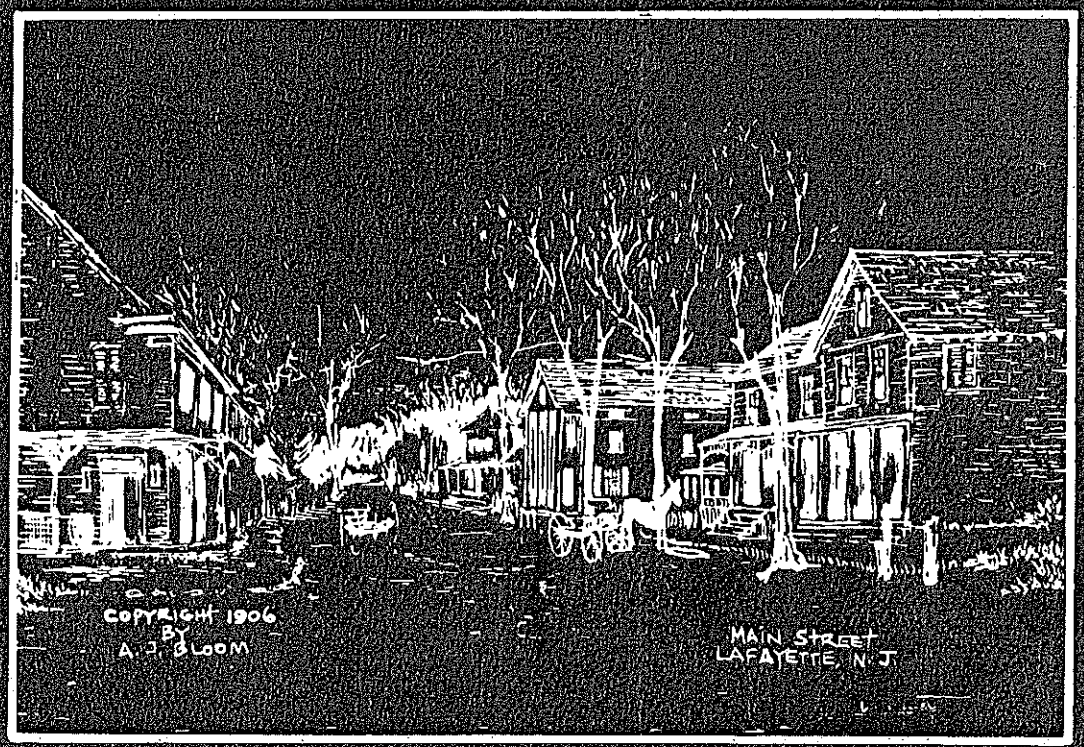
# LAFAYETTE TOWNSHIP

SUSSEX COUNTY NEW JERSEY

# MASTER PLAN

1977




HAROLD E. PELLOW & ASSOCIATES, INC.
CONSULTING ENGINEERS
AUGUSTA, NEW JERSEY

P. 21 - MARTINSBURG SHALE
16 - STRATIFIED DRIFT -

## ABSTRACT

| | |
|---|---|
| TITLE: | Township of Lafayette Master Plan |
| AUTHOR: | Harold E. Pellow and Associates, Incorporated |
| SUBJECT: | Land Use Element and Circulation Plan and Drainage Facilities Element |
| DATE: | November, 1977 |
| LOCAL PLANNING AGENCY: | Township of Lafayette Planning Board |
| SOURCE OF COPIES | Township of Lafayette |
| NUMBER OF PAGES | 76 |
| ABSTRACT: | This Master Plan Report is a presentation of a Land Use Element and a Circulation Plan and Drainage Facilities Element of a Master Plan. The report includes discussions and proposals regarding the region, existing land use, natural features, population, future land use, goals and objectives and township roads and drainage facilities |

# MASTER PLAN REPORT

December 1977

Lafayette Township

Sussex County

New Jersey

MAYOR

Carl Luthman

TOWNSHIP COMMITTEE

John Demarest
John Hocking
John Decker
William Lincoln

PLANNING BOARD

James Whitman, Chairman

Wilbur Hunt
Carl Luthman
Roland Post
Fred Brindopke
William Lincoln
William Morgan

Jack Schoff

Sharon Andrews, Recording Secretary

TOWNSHIP CLERK

Bessie Hunt

Prepared by

HAROLD E. PELLOW AND ASSOCIATES, INCORPORATED
Consulting Engineers
R.D. #1, Box 2D
Augusta, New Jersey

