1986

Site Planning: Southold Town Case Study

Maryanne Field
University of Rhode Island

SITE PLANNING: SOUTHOLD TOWN CASE STUDY

BY

MARYANNE FIELD

A RESEARCH PROJECT SUBMITTED IN

PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE AND MASTER OF

COMMUNITY PLANNING

UNIVERSITY OF RHODE ISLAND

1986

MASTER OF COMMUNITY PLANNING

RESEARCH PROJECT

OF

MARYANNE FIELD

Approved:

Major Professor Farhad Atash

Farhad Atash

Acknowledged:

Director Hal H. Foster Jr.

Dr. Howard Foster

List of Figures

Table Of Contents

CHAPTER ONE

Introduction

The research project topic is site planning and the application of the process to a specific site. The site planning process is a valuable method of analyzing the various aspects of a site and the community in which the site is located. The information obtained through the process is used for decision making during the formulation of designs. The research will provide the an insight to the unique characteristics of the site and community for the site planner and client. By following the steps outlined in chapter two, a successful design can be achieved to meet the needs and expectations of the client, user and community.

The next chapter outlines the steps in the site planning process and discuses the importance of each step. The process defines the problem and identifies the purpose of the development. Site specific information and community characteristics are collected for evaluation. Site specific information is used to evaluate a number of factors such as climate, topography, existing land features, structures, vegetation and soils. The community characteristics which are collected address the profile of a potential user as well as housing stock already available. This information is analyzed and put together to develop a site program. From the program site designs are developed. More than one design is prepared as alternatives. Evaluation of the alternatives to determine the advantages and disadvantages of each

design is discussed to come to a consensus as to the final design which would best suit the site and purpose of the development.

The third chapter applies the site planning process to a vacant site owned by the client. The client has expressed an interest in developing the site as rental housing. Maximum density permitted by the zoning ordinance is preferred by the client. The site analysis reveals limitations, constraints and opportunities posed by the physical characteristics of the site. The community analysis provides a profile of the population in the community. Housing characteristics are also collected and used for an indication of the housing type, quantity and cost available in the community. This information is worked into developing site plans and alternatives.

The forth chapter is a discussion of the two alternatives developed using the site and community analysis. The concept site plans are presented in the scale of 1" to 50', reduced by 50% to be included in the text. The housing type drawings are at the scale of 1" to 5', also reduced by 50%. Both alternatives include text describing the site and housing type. These alternatives were presented to the client for his comments. Together the site planner and client determined which design would best suit the community and site.

The research project makes use of various publications on site planning as well as knowledge obtained from the site planning course. Specific information on the site and community has been from local government publications such as the zoning or-

dinance and comprehensive plan. National publications such as the U.S. Census, U.S. Geological Society Quadrangle Maps and the U.S. Soil Survey provide much of the information necessary for analysis of the project. A review of this material as well as discussions with the client and site visits provided information in developing and evaluating the alternatives.

CHAPTER TWO

Site Planning

Site Planning and the site analysis process is essential to develop a successful design. Site planning pulls together various information about the specific site and potential user in order to determine a viable activity on the site for a particular site. The site analysis process is a series of steps to collect and analyze information pertaining to the site, user and area within the community.

The site planning process is an important part of a site development because it allows the site planner to place concepts on paper before actually placing it on the site. This allows for the concept to be evaluated before too much has been spent in developing the site. The process also aides the planner in understanding the client, user, site and any constraints associated with the site. It also allows for evaluation of more than one alternative before one design is chosen. Working out constraints the site, user and client may have before hand avoids creating any adverse impacts to the environment, surrounding community or prospective user of the site. This is less expensive in terms of time, effort, and cost than correcting problems after the site is developed. An inadequate preliminary analysis could result in more problems as the project is constructed.

2.1 Problem Definition and Purpose

The first step in the site analysis process is to define the

problem and purpose for development of a site. Defining the problem can prove to be the most difficult since there are many questions which need answers before a site planner can continue. This step sets a base for decision making for the future steps. As one goes through the process it may become necessary to modify the definition of the problem and purpose. Hidden constraints which are not easily identifiable or changes in client objectives could refocus the direction of the site design. The most influential person in the group usually determine the purpose of the development. This could be the client, a strong citizen group, or user group. It is the responsibility of the site planner to identify and take into consideration the objectives and needs of all interested persons in determining the purpose of a development.

2.2 Site Analysis

This very important aspect of the site planning process identifies through research all issues relating to the specific site and its natural features. Constraints such as topography, surface water and vegetation are identified. Data is collected on slope, vegetation, soils and any existing structures or special features. The most widely used source of information is the Quadrangle maps prepared by the United States Department of The Interior, Geological Survey. Indicated on these maps are boundaries, land survey systems, roads, buildings, railroads, power transmission lines, contours, mines and caves, surface features, vegetation, shoreline coastal features, rivers lakes, canals, swamps,

marshes and bogs. There are two drawbacks to using the Quadrangle maps. One is that the scale may be too large for a particular site to be identified and the second is that in areas of rapid growth the features may change just as rapidly. Site visits are necessary to check the data for its accuracy and update what information has been found through secondary sources. During the site visit it is advisable to take photographs and notes to later refresh the site planners memory or to reference if a question comes up which was not previously addressed.

Aerial photographs can provide information to update the Quadrangle map. Aerial photographs show vegetation, cultural features and land forms. Data collection by this method can be expensive if aerial photographs are not already available. If aerial photographs are available they may need updating. This method could also be at two large of a scale for smaller parcels of land.

Soil type and characteristics can be researched through Soil Survey manuals prepared by The United States Department of Agriculture, Soil Conservation Service. The soil types are overlaid on on aerial photographs so that land features can be easily identified. The soil survey maps indicate physical structures, natural boundaries and drainage patterns. Because this is a secondary source of information it may also be necessary to check the data. Although soils do not change to a great degree over time, some areas such as barrier beaches are vulnerable to changes and storm damage. The scale of the soil survey maps may

be at too large of a scale for smaller parcels. To avoid any problems with use of the secondary data sources, the site planner needs to review the information collected and then visit the site to note any changes.

Flood plains are a constraint in developing a particular site. Development in flood plain areas are restricted in most areas. To determine if the site is in a flood plain, there are maps published by the Federal Emergency Management Agency which show the boundaries of flood plains.

Climate of an area is an element which should not be overlooked. Investigation into wind, sun orientation, precipitation and temperature is necessary to evaluate the climate conditions of a site. The climate conditions of a site determine the building orientation and landscape design. The orientation of the buildings as well as the landscaping can be used to the designers advantage when trying to minimize the impacts caused by nature. Secondary data sources for this information are publications such as Handbook of Fundamentals published by the American Society of Heating, Refrigeration, and Air Conditioning engineers, The National Association of Homebuilders Institutional Manuals or the U.S. Climatic Atlas published by the Government Printing Office. Primary sources of data is available from the National Weather Service. Knowledge of weather systems and terminology is needed to mold the primary data to a form which is understandable to the designer.

