has, in some cases, blown into small dunes in the interior, and in other instances, created very large dunes reaching elevations of over 800 feet.

Where elevated tracts of land reach a height of over 900 feet in the western part of the county, there is the creation of features known as moraines. The material of such moraines consists of a mixture of boulders, silt, sand, gravel, and clay particles. These moraines are of a hilly and pitted appearance and in direct contrast with other areas known as till plains.

The appearance of the till plain region of Ottawa County is much more regular than that of a moraine. It has a smooth rolling characteristic and has more clay than the moraine.

The outwash plains found in the county are primarily flat and consist mainly of sand and gravel.

Rock formations which underlie Ottawa County are from the Paleozoic Era.

Vegetation

Before the 1850's, Grand Haven was covered with natural vegetation which was later destroyed by the lumber industries. In time, the timber was replanted as part of a soil stabilization process. Most of the natural vegetation was completely destroyed, but the same and other suitable vegetation was replaced. The main vegetation masses are composed of the following trees:

Pinus	Norway Pine
Pinus Banksiana	Jack Pine
Pinus Resinosa	Red Pine
Pinus Strobus	White Pine
Pinus Sylvestris	Scotch Pine
Pinus Nigra	Austrian Pine
Tsuga Canadensis	Hemlock
Acer Saccharum	Sugar Maple
Acer Rubrum	Red Maple
Quercus Alba	Red Oak
Quercus Rubra	White Oak
Quercus Ellipsoidalis	Northern Pin Oak
Tilia Americana	Basswood
Thuja Occidentalis	White Cedar
Sorbus Americana	American Mountain Ash
Populus Deltoides	Cottonwood
Populus Balsamifera	Balsam Popular
Fraxinus Americana	White Ash
Fagus Grandifolia	Beech
Betula Papyrifera	White Birch
Ulmus Americana	American Elm
Laris Laricina	Tamarack
Carya Ovata	Hickory
Juglans Nigra	Eastern Black Walnut

Wildlife

Before the concentration of population in the area, Grand Haven had many types of wild birds and animals. The wildlife disappeared as the population increased, and its only traces remaining may be seen in the few privately owned lands which are left along the islands of the Grand River. These islands play an important role during the hunting season for numerous private hunting clubs. The following animals may be found presently within the city and its islands in the Grand River:

Michigan Beaver
Marten
Mink
Squirrels (Black & Gray)
Partridge
Red Fox
Deer - In Marsh Grass
Quail
Wild Ducks - Marsh
Woodchucks
Skunks
Mud Turtles
Rabbits
Muskrats
Sea Gulls

Climate

The principal modifying factor in Grand Haven's climate is its proximity to Lake Michigan. The greatest effect the lake has in relation to agriculture is its stabilizing influence on temperature.

Grand Haven's annual precipitation is evenly distributed throughout the year. The average yearly rainfall recorded at the Weather Bureau Station is 31.37 inches.

Snowfall is a definite certainty in this area, and thus, each year forms as a protection for fall-sown grain. Average snowfall per season is 59.1 inches.

The prevailing winds south to west average 10 to 15 miles per hour, and produce a much lower temperature on the lake than farther inland. The highest wind gusts recorded have reached 50 miles per hour with no cyclones or hurricanes ever having been present.

CLIMATIC SUMMARY

Temperature			
January Average	F°	24.7	
July Average	F°	69.2	
Maximum	F°	101	
Minimum	F°	-25	
Mean	F°	46.7	

Average Dates Of Killing Frost		
Last in Spring	May 1	
First in Fall	Oct. 18	
Growing Season	171 Days	
Latest Recorded Frost	May 26	
Earliest Recorded Frost	Sept. 23	

Average Precipitation			
January	In.	2.15	
February	In.	1.90	2.29
March	In.	2.29	
April	In.	2.67	
May	In.	3.26	
June	In.	2.69	
July	In.	2.30	
August	In.	2.83	
September	In.	3.51	
October	In.	2.85	
November	In.	2.75	
December	In.	2.19	
Annual	In.	31.37	
Driest - 1904	In.	23.97	
Wettest - 1881	In.	47.89	

IV. THE HUMAN PATTERN

History

Nearly 300 years ago, Pere Marquette came upon a river which entered a lake having an island at its mouth; the island being what is now called Grand Haven. At this time, the only settlers within miles were Indians living their crude lives, "fasting and feasting on their dead" on the very shores of Lake Michigan.

Over 100 years later, came white fur traders who established headquarters for the American Fur Company. Among these fur traders were Joseph La Framboise and his wife who spent several years collecting furs. In 1790, Joseph La Framboise was murdered in an Indian raid. His wife was able to carry on in the fur trading business for more than 11 years following her husband's death. She then turned her posts over to Rix Robinson, once a lawyer from the East and a known fur trader on the Grand River.

On March 2, 1831, Ottawa County was laid out and established as a territorial county. Until this time, Grand Haven was occupied only by fur traders, Indians, and French voyagers living in the area. However, in 1834, Rev. William Ferry, his family and a small group of settlers came to Grand Haven to make their home. A year later, Robinson and Ferry began to lay out the streets of Grand Haven.

During this time, the government issued a patent for land. Rix Robinson, Rev. Ferry, Nathan White, and a Mr. Stuart organized the city's first company by buying land, erecting mills, and getting lumber operations underway.

On April 14, 1835, the first plot of village was recorded in Kalamazoo. Its boundaries were established on the north by Elliott Street; on the south by Howard Street; the east by 4th Street; and on the west by the Grand River.

Rev. Ferry contributed greatly to the beginning of Grand Haven's history. He and his son founded the first merchantile establishment and helped organize two of Grand Haven's first companies. The first school, located on his land, served many more purposes than the educating of children. It also served as the court house, meeting house, church and Sunday school building.

By 1837, Grand Haven was the center of activity in Ottawa County. Steamboats were operating on regular schedule; the lumber industry was continually flourishing; and the town was growing. The population had now climbed from a handful to nearly 250. By 1840, the lumber industry had climbed to a staggering height producing over 30 million feet of lumber in a season. Steamship travel was routed to Chicago and Milwaukee, and mail reached its destination on almost regular schedule, rather than being carried whenever one found the time.

Grand Haven has a natural harbor which was first surveyed by the Federal Government in 1800. Fifty years later, $20,000

was appropriated for its improvement. A lighthouse was then built on the south side of the harbor to accommodate the growing number of lake and foreign ships traveling to and from Grand Haven with their goods.

As the city grew, more and more travel ways were opened. Besides the establishing of a railroad route, a stage coach route was also provided which ran from Grand Haven to Kalamazoo. More steamers were operating from longer distances, and the first excursion boat named the "Chippewa" made its trial run between Chicago and Grand Haven.

By 1867, more funds were given for the surveying of the harbor, and more ships were taking advantage of Grand Haven's accessible harbor entrance. Lumbering was still the biggest trade in Grand Haven, and millions of feet of lumber were being shipped out each week. Grand Haven was now known to be one of the largest centers of lumber in the world. However, it was soon to experience its first major shock.

With all the lumber going out and none to replace it, soon the forests were depleted, and the lumber industry abruptly came to a halt. Mills were dismantled, and people were jobless. Many residents left the town, and business fell to a sharp decline. Grand Haven was in peril for almost 20 years.

When the extent of damage from the loss of the lumber industry was realized by Grand Haven residents, they took measures to combat further decline. They built up a reputation

of having recreational facilities, and advertised their fine summer resort facilities. New hotels were going up rapidly while old hotels were being remodeled. Grand Haven was opening its doors to summer visitors by the thousands and was soon to be known as a popular haven for tourists especially in the summer months.

In 1900, the Board of Trade, in a further effort to expand business facilities, organized a committee to encourage factories and various industries to build in Grand Haven. Bonds in the amount of $22,000 were issued to assist in bringing more business to the city.

The Eagel Tanning Company was one of the first industries built in this critical period. With its $1 million expansion after six years of thriving business, it created many more jobs and even moved into the automobile business when it began making leather seats for cars. Two other large industries which helped build Grand Haven's reputation were the Story and Clark Piano Company which moved from Chicago, and the Challenge Machine Company which began operating in 1903.

Around 1900, changes began taking place in the heart of the town. The streets were paved, and street lights were installed. Duncan Park was given as a gift to the city with the stipulation that the park be preserved almost entirely in its natural state. The only exceptions were nature trails and picnic areas.

Also at this time, one of Grand Haven's early established cemetaries was moved out of the center of town to its present location on the sand dunes, and in its place a central park was created to provide a spacious area of relaxation and quiet activity for the town's residents.

To meet the demands of school age children increasing in the neighborhoods, another school was erected and an athletic field was provided for group recreation.

As the town grew, more modernized efforts to improve living conditions took place. Concrete paving and an extensive sewage system benefitted homes and industries as well. The water plant was expanded to meet the growing needs of the town. Grand Haven's first city hospital named the Hatton Memorial Hospital was constructed, and at the same time, its first motorized fire equipment was purchased in the attempt to prevent further fires in Grand Haven.

In 1921, the Memorial Bridge was constructed over the south channel, thus, opening direct passage to Muskegon and other areas. When the bridge was installed, a bus line originating in Muskegon provided travel between the two cities.

The first zoning ordinance went into effect in Grand Haven in 1941, and was one of the first such ordinances in Michigan to be adopted by a city the size of Grand Haven.

Transportation facilities during the early 1950's were varied. At this time, the Grand Haven Municipal Airport was opened and served its many residents as well as those visiting

Grand Haven from other areas. A package freight boat service was then established which ran a course to Milwaukee. For automobile convenience, Beacon Boulevard (U.S. 31) was completed.

Just in this decade has Grand Haven really begun to develop its natural as well as man made resources for recreational purposes. The first of such developments was in 1961 when a ski bowl was constructed at Five-Mile Hill. Of the 42 days in operation during that winter, its total attendance was 2,702 people. November of 1962 brought about the construction of a musical fountain on Dewey Hill. The fountain shoots water 60 to 80 feet into the air and supplies musical synchronization. This fountain will also play an important part during the Christmas season when its lights will fall upon a 48 X 24 foot cross soon to be erected on Dewey Hill, and its music will consist of Christmas hymns.

The above listed recreation areas are two of Grand Haven's most unique forms of recreation. However, it also should be noted that the services of certain playgrounds, playfields, etc. are already in existence, scattered throughout Grand Haven.

The following page is a description of the presently existing recreation programs and their average participation during the summer and winter months.

		Participants
Basketball		
City League	5 Teams	62
Church B.B. League	8 Teams	96
Grade School - 5th Grade	6 Teams	42
Grade School - 6th Grade	6 Teams	42
Jr. & Sr. High Schools	5 Teams	40
Saturday Afternoon		150
Ferrysburg Rec.		45
City Volleyball League	8 Teams	72
Ice Skating		1,512
Ski Bowl		657
Swimming		
Saturday Beginning Instructions		677
Saturday Intermediate Instructions		181
Senior Life Saving		10
Water Safety Instructions		12
Family Swims		364
Men's Open		43
Women's Open		12
After School Swims		90
Group Swims		495
Swim Meet (Festival)		150
	Winter	4,860
Summer Swim Instruction		847
Junior Life Saving		36
Open Swims		144
Tennis		180
Summer Band & Music Instructions		254
Tot-Lot		120
Ferrysburg Playground		180
Mary White Playground		150
6th & Elliott Playground		150
Ferry Playground		200
Playground Sports Program		120
Arts & Crafts		180
Men's Volleyball		18
Recreation Softball		108
City Softball		144
Softball Tourney		144
Creative Dramatics		66
Junior Theater		30
Children's Theater		78
	Summer	3,160
	Total	8,020

Economy

Through the 1880's, Grand Haven's primary source of economy depended upon its thriving lumber industry. When its forests were nearly depleted, the economy shifted emphasis to the shipping and manufacturing industries. In recent years, it has developed its resort trade into a very prosperous economy.

The shipping and manufacturing industries have expanded greatly in the 20th century, and now reach a total of 105 highly diversified establishments. Today, these industries employ more than 4,500 men and women in the Grand Haven area. Of the 105 industries, 75 are located directly in Grand Haven. Also located in Grand Haven is its own electrical power plant which charges the third lowest rates in Michigan.

Grand Haven's primary sources of revenue include 69.7% general property taxes, 20.1% state-shared funds, and 10.2% for miscellaneous payments such as those for parking meters, fines, and permits.

Major expenses in the Grand Haven area are for services connected with urbanization, such as water, sewage, parks and recreation, streets and lighting. The suburbs invest their major expenses in fire protection, relief, and streets. Township residents pay less for such services as library facilities, storm drainage, health services, and police and fire protection.

