SHEM CREEK SPECIAL AREA MANAGEMENT PLAN

COASTAL ZONE
INFORMATION CENTER

prepared by:

THE TOWN OF MOUNT PLEASANT &

THE SOUTH CAROLINA COASTAL COUNCIL

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INTRODUCTION/ORGANIZATION

Introduction - This Special Area Management Plan is being prepared with the purpose of designating land development patterns and proposing construction policies which can be used in future years to guarantee that the Shem Creek area develops in an orderly and environmentally sensitive manner. The Management Plan is being prepared as a joint project by the Town of Mt. Pleasant and the South Carolina Coastal Council. It will be used by both to provide an adopted plan; stating specifically the manner, nature, and appearance future development in the area.

Shem Creek is a unique resource: to the Town of Mt. Pleasant the creek is a source of many jobs, a substantial provider of tax revenue, and an important element in the Town's economy. To the Coastal Council Shem Creek is important for the wetland resources found within and along the Creek; and for being the center of the Charleston Area's commercial fishing industry, one of the largest seafood processing points on the entire East coast. The shrimp fleet and the commercial fishing industry are recognized by the Council as being a resource of statewide significance which is deserving of a guarantee of space within which to effectively operate and if need be to expand.

Over the past few years a number of businesses which are not dependent upon a waterfront location have been constructed along and immediately adjacent to the Creek. Some of these uses have been determined by the Special Area Management Plan to be compatible with and complimentary to the businesses involved with servicing the commercial fishing fleet or processing their catch. Other businesses have been determined to be not complimentary. Space to accomodate the expansion of existing businesses or land on which to locate new businesses is at a premium, and the competition for building space could in future years deny the commercial fishing industry the ability to expand - or even force the fleet out of Shem Creek altogether.

Shem Creek is also important to the Town of Mt. Pleasant because it ultimately receives most of the stormwater runoff flowing through the Town's drainage system. This large volume of runoff, unless properly managed and planned for, can create flooding problems, and severely limit the Town's ability to service future development projects. Runoff water can also contain substances harmful to water quality and the ecosystems which border the marsh, one of the most sensitive ecosystems on the earth. It is very important that any substances which would lower water quality and affect the surrounding marshlands be removed from the system. The Management Plan will address this issue by making this a consideration in preparing a drainage plan for the entire basin.

The Special Area Management Plan must be both specific and broad in scope. Within the commercial center of the creek, the plan must be very specific and precise in detail - to the point of dealing with specific parcels of land and site improvements needed to implement the plan. In dealing with the entire drainage basin, precision and detail are not required; instead the planning effort has to be concerned with the acreage amounts of sub-basins, drainage patterns, channel widths, pipe sizes, amount of land coverage, and amount of open space. The plan in its completed form must be able to provide policy recommendations on both levels.

Organization of the Plan - This plan consists of two sections, interrelated but separate: a detailed development plan, containing policy recommendations and a Future Land Use Map for the commercial center of the Creek; and a Drainage Plan which delineats the boundaries of the natural drainge basin, and makes recommendations of ways to reduce flooding, and suggests land coverage patterns which will be the most effective in reducing future drainage problems. By following this approach in organizing the study, the specific site data necessary to the development plan, and the more generalized land coverage information required in the drainage plan can be obtained, depicted on maps of different scales, and policy recommendations produced for each section.

ECONOMIC ANALYSIS

Development/History - Shem Creek and its adjacent upland area are natural resources which have become of tremendous importance to the Town of Mt. Pleasant and the surrounding area. A small tributary of Charleston Harbor, Shem Creek flows through the center of present-day Mt. Pleasant, before running out a relatiely short distance above the Shem Creek bridge.

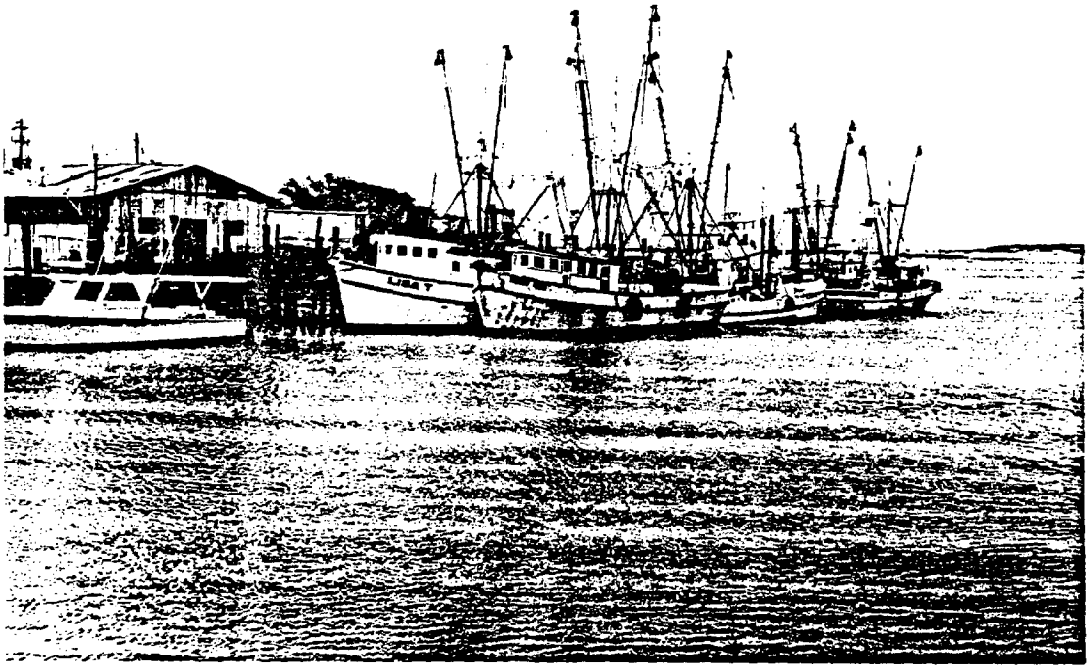
Although homes are located on both banks of this creek, the majority of its adjacent uplands are devoted to business use. While most of the economic development of Mt. Pleasant has taken place since 1946, the Shem Creek area has a long history of business activity. Sometime prior to 1784, a saw mill known as Greenwich Mill, was constructed alongside the creek. In 1795, a second mill, called by the same name, was built on this site. This mill, built by Jonathan Lucas, a skilled and educated millwright, was driven by water power and was a combination rice and saw mill - "the first such mill built in the vicinity of the city." (D. Huger Bacot, S.C. Magazine, Nov., 1953, article, Jonathan Lucas.) A grist mill, also built on this site some years later, was burned during the War Between the States.

In 1895 Captain Robert H. Magwood bought property along Shem Creek and began operating a "cooter pen" (a pen for holding and feeding terrapins). The turtles were fed shrimp and fiddler crabs until they were ready for shipment by train to restaurants in destinations as far away as Baltimore and New York City. This terrapin trade continued until the 1920's even though the property changed hands a number of times.

A few years later (at approximately the turn of the century), Magwood leased his property to E. O. Hall who opened E. O. Hall Shipyard. It was here that boats were built to be used for the transportation of vegetables from the East Cooper area to Charleston. After Hall's death in 1918, the shipyard was leased to Whitsell and North for two years, and in 1921 it became known as the Mt. Pleasant Boat Building Company. In 1943 the company entered into a contract with the U.S. Navy for the repair of inshore patrol boats. This contract lasted until the end of World War II, and in 1945 the company began to specialize in repair work, and storage and marine supply sales.

Shortly after World War II, a crab plant and an oyster cannery were located on Shem Creek in the area above the bridge. Both of these ventures appear to have been short-lived. The shrimping industry, for which Shem Creek is so famous, was introduced to that area by Captain William C. Magwood in 1930, and in 1946-47 the creek's first shrimp dock was built. By 1953 six of these docks had been built on Shem Creek, and by 1965 the last commercial shrimp dock to locate on Shem Creek was in operation.

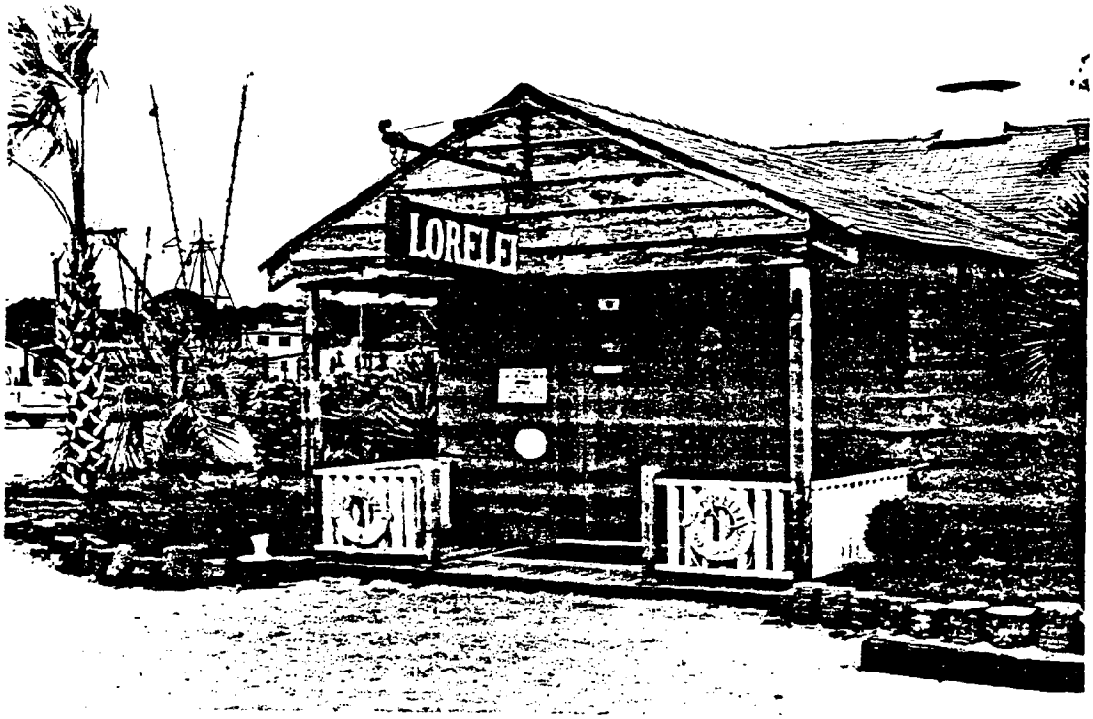
The 1950's saw a steady increase in the South Carolina shrimping industry, and this in turn led to increased business activities along Shem Creek. The industry in the early 1960's experienced a sharp decline, and during this time many trawlers left Shem Creek for waters further south. With the shrimping industry's upward trend since the latter half of the 1960's, trawlers have moved back to Shem Creek, and the 1st five years have seen a great increase in the number and size of boats.



In addition to the shrimp docks (including wholesale and retail seafood markets and dockage for the fishing vessels), two other groups of businesses related to the shrimping industry have come into being on Shem Creek. These are the waterfront services and the restaurants bordering the creek.

The waterfront services include marinas, ice and fuel docks, recreational head-boats and the long-established boat building and repair industry discussed above, the present-day Mt. Pleasant Boat Building Company. This boatyard was the center of economic activity in the early business years of Shem Creek and became the focal point of commercial develoment as the shrimping industry began moving into the area. In 1975, a dry stack marina was built beside the public boat ramp at the foot of Mill Street also, two recreational head-boats are presently operated out of the Creek. One of these began operation in 1968; the history of the other boat is not available.

In 1960, the first waterfront restaurant, The Lorelei, was built. It was followed in 1967 by The Trawler. Other restaurants or nightspots directly on the water are The Western Sizzlin Steak House (1976), London's, R.B.'s Oyster Bar (1980), and the Barge (1980). Some of these new businesses are in buildings that were built in the 1960's for similar businesses which proved to be unsuccessful. Several of these businesses were established before 1960, and several others came into being prior to 1970.



In the early to mid 1970's, a wide variety of new businesses consisting of retail and service businesses began locating in the general area of the creek. In 1975 a small shopping center, The Common, opened its doors for business. Its quaint, attractive shops built around a grassy square reflect an atmosphere reminiscent of the Old World. Merchants of the Shem Creek area generally agree that business opportunities there are good, and they project continued growth in this small but dynamic area of Mt. Pleasant.

A very important element in the growth of the businesses along Shem Creek, is the presence of Highway 17. This four lane road carries traffic volumes in excess of 27,000 trips per day. This high volume of automobile traffic has in large part been resonsible for the rapid growth and expansion of businesses which are in no way dependent or even related to Shem Creek.

In summary, the Shem Creek Business Center and the businesses presently located therein, results largely from the intersection of a working-fishing creek and the suburban business strip which follows Coleman Boulevard or Highway 17. The intersection of these two business attracting forces has resulted in the present mixture of fish houses, restaurants, ice docks, shoe shops, boat docks, ice houses . . . .

Characteristics and Trends - Past, present and anticipated trends have been reviewed and analyzed in order to find out what has happened, what is happening, and what can be expected to happen to the businesses located along the creek. The results of this analysis have been used as one of the factors in developing the policy recommendations and Future Land Use Map.

The statistical information prepared for this part of the report comes from an economic study of the Shem Creek Area prepared by the South Carolina Sea Grant Consortium under a grant provided by the Coastal Council.* During the preparation of this study an attempt was made to survey each business located within the planning area. Most of the businesses reponded and provided the survey teams with valuable information which was used as one of the sources for the report. From these surveys, other records, and statistical information - the analysis of trends and projections for future growth were made.

Economic Analysis of the Study Area - The businesses of the planning area were divided into four categories for the purposes of this study. The first three categories include those businesses that directly border the creek. The first category includes the fishhouses and retail seafood markets. These businesses are involved in the purchasing, processing and distribution of seafood. They also provide docking space for the fishing vessels as part of their normal business activities. The second group of businesses is the waterfront services sector. This category includes boat repair yards, marinas, ice and fuel docks, and recreational head-boats. The commonality of these types of businesses is that they must have access to the waterfront in order to conduct their business. Another waterfront category is the restaurants bordering the creek. These businesses recieve substantial benefits in "atmosphere" from presence of the marsh and the commercial fishing activities. The final category includes all other commercial activities in the planning area. These are businesses in which their locations are not dependent or even related to the presence of the Creek. All other properties were included in the category residential or vacant.

*Shem Creek An Economic Background - John W. Brown, Charles Newfeld, March 1981.