Harold E. Pellow
Harold E. Pellow, P.P. Lic. No. 1690

Lawrence G. Palmer
Lawrence G. Palmer, P.P. Lic. No. 1504

# TOWNSHIP OF LAFAYETTE

LAFAYETTE, NEW JERSEY 07848

September 29, 1977

Honorable Mayor, Committeemen
and Citizens

Ladies and Gentlemen:

It is a pleasure to transmit to you this Master Plan Report containing the proposals of the Township Planning Program as prepared and developed by the Township Planning Board during 1977 in conjunction with Harold E. Pellow and Associates, Incorporated, the Township Engineer. This report presents the data and findings of the Planning Board derived from studies prepared during the course of the Master Plan Program.

The purpose of the report is to provide information to the Planning Board, Zoning Board of Adjustment, Township Committee and the citizens of Lafayette Township in order to gain a better understanding of their township and its development potential and limitations.

Very truly yours,

Chairman
Lafayette Township
Planning Board

TABLE OF CONTENTS

TABLE OF CONTENTS (Cont.)

TABLE OF CONTENTS (Cont.)

## LIST OF TABLES

## LIST OF FIGURES

# INTRODUCTION

Lafayette Township is located in the heart of Sussex County, which is situated in the extreme northwest corner of New Jersey. Lafayette is one of the smaller townships in Sussex County with 18.3 square miles of area. The township is primarily an agrarian community with an estimated 1977 population of 1,400 residents.

Since regional growth and development trends directly influence the communities within a region, Lafayette Township has sought to identify its region in order to establish a better understanding of its obligations to meet the needs of the future.

Lafayette Township lies within Sussex County by its very nature. However, an analysis of population density, highway access, natural capacity for growth and other parameters revealed that Lafayette could be considered to be within a 220-square-mile-region consisting of communities or portions thereof with similar characteristics within Sussex County. Figure I illustrates the limits of the region which Lafayette Township is an intrinsic part. The region is the center

core of Sussex County extending from Fredon Township in the south to Wantage Township in the north, and from the Wallkill River in the east to the Kittatinny Ridge in the west

The 1977 population of approximately 1,400 residents represented a density of 76 people per square mile of township. Population density is often considered a measure of a municipality's ability to accept additional growth, and Lafayette's density is the lowest within the region. Conclusions reached on this statistic alone would indicate that Lafayette Township has the greatest ability in the region to absorb growth. This conclusion is far from accurate because neighboring municipalities have isolated high-density lake communities which tend to distort their true rural nature. An analysis of Lafayette Township's ability to absorb growth will be presented in the discussion of the Future Land Use Plan.