Population

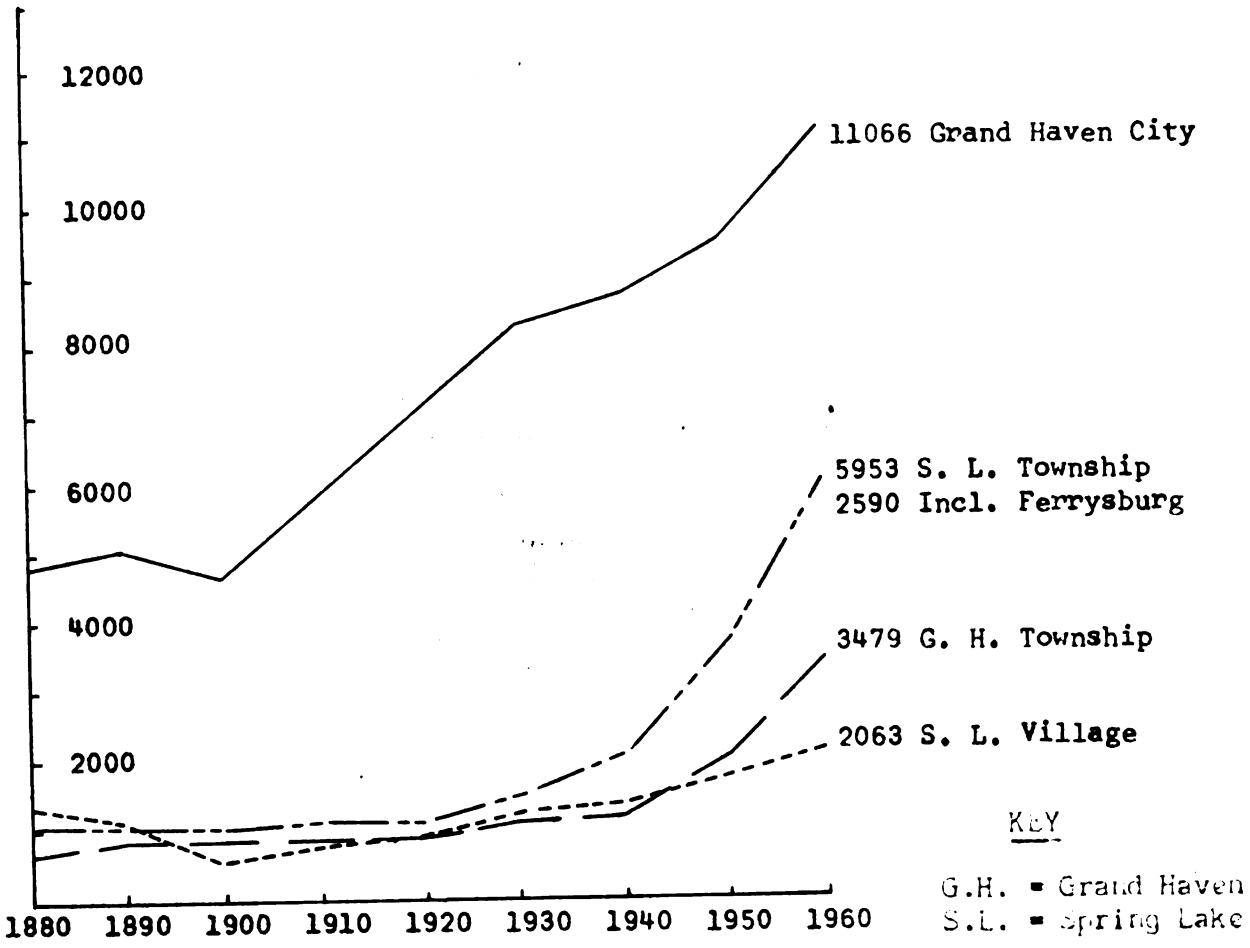
In order to justify a solution to the problem of meeting the needs for additional recreation facilities, an appropriate beginning is a study of the continual growth of population in the City of Grand Haven and its surrounding areas.

Evidence shows a gradual growth in population since Grand Haven was incorporated in 1867. The greatest increase, percentagewise, was in the first decade after incorporation when there was an increase of 58.7 per cent from 1870 to 1880. Following this period was a slight decline before the coming of the twentieth century. With its arrival, however, the population of Grand Haven began it climb again with an increase of 23 per cent. The years of depression did not contribute much to the increase of the area, however, in the 1940's, its growth continued at a rate of 8.4 per cent per year. In the last decade, the rate of increase has exceeded 16 per cent per year.

On the following page is a tabulation of the increase in total population of Grand Haven; the numerical increase; and the percentage of increase from the year 1880 to the estimated increase in 1980.

POPULATION GROWTH

1880-1960



POPULATION FIGURES - OFFICIAL CENSUS

Census Data	Population	Numerical Increase	% of Increase
1880	4,862	1,715	54.5
1890	5,023	161	3.3
1900	4,743	- 280	-5.6
1910	5,856	1,113	23.5
1920	6,500	1,349	23.0
1930	8,345	1,140	15.8
1940	8,539	554	5.4
1950	9,536	737	8.4
1960	11,066	1,530	16.0
1970 Est.	13,279	2,213	20.0
1980 Est.	15,384	2,213	20.0

Immigration into the Grand Haven area has contributed 47 per cent of the growth in population since 1950. Although there has been some migration out of the area, it is considerably nil in comparison to the influx of residents.

The net migration for the entire Ottawa County during the same period from 1950 showed a growth in population of 43 per cent, while the growth of the entire state was 36 per cent.

In projecting the population to the years 1970 to 1980, many uncertainties affect the population increase. With the already established and ever growing industrial and economical potential supplemented with the increasing tourist trade, the population in 1970 should increase by 20 per cent, from 11,066 to 13,279. If the economic and social trends continue in Grand Haven, by the year 1980, we should expect Grand Haven's population to reach 15,384.

Transportation

Grand Haven's transportation media consists of highways, railways, an air field, and water ways which include rivers, lakes and canals.

Besides the automobiles which are the major means of transportation to and from Grand Haven, there are also bus lines leading in and out of Grand Haven and surrounding areas. Trucks transporting goods and services are of significant value to the inhabitants of Grand Haven. In the planning of

recreation sites, consideration has, of course, been given to the routes by which buses and trucks must travel. The safety of such areas free children from the dangers of vehicles.

Another means of transportation is the railway. However, it is found to be of most significant use in the transporting of freight.

Grand Haven Memorial Airport is located on the south side of the city and covers approximately 278 acres of land. It is 1/2 mile wide from north to south, and a mile long from east to west. The airport furnishes three runways, all between 2,400 feet and 3,200 feet in length. Its major objective is serving the travelers with a charter service of four passenger planes and one freight plane to the Muskegon County Airport, nine miles away. Capital Airlines schedules regular flights to the east and west daily.

The harbor in Grand Haven is located at the mouth of the Grand River and the east side of Lake Michigan, and is 12 miles from Muskegon and 108 miles from the north coast of Chicago. It is constructed as a result of the harbor project authorized in 1866 by the R. & H. Act and subsequent acts. The project provides for protection of the mouth of the river with piers and revetments. It also provides for maintenance and annual dredging by the Corps of Engineers, 23 miles up to the Bass River. The channel along this area varies in depth from 8 feet to 23 feet and 100 to 300 feet in width. Beyond the Bass River, the water is at an extremely low depth of 2 to 3 feet, and only

small recreational craft operate in the area.

Because of the narrow widths in parts of the harbor channel, anchorage of vessels and mooring to piers is strictly prohibited. Small mooring facilities are provided at public and private wharves. One private wharf in particular is a marina located on the east side of the north pier which furnishes open water stalls for dockage and service facilities.

High water periods of the Grand River are generally in the spring, and continue for approximately two months with currents up to 3 to 5 miles per hour. The average season of navigation on the river and harbor is from April to December.

Spring Lake connects with the Grand River at Ferrysburg. It is about 4 ½ miles long, 700 to 2,000 feet wide, and has a depth of 20 to 40 feet.

Open Land Areas

With the steady growth of Grand Haven's population, there has been a steady decline in the amount of open land areas. This has caused a problem in finding and distributing enough land for recreational space to meet the challenge of the community's needs. Each new home going up intensifies the problem to an even greater extent. It is necessary to determine which land absolutely must be developed for recreational purposes, and which must be developed for housing, business, and industry. A plan must be drawn to include the stabilization of residential areas and their property values,

and a means of contributing to the mental and physical well being of the inhabitants of the community. The plan must also give assistance in reducing and maintaining the rate of juvenile delinquency, and equally important, it must make provisions for attracting new residents and visitors seeking recreational benefits.

Existing Land Use

Through most of the 1900's, Grand Haven's land was primarily used for the development of industry. However, in the last few decades, its land has been given over to the further development of commercial purposes, and even more recently, with the advantages of being located on the Grand River and Lake Michigan, Grand Haven's land has been used for some recreational purposes.

Business and Commercial

The majority of Grand Haven's business and commercial establishments are located on the north side of the city along North Washington Street and along Seventh Street. Recently a new commercial area has developed along North Beech Tree Street since U.S. 31 seemed to separate the city in half. The city's manufacturing land is also located on the north side of town along the south side of the Grand River, along Beech Tree Street and adjacent to it, and along the western side of U.S. 31.

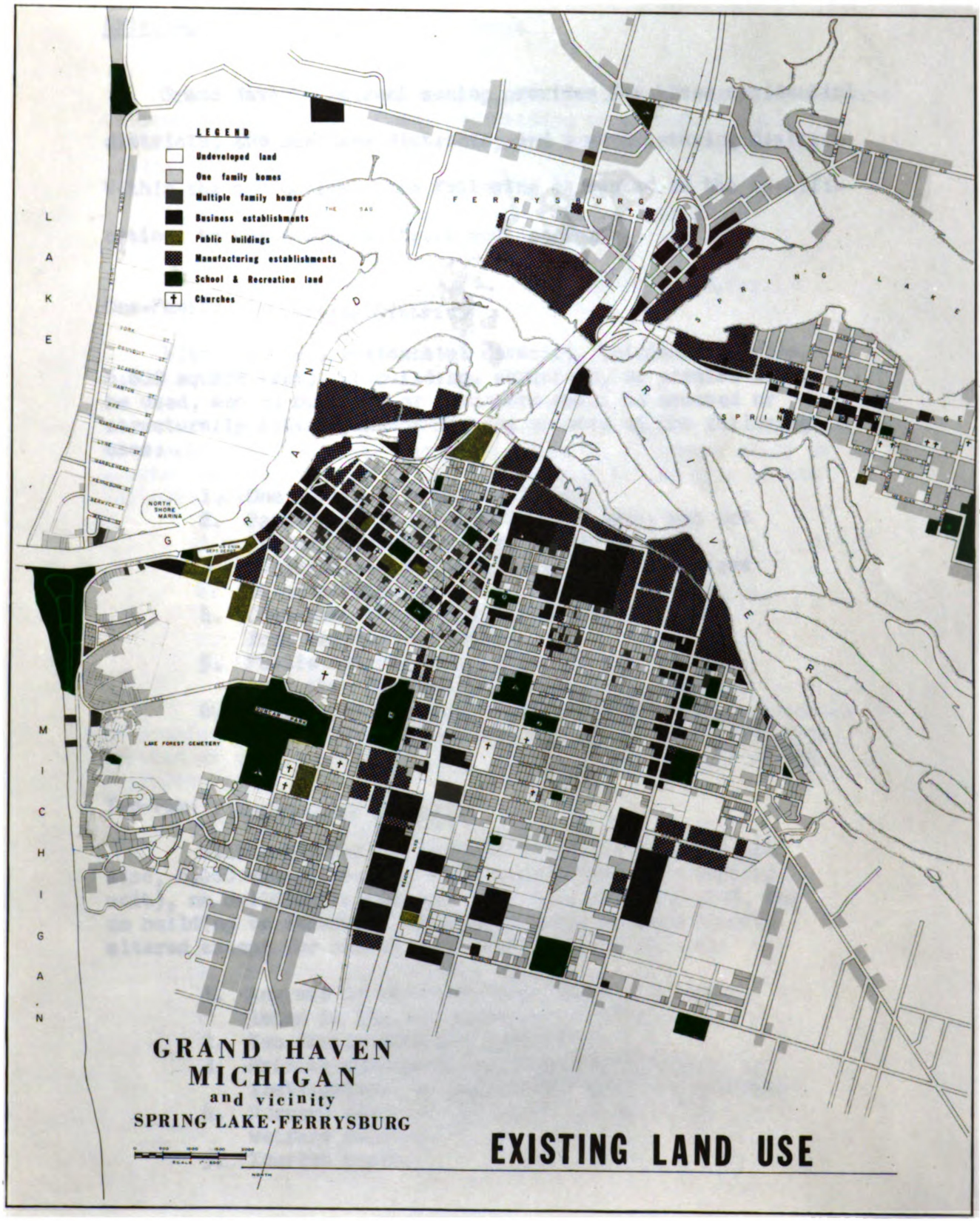
Residential

The three classes of residential land occupy the remaining land within the city limits with the exception of undeveloped land, Lake Forest Cemetery and park and playground land. Most of the undeveloped land is located on top of sand dunes on the north side of the city and north of the Grand River. Another portion of undeveloped land lies to the south of the Grand River and adjacent to Lake Forest Cemetary and Duncan Park. Still undeveloped in most cases, but rapidly developing, is land found on the southeast portion of Grand Haven. This area is presently occupied by a small number of homes, but is steadily developing with new residences.

Recreational

At present, approximately 130.9 acres of land are publicly owned for recreational purposes. These consist of 43 acres devoted to the Michigan State Park; 66.3 acres which are divided into neighboring parks, playgrounds and a city park; 9.5 acres used by three elementary schools; and 12.1 acres of land used by the junior and senior high schools.

The 43 acres of land owned by the Michigan State Park Commission are located on the west side of Grand Haven adjacent to Lake Michigan and south of the Grand River next to the harbor. In 1962, the park attendance was 1,120,810 people; the highest attendance of any state park in Michigan.


LEGEND
Undeveloped land
One family homes
Multiple family homes
Business establishments
Public buildings
Manufacturing establishments
School & Recreation land
Churches
LAKE MICHIGAN
GRAND HAVEN
FERRYSBURG
SPRING LAKE
NORTH SHORE MARINA
LAKE FOREST CEMETERY
GRAND HAVEN
MICHIGAN
and vicinity
SPRING LAKE-FERRYSBURG
EXISTING LAND USE

Existing Zoning

Grand Haven's present zoning provides for three residential districts, two business districts, and a manufacturing district. Within the zoning laws, the following is quoted on the specifications to which each district must conform:

One-Family Residential District

Within any R-1 residential district, (minimum lot size, 6,600 square feet), no building, structure, or premise shall be used, and no building or structure shall be erected or structurally altered except for one or more of the following uses:

1. One family detached dwellings.
2. Gardening and general farming uses, but not including commercial animal farms.
3. Municipal administrative or public services or properties.
4. Churches, located not less than 30 feet from residential lots.
5. Public and parochial schools, located not less than 30 feet from residential lots.
6. Public parks, playgrounds and community centers-non-commercial.