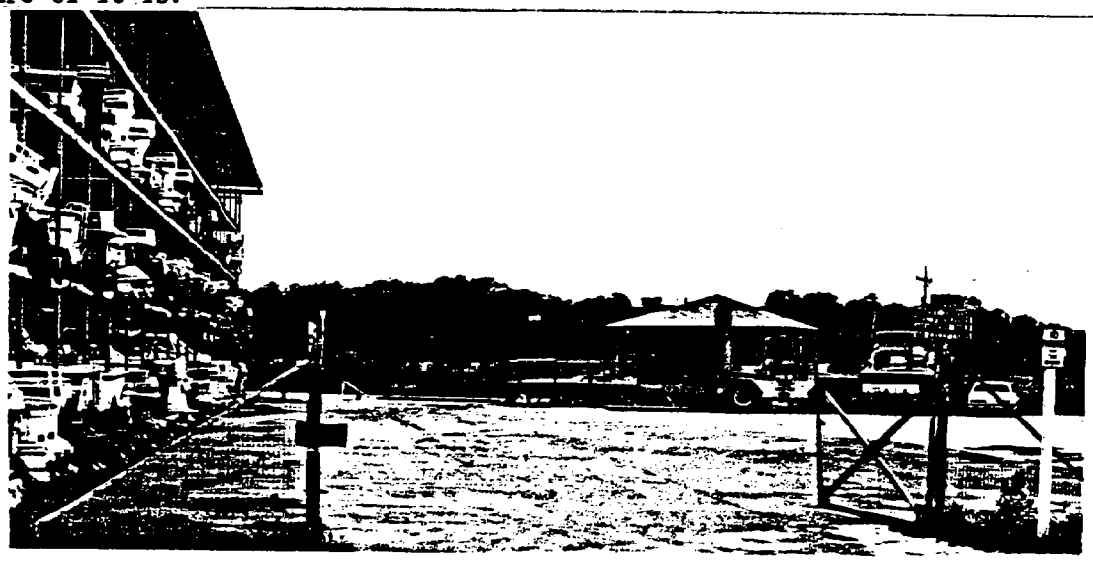
The following tables have been exerpted from the economic analysis and have been included in this plan as an indicator of current and anticipated conditions:

Real Estate Values Shem Creek (Appraised Values in 1980 Dollars)
(Thousands of Dollars)

	1971	1972	1975	1980	1986	1991	1996	2001
Fishhouses	903	756	608	587	700	700	700	700
Waterfront Services	1,085	1,172	1,050	1,001	1,140	1,162	1,185	1,207
Waterfront Restaurants	623	710	1,281	1,097	1,565	1,843	2,120	2,397
Non-waterfront Commercial	784	793	1,175	2,187	3,086	3,891	4,696	5,501
Residential and Vacant	1,408	1,314	1,756	1,445	1,625	1,687	1,750	1,800
Totals	4,803	4,745	5,870	6,317	8,116	9,283	10,451	11,605

The preceding table lists the real estate values for each category in constant 1980 dollars. The appraised values from the Assessor's records were converted to dollars of equal purchasing power in order to provide comparability between years without the effects of inflation. Forecasts of future appraised values were made by a linear extension of the trends for each category with the exception of the fishhouses.

Recreational boating has not played a substantial role in the development of Shem Creek. The first public boat ramp in the area was built in the mid 1950's near the Mt. Pleasant Boat Building Company. This ramp was later closed and a new one built at the foot of Mill Street. A dry stack marina located beside the public boat ramp in 1975. This area has become the focal point for recreational boating in Shem Creek. The marina can accommodate 80 boats at present and has the potential for accommodating 200 if expanded. Boating activities are estimated to produce approximately $200,000 a year in revenue. These figures do not take into account revenue produced by the two head boats operating out of Shem Creek. Not all of this money is spent in Mt. Pleasant, but certainly a share of it is.



The following table indicates the volume of use, and seasonal variations of use for the Mill Street Ramp:

RECREATIONAL BOAT LAUNCHINGS (ESTIMATED)

	Carloads/Day	Number of Days	Total	Expenditures
Summer Season				
Weekends	60	34	2040	$ 65,700
Weekdays	25	86	2150	69,200
Off Season				
Weekends	15	70	1050	33,800
Weekdays	5	175	875	28,200
Total		365	6115	$196,900

Expenditures are estimated by taking the total number of carloads x 2.0 persons per carload x $16.10 per person. The $16.10 figure is the one-way trip cost for private/rental boats in the South Atlantic Region from Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1979, N.M.F.S.

SHEM CREEK SUMMARY STATISTICS 1980

	Employment		Sales	Waterfront Footage	Building Area
	Full-Time	Seasonal & Part-time			
Commercial Fishing	27	206	5,630,000	1448	17,300
Fishing Boats (90 estimated)	270		3,483,000	-0-	-0-
Waterfront Services	65	11	3,724,000	1390	47,700
Waterfront Restaurants	179	20	4,020,000	625	58,000
Non-waterfront Commercial	77	36	NA	-0-	92,900
Totals	618	273	16,857,000	3463	215,900

Projections - The Economic Analysis also indicates that employment is likely to increase in most of the business categories over the next 20 years. The most likely scenerio is given below:

EMPLOYMENT IN SHEM CREEK STUDY AREA (TOTAL PERSONS)

Year	1980	1986	1991	1996	2001
Fishhouses	233	233	233	233	233
Commercial Fishing Boats	270	270	270	270	270
Waterfront Services	76	80	100	120	120
Waterfront Restaurants	199	250	275	300	325
Non-waterfront Commercial	113	140	170	200	225
Total	891	973	1048	1123	1173

An estimation of the amount of future business floor space which will most likely be needed to accomodate the business growth projections is listed below. These figures are estimates and do not take into acount additional space needed for off street parking, loading or unloading space, or other lands accessory to a business.

These estimates will be used as one of the guidelines in making recommendations for the future location of businesses. Other factors considered in making a recommendation would be the actual dependency of a waterfront location, the nature of any nuisances created by the use, anticipated traffic levels, adjacent land uses, the ability of the town to provide urban services, and the general wishes of the local government.

One important "unknown", fundamental to planning for Shem Creek exists, which needs to be considered in reviewing all future space requirements. All of these estimates have been prepared by using estimates of future employment to indicate the amount of additional floor space business is likely to require based on 1980 levels. The fishhouse and commercial fishing vessel employment is not projected to increase during the forecast period. This is because the industry is felt to be mature and should not grow beyond its present size without unexpected changes. The industry has the capacity to expand into other fisheries besides shrimp as it is showing signs of doing without increasing either employment or building space. This possibility exists because of two factors. The first is that shrimping is a seasonal fishery from July to December, allowing fuller use to be made of buildings and equipment during the off-season. The second factor is that many of the persons finding employment in the fishhouses are part-time employees, and the total number of labor-hours utilized could be greatly increased without new hirings. However, because the commercial fishing industry has been determined to be very important to the Charleston Area's economy and because the industry is absolutely dependent upon a waterfront location with particular characteristics - space will be reserved in the plan to accomodate expansions of these uses.

FLOORSPACE BY SECTOR 1980 - 2001

	1980				
	Employment	Sales	Sq.Feet	Sq.Feet/Employee	$/Employee
Fishhouses	233	5,630	17,300	74	24,200
Waterfront Services	76	3,483	47,700	627	45,800
Waterfront Restaurants	199	4,020	58,000	291	20,200
Non-Waterfront Commercial	113	NA	92,900	822	NA

	1991		1996		2001	
	Employment	Sq.Ft.	Employment	Sq.Ft.	Employment	Sq.Ft.
Fishhouses	233	17,300	233	17,300	233	17,300
Waterfront Services	100	62,700	120	75,240	120	75,240
Waterfront Restaurants	275	80,000	300	87,300	325	94,600
Non-waterfront Commercial	170	140,000	200	164,000	225	185,000

Square footage estimates formed by taking employment estimates from table using a constant floor space per employee in each sector.

Summary of Likely Economic Trends

The Shem Creek area contributes significantly to the Mt. Pleasant economy. This includes the commercial fishing industry; the waterfront service industry, both commercial and recreational boating; the waterfront restaurants; and the non-waterfront commercial businesses oriented to the Coleman Boulevard traffic and the Town of Mt. Pleasant.

Shrimp landings have not increased much over the past 30 years. However, the number and size of shrimp vessels and the real price of shrimp have increased substantially since 1965. The prospect for increasing the shrimp harvest in the future is not good.

Property tax figures indicate that the non-waterfront commercial businesses and the waterfront restaurants have been the most rapidly growing business sectors. The waterfront services sector and the commercial fishing sector have decreased their share of taxes paid in the study area. This is one indicator of a more rapid rate of growth in the first two sectors.

Employment in the planning area is projected to increase by roughly 25 - 30 percent between now and the year 2001. The largest gains in employment will come from the waterfront restaurants and the non-waterfront commercial sector. The only sector showing no gain is the commercial fishing group.

Total sales figures indicate that the area businesses produced about $17,000,000 in trade. This does not include the non-waterfront businesses, but does include a double counting of fishhouse receipts and the fishing vessel receipts. Without the double counting, the sales figure is $13,500,000.

The number of recreational boating person-days is estimated as a little over 6000 per year with associated annual expenditures of approximately $200,000. These expenditures do not include purchases of boats, motors, or other durable goods.

Future trends indicate a continued healthy economic growth; new businesses will be started and present ones will expand. In the long run, as land values rise and as demand for restaurant and commercial space increases, there is a risk that the commercial fishing industry could be displaced from the Creek area.

The waterfront restaurants gain considerable benefits from the presence of the water, the marsh, and the commercial fishing industry. The two main uses of waterfront - restaurants and fishing - are compatible as the present time they do not compete for direct access to the waterfront. A second factor benefiting the location of the restaurants is the high traffic flows on Coleman Boulevard. The traffic counts in 1960 were 11,100 cars per day; there are now 27,700 per day.

PHYSICAL DEVELOPMENT PATTERN

Existing Land Use - Measurements of existing land use within the Shem Creek Study were made in order to determine the amount of land presently used for different purposes. The following categories have been calculated:

- Commercial uses
- Marine Related and Support Facilities
- Residential Uses
- Open Space
- Parking Area
- Dock Space
- Highland Area
- Wetland Area

The following table provides these figures:

General Calculations

	Acres
Highland area	56.17
Wetland Area	92.42

Land Use Calculations

	Number of Parcels	Square Feet	Acres
Commercial Uses			
Retail shops	9	62,800	
Mixed use facilities	3	55,600	
Banks, offices, public buildings	7	28,000	
Restaurants	6	56,800	
Miscellaneous commercial use	3	19,600	
Totals	28	223,600	5.13
Marine Related and Support Facilities			
Boat repair yard and marine equipment repair	4	202,000	
Fuel docks and ice houses	2	6,000	
Fish processing plants	6	35,000	
Marine warehouses/storage	6	11,600	
Recreational boating & storage	2	222,400	
Totals	16	277,200	6.36
Residential Areas			
Totals	6	446,000	10.24
Open Space			
Totals	19	386,800	8.88
Parking			
Paved	17	152,400	3.50
Unpaved	24	291,600	6.96
Totals	41	444,000	10.19

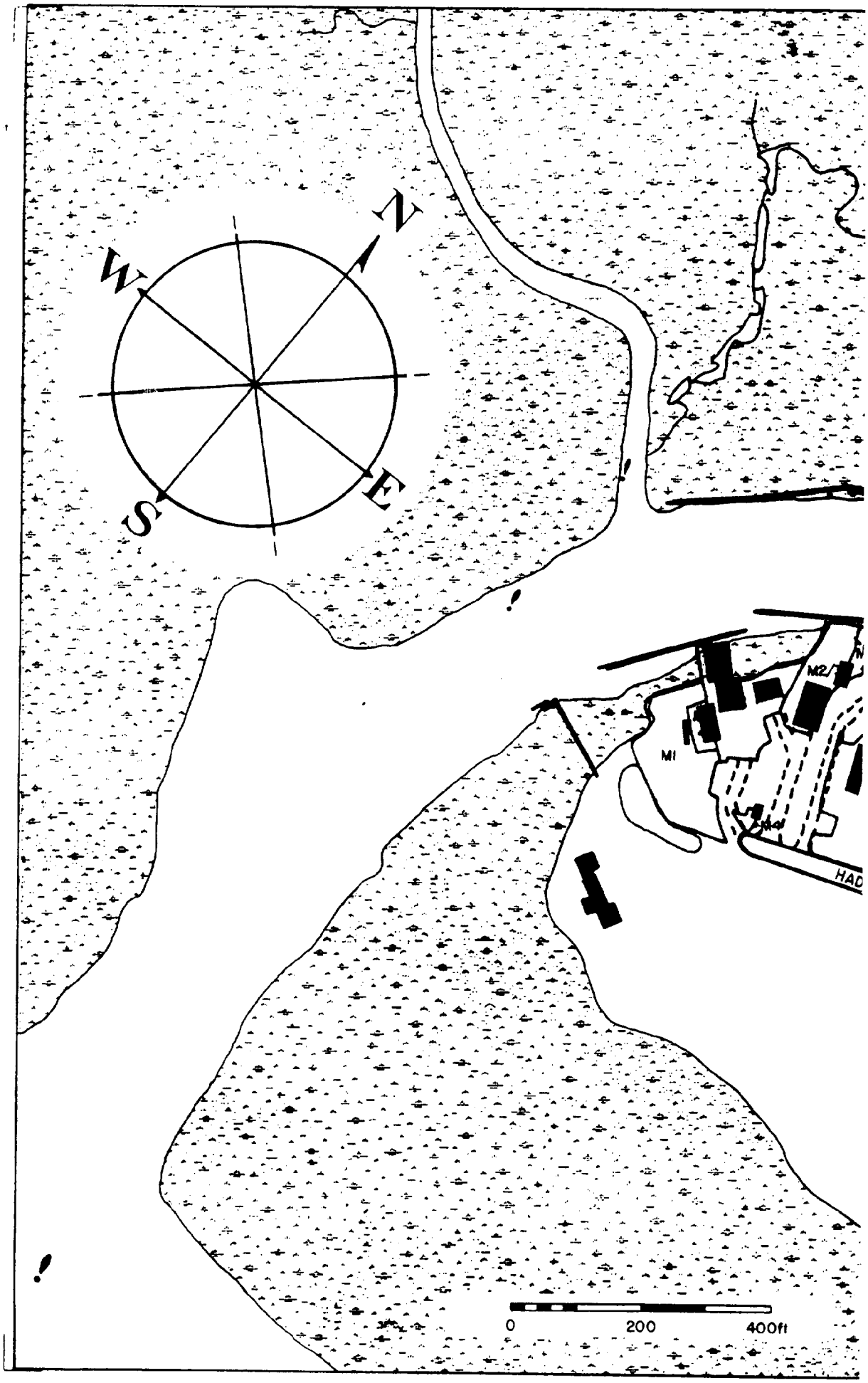
	Commercial	Recreational
Docking Footage	3,078	360 feet
Totals	3,438 feet	

SHEM CREEK SPECIAL AREA MANAGEMENT PLAN

OMMERCIAL/TRADE FACILITIES & ARINE RELATED FACILITIES MAP

C1 = retail shops
C2= mixed use facilities
C3= banks, offices, public utilities
C4= restaurants, clubs
C5= miscellaneous commercial