The most important element when evaluating the site specific

information is the zoning of the property and the jurisdictions zoning ordinance and subdivision regulations. The particular zone being residential, commercial, or industrial determines the permitted use on the property. The zoning ordinance specifies the area of land and dimensions required to build on a site. This includes minimum acreage, set back lines, height restrictions, building coverage, lighting, roads, landscaping, recreational/open space, buffer zones between different zones, and parking requirements. In the case of Residential, the number of units per acre allowed is specified. Subdivision regulations apply to the site if it is going to be divided into individual lots. Restrictions as to the provision of roads, dedication of roads, utilities and landscaping in order to subdivide are outlined by the jurisdictions subdivision regulations. The zoning ordinance and subdivision regulation may also set penalties for non compliance with the established ordinance and regulations. In order to avoid problems or hold-ups in getting approval from the regulating agencies the site design should follow and conform to all regulations set forth by the jurisdiction.

If the concept of the client is not in conformance with the zoning ordinance, additional steps can be taken to rezone the property. The process can be costly and time consuming since most governing bodies are required to hold public hearings for such requests. Even after all the hearings are over and the paperwork is completed it may be denied. The site planner is back at square one.

The site planner should also review the Comprehensive or Master Plan for the jurisdiction responsible for the area. The Comprehensive Plan or also called the Master Plan, evaluates existing land use, population and public facilities trends with an emphasis on providing viable recommendations for future land use and development. The Plan is also a statement of what the jurisdiction considers to be its long range goals and desirable types and patterns of development appropriate to achieve those goals. The plan takes into account all aspects of the community. It is a good source to review when determining the purpose of a development and evaluating the needs and desires of a community. The plan can give the designer insight to the needs of the community as well as provide information for a community analysis.

2.3 Community Analysis

The community analysis looks at the site as part of a larger region. Information can be obtained to provide a profile of the region or community. Included in the profile would be population trends, projections, and characteristics. Housing trends and characteristics can also be included for residential development. The U.S. Bureau of the Census, Population and Housing which is taken every ten years provides a good source of information. Detailed information such as education level, race, ethic background, income, occupation, commuting patterns, family size and household size is useful in determining the profile of a community. Major employment areas and the distance from residential

developments along with journey-to-work data can provide insight as to where residential locations are in demand. Expected changes in the community need to be taken into consideration. A large employer may be planning on leaving an area possibly causing a decline in the demand for housing or an increase in demand for new employers. The prospect of a large employer moving into an area may create a demand for new housing as well as a larger labor force pool. This could result in an increase of population.

Housing data provided by the census include total number of housing units, vacancy status, year-round or seasonal, renter or owner occupied, number of rooms per housing unit, median rent, value, facilities provided, and age of units. Many state and local planning agencies provide population projections as well as other statistical information which may be helpful. Building permit data can be useful in tracking the most recent trends in the housing market. Information from a local planning agency is helpful in updating the Census information. Housing information specifically can aid in determining the type of housing needed by the community. From this information types and sizes of housing already available can be determined. Information as to the household or family size gives an indication of housing needs Marital status can help in determining size and type of housing units are in demand.

Included as part of a community analysis is a market study. Besides evaluating the profile of a community, the site planner needs to evaluate what the competitors are constructing and plan-

ning. An evaluation of the competitors development can determine features which would distinguish one development form another. By providing amenities which are not available from a competitor, the site planner can create an development which may become more popular than the competitors. A look at what is being provided versus what is needed can help in determining the type of development. Too much of one thing can saturate the market and possibly leave vacant or underutilized developments.

Information on what is happening and what is planned for a community or region is an important aspect in analyzing a community. The information is put together to provide the site planner with a profile of the community or region. This is used in determining the purpose of the development, define the user or chose a particular user.

2.4 The User

Taking information from the community analysis, the site planner and client then can choose a particular user group or determine if the targeted user exists in the community. The client and site planner may choose the user group that has a particular demand or may leave the decision of user group up to the conditions and characteristics of the region. One might keep in mind the site may be designed for a mixture of users. A more detailed analysis of the user group in necessary to find out their particular needs.

For a residential development, information on lifestyle,

leisure time activities, family size, and income can be used to determine the type of housing unit which would best fit the user group. Cultural characteristics may need to be accommodated for. Difficult elements to determine is the values, likes and dislikes of the user group. Input from the user, if available is the best source. When the user is unavailable the site planner can make use of observation techniques to ascertain useful information. Visits to similar developments and interviews with the people is one method to obtain information. A variety of studies about a community may be available from local agencies. The site planner may feel that a study for the specific site be undertaken to collect pertinent information.

Commercial and industrial development would focus on the type of business and employees. The site planner would need information on the number of employees, activities, and interaction among the different activities. Business may need to locate near other business similar to themselves or complimentary to their activities. Space requirements and location of specific tasks as well schedules are information needed to evaluate space requirements and locational factors.

2.5 Site Program

The site program represents specific detail on the purpose, user and facilities to be associated with the site. Objective and goals of the development are outlined in the program. This provides the site planner with a base to make his design deci-

sions. The program lists the type of development, number and type of units, number and type of accessory uses such as parking lots, recreational structures, garages, and amenities. Requirements set by the zoning ordinance need to be reviewed at this point to make sure the program fits with the requirements.

The program acts as an agreement between the site planner and client on the specific details of the site design. Outlined in the program is details about the construction, building orientation, timetable for construction and financing opportunities. Included in the program may be a description of the design when completed and the interactions of the site users. A profile of the population utilizing the development need to be determined and included in the program.

The alternatives developed may have different packages describing the design. The alternatives can be evaluated by the information contained in the packages. The program addresses character of the user, objectives and goals of the project, package of activities, costs estimate and timetable of completion.

2.6 Plan Proposals

The site planner can prepare a given number of design alternatives following the specific details in the program. The number of alternatives produced should be limited so as not to take a great amount of time. The proposals can vary as to building location, composition and accessory uses composition and location.

The alternatives can be sketched out and the details about each evaluated. Included in the evaluation of alternatives is the conformance with the criteria set in the site program, costs and impacts associated with the design.

The site planner along with the client and preferably the user, need to evaluate all the alternatives. Weighing all the advantages, disadvantages, constraints and discussing the design leads to a decision as to which design will best meet the expectations of all persons involved with the project. Once a decision is made, which could take considerable amount of time, the next step is for the site planner to prepare a detailed site plan.

2.7 Preparing a Detailed Site Plan

In preparing the detailed site plan, the designer has to look carefully at the characteristics of the site concept and provide detailed drawings at a larger scale. The site plans should include floor plans, elevations, sections and detailed feature drawings. Details on parking spaces, sidewalks and landscaping features. All information on site features and details are necessary for surveyors and construction companies to map out the details on site. Details on construction materials are necessary for the calculation of costs.

2.8 Costs

In calculating cost of the development the site planner must take into account all costs attributed to the development. The

costs are added up and are used to determine the selling price or leasing cost. Included in the calculations is land value, improvement costs, hard construction costs, soft costs and of course a profit must be included. A chart for calculating the cost of a development is below:

A. Land Costs

1. total land value

2. total off-site improvement costs

- impact fees
- fees for water and sewer hook-ups
- fees for utility extensions

3. total on-site improvement costs

- landscaping
- parking
- storm management controls
- grading
- permit fees

B. Hard Construction Costs

1. labor

2. materials

* Adding items A and B gives a total production cost.