Two-Family Residential District

Within any R-2 residential district, (minimum lot size, 6,000 square feet or 3,600 square feet per dwelling unit), no building, structure or premise shall be used, and no building or structure shall be erected or structurally altered except for one or more of the following uses:

1. Any use or structure permitted and as regulated in the R-1 residential district.
2. Two family detached dwellings.
3. Private non-commercial recreation areas, institutional or community recreation centers.
4. Nursery schools, day nurseries or child welfare centers.
5. Tourist homes.

Multiple-Family Residential District

Within any R-3 residential district, no building, structure or premise shall be used and no building or structure shall be erected or structurally altered except for one or more of the following uses:

1. Any use or structure permitted and as regulated in the R-2 residential district.
2. Multiple family dwellings.
3. Apartment buildings, hotels, boarding houses.
4. Private clubs, lodges, social or recreational buildings.

Business District

Within any B-1 business district, no building, structure or premise shall be used and no building or structure shall be erected or structurally altered except for one or more of the following uses:

1. Any use permitted and as regulated in the R-3 residential district.
2. Any retail business or service establishment.
3. Commercial parking area.
4. Funeral home or mortuary.
5. Billboards or signboards.

Within any B-2 business district, no building, structure or premise shall be used and no building or structure shall be erected or structurally altered except for one or more of the following uses:

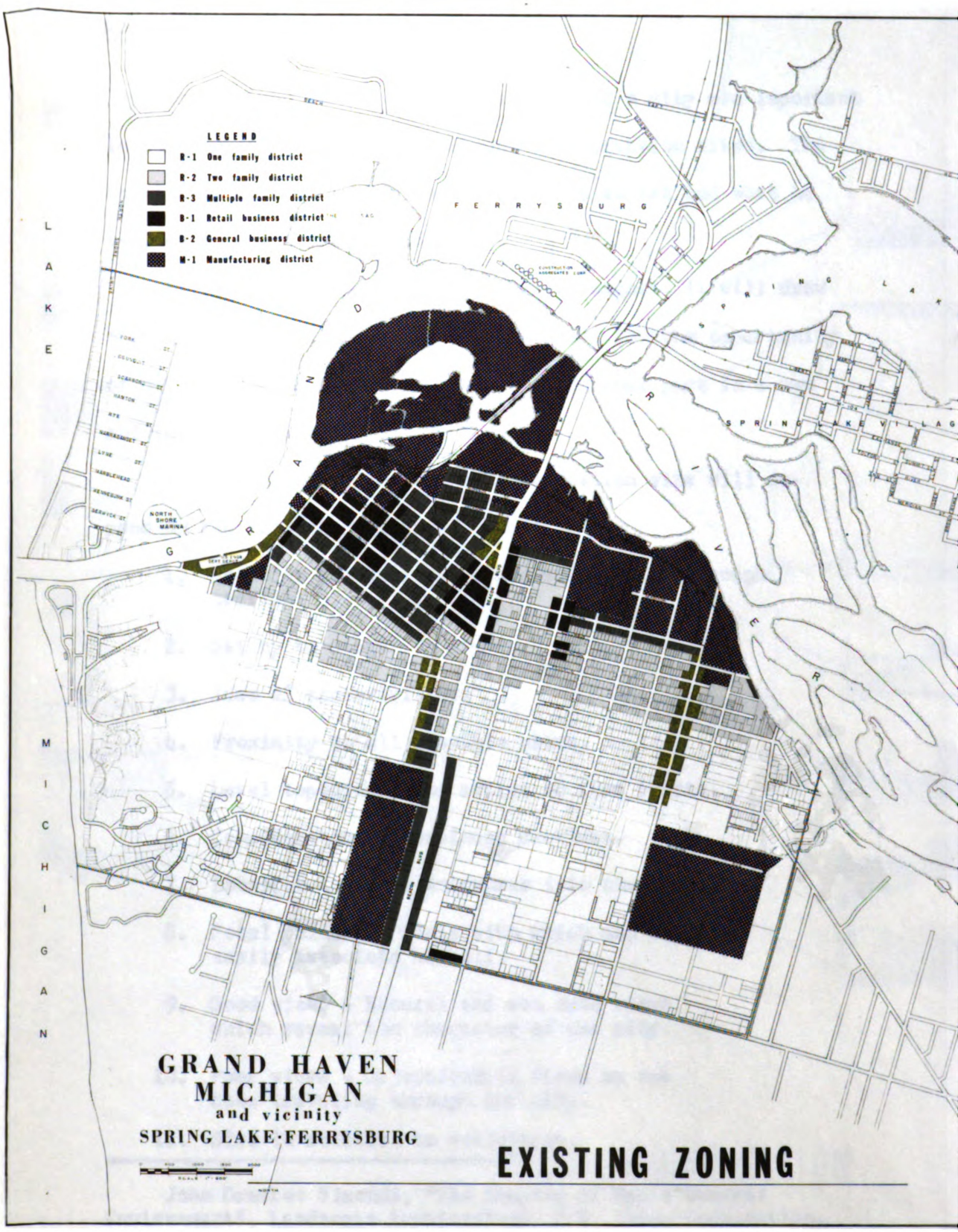
1. Any use permitted and as regulated in the B-1 business district.
2. Agricultural or industrial equipment sales lots.
3. Animal hospital or veterinary clinic.
4. Automobile or trailer sales lot.
5. Automobile repair garage.
6. Baseball or football stadium.
7. Outdoor theaters.
8. Sales and storage yards.
9. Truck terminal, ship terminal.
10. Wholesale business, storage building, docks, warehouses.

Manufacturing District

Within any M-1 manufacturing district, no building, structure or premise shall be used and no building or structure shall be erected or structurally altered except for one or more of the following uses:

1. Any use permitted as a principal or conditional use in B-2 district.
2. The manufacturing, compounding, processing, packaging, or treatment of different types of goods.
3. Sawmills, etc.
4. Petroleum or inflammable liquids storage when approved by the Fire Chief.
5. Railway or truck terminals.

City of Grand Haven - Zoning Ordinance, 1956.


LEGEND
R-1 One family district
R-2 Two family district
R-3 Multiple family district
B-1 Retail business district
B-2 General business district
M-1 Manufacturing district
LAKE MICHIGAN
GRAND HAVEN
MICHIGAN
and vicinity
SPRING LAKE-FERRYSBURG
EXISTING ZONING
FERRYSBURG
SPRING LAKE VILLAGE
NORTH SHORE MARINA
BEACH

Area Investigation

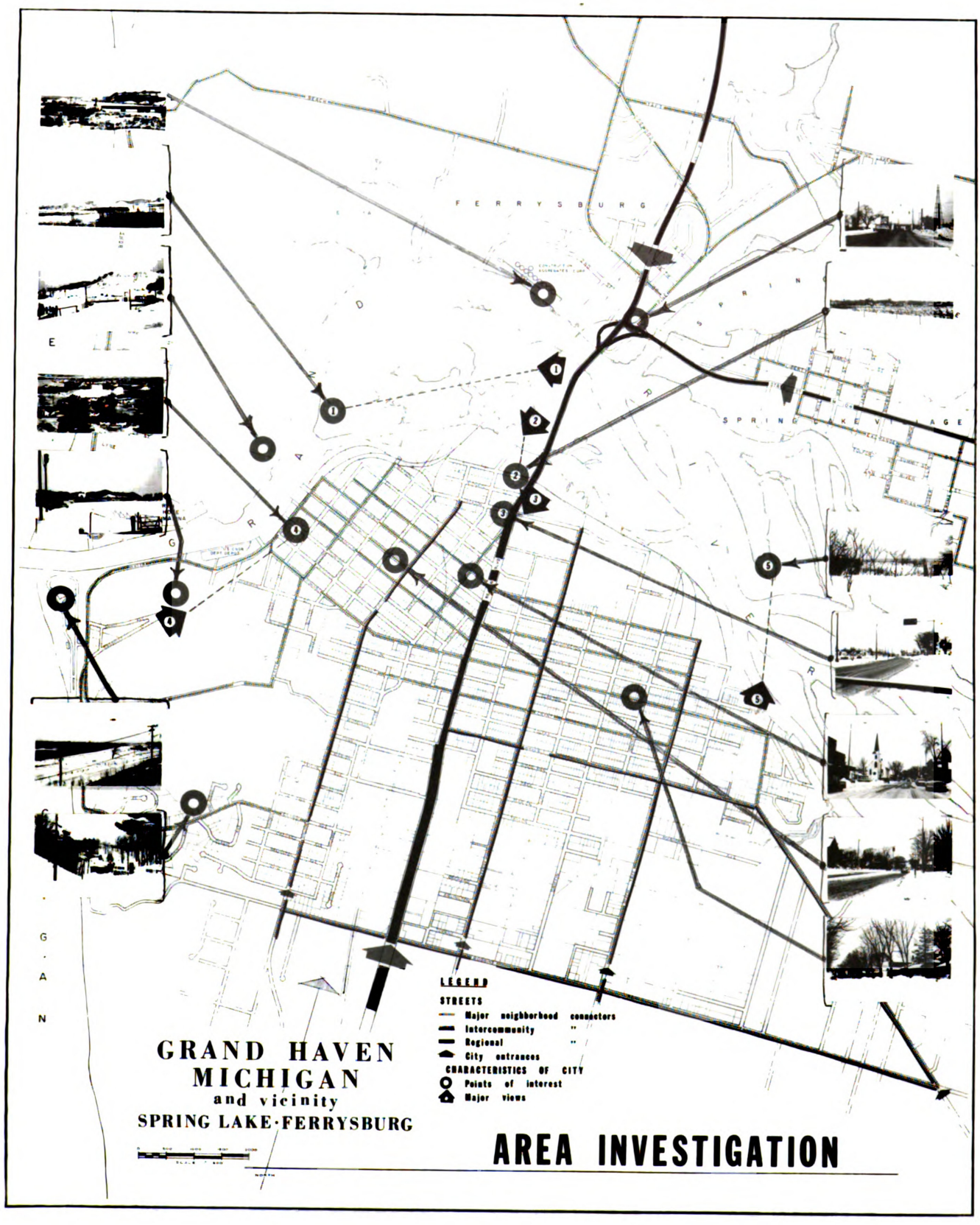
Natural and man made visual aspects of a city are important in determining successful placement of recreation sites. The total city must be viewed in relationship to man and what he sees as he moves through the city.

"A view is an impeller. A powerful magnet, it will draw one far, and from one position to another, for the opportunity of better commanding its limits or seeing some part in a new and intriguing way."

The successful placement of a recreation site will depend on the following factors:

1. Location of major and minor streets for through traffic.
2. Safety to users.
3. Ease of accessibility.
4. Proximity to all possible users.
5. Level topography for active or team sports.
6. Consideration of drainage problems.
7. Location to major entrances into the city.
8. Focal points - Points with which man can easily associate himself.
9. Good views - Natural and man made views which reveal the character of the city.
10. Poor views - Objectionable views as one sees traveling through the city.
11. Size in relation to activities.

John Ormsbee Simonds, "The Shaping of Man's Natural Environment", Landscape Architecture, F.W. Dodge Corporation, New York, 1961.


FERRYSBURG
SPRING LAKE VILLAGE
LEGEND
STREETS
Major neighborhood connectors
Intercommunity "
Regional "
City entrances
CHARACTERISTICS OF CITY
Points of interest
Major views
GRAND HAVEN
MICHIGAN
and vicinity
SPRING LAKE-FERRYSBURG
AREA INVESTIGATION

V. ANALYSIS

Particular Needs for Grand Haven

Although Grand Haven may be characterized as the center for a great deal of industry, its tourist business also thrives, particularly in the summer months. Like many similar communities of its size, it has certain recreational needs. However, with its advantageous location on two bodies of water, its recreational needs far outweigh those of similar communities.

Grand Haven's particular needs are geared to two classes of people; its local inhabitants, and its many summer and winter visitors. Grand Haven not only must satisfy its residents, but it must also set up a recreational system to attract as well as satisfy its visitors.

Primarily, the first problem to solve in establishing such a recreational system is the problem of providing adequate space for various types of recreational activities. First, such space must be found. Secondly, it must be so distributed as not to be a hindrance or hazard to its potential users. Of common dilemma to other such cities, the greatest need and demand for recreational activity is in the heart of the town where it is most crowded, but where those people are nearest to its benefits. Naturally, it is here where the least space is to be found.

In Grand Haven, there is a particularly undesirable traffic problem especially during the peak tourist season of the summer.

Because its streets are of a rectangular grid system, the traffic spreads to the main arteries of the residential section. These meet with collector streets which are highly overfilled with cars and especially hazardous to pedestrians.

Although there exists a double land highway (U.S. 31) which carries traffic directly into the main street of Grand Haven, the highway is now inadequate in serving the growing number of motorists.

Another problem common to cities which have a definite lack of recreational facilities, is that of blight in the older sections of the town. When a family with young children occupies a dwelling without access to play areas, the children are hindered from playing sufficiently. However, they must play somewhere, and therefore use the house and its surroundings for their tools. When such a couple improves their income, they move out, leaving a vacant house with no upkeep until the next such couple moves in. Over the years, with frequent turnover, poor maintenance, and lower rental rates, one house or an entire neighborhood contributes an area of slums to a city.

Although the lack of recreational facilities may not contribute 100 per cent to the occurance of a run down area, it is of undetermined importance to the well being of a community.

Future Land Use Considerations

After having determined the existing conditions and trends of Grand Haven, the following assumptions may be made for the

proposal of future planning for recreational facilities and land use patterns.

One-Family District

Because Grand Haven is surrounded by natural physical barriers on the north, east and west, its future growth can only spread to the south and southeast. Within the City of Grand Haven, the most ideal vacant land remaining will probably be used for the future development of one-family district residential areas. This would leave the less desirable land, which is not used for residential building, to waste unless it can be developed into desirable open spaces and a supplement to the city's recreation needs.

Two-Family District

At present, the two-family district areas lie between the multiple-family areas and the commercial sites. The growth of two-family areas in the old section of the city (west of U.S. 31) will probably stay within the boundaries of presently established zones, but on the east side of U.S. 31, the two-family districts will spread south along Beech Tree Street to Robbins Road because of the intense commercial development from Fulton Street along Beech Tree Street.