M1 = boat repair yards, marine equipment repair
M2= fuel docks, ice houses
M3= fish processing plants
M4= marine warehouses, storage facilities
M5= recreational boating facilities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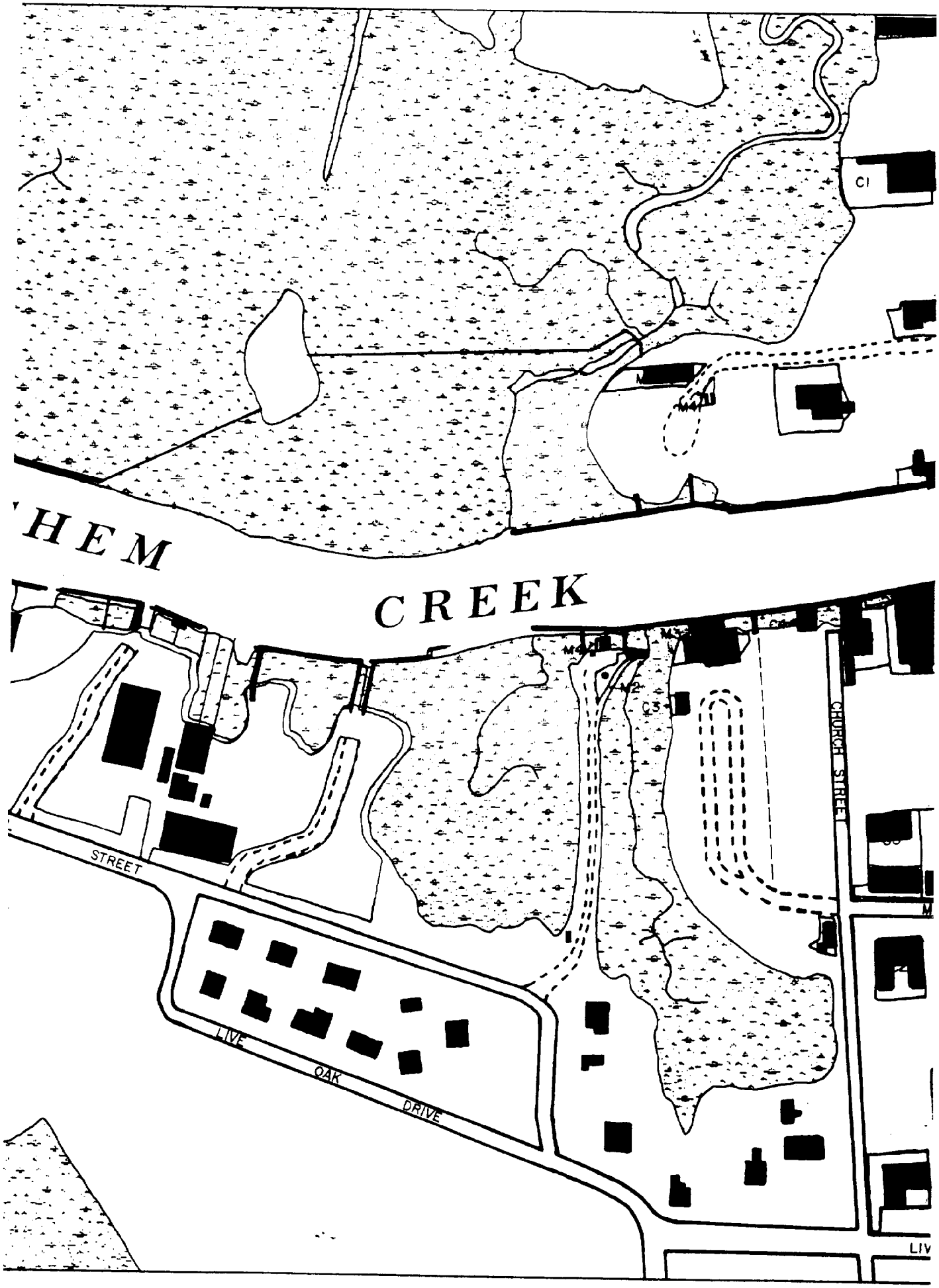
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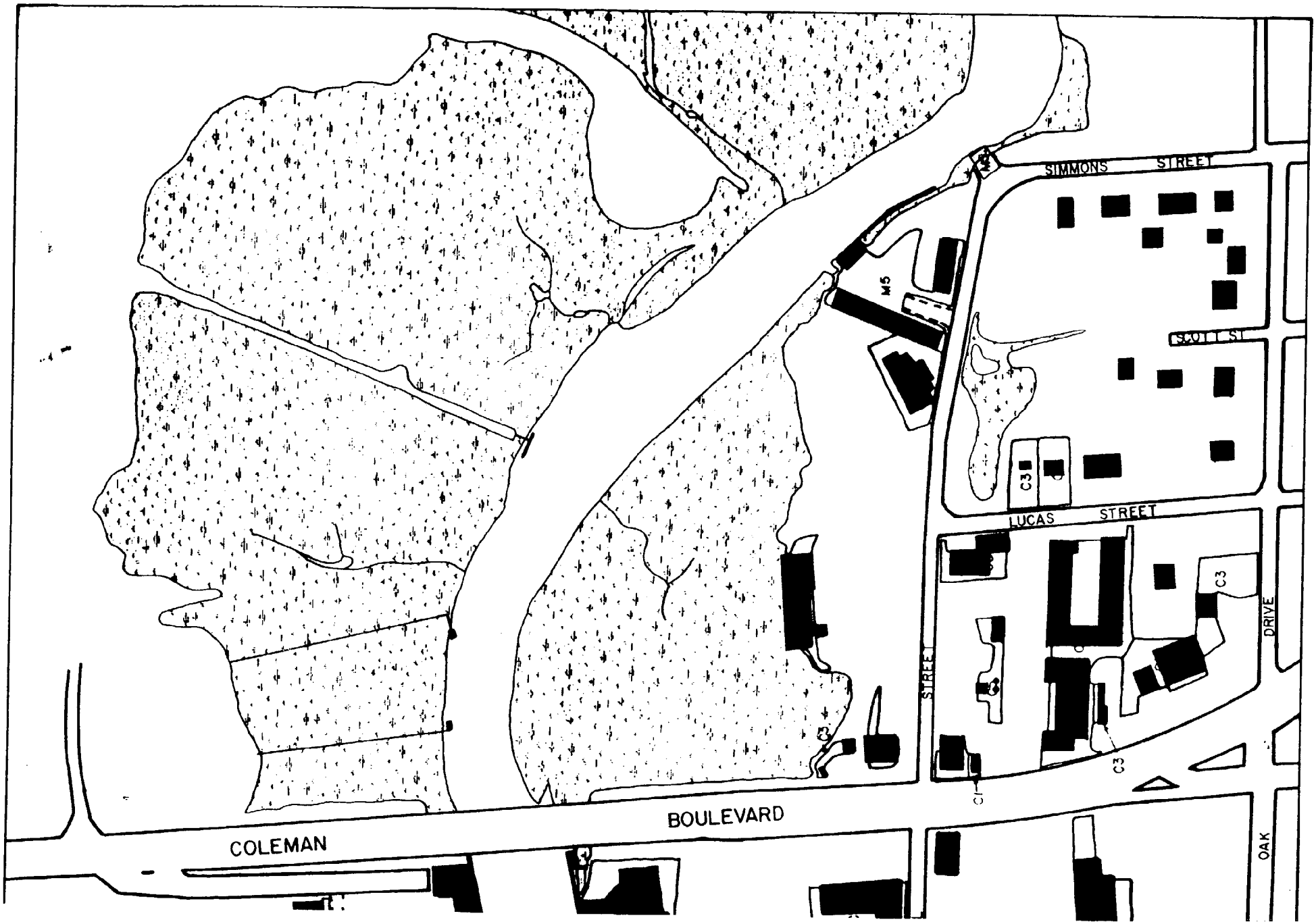
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C3
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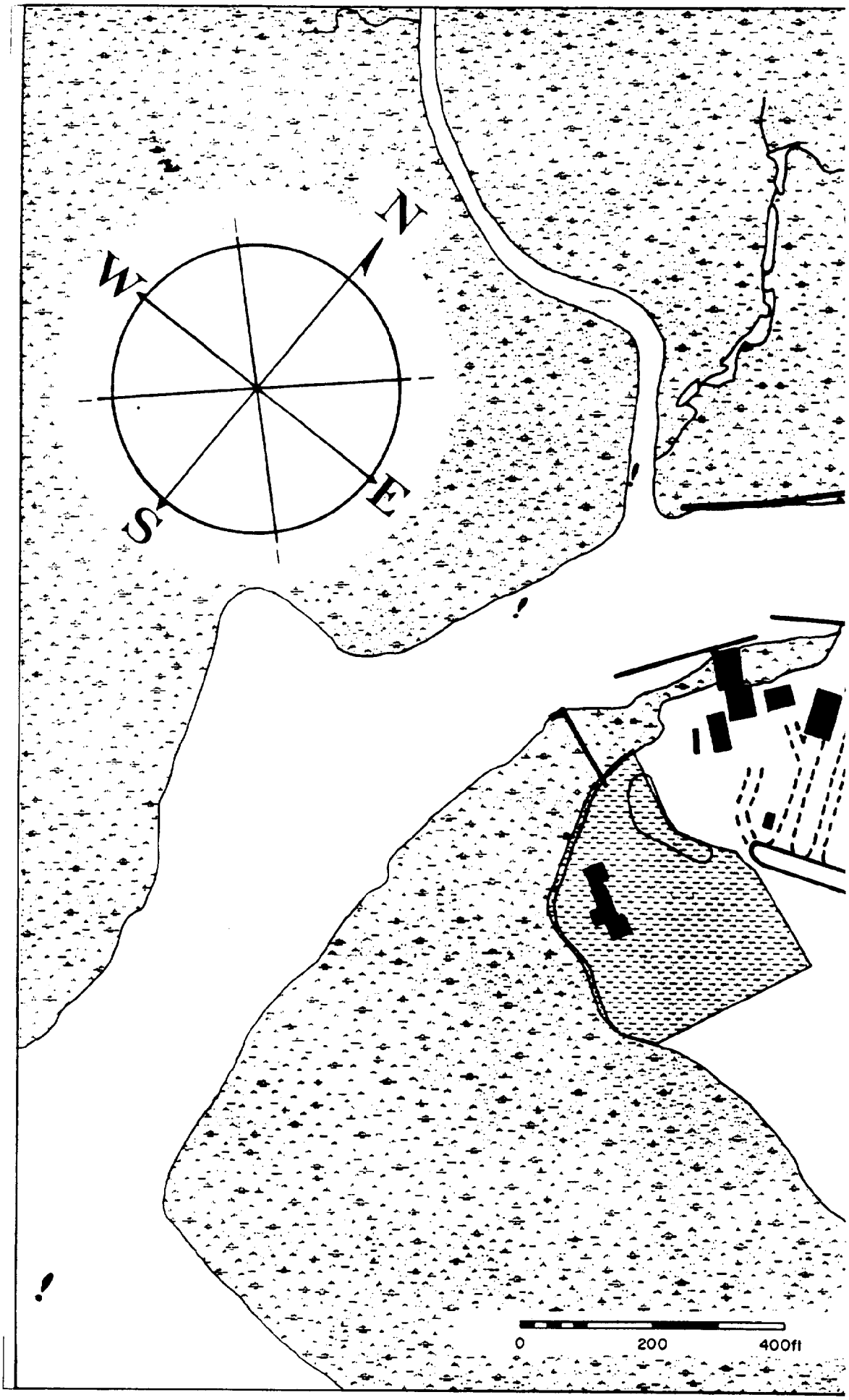
SHEM CREEK SPECIAL AREA MANAGEMENT PLAN