C. Contingency Fee for unexpected or hidden costs

D. Soft Costs

1. fees to Consultants, Lawyers, Architects and General Contractors.

2. interest for loans

Adding items A, B, C, and D gives a total for production costs and soft costs. From this total a profit can be calculated. The percentage add for profit usually range from 10% to 20 %. After adding the profit to costs, The total figure is divided by the number of units or square footage depending on type of development. This costing method determines the selling price or leasing rate.

There are a variety of sources for estimating costs of developments. One secondary source is the Dodge Construction Cost Manual, published by McGraw Hill. The site planner needs to take into account the region. Costs vary depending on the region. National figures are not useful in preparing detailed cost estimates. The site planner can contact various people involved in construction and land development and request estimates for the particular type of development.

The site planning process is necessary in the design of a successful development. Details of the site can be worked out in advance, avoiding any problems later in the construction phase. A good preliminary analysis saves time, effort and costs. The evaluation of the site ,user, and region along with determining the purpose and objectives of the project provides a sound base for designing a successful development.

CHAPTER THREE

Site Analysis

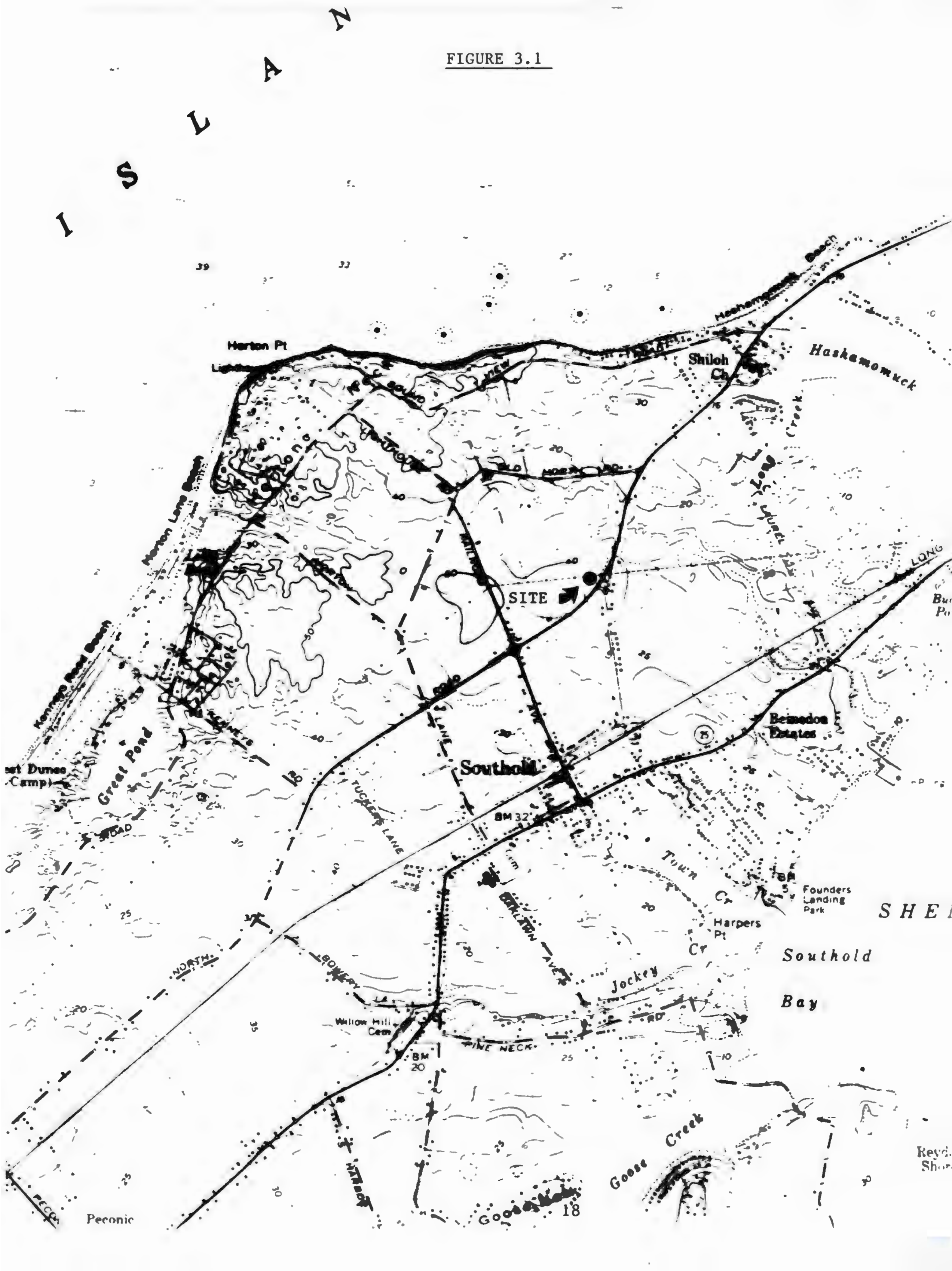
Site analysis, as described in the previous chapter, is information gathering and analyzing. Information about the site specific details and community characteristics is needed to design and evaluate a site plan. This chapter deals with a 7.227 acre site located in the Town of Southold, New York . Figure 3.1 illustrates the location of the site on a U.S.G.S. Quadrangle Map. The property owner is interested in developing the site as affordable rental housing. The site analysis is divided into two sections. The first is site specific characteristics and the second is community characteristics.