Multiple-Family District

Presently the multiple-family district is located in the old section of the city (west of U.S. 31) between the two-family

district and commercial and manufacturing areas. The multiple-family district in this section will probably be confined to its presently zoned boundaries. But a new section along both sides of U.S. 31, starting at Waverly Avenue and extending south to Robbins Road, will be developed.

Commercial Areas

Grand Haven's principal business area is located in the old section of town close to the main downtown area. Since Grand Haven was separated by U.S. 31, another commercial area has been developed along Beech Tree Street. As the population increases, it will be evident that the present zoned commercial areas will not adequately serve the people. Also with the growing population, vehicular traffic will continue to increase and a great problem of traffic congestion will occur. It will be necessary to plan for more adequate off-street parking and off-street loading zones.

Industry

Industry in Grand Haven supports more than 50 per cent of the tax dollar, and therefore plays an extremely important role in the prosperous growth of the city.

To establish a sound recreational system for the city and its surrounding areas, it is important to consider the types of industries that will likely thrive in the future. Among the best suited industries are the manufacturing of small craft for

pleasure and sport use; manufacturing of industrial plastics; tool and dye shops, brewery, chemical and industrial paints, etc. Also with the increase in marine transportation, increase in marinas and dock facilities will be necessary in the future. (Refer to Existing Land Use Map, Page 37).

Major Streets

In order to propose open spaces for recreational facilities, the question of safe circulating systems including major streets is important to consider, and a close look must be given to the routes which people must take to arrive at a recreational area. Major streets are a necessity for motorists, but in another light, are a pure hazard for children to cross in reaching their destination. A traffic count taken at various points on U.S. 31 and M-104 recently indicates that approximately 17,400 vehicles enter and leave the City of Grand Haven every 24 hours.

The major streets of Grand Haven can be classified for this study into several types according to their function.

1. Neighborhood Connector Streets (Major residential streets which link the neighborhoods together).

Washington Street	Robbins Road
Franklin Street	Waverly Avenue
Fulton Street	Sheldon Road
Pennoyer Street	Grant Street
Ferry Street	Lake Avenue
Beech Tree Street	Water Street

2. Intercommunity Streets (Connecting streets which have access from neighborhoods to nearby municipalities).

U.S. 31 - Beacon Blvd.	Robbins Road
Sheldon Road	Beech Tree Street
Ferry Street	Waverly Avenue

3. Regional Highways (Connector system which supplies large volumes of traffic from long distances).

U.S. 31 M-104

(Limited access highway proposed to replace U.S. 31 in the future).

Refer to Area Investigation Map, Page 43.

Semi-Public Recreation Land

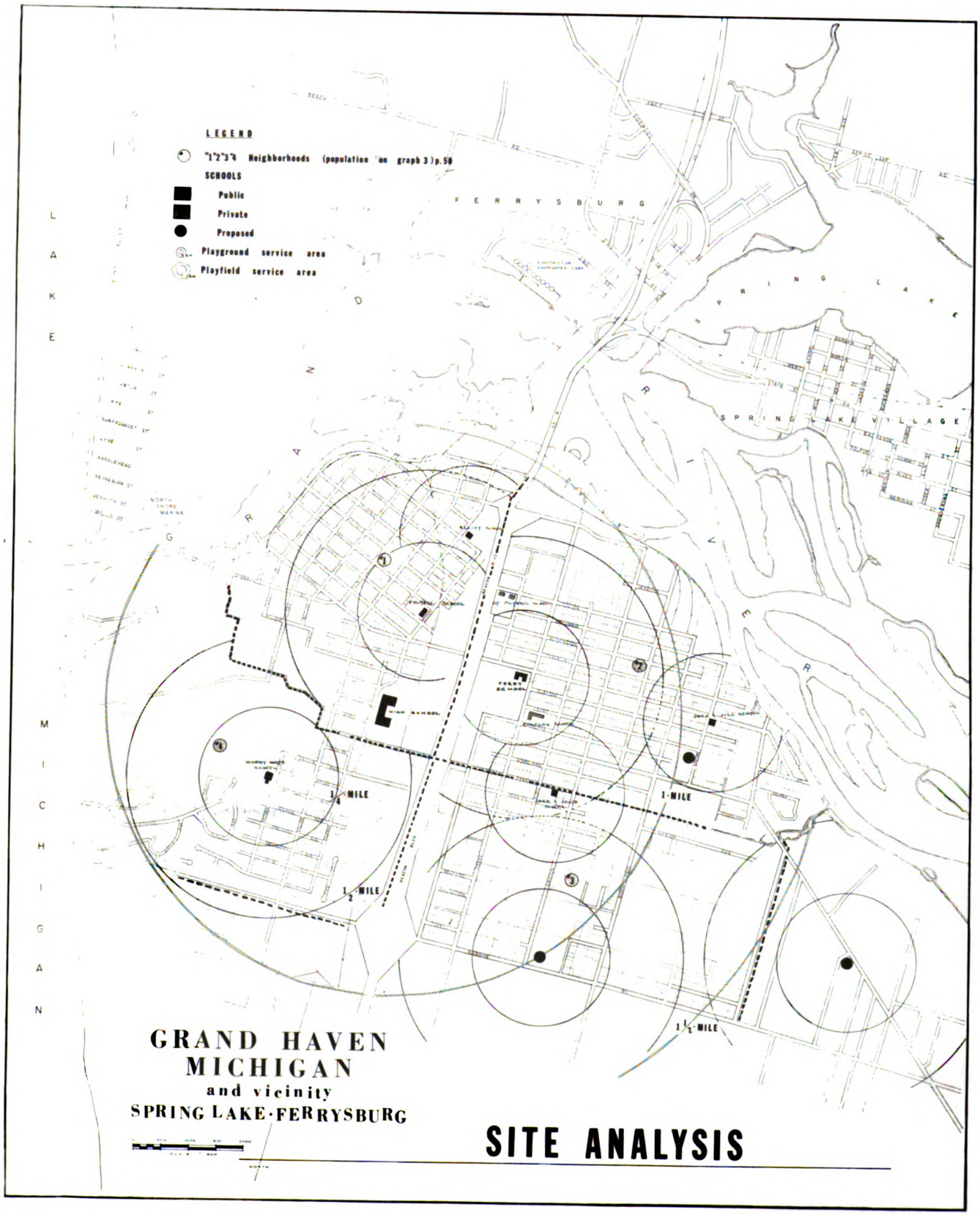
Part of Grand Haven's land is used for a cemetery, ski bowl, and private recreational lands found on the islands of the Grand River in the form of hunting preserves and open spaces of beauty. These areas must of course be left in their present state to retain Grand Haven's feeling of open spaces, and to act as pleasant interruptions to monotonous suburban development. Such a facility of undeveloped land is invaluable to the city's overall recreation program, and once developed, can never be replaced.

Neighborhood Pattern

For planning purposes, the City of Grand Haven is divided into four neighborhood areas. The city itself is divided by U.S. 31 (Beacon Boulevard), resulting in two neighborhoods to the west of the highway, and two neighborhoods

to the east. The community is further divided by Park Street; its extension west to the lake, and its extension east into the Beech Tree industrial park.

For the purpose of reference, the neighborhoods are numbered and named; beginning with the Northwest neighborhood, #1, Central; the Northeast neighborhood, #2, Ferry; the Southeast neighborhood, #3, Griffin; and the Southwest neighborhood, #4, Taylor. The neighborhoods have, for the most part, assumed the name of existing elementary schools, and the elementary schools are the focal point of each neighborhood.


LEGEND
1 2 3 4 Neighborhoods (population on graph 3) p.50
SCHOOLS
Public
Private
Proposed
Playground service area
Playfield service area
LAKE MICHIGAN
FERRYSBURG
SPRING LAKE VILLAGE
SPRING LAKE
GRAND RIVER
1/4 MILE
1/2 MILE
1-MILE
1 1/2 MILE
GRAND HAVEN
MICHIGAN
and vicinity
SPRING LAKE·FERRYSBURG
SITE ANALYSIS

Schools

The site analysis map shows the location of all existing public and parochial schools and future proposed schools. Presently, the Grand Haven School Board has anticipated a need for a new junior high school, and its location will be in the southeast neighborhood. With the steady increase of population, the high school will undoubtedly have to be enlarged, and the presently proposed Griffin school playground will have to be constructed.

Population

The distribution and density of existing and potential population is determined from the present land use map. A reliable estimate of population density and distribution is helpful in determining the best size and location of parks, playgrounds, playfields, and other recreation areas. The ultimate neighborhood population estimate was prepared by Grand Haven's Planning Commission, and the 1960 neighborhood population was estimated from present land use. Reasonable estimates of population density for 1980 and its ultimate distribution in the neighborhoods are based on existing zoning, existing and probable future land uses, topography and the physical suitability of vacant lands for residential development. The chart on the following page estimates the 1960 population, 1980 population, and the ultimate population.

ESTIMATED 1960 AND ULTIMATE POPULATION BY NEIGHBORHOOD

Neighborhood	1960 Existing Population #		Estimated 1961-1980 Additional Population *		Estimated Ultimate Population +	
	Dwelling Units	Persons	Dwelling Units	Persons	Dwelling Units	Persons
#1 Central	1,344	4,318	1,475	4,720	1,706	5,460
#2 Ferry	1,302	4,186	1,498	4,793	1,546	4,948
#3 Griffin	303	987	1,244	3,981	1,473	4,715
#4 Taylor	487	1,575	591	1,890	609	1,950
Total	3,436	11,066	4,808	15,384	5,334	17,073

Based on land use map, aerial photographs, and ratio-3.2 persons per dwelling unit.

* Based on existing and suggested zoning plan, existing land uses, physical suitability of vacant lands, topography and ratio of 3.2 persons per dwelling unit.

+ Estimated by Grand Haven Planning Commission

(Neighborhood locations on Site Analysis map)

Visitor Population

In order to develop a sound recreation system for Grand Haven, it is not only essential to consider the local population living within the city limits, but also the visitor population which invades the city for scenic and recreational purposes.

During the summer months, the population within the Tri-City area increases by 3,500-4,000 people in an average weekend. This figure is only an approximation derived from the amount of extra living accommodations provided in the Tri-City area, ranging from cottages, motels, hotels, trailer courts and camp sites.

VI. INVESTIGATION OF GENERAL RECREATION STANDARDS IN REFERENCE TO GRAND HAVEN

Essentially, recreation standards consist of a description of number, size, and location of various types of parks and recreation areas. The standards include a recommendation for the amount of open spaces to be used, and the activities and patterns of such areas as parks, playgrounds, playfields, and a variety of other facilities needed in each area for the present and future recreation seekers.

Objectives of a Park and Recreation Plan

Objectives for the planning of parks and recreation areas are many. Besides including the number, size, and location of the different types of recreational areas and their standards, the plan should ultimately consist of the different types of space available, requirements both indoors and outdoors, commercial, private and public land patterns, and the many types of leisurely activities.

Recreation is an important function of the daily lives of all people in a community. For the pre-school age child as well as the retired adult, desirable recreational facilities must be provided which meet space and locational requirements based on particular needs of the several age groups.

"A plan's aim should be to help people achieve basic human objectives, such as companionship, relaxation, and physical health, particularly in active sports, and the enjoyment of

nature in quiet parks. Such a plan should also consider the many other functions of park and recreation land, such as aesthetic effects and the economic benefits through the stabilization of property values which can attract home purchasers and business and industrial firms. A park and recreation plan ideally should recommend the amount and location of land and facilities to satisfy these diverse functions and to help the residents of the community realize these intangible goals."

Park and Recreation Standards

A number of local and national agencies have developed certain sets of standards for use in the planning of different types of public recreational areas in communities. Seven such examples are shown in the following five charts.

A Park and Recreation Plan, Marple Township, Delaware County, Pennsylvania.

COMPARATIVE RECREATION STANDARDS FOR TOT LOT

	National Recreation Association	American Public Health Association	Department Of Parks & Recreation	California Committee On Planning For Recreation	Detroit City Plan Commission	Delaware County Planning Commission	Anchorage Alaska Planning Commission
Age Group Served	Under 8	2-6 Years	-	Under 5	Under 5	1 1/2-5 Years	Under 5
Desirable Size	1500-4000 Sq. Ft.	1500-5000 Sq. Ft.	-	.25 Acres	.25-2 Acres	1500-5000 Sq. Ft.	2,500 To 10,000 Sq. Ft.
Pop. Served by 1 Site	30-60 Families	30-100 Families	-	-	-	300-700 Persons	Up To 100 Families
Sq. Ft. Per Child	-	-	-	-	-	50 Sq. Ft.	75 Sq. Ft. Per Child
Maximum Radius Served	-	-	-	1/4 Mi.	1/4 Mi.	1/8 Mi.	1/8 Mi.

COMPARATIVE RECREATION STANDARDS FOR NEIGHBORHOOD PLAYGROUNDS

	National Recreation Association	American Public Health Association	Department Of Parks & Recreation	California Committee On Planning For Recreation	Detroit City Plan Commission	Delaware County Planning Commission	Anchorage Alaska Planning Commission
Age Group Served	5-15 Years	15 & Under	-	5-14 Years	Under 13 years	6-11 years	5-15 Years
Desirable Size	4-7 Acres	2.75-6 Acres	3-7 Acres	6.5 Acres	3-7 Acres	3-7 Acres	3-7 Acres
Pop. Served by 1 Site	1000-5000 Persons	1000-5000 Persons	-	3500-4500 Persons	4000 Persons	4500 Persons	Max. Pop. 500
Area Per 1000 Persons	1.25 Acres	1.20 Acres	-	-	1 & 1.25 Acres	1.25 Acres	1.25 Acres
Maximum Radius Served	1/2 Mi.	1/4-1/2 Mi.	1/4 Mi.	1/4 Mi.	1/2 Mi.	1/2 Mi.	1/4-1/2 Mi.