RESIDENTIAL AREAS MAP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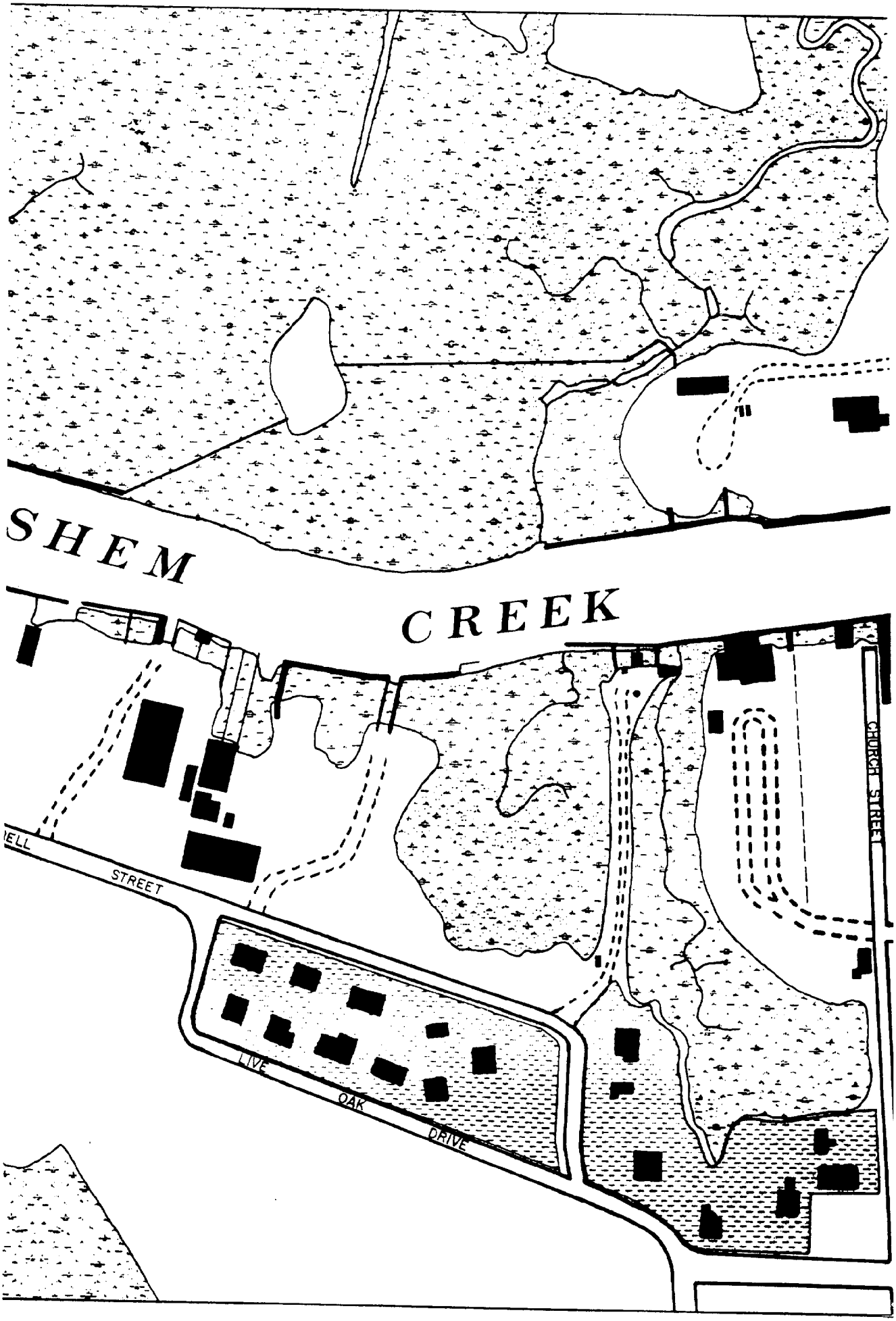
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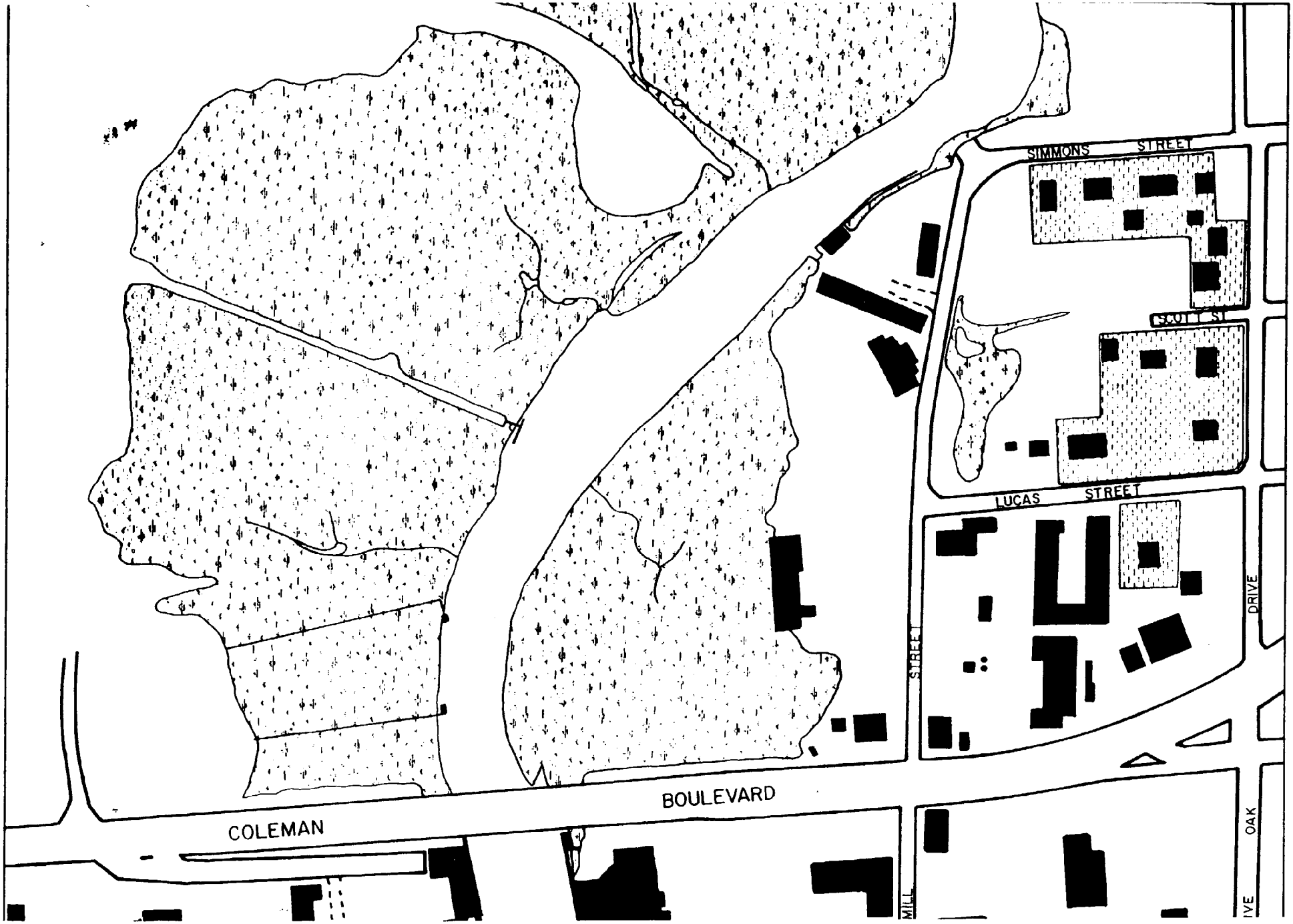
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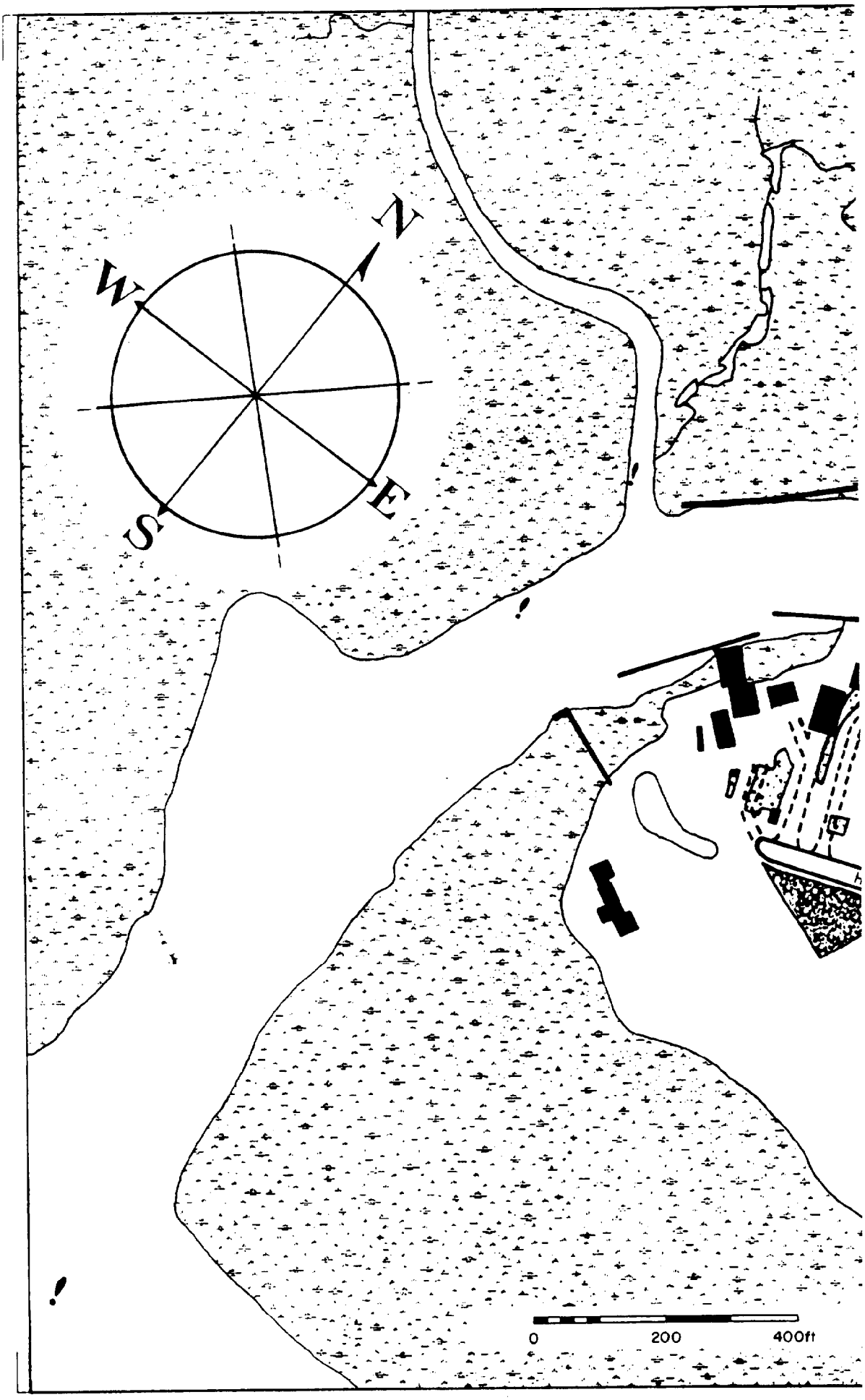
SHEM CREEK SPECIAL AREA MANAGEMENT PLAN

PARKING AREAS & OPEN SPACE

- paved areas
- unpaved areas
- open space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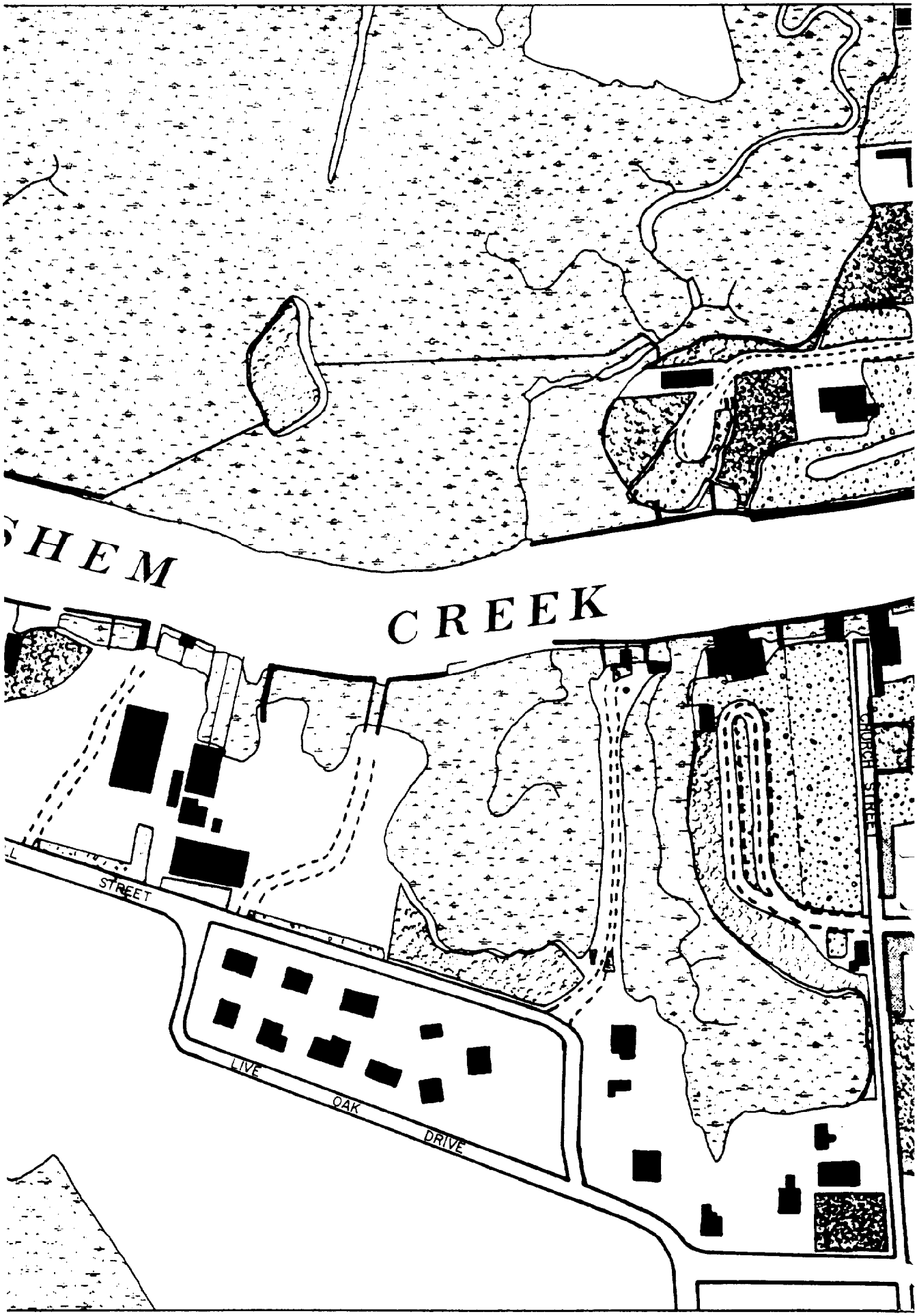
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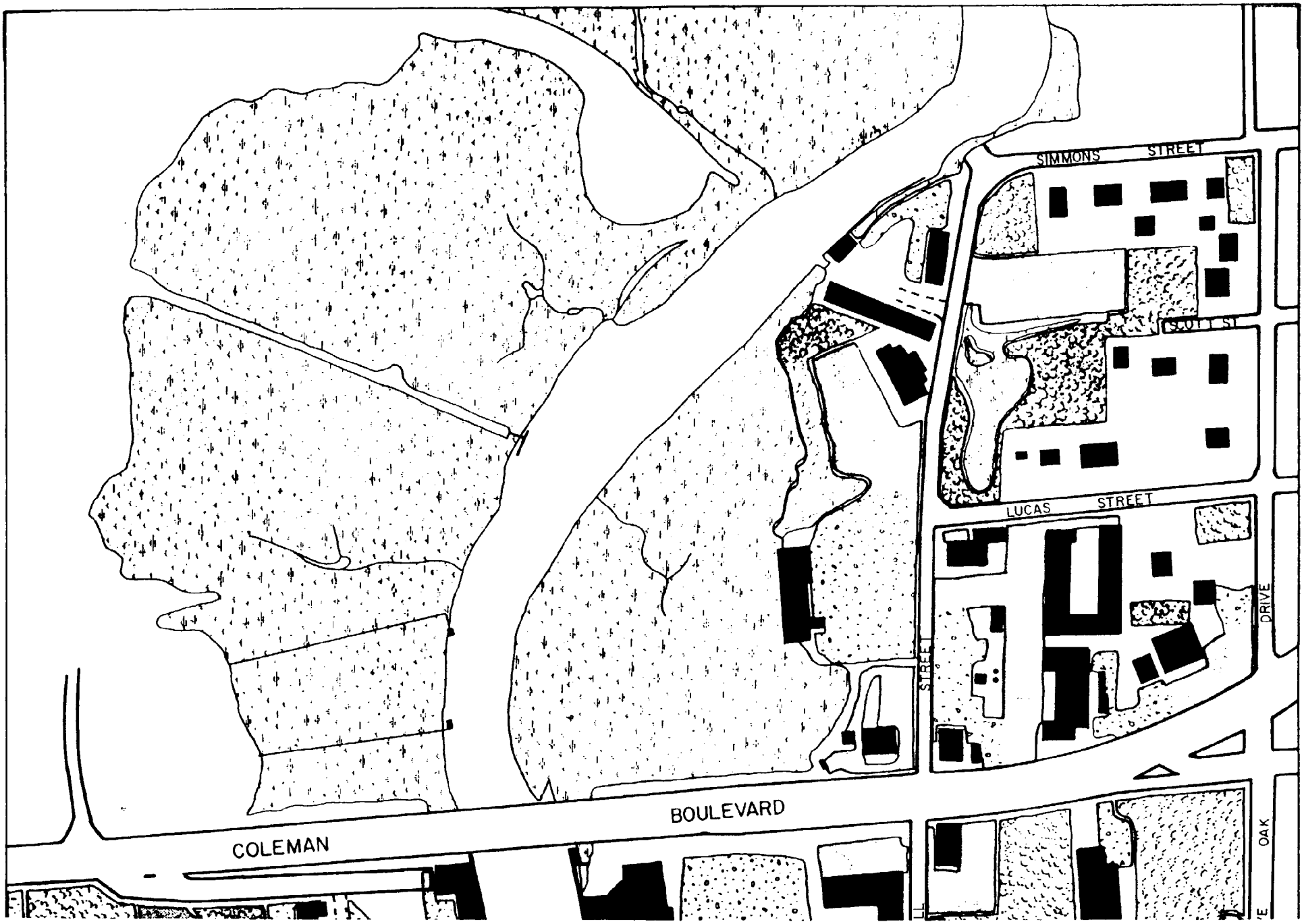
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Trends - Some of the important trends which this analysis has produced show that:

Over 175,000 square feet or roughly four acres of land are used for restaurants and retail facilities.