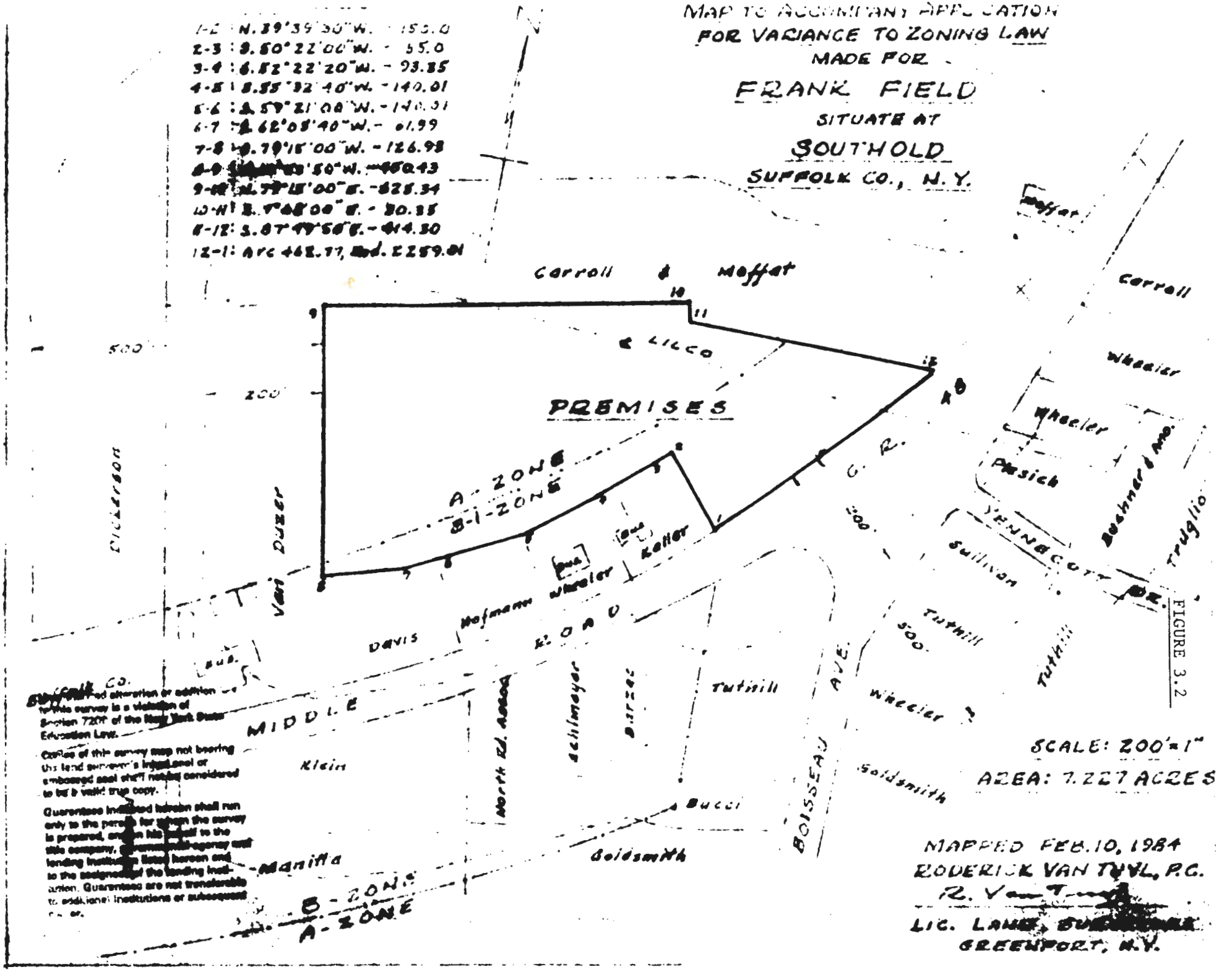
3.1 Site Characteristics

The site is located along County Road 48 just north of the village of Southold. The site has an odd shape with the bulk of the property behind existing commercial uses fronting on County Route 48 (see figure 3.2). The site was previously an potato farming field. The Quadrangle map indicates that the topography is relatively flat. A site visit confirms this. The property shows a slight change in grade from point 1 to point 12 on figure 3.2. The grade increases approximately three feet from point 1 to point 12.

The U.S.G.S. Quadrangle map and surveyors map indicate power transmission lines crossing through the site in the northeast

FIGURE 3.1


I S L A N
Horton Pt
Shiloh Ch
Haskamomuck
Long Creek
SITE
Southold
BM 32
Tuckers Lane
Town Cr
Founders Landing Park
Harpers Pt
Cr
S H E
Southold
Bay
Jockey
Great Pond
Willow Hill Cem
BM 20
Pine Neck
Goose Creek
18
Peconic
Bayview
North
Bowery La
Horton Lane Beach
Kenneys Road Beach
Hashamomuck Beach
Long Island Sound



Unauthorized alteration or addition to this survey is a violation of Section 7209 of the New York State Education Law.

Copies of this survey map not bearing this land surveyor's inked seal or embossed seal shall not be considered to be a valid true copy.

Guarantees indicated hereon shall run only to the person for whom the survey is prepared, and to his title company, lending institutions listed hereon and to the assignees of the lending institution. Guarantees are not transferable to additional institutions or subsequent owners.

FIGURE 3.2

corner. Further investigation reveals that a tower is located on the property and there exists a 60 foot easement paralleling the power transmission line. The easement prohibits any structures to be built within the boundaries. The land can be used for recreational purposes such as a ballfield.

Community water is available to the site. Community sewer is not available , thus individual septic systems are necessary. The soils on the property is HaA. This is defined as Haven Loam, 0 to 2 percent slope. The soils limitation chart in the Soil Survey of Suffolk County, New York indicates a slight limitation for sewerage disposal fields and home sites.[1]

During the site visit it was noted that very little vegetation exists on the property. The potato farming ceased recently leaving weeds to grow. This could be considered a constraint to providing landscaping as a buffer to the natural elements of the climate. The site planner feels that this is an opportunity to provide landscaping where it is best fit to be energy efficient. The U.S.G.S. Quadrangle map, Soil Survey and site visit did not indicate the presence of wetlands or surface water.

The climate of the region is not extreme in any season. The water bodies surrounding the community tend to mitigate the colder months while in the warmer months the breeze from the water bodies keeps the temperature and humidity down. The highest normal temperature occurs during July (71.3). The lowest normal temperature occurs during the month of February (31.9). The long Island area receives the minimum amount of precipitation in the

winter season for the state of New York. The moderating influence of the water also reduces the amount of snow accumulation. The region is vulnerable to hurricanes and tropical storms which could cause considerable damage in areas adjacent to the water bodies. During the winter months the wind is generally from the northwest. Southwest winds are more common during the warmer months.

The property is split between two different land use zones. The portion of the property which fronts on County Road 48 is zoned General Business (B-1) 200 feet back from the property line. The remainder of the property is zoned Agricultural (A). Under the current zoning classification the client will not be permitted to develop the property as residential at the density desired. The client will seek a rezoning of the property to Hamlet Density Residential (HD) District. For the purpose of this research project the author is making the assumption that the property is zoned Hamlet Density Residential (HD) District.

The Southold Town Zoning Code states the following purpose for Hamlet Density Residential (HD) District:

> "The purpose of the Hamlet Density (HD) Residential District is to (1) permit a mix of housing types and level of residential density appropriate to the areas in and around the major hamlet centers, particularly Mattituck, Cutchogue, Southold, Orient and the village of Greenport and (2) to promote the provision of lower cost housing in these hamlet and village areas, where provision of utilities exists or may be possible and desirable and where public facilities and commercial activities are available."[2]

Permitted uses in the Hamlet Density (HD) Residential District is one-family detached dwellings and two-family dwellings. Multiple dwellings, townhouses, row or attached housed are permitted by special exception by the Planning Board. Zoning regulations also pose a constraint on the design of the site.

The Master Plan for the Town of Southold has recently undergone an update. In the update, the section on Land Use Proposals discusses the various land use categories and makes recommendations. The Master Plan states the following in regards to the Hamlet Density Residential District:

> "In order to develop properties for residential uses at a density greater than the base density, an approved central water supply is required, and to develop within this area at a density greater than two units per acre, a sewerage treatment facility or connection to a sewer system would be needed. Thus, if public water service were available, but sewerage treatment were not available, the maximum density permitted would be two units per acre or 20,000 square foot lots for conventional subdivision. If public water and sewerage treatment were available, then areas designated as Hamlet Density could be developed at densities up to four units per acres"[3]

The natural features of a site can work for the design or against a design. The constraints need to be determined in order to work them into the site design. This is the most important step undertaken to prevent future problems with the site design and any unnecessary extra costs.