COMPARATIVE RECREATIONAL STANDARDS FOR NEIGHBORHOOD PARK

	National Recreation Association	American Public Health Association	Department Of Parks & Recreation	California Committee On Planning For Recreation	Detroit City Plan Commission	Delaware County Planning Commission	Anchorage Alaska Planning Commission
Age Group Served	-	All Ages	-	-	-	All Ages	All Ages
Desirable Size	1.5-2 Acres	1.5-3.5 Acres	-	-	-	2 Lots To Several Acres	2 Lots To Several Acres
Pop. Served by 1 Site	-	1000-5000 Population	-	-	-	4500 Persons	People Of Neighborhood
Area Per 1000 Persons	-	.95 Average Acre	-	-	-	1 Acre	1.25 Acres
Maximum Radius Served	1/4-1/2 Mi.	1/4-1/2 Mi.	-	-	-	1/2 Mi.	Walking Distance Of All Homes

	National Recreation Association	American Public Health Association	Department Of Parks & Recreation	California Committee On Planning For Recreation	Detroit City Plan Commission	Delaware County Planning Commission	Anchorage Alaska Planning Commission
Age Group Served	All Ages	All Ages	-	All Ages	All Ages	Over 11 Years	High School And Adults
Desirable Size	10-20 Acres	12-20 Acres	15-30 Acres	20-Plus Acres	20-25 Acres	15-30 Acres	10-20 Acres
Pop. Served by 1 Site	800 Population	-	-	5,000 - 15,000 Persons	-	10-20,000 Persons	15,000 Persons
Area Per 1000 Persons	1.25 Acres	1 Acre	-	-	2.5 Acres	1.5-2.0 Acres	1.25 Acres
Maximum Radius Served	1/2-1 Mi.	1-1.5 Mi.	1/2-1 Mi.	1-1.5 Mi.	1-1.5 Mi.	1 Mi.	1-2 Mi.

COMPARATIVE RECREATION STANDARDS FOR COMMUNITY PARK

	National Recreation Association	American Public Health Association	Department Of Parks & Recreation	California Committee On Planning For Recreation	Detroit City Plan Commission	Delaware County Planning Commission	Anchorage Alaska Planning Commission
Age Group Served	-	All Ages	-	All Ages	-	All Ages	All Ages
Desirable Size	-	50-Plus Acres	-	20-Plus Acres	10-100 Acres	25-Plus Acres	Minimum Of 300 Acres
Acres Per 1000 Persons	-	3-4 Acres	-	-	1-1.5 Mi.	2-3 Acres	-
Maximum Radius Served	-	-	1-3 Mi.	1-1.5 Mi. (Combination with Play-field)	- (Combination with Play-field)	-	-

The standards differ very little because they are applied to the average community in urban areas. However, the standards depend largely on the relationships found to be valid in the suburban areas as well as urban areas.

Such factors as the amount of space needed for specific activities, age group most served by each facility, distance users must travel to the area, and minimum space required per unit of population (usually based on 1,000 persons) for use of a given facility all go into the planning of standards for recreational areas.

To meet the requirements of planning for quantity of users, space, distance, etc., an average set of standards must be derived from existing conditions, and later must be projected to a future level of planning in adjustment to changes in conditions, needs and resources.

Minimum Size, Equipment, and Game Facilities for Recreation Areas

The following is a description of the type of recreation areas suggested for a community, and the type of facilities needed to satisfy its users.

Outdoor recreation areas may be classified into four main divisions:

1. Neighborhood Playgrounds & Playlots
2. Neighborhood Parks
3. Community Parks
4. Community Playfields

Before considering the design and equipment of a specific type of recreation area, it is important to point out the necessary features, location, and size of minimum neighborhood playgrounds, playlots, and parks, and community playfields and parks to establish a well balanced recreation system.

Neighborhood Playground and Playlot

To provide the varying needs and interests of children from pre-school to 12 years of age, sections of a playground must be developed for specific uses. Such sections should include the following:

1. A playlot not smaller than .25 acres for use exclusively by pre-school children. The area should contain a range of facilities such as swings, slides, sandboxes, climbing maze, shelter, etc.

2. An apparatus area of at least .35 acres for elementary school children 5-12 years of age. It is desirable that such an apparatus area be in one central place, under the direction of a supervisor, rather than scattered around the playground. The area should include swings, slide, horizontal ladder, traveling rings, climbing bars, etc.

3. A park-like area for free play by elementary school children at least .50 acres in size. The area need consist only of open space in which children may run and play.

4. A shaded area for handicraft and quiet activity not smaller than .30 acres. Benches and tables, a small platform,

hop scotch corner, and marble throwing area should be provided.

5. A small shelter house and wading pool may provide the center of a playground. In this area, parents may wish to sit while their children wade in the pool or go about other areas to play. Its size should be approximately .25 acres.

6. A multiple-use paved area of concrete or asphalt for court games, such as basketball, volleyball, deck tennis, paddle tennis, and badminton. The area should be of at least .50 acres if adjoining a school, or 1.00 acres if without adjoining space. Net and posts should be easily removable so that the area can also accommodate ice skating or running games.

7. An area of at least 2.00 acres for field play should be provided for field games such as softball, touch football, and field hockey.

8. An area for elderly people to sit and perhaps engage in such activities as card games, chess, etc. Tables and benches should be equipped for such activities. The land should consist of approximately .15 acres.

9. A landscape area to act as a buffer to various sections of the playground. The area should be about 1.35 acres.

10. A .20 acre parking lot for visitors.

The entire area adds up to approximately 5.85 acres which is the minimum acreage for a well balanced neighborhood playground and playlot combination.

Neighborhood Park

The neighborhood park should consist of approximately 1.5 acres of land, natural in character. The park should contain trees, shrubs, turf, flowers, foot paths, and benches on which people may sit to enjoy the surrounding beauty.

Community Park

The community park should consist of natural features on a much larger scale than the neighborhood park. Such features as a woodland, open lawn, meadow and valley are desirable when land permits. Secluded sections should be easily accessible by walking and bicycle paths and hiking trails. Boating, waterfowl, sanctuary, outdoor bandshell, arboretum, and botanical gardens make such a park an ideal center for recreation in a community.

Community Playfield

A community is a group of neighborhoods forming a city, and the community playfield is a center of recreation to be used by all these neighborhoods.

Since the neighborhood playground and playlot facilitates the recreation for young children, the community playfield should be designed to meet the recreational needs primarily of persons in their teens and middle ages.

One particular section of the playfield should be devoted to field sports, such as basketball, softball, football, soccer,

and field hockey. It is desirable that there be separate sections for both women's games and men's games, and that vegetation or screens be the dividing lines for various parts of the playfield. The total area should be at least 7.5 acres.

Another section of the playfield should consist of a paved area for such court games as basketball, handball, horse shoes, badminton, shuffleboard, tennis, and volleyball. This area should have a size of at least 1.6 acres, and should be located near footpaths and parking facilities for easy access by its users.

A third section of the playfield should be devoted to a concrete slab used for skating and dancing. This area should contain at least 1.5 acres for adequate use.

A fourth section should be given to an area of park-like appearance for free play on lawns. The area should consist of at least 2.00 acres.

Parking facilities should accommodate a minimum of 50-60 cars, and use approximately .40 acres of land.

In the entire community playfield, approximately 11.65 acres of land are needed for adequate usage of all neighborhoods.

Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education, by Participants in National Facilities Conference, Published by Athletic Institute, 1947.

VII. APPLICATION OF GENERAL RECREATION STANDARDS TO GRAND HAVEN

Many investigations had to be made before reaching a conclusion of the appropriate number of acres needed per present population for recreation, and the number of acres needed for the future population. The standards for Grand Haven are found to differ considerably from those of another community similar in size and character, simply because it is unique in its location on two bodies of water.

Since Grand Haven lies at the mouth of the Grand River and Lake Michigan, and possesses numerous natural physical qualities, it attracts many visitors seeking recreational pleasures. Also, because of Grand Haven's attractive location and easy access, it is an inviting town in which to reside. Its recreation program therefore must be founded on a set of standards arrived at by the study of present and future population projections for local population and for visitors.

The goal arrived at here is twelve acres of public land space per every 1,000 persons. Of course, in order for the success of such a goal, the land should be in a proper place and should meet the requirements of effective utilization; for instance, slope and shape of land are to be determined in planning particular facilities.

Because highly desirable land is not always available, new land must be acquired from former uses. The standards of 12 acres per 1,000 persons are the desired requirements for

recreational needs, and when land is actually acquired, it should be in excess of the desired requirements.

The following chart indicates the park and recreation standards recommended for Grand Haven.

PARK AND RECREATION STANDARDS RECOMMENDED FOR GRAND HAVEN, MICHIGAN

	Acres Per 1000 Population	Age Group Served	Desired Site Size	Maximum Radius Served	Maximum Slope Of Site
Tot Lot	Varies To Playground Size	Under 5	.25 - 2 Acres	1/4 Mi.	5%
Neighborhood Playground	3.0 Acres	5-15 Years	3-7 Acres	1/4 Mi.	5%
Neighborhood Park	1.5 Acres	All Ages	1.5 - Plus Acres	1/2 Mi.	No Limit
Community Playfield	2.5 Acres	12 And Over	15-30 Acres	1 1/2 Mi.	5%
Community Park	5.0 Acres	All Ages	20 Plus Acres	1 1/2 Mi.	No Limit
Total	12.0 Acres	-	-	-	-

Methods of Determining Recreation Needs from Standards

The standards developed have been used to evaluate park and recreation land for the present and future anticipated population.

The following charts indicate the location of existing sites and the city's recreational acreage needs.

EXISTING AND REQUIRED NEIGHBORHOOD PLAYGROUNDS AND FACILITIES

Location	Existing Areas and Facilities				Required			
	Acres	Facilities	Condition	1960 Population	Estimated 1980 Pop.	Needed Acres-1980	Estimated Ultimate Population	Needed Acres For Ultimate Population
Neighborhood #1								
Central School	.62	Multi-use Area Swings, Basketball	Fair	4,318	4,720	14.2	5,460	16.4
Elliot & Sixth School Site	1.4	Softball Field Apparatus Basketball	Poor					
Total	2.02							
Neighborhood #2								
Ferry School	4.5	4 Tennis Courts 1 Multi-use Area 3 Basketball Cts. 1 Softball Field 1 Baseball Field	Good					
St. Patricks School	.41	Apparatus Area	Fair	4,186	4,793	12.5	4,948	14.8
Christian School	1.5	Apparatus Area	Fair					
Franklin & Easter Playground	1.1	1 Softball Field 1 Basketball Ct. Apparatus Area	Fair					
Total	7.5							

(more)

EXISTING AND REQUIRED NEIGHBORHOOD PLAYGROUNDS AND FACILITIES cont'd

Location	Existing Areas and Facilities				Required			
	Acres	Facilities	Condition	1960 Population	Estimated 1980 Pop.	Needed Acres-1980	Estimated Ultimate Population	Needed Acres For Ultimate Population
Neighborhood #3								
Griffin School Site	6.5	Undeveloped	-	987	3,981	11.9	4,715	14.1
Total	6.5							
Neighborhood #4								
Mary White School	4.4	2 Ball Fields 2 Basketball Cts. Play Equipment	Good	1,575	1,890	5.7	1,950	5.9
Highland Park	.1	2 Private Tennis Courts	Good					
Total	5.5							
Total	21.5	-	-	11,066	15,384	44.3	17,073	51.2
					Total Need: 22.8			29.7

EXISTING AND REQUIRED NEIGHBORHOOD PARK FACILITIES

Location	Existing Areas and Facilities				Required			
	Acres	Facilities	Condition	1960 Population	Estimated 1980 Pop.	Needed Acres For 1980 Pop.	Estimated Ultimate Population	Needed Acres For Ultimate Population
Neighborhood #1								
Central Park	3	-	Good					
Johnson Park	.1	-	Fair					
Klaaver Park	.1	-	Fair	4,318	4,720	7.1	5,460	8.2
Depot Park	.1	-	Fair					
Total	3.3	-						
Neighborhood #2								
Bolt Park	.5	-	Good	4,186	4,793	7.2	4,948	7.4
Connely Park	.1	-	Fair					
Total	.6	-						
Neighborhood #3								
None	-	None	-	987	3,981	6.0	4,715	7.1
Neighborhood #4								
Kelly Park	.1	-	Good	1,575	1,890	2.8	1,950	2.9
Total	.1							
Total	4.0	-	-	11,066	15,384	23.1	17,073	25.6
					Total Need:	19.1		21.6

EXISTING AND REQUIRED COMMUNITY PARK

Location	Existing				Required			
	Existing Acres	Facilities	Condition	1960 Population	Estimated 1980 Pop.	Needed Acres For 1980 Pop.	Estimated Ultimate Population	Needed Acres For Ultimate Population
Neighborhood #1 None	-	-	-	4,318	4,720	23.6	5,460	27.3
Neighborhood #2 None	-	-	-	4,186	4,793	24.0	4,948	24.7
Neighborhood #3 None	-	-	-	987	3,981	19.9	4,715	23.6
Neighborhood #4 Duncan Park	43	Natural Park	Excellent	1,575	1,890	9.5	1,950	9.6
Total	43			11,066	15,384	77.0	17,073	85.2
					Total Need: 34.0			42.2

EXISTING AND REQUIRED COMMUNITY PLAYFIELDS

Location	Existing				Required			
	Acres	Facilities	Condition	1960 Population	Estimated 1980 Pop.	Needed Acres For 1980 Population	Estimated Ultimate Population	Needed Acres For Ultimate Population
Neighborhood #1 High School	4.9	Football Field Track	Excellent	4,318	4,720	11.8	5,460	13.7
Neighborhood #2 Beechtree Baseball Diamond	6.8	Class A Baseball Field	Good	4,186	4,793	12.0	4,948	12.4
Neighborhood #3 None	-	-	-	987	3,981	10.0	4,715	11.8
Neighborhood #4 None	-	-		1,575	1,890	4.7	1,950	4.9
Total	11.7	-	-	11,066	15,384	38.5	17,073	42.8
					Total Need:	26.8		31.7

Determination of Service Areas

The Site Analysis Map on page 51 shows service areas of each type of facility except for the community park which serves all parts of the city regardless of its distance.