The commercial uses which are not involved in commercial fishing, boat repair or servicing boats occupy slightly over five acres.

The six fishhouses located on Shem Creek are located on 35,200 square feet of area - or approximately 3/4 of an acre.

All of the uses involved in the marine related business are located on a little more than six acres of land.

All residential uses located within the Planning Area are located on ten acres of land.

Almost nine acres of open highland area, on 19 different sites, have been identified within the planning area. Indicating that additional space for expanding or new construction can reasonably be expected to be available.

Measurements indicated that ten acres of useable parking area exists with 3.5 acres being paved and the remainder consisting of unpaved surfaces.

Over 3,400 linear feet of docks line both sides of Shem Creek, with commercial docks making up the majority of this figure.

In total, the planning area contains 56 acres of highland and almost 92.5 acres of wetland area (which includes the creek, the marshes and mud flats adjacent to the water).

Water and Sewer - At the present time the entire Shem Creek Planning Area has public water through the Mt. Pleasant Water and Sewer Commission. Public sewer is not presently available in the unincorporated area on the North west side of the Creek. With the construction of the EPA 201 sewer lines, sewer service would be provided to this area, which would probably encourage expansion and development on land currently vacant. It is expected that this sewer line would be constructed prior to 1983.

Dock Space - There is 2,578 linear feet of useable commercial dock space along the shoreline of Shem Creek. Furthermore, there is approximately 500 linear feet of dock space which is across the Creek from Mt. Pleasant Boat Building, Magwood's and Wando Seafood. However, it is useable only in a limited sense due to two severe handicaps: First, it is linked to highground by a pedestrian walkway built over the marsh which is about 1200 feet long. This distance virtually eliminates any heavy loading and unloading. Second, the dock is constructed beyond the natural channel which makes it unusable at low tide, severely restricting its operating hours.

Commercial dock space is a major determinant of how adjoining highground is used. If it is not possible to expand any of these docking areas, it may be safe to assume that the fishing and shrimping activities are presently at or near full potential based on availability of space.

Recreational dock space is confined to the Maria Scott Marina and is available only to members of the Marina.

ENVIRONMENTAL CHARACTERISITCS

Marshlands - Prior to 1950 most of the lands adjoining Shem Creek were marshlands, unaltered except for the Mt. Pleasant Boat Building property and a commercial shrimp dock. As the creek became a commercial fishing center, these marshlands were filled to provide land on which to locate new businesses. This filling has continued to the point where most of the lands located below the Shem Creek Bridge south of Haddell Street, have been created by filling in marshlands. Fortunately, a great deal of productive marshland still remains along the creek.

Marshlands by their nature are valuable resources which are biologically very productive and also serve important roles in the managment of flooding and purification of runoff water. One study done by Eugene Odum of the University of Georgia* has shown that on an average, a healthy marsh can produce ten tons of dry organic matter per acre per year. A small portion of this dry organic matter is grazed on by terrestrial animals such as grasshoppers while most of it is washed into adjacent water bodies and is acted on by many different types of fungi and bacteria that convert the detritus into a foodsource very rich and high in protein. Filter feeders, such as oysters and clams, and microscopic animals, (the first step in the food chain) feed on this. They are in turn fed upon by larger animals, who make up levels in the food chain which ultimately ends with man being a final consumer.

Marshlands are also important as nursery areas and spawning areas where many fish and shellfish reproduce. Several of the species remain along the marsh until they reach their adult states. Estimates indicate that approximately 75% of the commercially important fish species must use marshlands at one time during their life cycle. Most commercially important invertebrates such as pink, white and brown shrimp, blue crabs, oysters, and clams use marshlands for nurseries as well as many finfish such as flounder, spot, summer trout, weak fish, mullet . . .

These marshes are also important as habitat areas for the commercially and recreationally important fish, crabs, shrimp and shellfish. Many species common to low country marsh areas can be found in the Shem Creek Planning Area.

One often overlooked important contribution marshlands make in an urban or developed setting is erosion protection. Marshes often slow grade runoff, absorb storm surges, dissipate wave energy and consequently serve as a buffer to surrounding properties minimizing property damage and during flood conditions.

Recently the value of marshes as filters of urban runoff water has been recognized. Stands of marsh vegetation act to slow runoff water and allow sediments to drop out of the water column. This large surface area of a marsh allows the body of water to spread out and encourage the absorption of materials. Some of the things commonly found in stormwater runoff which can be filtered by marsh include, organic materials, pesticides, herbicides, heavy metals, grease and oils. A healthy marsh has the ability to filter these substances out of runoff water before it reaches the main water body thus representing a natural treatment plant. Certainly, the most cost-effctive method of purifying stormwater and protecting water quality.

The marshlands around Shem Creek are typical to most other areas located along this section of the South Carolina coast. In addition to the fish and shellfish species already listed, the predominate plants and animals are as follows:*

*Source: The Role of Tidal Marshes, The State of New York Conservation Department, The Conservationist, June - July 1961, Eugene P. Odum.

Plants

Scientific Name	Common Name	Location in Salt Marsh
Spartina alterniflora	Smooth Cordgrass	Low & High Marsh
Juncus romerianus	Black Needlerush	High Marsh
Distichis spicta	Salt Grass	High Marsh
Spartina patens	Marsh Hay Cordgrass	High marsh
Borrichia frutescens	Sea Ox-Eye	High Marsh
Iva frutescens	Marsh Elder	High Marsh
Baccharis halimifolia	Sea Myrtle	Marsh Upland

Animals
- Rabbits
- Racoons
- Opossums
- Rodents
- Snakes
- Turtles
- Fiddler Crabs
- Periwinkles
- Mud Snails
- Ribbed Mussels

Birds
- Pelicans
- Gulls
- Ibis
- Egrets
- Terns
- Herons

*Source: An inventory of South Carolina's Salt Marsh, Ralph W. Timer, Jr. s.e. Marine Resources Center, Tech Report 23, May, 1977.

Soils-Most of the Town of Mt. Pleasant is located within the Wando-Seabrook soil association. These are described as being moderately well drained to extensively drained, nearly level to gently sloping soils. Around Shem Creek, most of the highland area which has not been constructed from fill material belongs to this Wando soil classification.

Soil surveys have not been done on the lands constructed with fill material. Consequently, soils information is not available for these sites. However, the stability of the existing buildings which have been built on fill material indicates major problems for building should not exist on these locations.

Flooding-Almost all of the planning area is located within zone A-13 as shown on the Federal Flood Insurance Agencies' Flood Insurance Rate Map. This indicates that the property is within the 100 year flood plan and is consequently subject to a 1% chance of being flooded during any given year. The Town of Mt. Pleasant enforces building codes through its code enforcement program which require that new construction be raised above the anticipated flood elevation or be flood proofed in accordance with approved methods. These regulations have been in effect for several years and are not expected to limit the "buildability" of a site in any significant manner.

Water Quality-Shem Creek is presently classified by the South Carolina Department of Health and Environmental Control (DHEC) as having South Carolina water quality somewhat degraded but generally suitable for accomodating future discharge sources. The South Carolina Department of Health and Environmenal Control (DHEC) will continue to permit discharge points along Shem Creek until the water quality contravenes minimum levels.

The water quality in Shem Creek can be attributed to three factors: 1) two point source discharges enter into the creek, one at Wando Seafood near the mouth of the creek and the other farther up the Creek, past the bridge, a package treatment serving Hickory Shadows Subdivision; 2) other nonpoint sources of pollution enter the creek along most of its course. These discharges carry stormwater runoff from all over the Shem Creek drainage basin. (A detailed analysis of the drainage basin is contained in another section of this plan.) 3) Most significantly, the Charleston Harbor influences water quality through its tidal flow into the Creek. The interchange of Creek water and Harbor water ranges over most of the creek. As a result, water quality in the Creek will always be influenced by that of the harbor.

DHEC maintains an ongoing monitoring of Shem Creek water quality. This monitoring reviews the levels of elements in the water and also measures dissolved oxygen levels as well as other readings. Unusually high levels of a particular element is indicative of the source of pollution. For example, high levls of nitrogen and phosphorus would indicate that runoff from lawns and gardens being treated with fertilizers are ending up in the creek. High levels of lead could come from automobile emission gases settling onto roads and parking lots then being carried downstream by rainwater.

Measurements in Shem Creek show slightly increased levels of lead and iron present over most of the creek. High measurements of Biological Oxygen Demand (BOD), (usually indicative of the presence of organic substances or something causing a change in the natural ecosystem), have also been recorded at measuring stations located above the public boat ramp. No problems have been recorded or indicated by measurements from the Shem Creek Bridge.

In summary, water quality in Shem Creek has been degraded by the overall water quality of the Charleston Harbor. Slightly high levels of iron and lead have been indicated along the creek, but these are not viewed as a severe problem. These levels are probably attributable to runoff, although it is impossible to identify a source. Inexpensive solutions can be used to reduce runoff pollution. Tested methods include using holding ponds in conjunction with large developments, providing greenbelt areas for water percolaton, using porous paving materials on parking lots, filtering runoff through marshes, and a variety of other methods. These are discussed in the drainage section of this plan.

Historic Sites - The section of the Study area south of Shem Creek and west of Coleman Boulevard is in the National Register of Historic Places. Although there may be several structures in the study area which may quality for individual nomination to the National Register, only one house has been selected as a representative historic site at this time. The Captain Peter C. Lewis House at 206 Live Oak Drive was constructed around 1855. It presents a fine visual landmark on the corner of Live Oak and Magwood Lane. Further research of the houses between Live Oak Drive and Haddrell Street conducted under the Town Appearance Commission is needed to uncover more of the historical significance of the Shem Creek Study Area.

TRAFFIC

Pedestrian Circulation - Pedestrian traffic is limited for the most part to the side walk area along Coleman Boulevard to the Shem Creek Bridge. The Bridge is used primarily for recreational fishing and as a place where people can enjoy a scenic vista. Other activity nodes used by visitors to the Creek are the docks behind the restaurants and the fish houses on either side of the Creek. The curious public visiting these sites generally use the parking areas provided by the businesses, in order to look at the boats docks along the creek. Visitors to the Creek are viewed favorably by the business community since they are likely to spend money as well as time. Pedestrian circulation problems only arise during the summer season when both shrimping and tourism are at a height. Although this is a manageable problem, it does indicate that an alternative access point to the Creek is necessary. The most obvious and underutilized areas would be the land between the Western Sizzlin and London's on the creek side of Mill Street. This would be a significant chance to provide access to the creek, as well as, enhance opportunities for a variety of activities (i.e. fishing, crabbing, sightseeing). A dock structure would provide the linkage from the highground to the creek.

Vehicular circulation - Safe vehicular circulation for the Shem Creek Area is jeapordized at two particular locations. The most dangerous is the Pelzer/Coleman intersection which is without any type of traffic signal. The commercial area on the north side of the creek has several major traffic generators, such as a restaurant, a wholesale/retail seafood establishment, and the shrimping docks. This area is hampered due to the offset jog at the intersection (Pelzer does not line up with the street serving these businesses), and the absence of a traffic light. Peak hour traffic virtually eliminates the possibility of turns onto Coleman Boulevard from either Pelzer or the commercuial area across the street.

The other problem spot stretches from the public boat landing on Mill Street to Simmons Street. The fact that boaters have to back their cars and boat trailers into the street which is being used by regular traffic can not be avoided due to the physical constraints of the landing. However, by providing a linkage from Scott Street to the Boat Landing's parking lot, circulation would be greatly improved.

Most of the streets in the planning area are State Highway maintained. Mill Street from Lucas Street to Simmons and Live Oak from Haddrell Street to Whilden Street are the two exceptions. These streets are periodically budgeted for resurfacing by the Town.

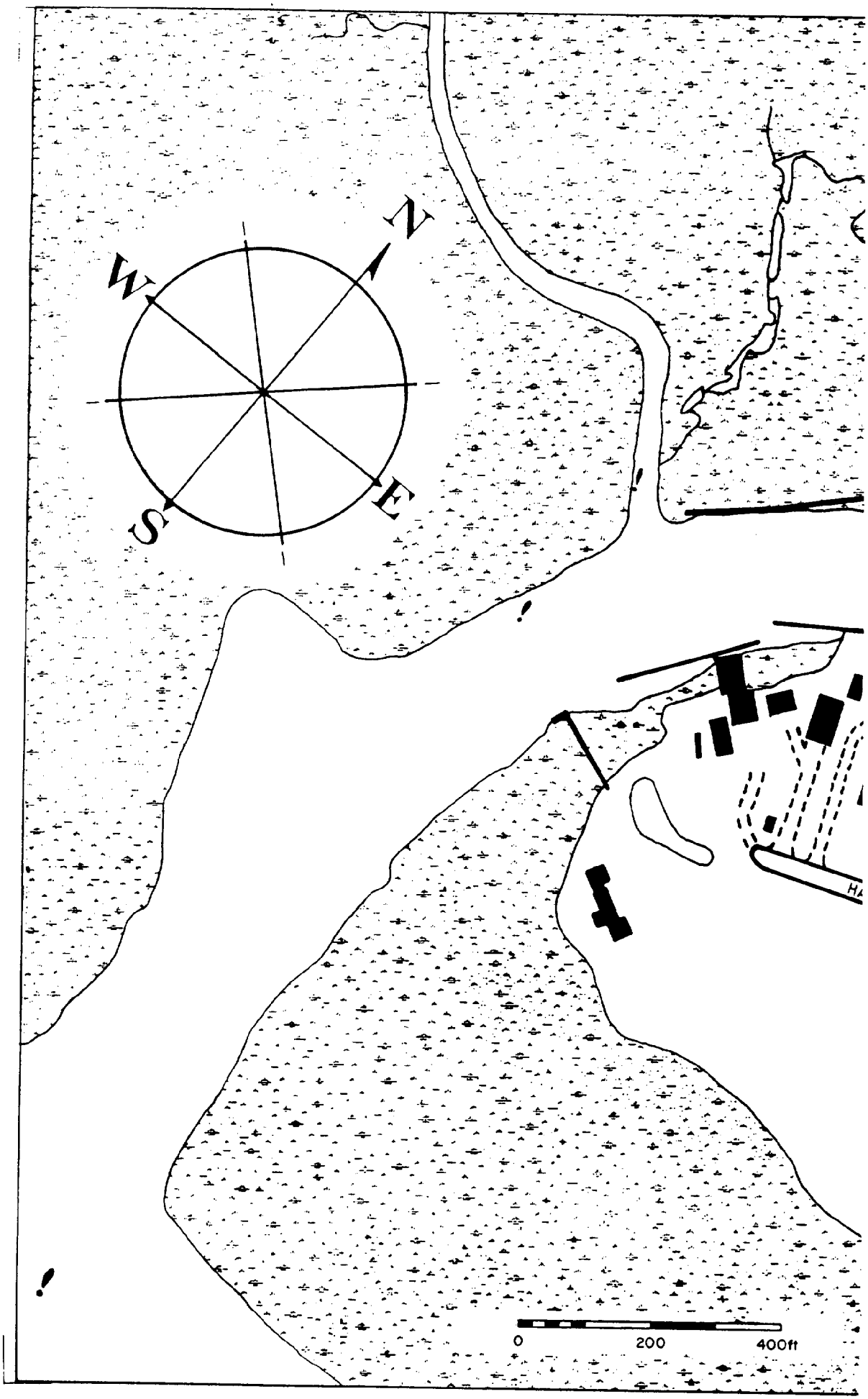
The ends of Lucas, Church, and Wharf Streets are owned by the Town, but are presently leased to private interests for their use.