3.2 Community Characteristics

This sections pulls together information to provide a

profile of the community as well as assessing the site potential for success. The Census of Population and Housing is used to provide data in analyzing the existing characteristics. For the purpose of this research project the community will be defined as the entire town of Southold which includes five individual census tracts. The census tract which the site is included is defined as the neighborhood. There are four other neighborhoods in the community. Population characteristics used for the analysis is age, marital status, household and family size, educational level, ancestry, occupation and income. The housing characteristics utilized includes year-round or seasonal, owner or renter occupied, persons per unit, number of units in structure and age of structure.

Population

The median age of the neighborhood is 47.9 years. This is higher than the median age of the community which is 43.0 years. This indicates that the neighborhood has a higher percentage of persons in the older category. The percentage of people in the age categories under 54 for the neighborhood is lower than for the community. The percentage of persons in the 55 and older age groups are higher for the neighborhood than the community.

Sixty percent of the population of the neighborhood is married. The neighborhood has a higher percentage of married persons than the community. Although there are a higher percentage of persons married in the neighborhood, the household size (2.43)

and family size (2.88) are lower than the community (2.50 and 2.99 respectfully) as a whole. The neighborhood also shows a lower percentage of families with children under 18. The community showed 39% of the families had children under 18 where as in the neighborhood 33% of the families reported to have children under 18.

The educational level of persons in the neighborhood is higher than the community. The neighborhood had 42.2% of the population had some college experience. The community as a whole showed 36.8% of the population had some college experience.

People of single ancestry groups were the highest percentage in both the community and neighborhood. In the community the highest percentage was Polish (20.1%) with English (18.2%) as second. The neighborhood showed English (21.0%) to be the highest and Polish (17.7%) to be the second highest.

The majority of the population in both the community and neighborhood work within the county of residence. This is no surprise since the community encompasses an entire fork of Long Island which is to the eastern end of the county. The community is surrounded by water bodies on all but the western boundary.

The highest percentage of income occupations for people in the labor force of the neighborhood is in the managerial and professional specialty category (26.9%) and technical, sales and administrative support categories (32.2%). Both of these categories are higher percentage than the community as a whole.

Household income data shows a distinct difference between

the community and neighborhood. The community shows the highest percentage of households having an income of $25,000 to $34,999. The neighborhood shows the highest percentage to be between $15,000 and $19,999. The neighborhood also has a higher percentage of households with social security income.

In comparing the neighborhood to the community as a whole, the neighborhood profile would be that of an older population with smaller family size, higher education level, lower income level and a greater number of households with social security income. This suggests that the population may be at the retirement stage of the life cycle.

Housing

The majority of housing in the neighborhood and community is year-round. The neighborhood has a higher percentage of year-round than the community (77.2% compared to 75.0%). These year-round housing units are mostly owner-occupied. Owner-occupied housing units in the neighborhood is 73.2% which is slightly higher than that of the community (71.7%). The median number of persons per unit for the renter-occupied units is 1.75 . This is the lowest in all five of the neighborhoods of the community. The owner-occupied units have a median of 2.15 persons per unit in the neighborhood. This is also the lowest number of persons per unit in all five neighborhoods.

In both the community and neighborhood the majority of the housing units are single-family (1 unit per structure). The

neighborhood has 93.9% of the units single-family where as in the community 90.9% of the housing is single-family. The community has 64.4% of the housing structures built before 1959. The neighborhood has 57.0% of the housing structures built before 1959.

Recent trends in residential development have been towards condominium and second home markets. The community is located in an increasing popular resort area for residents of New York City. Many people buy homes as second homes and use them later as year-round retirement homes. This demand has put a squeeze on the homes available for local residents who need year-round housing that is affordable for young families and older persons.

The information collected from the site specific details to the community profile needs to be addressed in the site design process to assure that the design will fit the site as well as the community. Overlooking any of these aspect could result in a poor or unsuccessful design which ends up costing more in terms of time money and effort. Following the site plan process can identify important issues and constraints before its too late to work it into the design.

The site has unique physical characteristics which pose a challenge in designing a residential development. The odd shape of the site, power transmission lines and tower are constraints in placing structures and roads. These constraints can not be altered and thus, the design has to work around them. The lack of vegetation can be considered an opportunity to provide landscaping where it is most aesthetically pleasing and energy efficient

in the design.

The community characteristics information provided an interesting profile of the population in the neighborhood. The profile is that of an older married couple living with out children under 18. The profile also indicates a high educational level and a higher income level than the community as a whole. there is a higher percentage of persons in the neighborhood with social security income. The family and household size is also relatively low. This information suggest that there is a high number of retired persons in the neighborhood than the community.

The housing stock in the neighborhood is owner-occupied, year-round and single-family detached. Many of the new residential developments are also owner-occupied seasonal and multi-family. The newer units are marketed towards second home buyers in the high income levels.

The provision of year-round rental units would be seeked by retired persons as well as young families who can not yet afford to purchase their own home. Year-round rental units would be an asset to the neighborhood housing stock.