The analysis determines whether each public park or recreation facility is adequate in size to serve the population anticipated in a service area or neighborhood.

A circle is drawn around each neighborhood park, playground and playfield with a radius as specified in the standards. In order for children to walk to a neighborhood playground, its maximum radius should not be more than $\frac{1}{4}$ of a mile.

The entire service area is estimated for the adequacy of existing parks and playgrounds in regard to the total potential population.

Determination of Population Within the Service Area and Number of Additional Acres of Recreational Land Needed Within the Neighborhood

(A count of the existing dwellings and population within each neighborhood is indicated on the chart on page 78).

In column one is the number of buildings existing in each neighborhood. Column two shows the number of persons living in this area under the 1960 population count. Column three indicates the estimated dwellings for the year 1980, and column four shows the estimated population for 1980. Column five shows the ultimate buildup of the area, and column six, the number of people that could possibly live there, (derived

from present zoning laws).

To estimate the population within the neighborhood, it is necessary to multiply the number of dwellings existing or proposed by the number of people in the average family (3.21 as estimated by the 1960 census). The totals of each column indicate the ultimate population which could be served by each existing site for the year figured.

To determine the amount of additional park and recreation space needed for Grand Haven in 1980, and its ultimate buildup, the determined population figures of each neighborhood must then be multiplied by the acres per 1,000 people recommended for Grand Haven.

ESTIMATED 1960 AND ULTIMATE POPULATION BY NEIGHBORHOOD

Neighborhood	1960 Existing Population #		Estimated 1961-1980 * Additional Population		Estimated Ultimate Population +	
	Dwelling Units	Persons	Dwelling Units	Persons	Dwelling Units	Persons
#1 Central	1,344	4,318	1,475	4,720	1,706	5,460
#2 Ferry	1,302	4,186	1,498	4,793	1,546	4,948
#3 Griffin	303	987	1,244	3,981	1,473	4,715
#4 Taylor	487	1,575	591	1,890	609	1,950
Total	3,436	11,066	4,808	15,384	5,334	17,073

Based on land use map, aerial photographs, and ratio-3.2 persons per dwelling unit.

* Based on existing and suggested zoning plan, existing land uses, physical suitability of vacant lands, topography and ratio of 3.2 persons per dwelling unit.

+ Estimated by Grand Haven Planning Commission

Determination of Possible Sites for Acquisition

The vacant land indicated on the existing land use map has been studied in regard to accessibility, possible development, suitability, and topography. However, most of this land is unsuitable because of its inaccessibility to neighboring users.

The vacant land in the one-family areas is so small it could only be used for playgrounds and neighborhood parks. The Northwest neighborhood shows promise of extensive recreational uses, however, its traffic hazards reduce its desirability greatly.

Because of the lack of suitable land in the areas studied, another solution has been developed. This solution is to acquire approximately 89 acres of land on either side of U.S. 31 with the acknowledged construction of a new interstate highway through the city in place of U.S. 31. This proposal gives needed recreation land adjacent to each neighborhood and to six of the nine schools in Grand Haven, and provides an attractive entrance into the city.

The Michigan Highway Department would then have to acquire 68 acres of land for the construction of the highway, and develop the remaining land for recreation and aesthetic value. (Refer back to Site Analysis Map, page 51).

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VIII. LAND ACQUISITION

Size and Location of Acquired Land

According to the determined recreational standards, there is a need to acquire 125 acres of park and recreational land in Grand Haven. With the construction of the limited access highway, the Highway Department should further be convinced to elevate the highway so that the land under it and the right of way, 300 to 350 feet (total; 68 acres) can be developed into recreational land. Further, the recreational land can serve as a buffer strip between the highway and the adjacent residential areas. This proposal would lessen the need to acquire all 125 acres, but acquire approximately 89 acres in a linear manner on both sides of presently located U.S. 31, beginning at Robbins Road on the south end of the city, and extending north to the second bridge on the Grand River.

The total recreation program includes playgrounds, playfields and parks which will be adjacent to the proposed elevated interstate highway. The two sides of the city will be connected by six existing streets used as throughways.

Several other alternative locations for the highway have been investigated. One in particular is that of rerouting the highway from presently existing U.S. 31 to the west side of the city along Lake Michigan over the sand dunes on presently undeveloped land. This investigation has some advantages, however, they are far outweighed by the disadvantages. One point in its favor is that the highway would be located on mostly undeveloped

city land, and would thus avoid congesting traffic in the middle of the city. The disadvantages of this location are many. Primarily, the project is too expensive. It would destroy the natural and visual qualities of the sand dunes, and further, it would lower the property value of the presently most exclusive section of the city. Also, it would increase congestion of the already overcrowded conditions of the state park.

Another proposal is to reroute the highway on the east side of the city along the Grand River to the presently located bridge across the river. This proposal is impractical because of the presently located manufacturing area along the Grand River, excessive marsh land along the river, and because the construction and acquisition of land would be too costly.

A third proposal is to reroute the highway on the east side of the city across the Grand River and around Spring Lake. This method is also inadequate in serving the city and the area north of the city because such a location would come too close to the presently existing I-96 highway.

Justification for Acquisition

There are many reasons which justify the acquisition of the proposed land for the combining of recreational land with the elevated highway.

1. The elevated highway would provide easy access into the city without any traffic congestion, and the land on both

sides of the highway would present a beautifully scenic entrance into the city.

2. With the elevation of the highway, its right of way would be converted into recreational land. However, if the highway were to be proposed on ground level, the land could only be used as its right of way.

3. The combination of elevated highway and recreational land into one area would also prevent the city from having to seek alternative locations for its recreational land in the city where the land is expensive and ranges in the neighborhood of $100 to $200 per square foot.

4. The difference in cost between the elevated highway and ground level highway in the Grand Haven area is roughly $6,900,000 of which 90 per cent would be paid by the Federal Government.

5. Since the limited access highway is financed for the most part by the Federal Government, Grand Haven can further receive additional money for recreation land through various Federal Assistance Programs.

6. The combination of recreational land with the highway would centralize community recreation within easy reach of all the sections of the city, and away from hazards of traffic.

7. With the establishment of such an area, surrounding property values would increase and thus, encourage more permanent residents.

8. The location of a central recreational area would unite the neighborhoods of Grand Haven, rather than the two separate communities it has become, due to the physical dividing line of U.S. 31.

9. Because the area is located next to four public schools and two parochial schools, the required play facilities could be provided adjacent to the schools, and supervision could be handled by the School Board and Municipal Recreation Department.

Establishing such an area would, of course, bring hardships and inconveniences to some people. In some instances, certain people will be forced to move to a new location. However, it is true that the proposed area is in below average and average neighborhoods, and these neighborhoods will likely never advance to higher standards, but will proceed to decline in value and eventually decay.

By developing a park-type recreation area, unsightly structures on the land would be eliminated, and at the same time, surrounding structures would increase their value because of park land adjacent to them.

Methods of Acquiring Land for Recreation

The various ways by which the City of Grand Haven may obtain land for recreational purposes are through purchase, gifts, dedications, transfer of land, tax delinquency, or a combination of all.

Financial Support of Recreation Sites

Revenues for the municipal government are obtained from several sources, of which the general property tax yields are by far the greatest amount. Business taxes, forfeit, and donations also make up methods by which financial support may be gained for recreation sites.

Also the funds appropriated by the city for community recreation can be supplemented with expenditures made by the U.S. Government for community recreation under the work of relief agencies.

If community recreation is provided by a combination of park-school plan, it may receive some state support under federal financial aid to states for education.

Recreation sites may also be financed through bond issues when a city borrows for long term bonds of 20-30 years. Other methods by which recreation sites may be financed are through local benefit taxes for special assessments on residents whose properties border on recreational sites and who receive added benefits because of site location, and through the sale of general obligation bonds, which are assessed to people living outside the city limits but enjoying the benefits of schools and community recreation.

The actual construction of the limited access highway will be undertaken by the State Highway Department, and financed for the most part by the Federal Government with assistance from the State of Michigan. Since the highway is proposed as

an elevated highway, a 300-350 foot right of way should be developed into a park-type buffer strip and financed along with the construction of the highway.

This assistance would supplement the construction of the total recreation area, and help to develop a better aesthetic value to both the motorist and the urban dweller.

Relocation of Present Land Occupants

With the construction of the limited access highway and the development of recreational land, 340 homes and their occupants, and four duplex apartments and four triple apartment buildings, plus their occupants, will have to be relocated. The relocation should be so carried out as to retain the maximum number of residents within the city limits to protect the city's present tax benefits. To carry out this idea, it is necessary to acquire the presently open land, mostly in the Griffin neighborhood, and provide the people involved with beneficial qualities, such as larger lots, less traffic congestion, and a better opportunity to build a larger home. To further encourage these people relocating, more monetary value should be put on their property if they choose to stay within the city limits.

Commercial and manufacturing occupants should also be given the same consideration where a new location could benefit their production and sales, with little or no increase to the cost of land. The area which should be considered for

relocated establishments is the land immediately west of the newly proposed limited access highway, from Park Street to Robbins Road. This area is presently zoned for manufacturing purposes. Another ideal area along Beech Tree Street has developed rapidly in the last seven years, and provides excellent opportunity for both commercial and manufacturing establishments.

IX. DESIGN

Program

The usefulness of a city's recreation areas depends not alone upon their size and location, but upon the way in which they are designed, developed, equipped, maintained, and operated for use. During much of the year when outdoor activities are curtailed because of bad weather, it is essential that school buildings or other recreational buildings be made available for indoor activities. Whenever possible, playgrounds and playfields should be adjacent to these buildings so that all activities are centralized together.

Program Planning Principles

"A community program for recreation must include the discovery of potential interests, talent and skills; training and education in the creative use of leisure, and a wide variety of opportunities to serve the multitudes of interests—physical, social, musical, dramatic, nature, etc. of different individuals."

In almost any community, individuals differ in their recreational interests and needs. It is, however, important to set forth certain essential activities which will benefit all

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Danford, Howard G., Recreation in the American Community, New York: Harper and Brother, 1953.

people. Such activities would include:

1. Provide equality of opportunity for all. Facilities and programs should be sufficiently broad and well distributed to enable all the people to be served.

2. Provide a wide range of individual choices in different types of activities, games, music, arts and crafts, nature, social recreation, athletic games and sports.

3. Provide continuous recreation throughout the year.

4. Provide activities which will serve children of all ages, young people, adults, and senior citizens.

5. Provide equal activities for both sexes by furnishing separate active play areas.

6. Provide activities which will encourage family recreation from picnicing to bicycle riding.

7. Provide passive as well as active forms of recreation from vigorous participation to enjoyment of watching, listening, or mere contemplation.

8. Assure safe and healthful conditions for recreational activities.

Design Principles

There are certain factors and objectives which should be considered in establishing a sound recreation system. Among

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Guide for Planning Facilities for Athletics, Recreation, Physical and Health Education, by Participants in National Facilities Conference, Published by Athletic Institute, 1947.

these principles are:

1. An effective use of the entire area because recreation land is limited in size. Since the land proposed for recreational areas is expensive, they should be planned for minimum population standards where every part of the area functions properly in both utility and beauty.

2. Location and arrangement of the areas and facilities. The facilities should be so arranged as to provide for the best use as to their orientation in relation to the sun and prevailing winds, as well as their location within the recreation site in relationship to other uses.

3. Adequate space for the facilities.

To assure safety and satisfaction of use of play equipment, game courts, playfields, and other features, there must be satisfactory allowance given to each area so the use can be carried out with no interference from adjacent facilities.

4. Ease of supervision and operation.

The areas which require more supervision should be closely related to one another so that they can be supervised and operated from a central point, preferably near the tot lot since mothers usually accompany their children.

5. Facility of circulation and accessibility.

The walks and path system should be so distributed through the area as not to interfere with facilities and give direct access to other areas on the site.

6. Utilization of natural features.

Utilize all natural features found on site such as trees, slope, water, etc.

7. Safety.

Areas such as ball fields should be located and oriented so as not to interfere with adjacent areas and pedestrial circulation.

8. Economy in maintenance.

The materials used should, by nature, require little maintenance. The playground should be constructed on sand, court games in concrete or asphalt, and playfields in grass.

9. Convenience of people using areas.

The total recreation area should have adequate comfort facilities, such as drinking fountains, seating, toilet facilities, adjacent parking spaces, and direct circulation systems spaced equally throughout the total area.

10. Parking Spaces.

The parking spaces should be located adjacent to almost all activities which are used by a variety of people, and individual parking lots should be large enough to accommodate at least 40 to 50 cars.

11. Appearance.

The total recreation area should present a pleasing appearance from both within the area and outside. A pleasing appearance stimulates adjacent properties and a better use of the total recreation land.

Lee, Joseph, Play in Education, New York: National Recreation Association, 1942.

Combination Park-School Plan

The park-school plan is one which combines a park, school, playground, and similar recreation facilities into a single functional unit for education, recreation and other community activities. The concept is greater than just a grouping of these facilities on a single site. It is a unit, the wholeness of which is its essential characteristic. It is a plan functionally designed to house and make possible an integrated program of education, recreation and community activities suitable to the geographic area it serves.

This functional concept recognizes that day-by-day experiences of children which take place outside school are also educational. They are as essential in a complete educational program as many of the more formally organized classroom activities. The park-school combination, therefore, is a plan designed to integrate both school and community experience into an overall program of community education.

The program provided in these areas should be equally carried out by the school board and community education board. With the cooperation of both agencies, the program can be better carried out to serve children and adults in cooperative joint planning for programs of education-recreation. Further, this combination provides and helps to finance both outdoor and indoor recreational facilities.

Outdoor Recreational Facilities

Outdoor recreational facilities are generally considered in two categories: active, which include neighborhood playgrounds, community playfields, and city-wide facilities such as beaches, golf courses, etc.; and passive, which include neighborhood parks, community parks, regional parks, and various special types of city parks around municipal buildings.