Creek Congestion

SHEM CREEK SPECIAL AREA MANAGEMENT PLAN

ACTIVITY AREAS MAP

✳ activity node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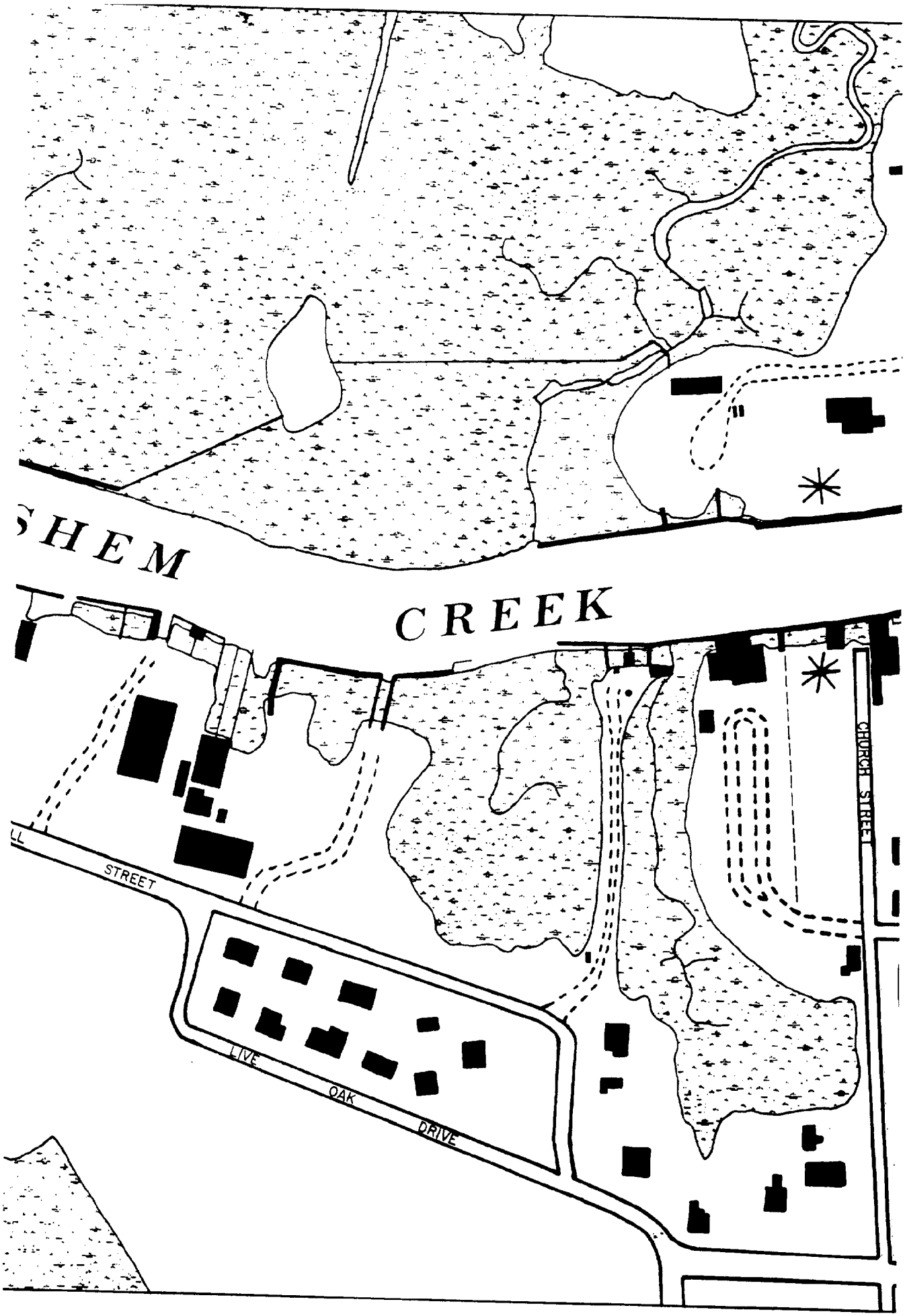
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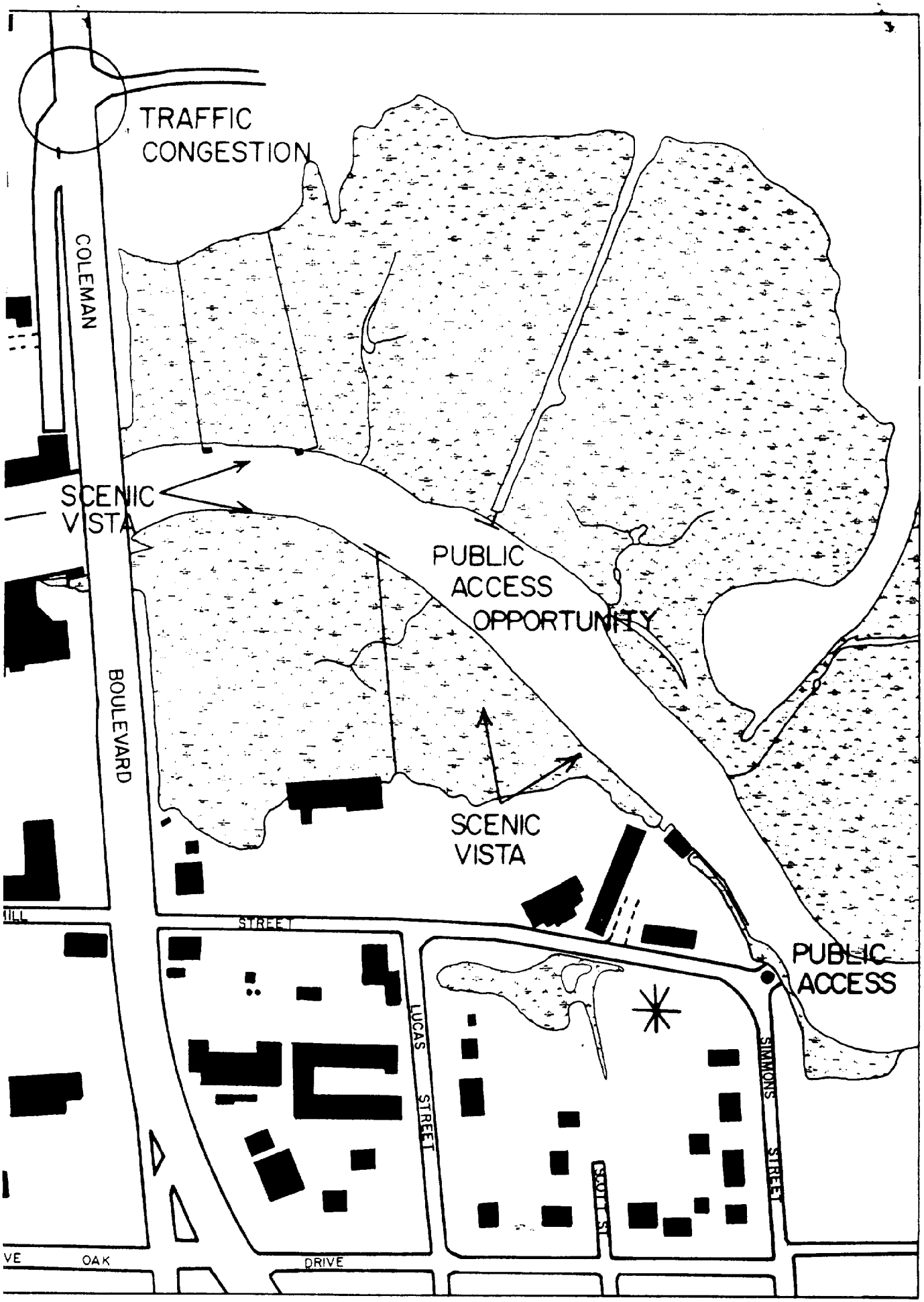
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ACCESS
LUCAS
STREET
SIMMONS
STREET
SCOTT ST
OAK
DRIVE

THE DEVELOPMENT PLAN

Component Sections - The Development Plan consists of a number of policy recommendations and a Future Land Use Map of the Planning Area. The policies and the map detail recommended courses of action which should be followed by the Coastal Council, Charleston County, Town of Mt. Pleasant, and local property owners in the future expansion of the Shem Creek Planning Area.

Many different studies, analyses and sources of information went into the preparation of the development plan; some examples follow:

The Economic Analysis - provided an insight into the value of commercial property, number of people dependent upon the creek for employment, and prospects for future growth.

Historic Development Trends - indicated that Shem Creek has developed in a mixed fashion, with industrial uses located adjacent to residential and commercial facilities. It also has shown that a great amount of filling in the marsh to create highland building areas has occured.

Present Development Pattern - shows that the mixture of uses still remains, parking throughout most of the planning area is not a problem, some circulation problems exist, and that space for the future expansion of business can probably be acquired.

Environmental Analysis - shows that roughly two-thirds of the Planning Area remains in marshlands, or in other wetlands; soils generally consist of fill material; the entire area is located within a flood hazard area; and that water quality in Shem Creek and in the Charleston Harbor is poor.

Traffic Survey - the traffic survey indicated that seasonal boat congestion in the creek does occur, automobile created traffic problems also exist, and conflicts between pedestrians and the automobiles are also a very real concern. Each of these problems can be minimized by good management procedures or by better design of new facilities.

PLAN OBJECTIVES AND POLICY RECOMMENDATIONS

The following Plan Objectives and Policy Recommendations will govern the future development of the Shem Creek Planning Area:

PLAN OBJECTIVES

A. Keep Shem Creek navigable for both commercial fishing and pleasure boating.

B. Reserve sufficient space for the continued operation and expansion of the businesses involved in the commercial fishing and boat repair industries.

C. Designate areas where restaurant and retail businesses compatible with the commercial fishing industries and Shem Creek are allowed to locate or expand.

D. Prepare a plan for future land use, transportation recommendations, and drainage improvements to be used in making future land use decisions within the Shem Creek Business Area.

E. Develop methods of implementing the plan by encouraging the redevelopment and upgrading of private businesses, and by improving the development regulations of Charleston County, the Town of Mt. Pleasant, and Coastal Council as they relate to the Shem Creek Area.

F. Provide alternative methods of public access to the creek.

POLICY RECOMMENDATIONS

LAND USE

POLICY: Future building or expansions of exisiting businesses within the Shem Creek area will be based upon the future land use patterns and policy recommendations of this study.

POLICY: Annexation of the area on the north side of Shem Creek, presently located in Charleston County, would provide for a continuity of public service, police and fire protection and development regulations.

POLICY: Seafood restaurants, which by their nature, will contribute to the atmosphere along the creek should be allowed to locate or expand in the places specifically designated for such activities by the Future Land Use Map. These uses must be aesthetically complimentary to existing uses, constructed in accordance with the policies of this Management Plan, and all ordinances of the City of Mt. Pleasant.

POLICY: In limited instances water dependent uses and seafood restaruants will be allowed to be constructed on piers or pilings over unproductive non-vegetated wetland areas; if in the determination of the City of Mt. Pleasant, such expansion can be justified due to the location of the use, need, or other applicable considerations. Furthermore, any use built over a wetland area will not be allowed to impede navigation or disrupt the normal activities of the commercial fishing industry.

Whereas this policy determines the acceptability and compatibility of locating water dependent uses and seafood restaurants over specific wetland areas in the Shem Creek Planning Area, it is recognized that the responsibility of assigning a just and reasonable compensation to the public for the use of State wetlands for commercial purposes rests with the Attorney General for the State of South Carolina. The intent of this policy relates only to the compatibility of land uses, the protection of productive natural resources, and economic enhancement of Mt. Pleasant and Charleston County.

POLICY: The Mt. Pleasant Zoning Ordinance will be amended to incorporate the following changes:

Two new zoning districts should be created and district boundaries should be redrawn to clearly represent existing and intended land use patterns (i.e. conservation areas, commercial uses, industrial uses, residential areas).

Amend the list of uses permitted in each district in order to phase out incompatible uses by not allowing their reconstruction or replacement in the event of abandonment or destruction.

Adopt a co-ordinated development theme for the Shem Creek Business Area (excluding the Haddrell Point marine industrial area). The Mt. Pleasant town appearance Board will implement this proposal in their review of development proposals within the area.

Expand the area of jurisdiction for the town appearance board to include all of the Marine Business District shown on the future land use map.

Implement landscaping standards to be enforced within the Shem Creek Business District.

Establish a density of residential development permitted in mixed use development proposals.

POLICY: In the Marine Business Zone and Marine Industrial Zone, parking areas shall not be paved with impervious materials. Landscaped areas, capable of holding runoff water for short periods of time, crushed shell paving materials, or other alternative ways of allowing rainwater perculation shall be used in covering parking areas instead of impervious materials. A vegetated buffer of 10 feet or more should be provided between the creek and any parking areas.

POLICY: The marsh vistas along the creek are underutilized. It is recommended that new restaurants and other non water dependent businesses orient themselves so as to take advantage of the drainage benefits and scenic vistas afforded by marshland locations. However, in no case will marshland be allowed to be filled simply for commercial development purposes.

POLICY: Water dependent businesses, particularly those involved with the commercial fishing industry will be allowed to expand within the areas designated by the Future Land Use Map. (Indicated on the Map as "pier expansion for water dependent uses.") After justification of a need, buildings for water dependent uses will be allowed to be constructed on pilings over wetland areas, provided that the use does not impede navigation or interfere with previously existing uses.

POLICY: Outdoor restaurants are in keeping with the proposals for development of the Shem Creek Business Area. However, regulations for litter control, public safety, outside lights and sound and other considerations must be reviewed by the Town of Mt. Pleasant before these uses are approved for construction.