CHAPTER FOUR

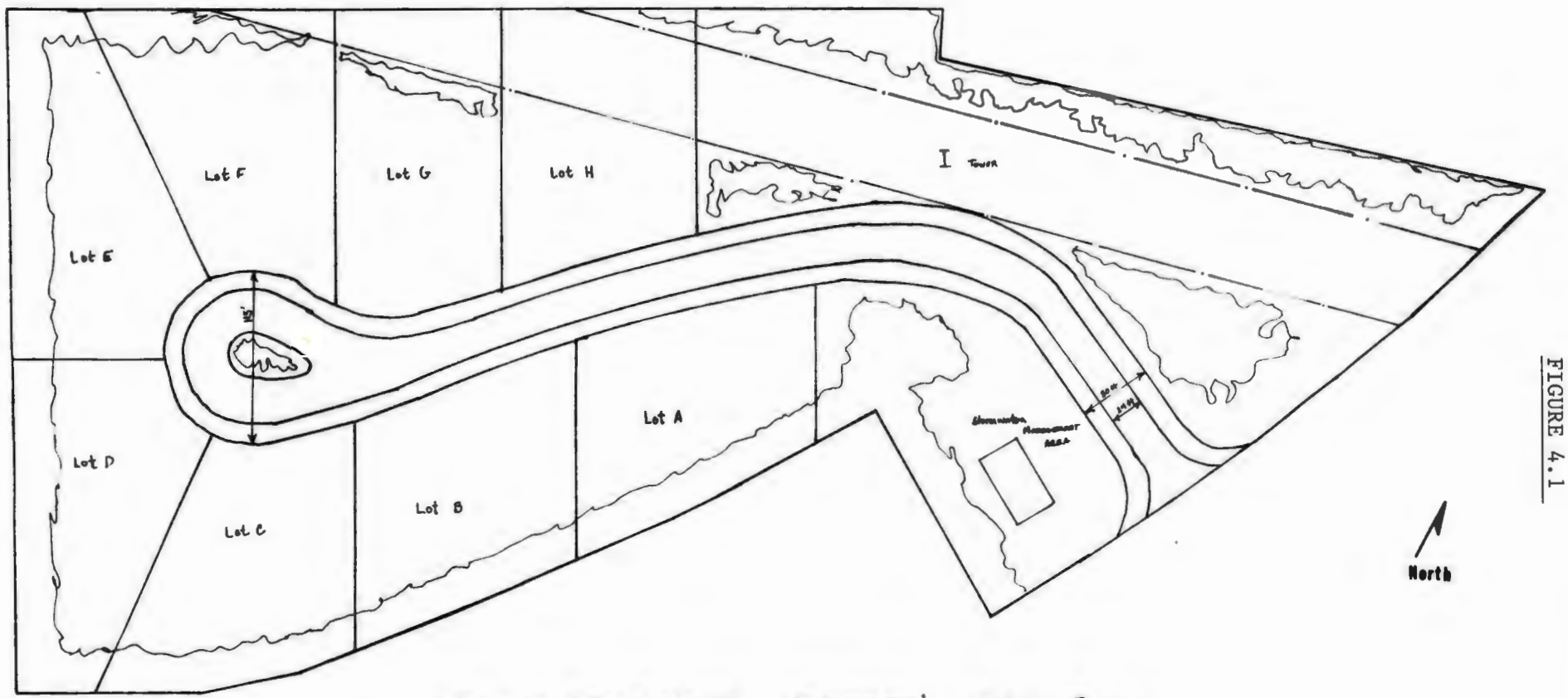
Alternative Site Plans

Alternative are developed and evaluated as to meeting the criteria set in the purpose statement. Throughout the site and community analysis, ideas begin to formulate. It is these ideas that become alternatives. The 7.227 acre site designs are rental units both single-family, one attached and one detached design. The detached units are on individual lots. The second alternative is townhouses. Each design is evaluated for its advantages and disadvantages.

4.1 Concept One

This alternative breaks up the property into individual lots at the density and lot sizes prescribed by the zoning ordinance (see figure 4.1). Since the site has public water and does not have public sewer, the minimum lot size is 20,000 square feet per housing unit. This allows for a maximum of 15 units or lots. The lots are required to be 75 feet wide and 120 feet deep. Due to this requirement only 8 lots were able to be placed on the site. In order for all the lots to have frontage onto the driveway, the driveway is 750 feet in length with a circle in the center of the end. The circle is provided because the length of the driveway is too long to work as a cul-de-sac. The circle provides for maneuvering of safety vehicles.

The site is located at an odd intersection. Both directions



CONCEPT SITE PLAN

FIGURE 4.1

ALTERNATIVE ONE

Single - family

December 1986

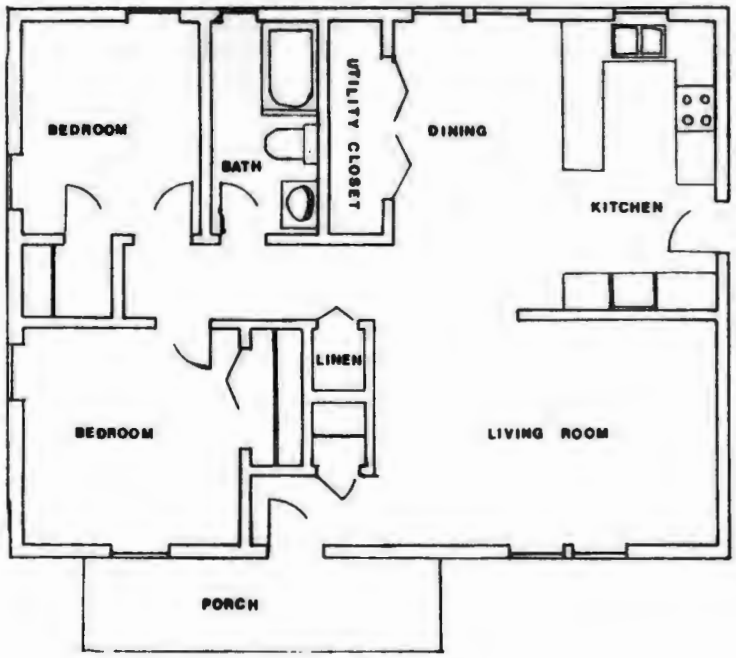
Scale 1"to 50'

MaryAnne Field

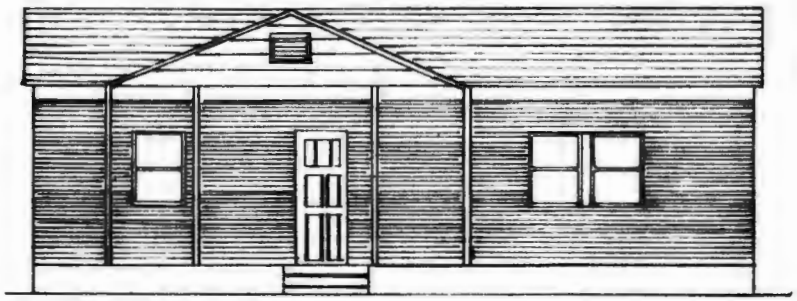
of the county road pass the site. Across from the county road is a traffic circle an triangular intersection. Access is provided across from the traffic circle allowing people a choice of direction. The driveway is 24 feet wide with 13 feet on both sides reserved for shoulders or sidewalks.

On the southern boundary of the property which does not front on the county road, commercial uses are adjacent to the site. Because this is considered an incompatible use, a 25 foot buffer of deciduous and evergreen trees will provide a buffer zone. The western boundary of the site will have a 25 foot buffer area although it is residentially zoned. The commercial property in front of this area uses their rear of the lot for storage which could be aesthetically unpleasing. Landscaping is also provided along the power transmission lines to block winds from the open field adjacent to that area of the site. Individual renters will be encouraged to landscape around their units in addition to what is provided.

The housing unit chosen for the single family design will be similar to other homes in the area. The majority of the homes are one floor ranch style (see figure 4.2). The zoning ordinance requires a minimum of 850 square feet for the housing unit. The house measures 31 feet by 40 feet which calculates to 1240 square feet. The house has two entrances. The formal entrance is located adjacent to the living room. The second entrance is off the kitchen. There are two bedrooms, a bath, and combined dining and kitchen area. The combined area gives the sense of openness and



FLOOR PLAN



ELEVATION

FIGURE 4.2

ALTERNATIVE ONE

SINGLE FAMILY — Scale 1" to 5

December 1986 — MaryAnne Field

makes the rooms seem larger. The client has requested designs which are two bedroom units. This should not be a problem since the family and household size in the neighborhood is small.

4.2 Concept Two

The second alternative is a townhouse design. There are three buildings each with five units. The zoning ordinance allows for the same density as with the single-family design, but gives flexibility in the arrangement of buildings. For multiple dwelling units or townhouses in this zoning district which has public water but not public sewer, one unit per 20,000 square feet is the maximum density. This calculates out to 15 units. Figure 4.3 illustrates the concept site plan for the townhouse design.