Outdoor recreational facilities in residential areas, such as neighborhood parks and playgrounds, provide opportunity for active exercise and exposure to sunshine. Passive recreation helps to relieve the nervous strain of urban life and helps foster good social relationships. Neighborhood parks are planned to serve all groups, however, special emphasis is placed on serving mothers with babies, the aged, and entire families.

Indoor Social and Cultural Facilities

Indoor social, cultural, and recreational facilities supplement dwelling facilities and provide opportunities for normal group activity. Services and organizations for which space may be required in a neighborhood include: Social service; vocational and employment guidance, child guidance; Literature and the Arts; library, art exhibits, lectures, musical programs; Recreation; parties given by neighborhood organizations, indoor sports and games.

Proposed Site Adjacent to Highway

The design program for the proposed recreation site adjacent to the highway should include a variety of recreational activities ranging from active to passive.

The active recreational activities should be located adjacent to the school in proposed playgrounds and playfields where the schools can supplement the outdoor recreation activities with indoor activities during bad weather. The playgrounds and playfields will be geared to activities which are suitable for the young and old. For the types of activities which should be located on playgrounds and playfields, refer to pages 62-66.

The passive recreation areas will be distributed throughout the total proposed site, and will include activities of park-type nature, such as sitting areas, picnic grounds, woodland, nature trails, bandshell, arboretum, marina for boat rental and storage, and wildlife refuge. The various activities distributed through the site will be connected by a direct walk system separated from the automobile traffic or any other hazardous obstacles.

Area on Waverly and Beech Tree Street

This area is presently used as a community ball field, but is to be converted into a neighborhood playground. For size and type of area, refer to page 63. The ball field will be relocated on the major proposed site where it will better serve the future population.

Application of Former Concept of Parks and Recreation to Grand Haven

Looking back into history, we saw that the development of parks, boulevards and parkways had a definite purpose to fulfill; that is, to provide light and air to adjacent properties, provide both active and passive recreation, separate the pedestrians from traffic, and connect parkland by bands of vegetation to guide the inhabitants from pure nature to man made structures.

This naturalistic idea could be developed similarly in Grand Haven with the acquisition of land adjacent to the proposed elevated limited access highway in a linear manner which would give clear separation from automobile traffic, and at the same time, give aesthetic beauty to the land for motorist and city dweller satisfaction, and provide needed recreation land.

Character of Proposed Recreation Site

The proposed design of the site is of a naturalistic character with a variety of activities in between masses of vegetation. The recreation site is designed for the city dweller as well as the passing motorist.

The activities proposed for the site fall into two categories; active and passive, with the active areas located for the most part next to six existing schools, and the passive activities distributed throughout the site.

The central location of the recreation site equally serves all neighborhoods, and provides easy access to the by-passing motorist. The site strives to encourage the people to congregate, walk and participate in a variety of activities away from the automobile and other hazards.

To encourage more extensive participation by people living in the city, the existing city streets will be lined with vegetation belts where needed to establish a direct guide to the recreation site and a gradual association to nature.

The major proposed recreation site consists of approximately 89 acres acquired by the City of Grand Haven, and additional recreational land of 68 acres acquired by the Michigan Highway Department after the construction of the elevated, limited access highway which will include land under the highway and 300-350 feet of right of way.

The location of the recreational site will be in a linear manner along both sides at various points of the proposed highway. This major site will begin at Robbins Road on the south side of the city, and extend to the second bridge on the Grand River at the north end of the city.

Another proposed site is a small site presently located on Beech Tree Street and Waverly Road. This area is now a community ball field, however, it will be converted into a neighborhood playground.

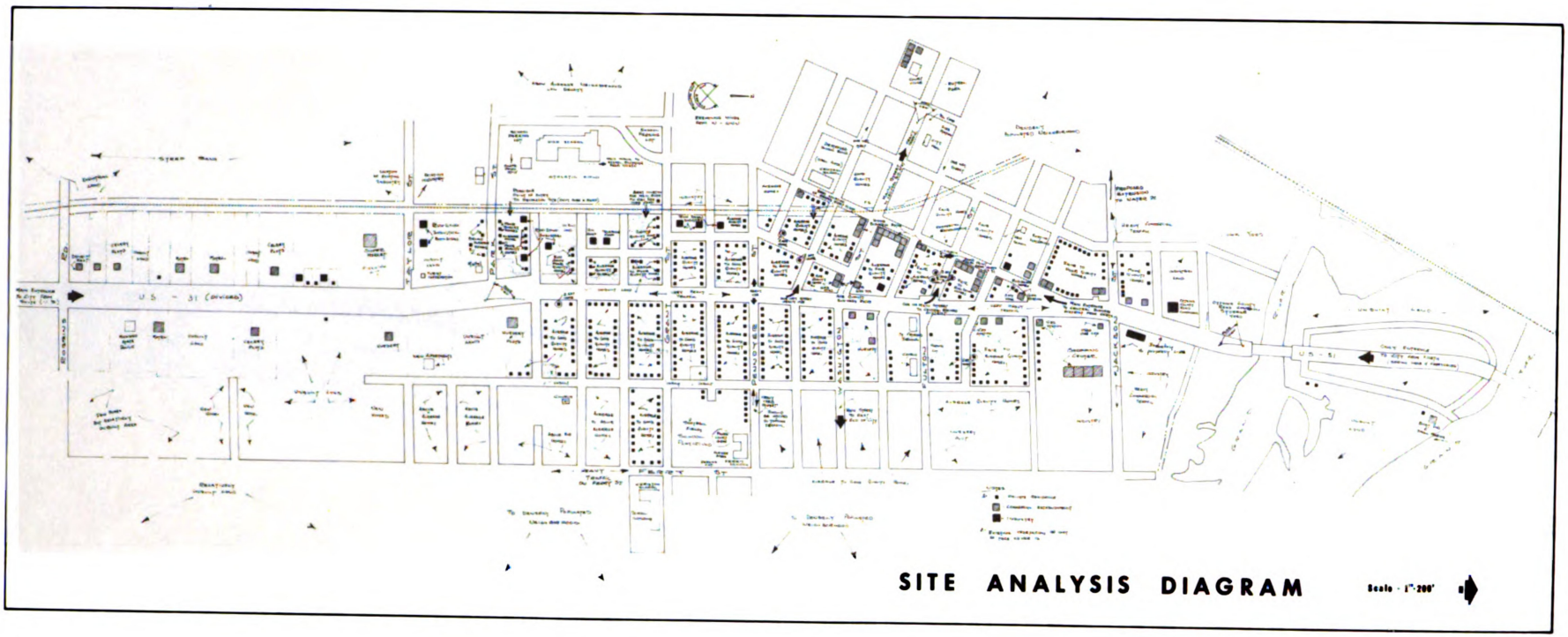
The Franklin-Eastern Playground will be converted from its present facility into residential building purposes as its location is of minor importance to recreation.

The major site will provide centrally located recreation in a park atmosphere which continually flows from one area to another, enabling a person to travel uninterrupted by traffic or other obstacles. The topography of the site proves satisfactory for construction of active recreation areas.

Before any actually designing can take place, the project site must be broken down into two parts; its existing land use, and its design program for recreational use.

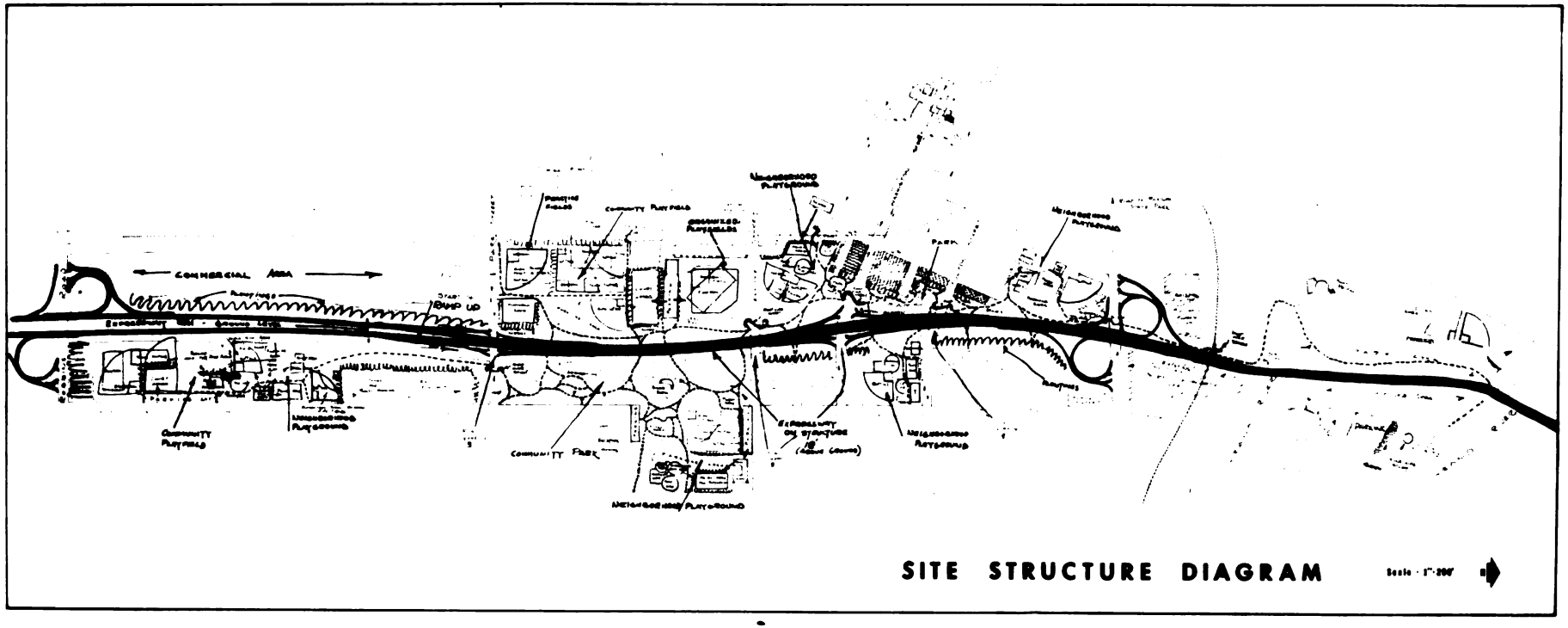
Site Analysis Diagram

In order to design the proposed designated recreation land, it is first necessary to record the presently existing land use. This is done on a site analysis diagram map which shows every home, business and manufacturing establishment, school, street and other structures proposed in and adjacent to the recreation site. This data helps to establish the number of people and buildings in the area and the necessary streets to carry the city's traffic from one side of town to the other.


U.S. - 31 (BYPASS)
SITE ANALYSIS DIAGRAM
Scale - 1"=200'

Site Structure Diagram

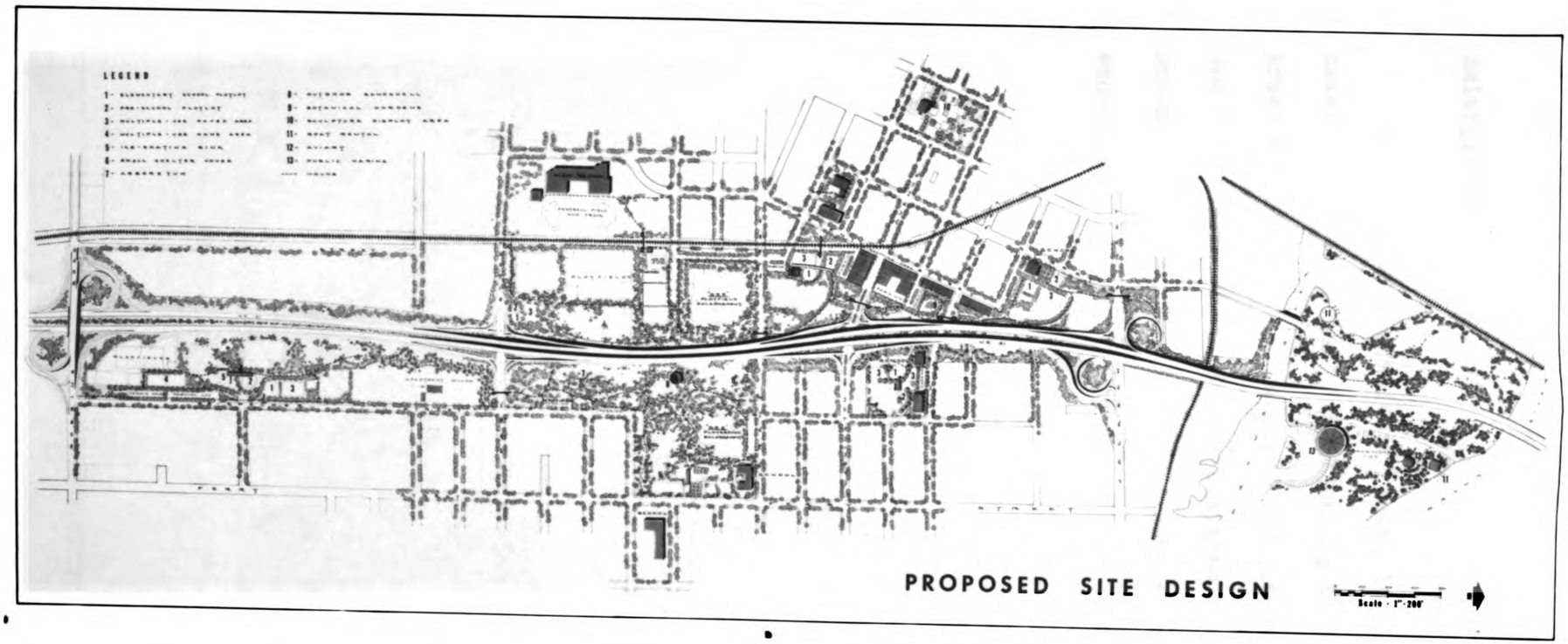
The total function of the site is analyzed on the site structure diagram map which follows. This map shows the location of proposed recreational sites in relation to the proposed elevated highway, the local city streets extending through the city, and the location of recreational facilities in relation to schools and the city's neighborhoods.