POLICY: Mixed use developments containing different types of retail businesses with residential uses located on second and third stories, are in keeping with the proposed development pattern for the Shem Creek Business Area. Because of different peak periods of use, these developments should include community use open spaces, and common parking areas in their plans.

POLICY: Space for the future expansion of businesses associated with the commercial fishing industry will be reserved on the north side of Shem Creek (see Future Land Use Map). The uses already in existence along Haddrell Point will be encouraged to continue in operation and expand as space allows.

POLICY RECOMMENDATIONS

DREDGING AND CREEK MAINTENANCE

POLICY: The Town of Mt. Pleasant and Coastal Council will work with the Corps of Engineers and make every effort to insure that Shem Creek remains in the Corps' maintenance dredging program.

POLICY: In order to maintain navigable water depths, water related businesses are encouraged to have the areas dredged in front of their businesses during the period that the dredging operation is underway.

POLICY: The Coast Guard should enforce mooring standards and prohibit the long term parallel mooring of boats obstructing safe navigation along the creek.

POLICY: Bulkheads for erosion control purposes will be allowed to be constructed along any existing developed piece of highland property between the Charleston Harbor and the Shem Creek Bridge. All bulkheads must be constructed along the existing scarpline; any back filling to increase lot size will not be allowed.

PUBLIC ACCESS

POLICY: The Town of Mt. Pleasant should improve vehicular circulation around the public boat ramp by providing an entrance into the parking area from Scott Street.

POLICY: The recommended public access points indicated on the Future Land Use Map should be acquired/constructed.

POLICY: Traffic signalization and traffic signs should be installed at the appropriate places as designted by this plan.

IMPLEMENTATION POLICIES

POLICY: The following procedure will be used in adopting the Shem Creek Management Plan.

> The first step in implementing the Plan will be its adoption by the Shem Creek Citizens Advisory Committee. Second, the recommended Plan will be approved by the Mt. Pleasant Town Planning Board, and the Management Committee of the South Carolina Coastal Council. Final adoption of the Plan can occur concurrently or independently by action of the Mt. Pleasant Town Council and the South Carolina Coastal Council.

POLICY: Mt. Pleasant will implement the Plan by creating the two new zoning districts described in the Plan, working toward annexation of unincorporated parts of the Planning Area, and by applying the Plan's policies to building permits, variances, and other land use decisions.

POLICY: Implementation of the Plan by the Coastal Council will consist of using the Plan's policies in making permit, certification and federal consistency decisions. The South Carolina Coastal Zone Management Program will also be used in making these decisions. On matters not addressed by this Plan, the Coastal Council will use their standard operating procedures as set forth by law.

POLICY: Ammending the Plan will require joint approval by the Coastal Council and the Town of Mt. Pleasant.

POLICY ELABORATION - If this plan is to be implemented it is very important that the policy recommendations be used in making future decisions. Some of these policy decisions are conceptual in nature, others follow a legal course and others involve specific recommendations for the alteration and drainage of public and private properties. The following are more precise explanations of some of the policy recommendations of this Plan:

Land Use - The designation of sites suitable for restaurants and retail businesses compatible with the existing commercial fishing industry will be accomplished through the creation of a new zoning district. The specific revisions suggested are listed under the implementation section which lists proposed revisions to the permitted and conditional uses allowed to locate in the zone. The specific site and designation of the zoning district boundaries was the product of a review of existing land use patterns, circulation patterns, space available for the expansion to businesses, parking space availability and the location to the Creek. The results of that analysis are shown on the Future Land Use Map as the "Marine Related Business Zone".

When the area on the north side of the Creek is annexed into the Town of Mt. Pleasant, the Marine Related Business Zone should be given to the property presently occupied by the Loreli Restaurant. The Zenith Repair Shop, Multimile Tire and all of the property within the Planning Area fronting Highway 17. Mt. Pleasant Seafood, all of the property bordering Shem Creek, and the two sites shown on the Future Land Use Map as future marine industrial sites should be given the Marine Industrial Zone classification. This site will provide space for an expansion of the commercial fishing should one occur.

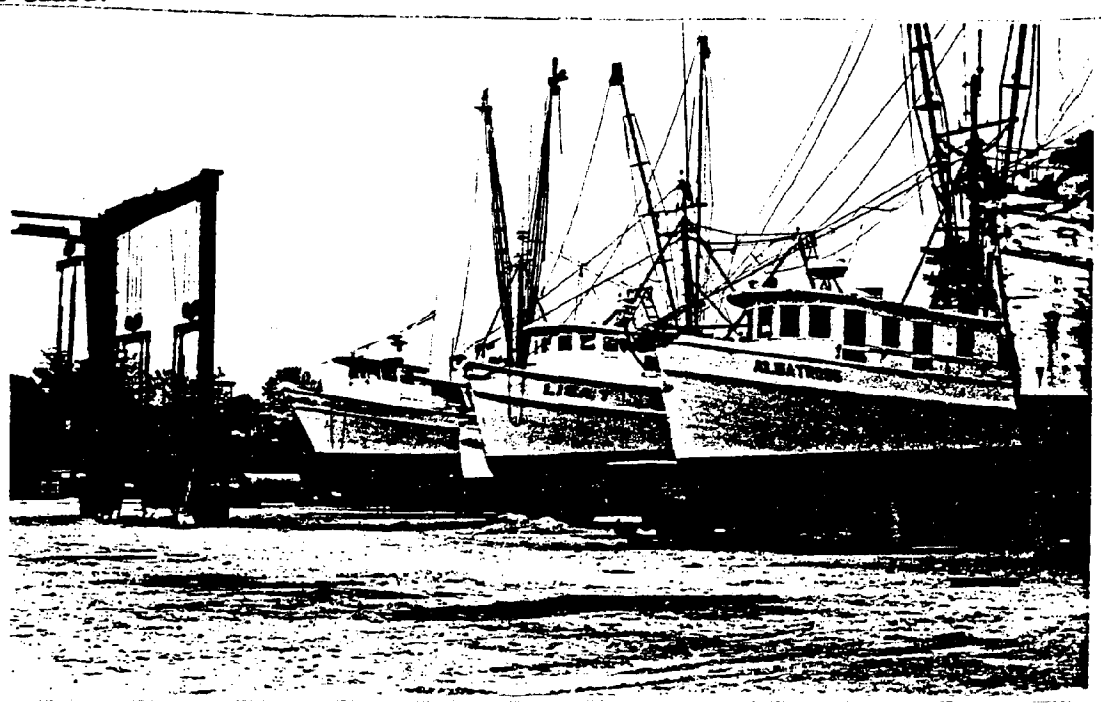
Marshlands - The marshes remaining within the Planning Area have been shown to be very productive and significant areas. It has been recommended that the marshes be used as sources of scenic vistas to encourage the location of restaurants and similar businesses compatible with the proposed plan. It has also been recommended that the marsh areas be used as drainage basins to filter storm water runoff from upland areas before it enters the Creek; thus minimizing the presence or impact of any pollutants on water quality. Catch basins located on the marsh borders can be used to dissipate stormwater runoff over the entire marsh, allowing it to trickle through the basin before reaching the Creek. Many heavy metals and other pollutants will settle out of the water column and be deposited in the marsh sediment.

PUBLIC ACCESS - A public access site should be constructed along the existing Lucas Street right of way, north of Mill Street. The Town of Mt. Pleasant through this right of way could build a walkway and dock on the Creek. The walkway should be approximately four feet in width and 370 feet in length. The walkway would provide a platform from which to view the marsh and its creatures. Benches and several explanatory signs describing marsh plants and animals could be placed at intervals along the walkway. The dock would provide a fishing and crabbing facility which local residents could use. Parking for the facility would be available at the county boat ramp lot within easy walking distance.

DREDGING- The continuation of the Corps of Engineers five year channel maintainance dredging schedule is very important to keep a healthy business climate going along Shem Creek. The continuation of this program will, in large part, be dependent upon locating and maintaining a spoil disposal area near the creek. Rising costs of dredging operations, created by expensive fuel prices make a close spoil location a necessity. During previous dredging periods the Patriot's Point property has been used as a spoil location; but development has eliminated this area as a potential site. The Coastal Council recognizes the importance of finding a spoil disposal site, to keep the creek open and will work with the Corps of Engineers and City of Mt. Pleasant in finding the least environmentally damaging site which will be economically feasible for use.

PAVING MATERIALS FOR PARKING LOTS - Crushed shells, pea gravel, oyster shell and other similar paving surfaces which will allow rain water to perculate through the surface should be used in future developments along the Creek. Asphalt and concrete are not acceptible surfaces and will not be permitted. Any repaving within either the Marine Industrial Zone or the Marine related business zone will be considered as a new paving and will be subject to the requirements of the Policy. In addition, vegetative buffers should be provided between the Creek and any parking areas. These buffers may contain grasses, ground cover, plants, evergreen shrubs or any type of trees.

CONGESTION - The large number of shrimp boats using Shem Creek can create circulation problems around the bridge area. This can become an obstruction to navigation and create a dangerous situation. The problem is a manageable one, with the U.S. Coast Guard having the responsibility for controlling the circulation within the Creek. This Plan recognizes that the problem can occur and probably will continue to occur because of the location of the fish houses. However, because of the importance placed on keeping Shem Creek as it presently is - the reponsibility of managing the congestion problem will remain with the Coast Guard.



APPEARANCE - Shem Creek has what has been described as "atmosphere". The relationship around the bridge area of the shrimp boats, fishhouses, and restaurants has been identified as an attribute worthy of protection. It is very important if the area is to be successful in continuing to attract visitors to maintain the apperance of the area as much as possible. Several techniques can be used to accomplish this: paving areas can be paved with shell, gravel or other "non-shopping center" materials. Plant materials and landscaping can be used within and adjacent to parking areas and buildings to soften the effect of the cars and construction materials. Buildings can be wooden or rough stuccoed, rather than brick veneer. Tin roofs can be used when feasible. Paints and colors should be earth toned instead of bright glaring colors. Signs should be non-neon, unobtrusive and designed to accent the building and its use - as opposed to being the buildings most dominate feature.

The Town of Mt. Pleasant through its zoning ordinance has regulations governing the location and types of signs and plant materials allowable or required in each zoning district. In addition, the Town Appearance Board has the responsibility for permitting all changes or new construction taking place within the area.

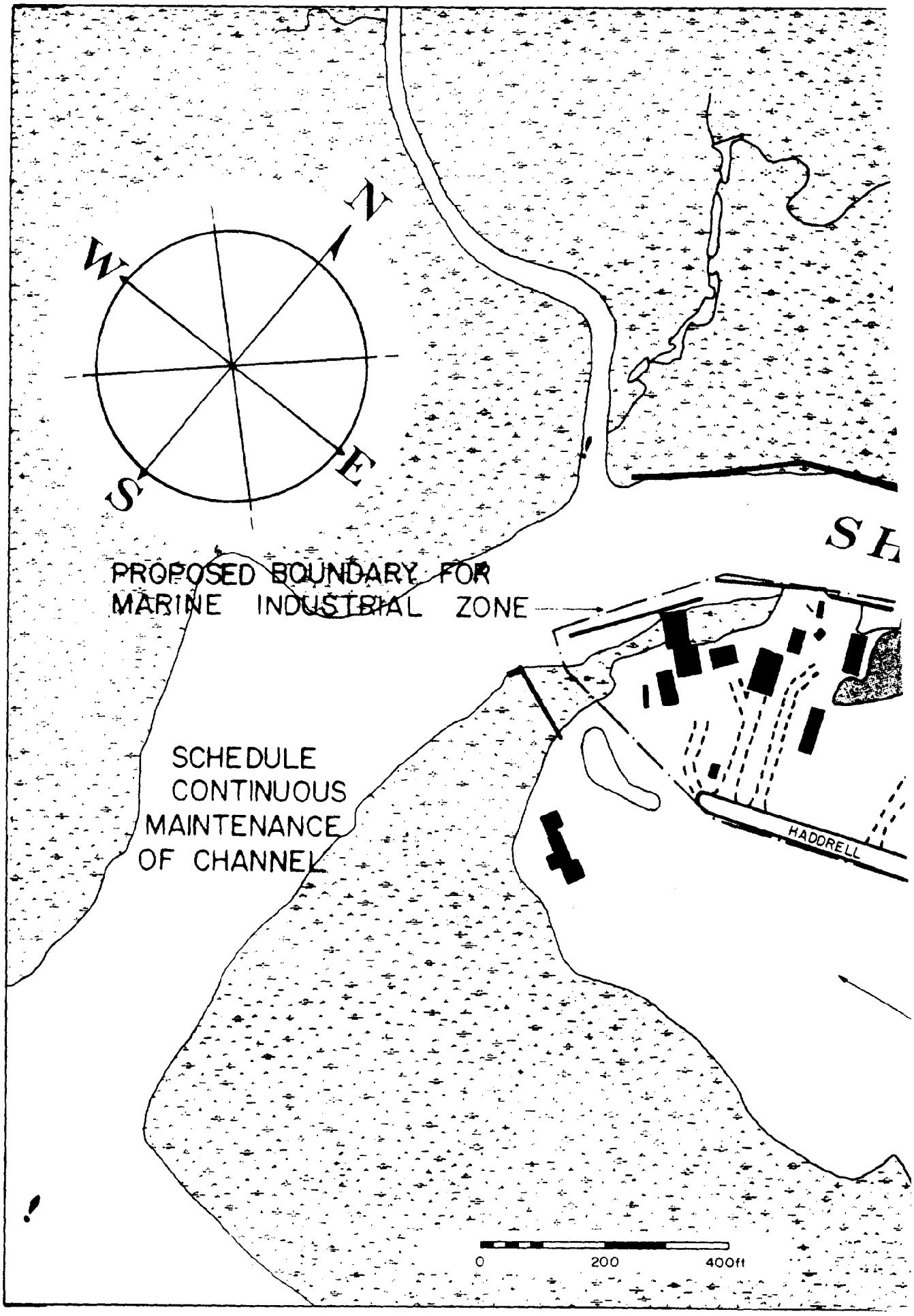
CIRCULATION - Several circulation improvements have been recommended by the Plan. They include: the installation of a traffic signal and realignment of an intersection at the junction of Highway 17 and Pelzer Drive; and construction of a second access point from the County Boat Ramp parking lot on Scott Street. With the exception of these two improvements, the vehicular circulation system of the Planning Area should not create any major problems to the future development of the area. Sidewalks are virtually non-existant throughout most of the planning area and will be needed in many sections if it continues to increase in density. The Town of Mt. Pleasant should consider requiring sidewalks and connecting existing sections in its future planning and zoning decisions,