The zoning ordinance has specific requirements for parking areas in a multiple dwelling or townhouse development. Two parking spaces are required for each unit. This totals to 30 parking spaces. Thirty-three spaces are indicated on the site plan and there is room for additional if it becomes necessary. The size of the parking spaces need to be a minimum of 9 feet by 19 feet. All parking spaces are 10 feet by 20 feet. Isles between rows of parking spaces are to be a minimum of 22 feet wide. The site plan indicates that the width is 25 feet. Parking areas are also required to be screened by a wall, fence or thick hedge of not less than 4 feet and not more than 8 feet in height. This is also indicated on the site plan. Pedestrian walkways are provided between the buildings and parking areas. The driveway is 520 feet

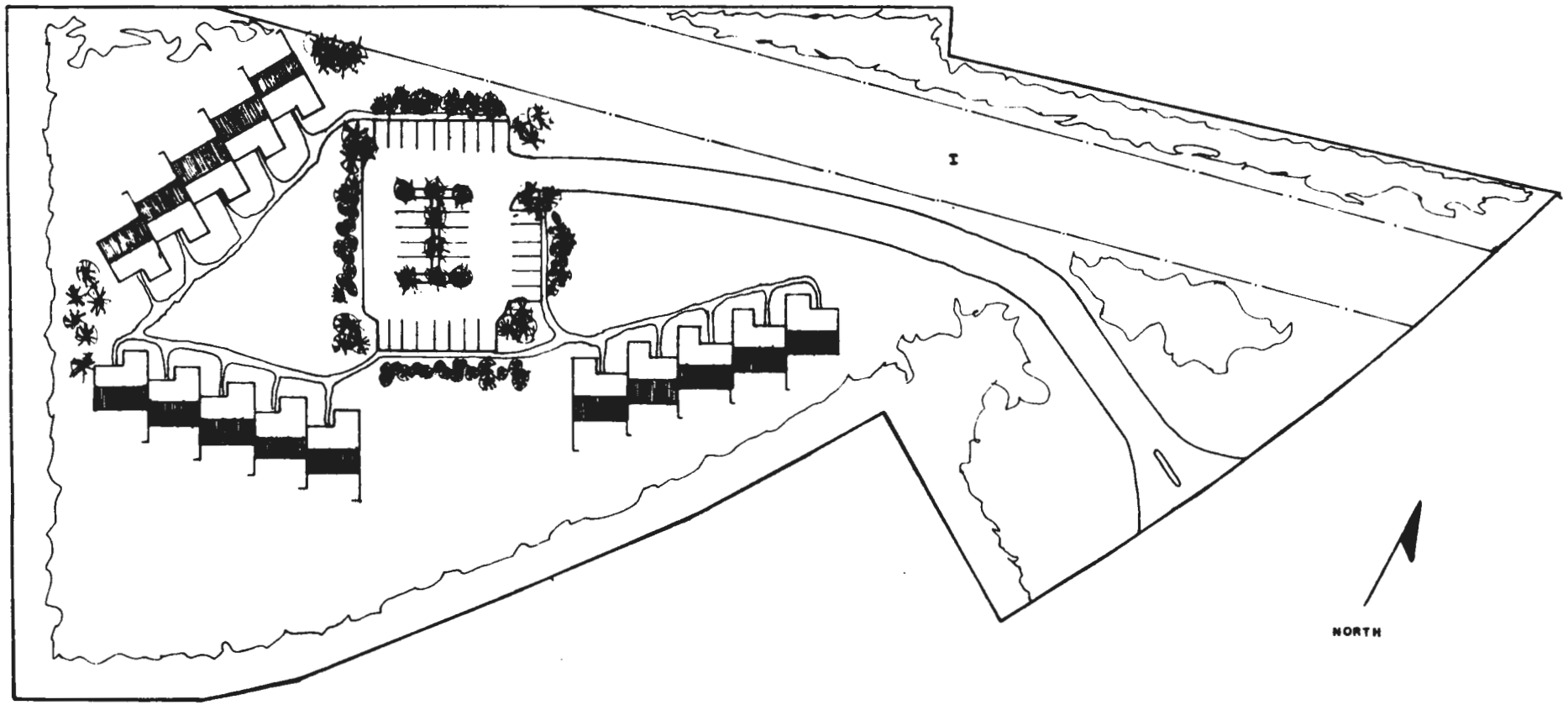


FIGURE 4.3

CONCEPT SITE PLAN

ALTERNATIVE TWO

Townhouse Design — Scale 1" to 50'

December 1986 — MaryAnne Field

in length.

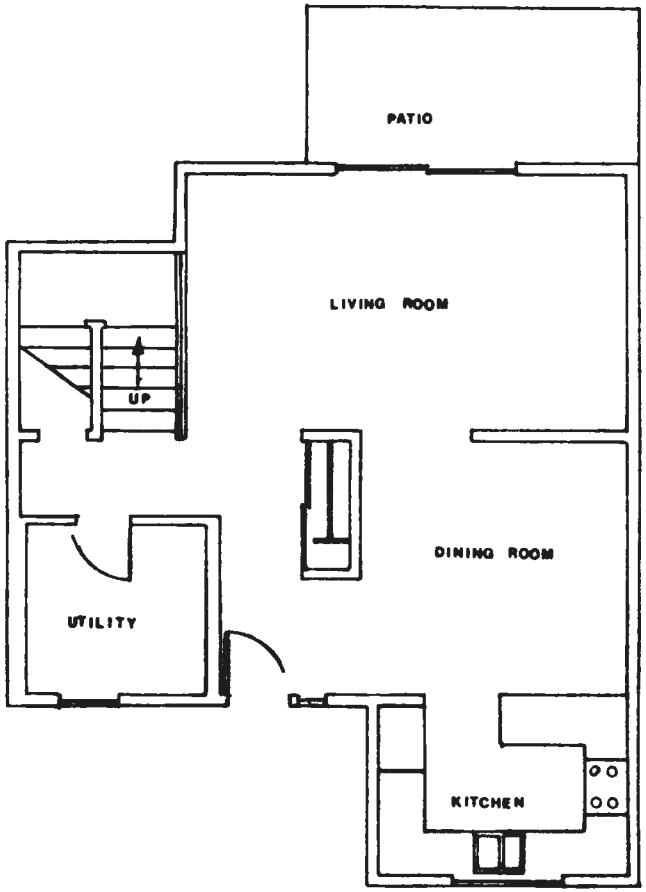
The zoning ordinance also prohibits in multiple-dwelling units and townhouse developments the parking of motor vehicles within 15 feet of any wall which contains windows less than 8 feet above ground level. The parking area is centrally located and arranged so that the parking is not in the front of any unit. This leaves a green space in the front of every unit for a front yard and pleasant view.

The 25 foot vegetative buffer area along the commercial uses adjacent to the property is provided to reduce the possibility of nuisance. Additional buffer area is provided along the power transmission lines.