SITE STRUCTURE DIAGRAM

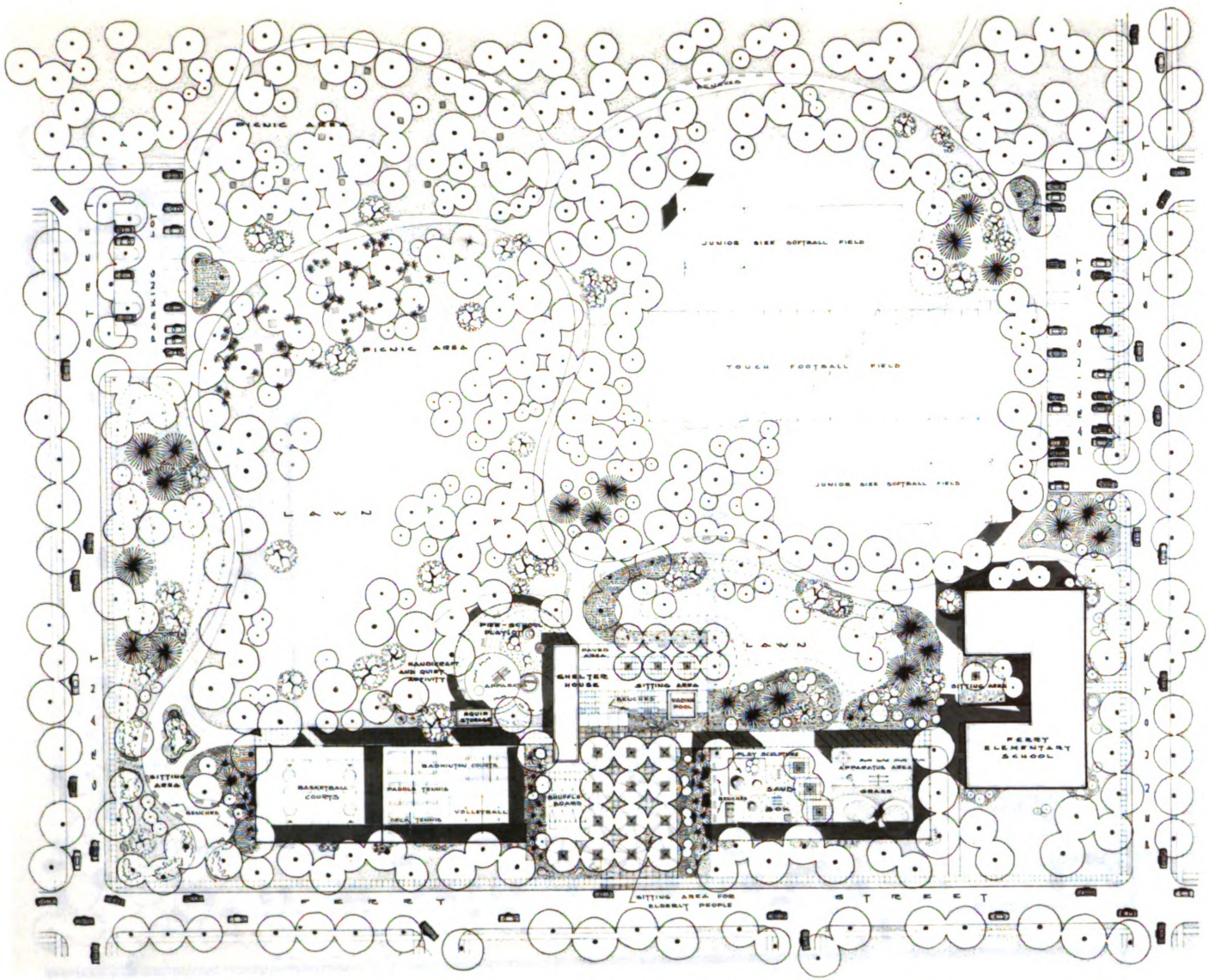
Total Design of Proposed Site

The total design of the proposed recreation areas is no more than the balance of the planning process which has been developed through reanalysis, logical development, and refinement of details from the structure diagram map.


LEGEND
PROPOSED SITE DESIGN

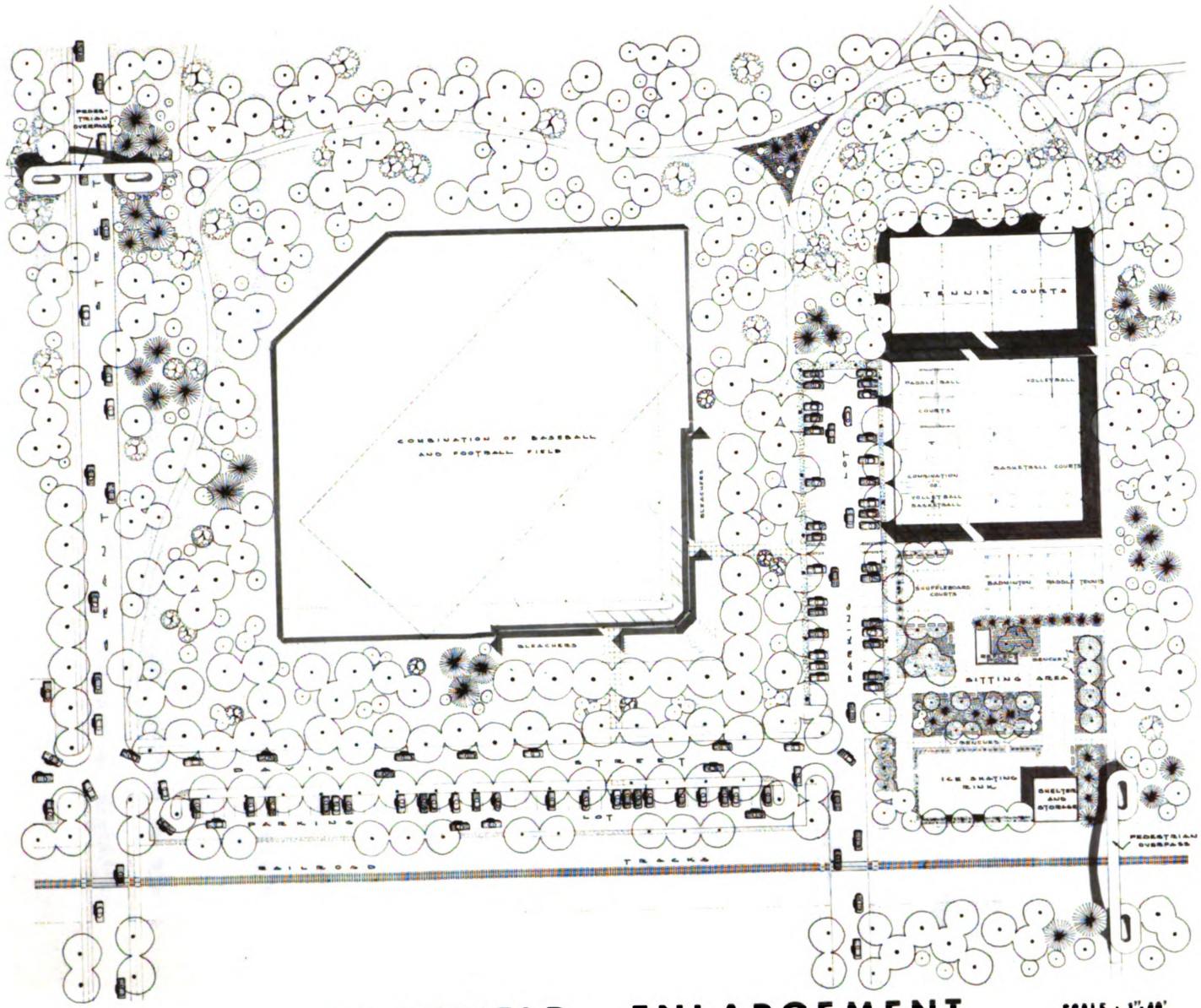
Enlargement of Areas

With the determination of total land use of the recreation sites and their relationship to activities, two areas are depicted and enlarged for a detailed observation. One of the areas is that of a playground adjacent to Ferry School; the other is a playfield area adjacent to the high school.



PLAYGROUND ENLARGEMENT

SCALE · 1"-40'



PLAYFIELD ENLARGEMENT

SCALE · 1"-40'

Basic Construction Details for Recreational Areas

Drainage and Grading - All sites include overall drainage and grading, designed to facilitate quick drying of all outdoor areas. Surface drainage on unpaved areas is controlled by slope grading to natural or artificial surface-water collectors, such as inlets and catch-basins connected to a storm-water drainage system. In order to facilitate surface drainage of activity areas, it is necessary to establish a 2% minimum slope. The surface slope on paved areas should be a minimum of 1%.

Surfacing - There is no one surface which satisfactorily meets all criteria for all activities because conditions of use, climate and location differ.

Playgrounds: Earth is preferred for utility, appearance, psychological and aesthetic values of the area.

Court Games: Concrete is the material desired because of durability, performance, and hard surface.

Walks: Asphalt is the desired material to be used for all walks. The walks vary in width in accordance to traffic density.

Paths: In areas such as picnic grounds, gardens or arboretum, the material desired for use is Tanbark or tightly packed gravel.

Lighting - The use of lights will categorize into three types: field lighting, court game lighting, and general area lighting.

1. Field lighting - will be located only in the combination field; football and baseball. As a result of this combination, two different lighting systems must be used as baseball requires higher illumination than football.

2. Court game lighting - Since the players are looking up much of the time, particular attention is given to keeping the lighting units out of their field of vision. Floodlights are found to be less annoying when located between courts and near the net line. Four aluminum floodlights per court are sufficient. A relatively even distribution of light upon the court and in the region of ball travel is required. Night lighting would accommodate such activities as basketball, badminton, volleyball, and shuffleboard.

3. General lighting - The lighting of park and playground areas is provided through tower lighting. It provides sufficient illumination for movement throughout the area, and is generally arranged to cover as much territory as possible with the greatest economy. Tower lights of this nature are operated by time clocks so that those in certain areas turn off at a specified time and others remain lit.

The placement of lights in the outdoor design usually are at a location to serve their primary function and still not be a nuisance to the neighborhood residents or highway travelers. All lighting service is supplied through underground conduits. The lighting is so placed to illuminate stairways, ramps, and secluded angles of buildings to eliminate misuse and provide

safety. The walkways throughout the park are also lighted by underground conduits and the entire power system is tied into the city lighting system.

Fencing - Fences are required around facility units for the purpose of isolation to aid in supervision, and for the protection of participants, spectators, and general public property. The fences are, for the most part, provided to keep the flow of traffic and the participants separated.

The type of fencing for special areas would include those for tennis courts, small children's area, and apparatus area. A tennis court should be surrounded by a fence 12 feet in height, placed 21 feet behind the baseline, and extending 10 feet beyond the sidelines. The small children's area should be protected with a low fence to keep the children inside. The apparatus area should be encircled with a medium height fence.

Backstops - are provided for the protection of spectators as well as for the prevention of loss of equipment.

Pedestrian Ramps - The construction of pedestrian ramps is for the safety of the park users. They are made of pre-stressed concrete ramped in an arch across the street to railroad tracks. The height of each ramp extending across a road is 16 feet, and 22 feet across railroad tracks.

Highway and Through Streets - The highway will enter Grand Haven on existing U.S. 31 from both sides of the city. It will become structurally elevated 600 feet south of Park Street and extend north to the existing surface of U.S. 31 after the first bridge over the Grand River. The highway will maintain a level of 18 feet above the existing ground surface, and will have four connection points leading to Grand Haven's street system. The east and west part of the city will be connected by existing streets having downgrade ramps of 3 feet upon entering the park land. This is to discourage persons from crossing the highway.

Vegetation - Vegetation used for the design of the site is of the same general type of trees and shrubs found throughout the Grand Haven area. Nothing unusual will be utilized for the vegetation, but rather, easily identifiable trees and shrubs which give the area a familiar appearance, and blend in with the vegetation already in existence on surrounding land.

Along the streets extending through the site, there will be barriers of dense shrubs planted to discourage park users from crossing the streets and encourage them to use the overpass bridges as a means of getting from one recreation area to another. All trees are within 50 feet of the highway structure.

Master Plan

The Master Plan shows all the retained existing and proposed recreation areas needed for the present and future growth of the City of Grand Haven.

GRAND HAVEN
MICHIGAN
and vicinity
SPRING LAKE-FERRYSBURG

MASTER PLAN

X. CONCLUSION

The proposed plan for establishing a system of recreation in various areas of Grand Haven was derived from a study of many major phases.

The main questions which had to be answered in order to even seriously consider such a proposal, were first, was there a true need for additional recreation facilities based on the future growth of population and economy in Grand Haven; and secondly, was there an area which could best serve the placement of such facilities?

When these questions were answered, there was then a reason for covering all phases of Grand Haven's character in order to further add to the information needed to establish a future plan for recreation in Grand Haven.

In regard to the need for recreation based on future population and economy growth, Grand Haven's population has increased steadily since its incorporation, and by 1970, it will have increased by 20 per cent. Its economy has been ever increasing with more homes, restaurants, shops, industry and visitor accommodations being constructed every day.

A set of average recreational standards were used to determine the actual needs for Grand Haven. These standards revealed that a variety of recreational facilities should be in close proximity to most of the city's residents. With this in mind, it became apparent that the best plan would be to combine the needed recreational land with the proposed elevated, limited

access highway going through the city. In this combination, the land under and on each side of the highway could be utilized for the purpose of recreation rather than a mere right of way for the highway.

This was the most ideal spot for many reasons; one being its proximity to all neighborhoods, another, its ability to bring together for recreational enjoyment, the neighborhoods which have been separated by the physical dividing line of U.S. 31.

The many detailed studies presented in the foregoing pages are each in their own way of vital necessity to the establishment of an ideal recreation program for the City of Grand Haven, Michigan.

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