SHEM CREEK SPECIAL AREA MANAGEMENT PLAN

UTURE LAND USE MAP

areas with development or expansion opportunities

proposed zoning district boundaries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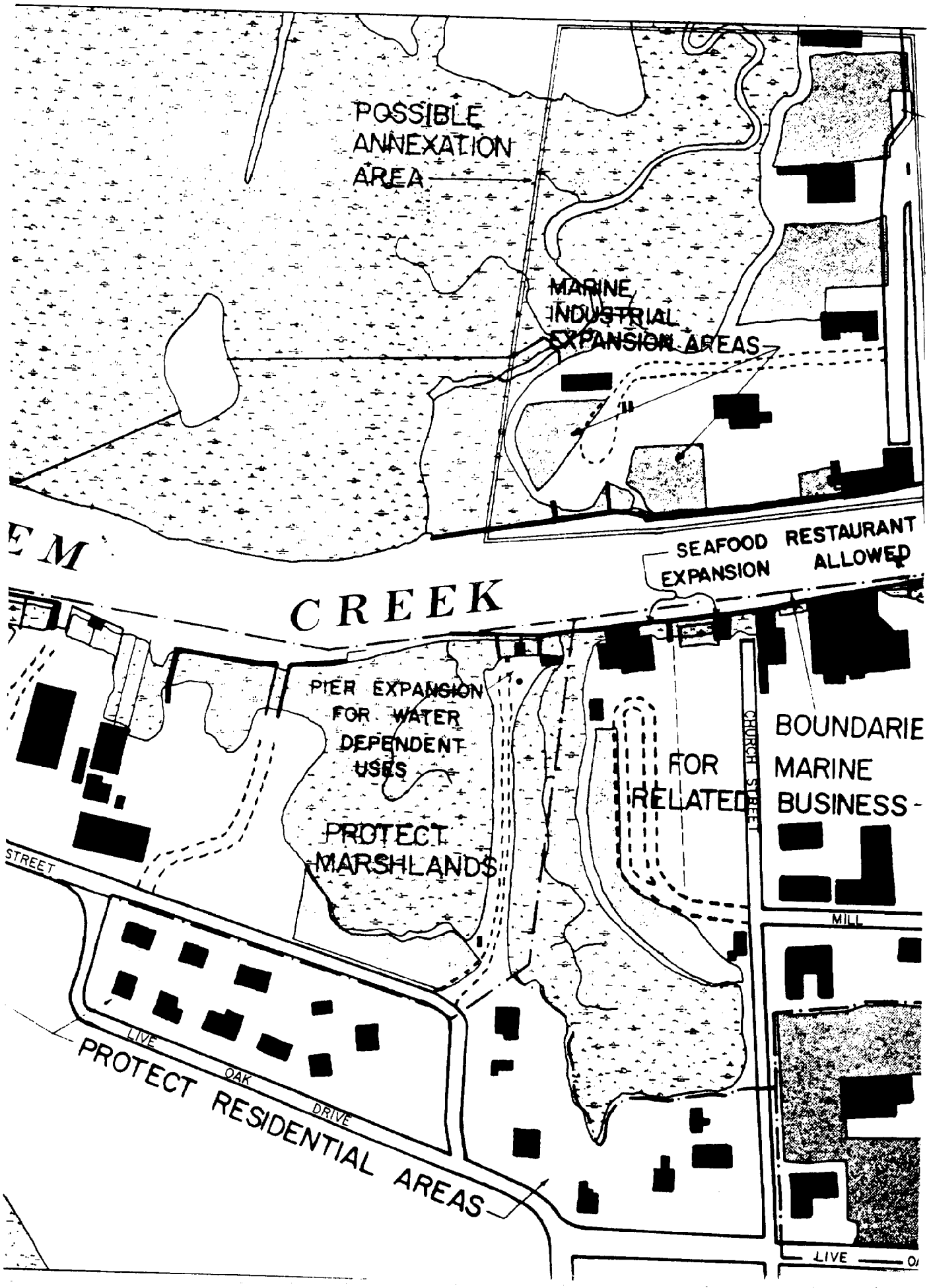
POSSIBLE ANNEXATION AREA
MARINE INDUSTRIAL EXPANSION AREAS
SEAFOOD RESTAURANT EXPANSION ALLOWED
CREEK
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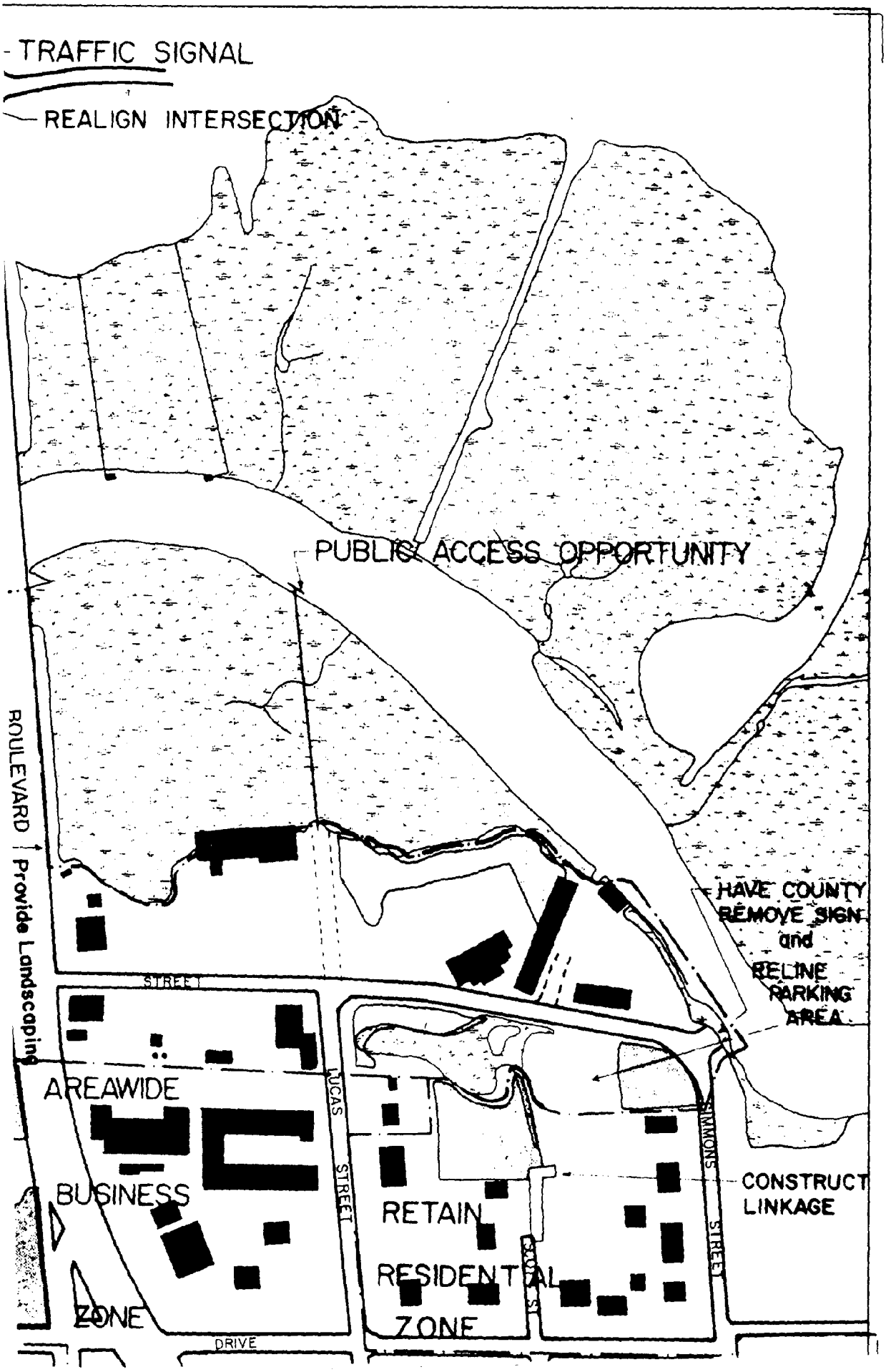
TRAFFIC SIGNAL
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PUBLIC ACCESS OPPORTUNITY
BOULEVARD
Provide Landscaping
STREET
HAVE COUNTY REMOVE SIGN and RELINE PARKING AREA
AREAWIDE
BUSINESS
ZONE
LUCAS STREET
RETAIN
RESIDENTIAL
ZONE
SIMMONS STREET
CONSTRUCT LINKAGE
DRIVE

IMPLEMENTATION

Adoption - Before the Management Plan can be successfully implemented, it must first be adopted by both the Town of Mt. Pleasant and Coastal Council. Adoption by the two groups should occur concurrently; however, independent approvals by either body may be granted to ratify the Plan's recommendations and begin implementation.

The Shem Creek Citizens Advisory Committee plays the first role in the implementation process. After that group approves the Plan it will be forwarded to the Mt. Pleasant Town Planning Board and the Management Committee of the Coastal Council. Each group will review the Plan and concurrently make recommendations of approval or denial to the Mt. Pleasant Town Council and Coastal Council. Prior to action on the Plan a public hearing shall be held by the Planning Commission in accordance with the provisions of the South Carolina Planning Statutes. The Coastal Council review will make a determination if the Plan is or is not consistent with the Coastal Zone Management Program for South Carolina. Upon making a finding that the Plan is consistent - it will become a part of the Council's Coastal Zone Management Plan.

Because a partnership between the Coastal Council and Mt. Pleasant will be formed for implementation of the Plan, coordination of the Plan with the South Carolina Coastal Management Program has been performed throughout the Plan's development. Federal regulations affecting changes in the South Carolina Coastal Management Program apply to the Coastal Council's adoption of the Plan. The requirements are (1) that the Plan be in conformance with the Management Program, (2) that the Plan be submitted to the Office of Coastal Zone Management for a determination of whether or not Plan adoption is a routine program implementation action, (3) that notice be given of the opportunity for comments on this determination, and (4) that notice be given of the Office of Coastal Zone Management's determination and the applicability of federal consistency with the Plan. (See 15 CFR 923.84, Vol. 44, No. 61 - Wed., March 28, 1979.) When these requirements are met, the Plan will be a part of the federally approved South Carolina Coastal Management Program.

Local Role - Mt. Pleasant will include the recommendations of the Shem Creek Plan in the Town's long range Comprehensive Planning process. The specific revisions suggested by the Plan should be incorporated into the Mt. Pleasant Land Development Regulations. The Mt. Pleasant Town Council will implement the Plan by:

1. Creating the Marine Related Business District and the Marine Industrial District;
2. Applying the Plan's Policies to building permit decisions, variance requests and other official land use actions, and;
3. Working towards the annexation of the unincorporated sections of the Planning Area as shown on the Future Land Use Map.

The following is a review of the suggested revisions to the Zoning and Subdivision regulations:

ZONING - The Mt. Pleasant Zoning Ordinance and Map will need to be amended to implement several of the Management Plan Objectives and Policies. This action could be initiated by either the Mt. Pleasant Board of Planning and Zoning or the Town Council. Two new zoning districts are suggested for inclusion into the Mt. Pleasant Zoning Ordinance. They are listed as follows:

Marine Industrial District

Intent of the District - It is the intent of this district to develop and reserve land and waterfront locations for industries and services which are dependent upon a waterfront location. This district is designed to exclude other uses which would occupy sites needed and the continuance of a healthy marine industrial environment. It is also designed to discourage any encroachment by residential, commercial or other uses capable of adversely affecting the basic industrial character of the district.

Permitted Uses

Ship building and repair
Seafood processing
Fuel docks
Ice houses
Marine equipment repair
Marine warehouses and storage
Marine salvage operations

Marine Business District

Intent of District - It is the intent of the Marine Business District to allow businesses closely related to waterfront activity which are compatible with existing marine industries. This district is further designed to allow retail and service establishments which are compatible with the characteristics of the waterfront area to locate within the zone. By encouraging a mixture of compatible uses it excludes uses which would not benefit by locating in close proximity to the waterfront area. The conditional uses procedure will be used to allow other uses not specifically permitted by demonstrating that: (1) The use does need to locate in close proximity to waterfront activities. (2) That it will not be detrimental to existing waterfront uses. (3) It will enhance the character of the Marine Business District.

Permitted Uses

1. Seafood restaurant
2. Ice houses
3. Seafood processing
4. Marine equipment repair
5. Marine warehouse and storage
6. Recreational boating and storage
7. Bait and tackle
8. Marine equipment retail

Conditional uses: The following uses may be allowed in accordance with the provisions for approving conditional uses (p.58 Mt. Pleasant Zoning Ordinance.)

1. Combination residential structure of not more than three stories with any use allowed in this zoning district provided: a. no dwelling unit is located on the street level or any level which has commercial uses; b. and all dwelling units have separate access to the street.
2. Retail and service establishments related to activities and characteristics of the waterfront. Provided further that it demonstrates the conditions defined in the Intent of the District.

Specific setback, buffer screen, and height requirements should be developed by the Planning Board prior to their adoption.

The recommended map amendments are shown on the Future Land Use Map. Briefly, the area between Haddrell Street and the Creek is proposed for a Marine Industrial Zoning District which would accommodate the existing uses, and allow for their needed expansion. The Residential Zoning District would remain intact. The remaining areas as shown on the map would be zoned Marine Business and Areawide Business. On the north side of the Creek it is suggested that regardless of annexation that this property be zoned with both the Marine Industrial and Marine Business Zoning Districts.

Another recommendation is that the Historic Zoning District be removed from the Marine Industrial District. Appearance standards are often contrary to industrial structures. Also the Town does not need to jeopardize the legitimacy of its Historic District by including an area which by its very nature involves periodic changes in appearnace and activity.

Subdivision Regulations - The Mt. Pleasant subdivision regulations will need to be updated based on the recommendations of the Shem creek Drainage Study. Furthermore, these regulations should also address provision of public access to shore front areas, since most of these problems can be solved at the initial stage of subdividing land into developable lots. This would not only affect the resubdivision of land along the Study area, but also, any further subdivisions in the remainder of the Shem Creek Drainage Basin. Prior to the adoption of any new subdivision regulations by the Town of Mt. Pleasant, they should be submitted to the South Carolina Coastal Council for consistency with the Coastal Management Plan.

Coastal Council Role - The Coastal Council issues permits for any alteration occuring within the critical areas of the coastal zone. Within Shem Creek this would encompass all of the wetland areas. In implementing this Plan the Council will adopt the Plan as a part of its Managment program which utilizes the permitting process as one of its means of implementation. All alterations within the wetlands, occurring after adoption of the plan must be consistant with the Plan. Permits will be denied for alterations that are inconsistent with the Plan.

The Coastal Council also certifies all federal and state agency permitting activities occuring within the Coastal Zone. This includes such actions as the extension of water and sewer lines, highway improvements, discharge of wastewater, and other activities. The certification process will also be used to implement the Plan by requiring all activities to be consistent with the Plan or be subject to denial of certification.

Amending the Plan - Any ammendment to the Plan's policy recommendations or Future Land Use Map must be approved by both the Town Council and Coastal Council. Either body may initiate the ammendment action, but both must grant approval. Any ammendment to the Plan must be consistent with both the Mt. Pleasant Land Use Planning Program and the South Carolina Coastal Zone Management Program.

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