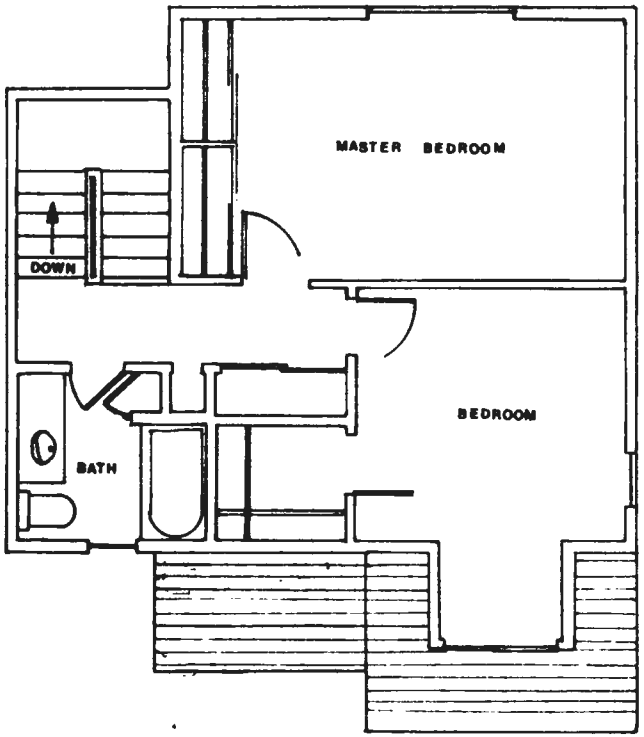
The housing unit is two stories measuring 35 feet by 39.5 feet (see figure 4.4 and 4.5). The unit has two bedrooms, one bath, utility closet, kitchen which is open to the dining area and a living room. The living room has a sliding glass door which opens onto a cement slab patio. A side window was added to the second bedroom to allow more natural lighting to enter the room. The units are also staggered to provide space on the side walls for the window. In two of the buildings, the rear of the unit with the siding glass door is facing south. This give maximum southern exposure.

4.3 Chosen Concept

Both designs were presented to the client for review and alternative two was Chosen to be the preferred design. This design



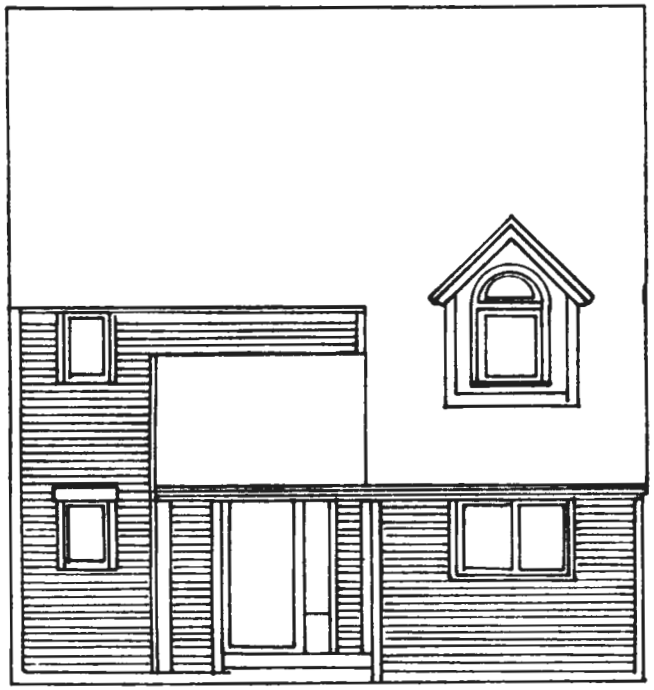
FIRST FLOOR

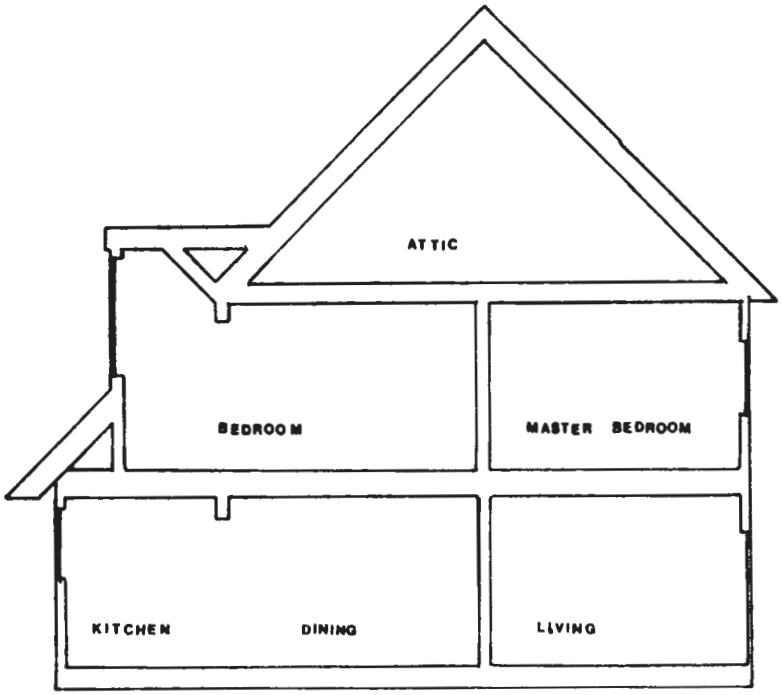


SECOND FLOOR

FIGURE 4.4

ALTERNATIVE TWO
Townhouse Design
December 1986
Scale 1" to 5'
MaryAnne Field





FRONT ELEVATION

SECTION

FIGURE 4.5

ALTERATIVE TWO

Townhouse Design — Scale 1" to 5'

December 1986 — MaryAnne Field

allows for the maximum usage of the property without losing the density. By building a higher number of units the costs for providing utilities, driveway and landscaping is lower per unit. The cost for purchasing the property per unit is also decreased. The cost for construction of the buildings would be higher since there are more buildings. The advantage of having flexibility in design of the site and location of housing units was the reason for choosing this design. Figure 4.4 shows a section of the site to illustrate how the units look when built.

SITE SECTION

FIGURE 4.6

Townhouse Design	ALTERNATIVE TWO	Scale 1" to 20'
December 1986		MaryAnne Field

Notes

[1]Information from Soil Survey of Suffolk County, New York. United States Department of Agriculture, Soil Conservation Service. (1975), Table 7, page 52.

[2]Zoning Ordinance for The Town Of Southold, New York. (January 1986)

[3]Master Plan Update For The Town of Southold, New York. Raymond, Parrish and Pine. (1986), Page 9.

Bibliography

Lynch, Kevin and Hack, Gary. Site Planning. Cambridge: MIT Press, 1984

Raymond, Parrish and Pine. Master Plan Update: Summary; Town of Southold, New York. 1986

Robinette, Gary O., and McClennon, eds. Landscape Planning for Energy Conservation. New York: Van Nostrand Reinhold. 1983

Rubenstien, Harvey M. A Guide to Site and Environmental Planning. New York: John Wiley. 1980

United States Bureau of the Census, Population and Housing. Washington, D.C.: U.S. Government Printing Office. 1980

United States Department of Agriculture, Soil Conservation service, Soil Survey of Suffolk County, New York. 1975

United States Department of Commerce, Officials of the Nation Oceanic and Atmospheric Administration. Climates of The States: A Pratical Reference Containing Basic Climatological Data of The United States

Untermann, Richard, and Small, Robert. Site Planning for Cluster Housing. Van Nostrand Reinhold. 1977

Zoning Ordinance: The Town of Sothold, New York. 1986