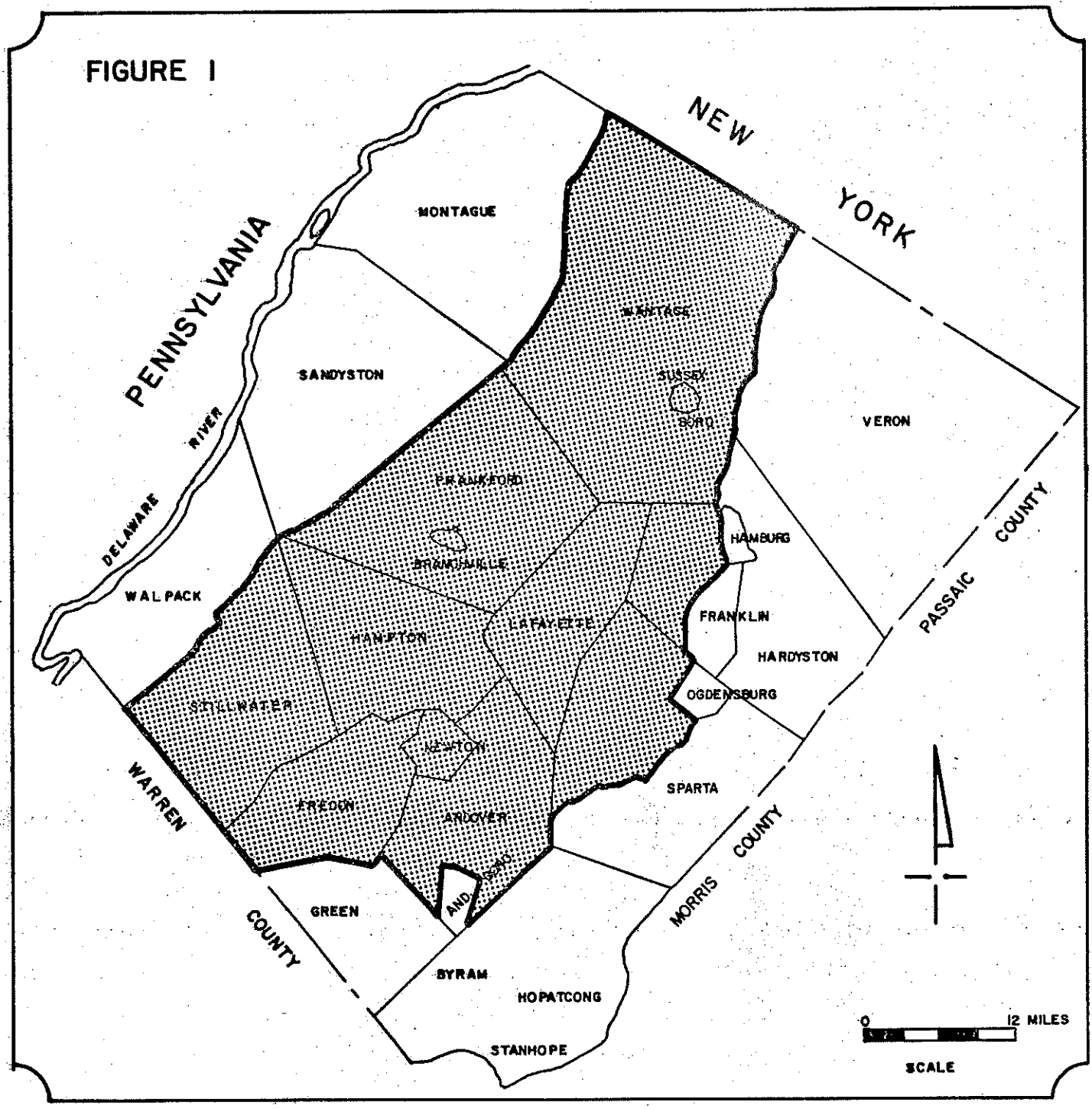
Highway access is also considered a measure of a municipality's ability to support housing. The suitability of the road network generally reflects on the degree of convenient access to employment, shopping and services. A countywide comparison of highway access based on county roads and state highways was one parameter in the deter-

mination of Lafayette's region and Lafayette Township's access was found to be poorer than the average community within the region.

The capacity for growth is also a function of the physical and natural characteristics within the township. A Land Use Analysis has been conducted and is presented in Chapter I. A Natural Resource Inventory has also been made. The N.R.I. documents the available information and evaluates Lafayette's capacity to absorb future growth. The results of the inventory include a building-constraints map which was a major consideration in the development of a Future Land Use Plan which is included in this "Land Use Element".

The "Land Use Element" of a Master Plan for Lafayette has incorporated a Land Use and Housing Analysis, a Natural Resource Inventory and Population Report in order to establish the background data necessary to formulate a Future Land Use Plan. In addition, a Circulation Plan and Drainage Facilities Element has been prepared to assist the Planning Board in the establishment of drainage easements, off-tract and off-site improvements and in the development of the Capital Improvements Budget.

FIGURE 1




# MAP OF SUSSEX COUNTY AND LOCATION OF LAFAYETTE TWP. REGION

LEGEND

LAFAYETTE REGION - SUSSEX CO. - NEW JERSEY

PREPARED BY :

HAROLD E. PELLOW & ASSOCIATES
CONSULTING ENGINEERS
AUGUSTA - NEW JERSEY
MAY 1977

# PART I

## LAND USE ELEMENT

## FORWARD

The Township of Lafayette has undertaken the development of a "Land Use Element" of a Master Plan in order to conform to the requirements of 40:55D-28 and 40:55D-62 of the Municipal Land Use Law, Chapter 291, Laws of New Jersey 1975.

The Township has also undertaken the development of a "Land Use Element" to evaluate the present condition of the Township and to provide information to the Planning Board, Zoning Board of Adjustment, Township Committee and the citizens of Lafayette Township in order to gain a better understanding of their township and its development potential and limitations. The "Land Use Element" serves as the foundation for the development of the Master Plan and also serves as a guide to the decision-making process which will determine the way the township will grow.

# CHAPTER I

## EXISTING LAND USE STUDY

# CHAPTER I

## EXISTING LAND USE STUDY

### INTRODUCTION:

The existing Land Use Map and Study is one of the most essential bodies of information used in the planning process. It is an inventory of existing land uses which illustrates the relationships and the extent of development of the land as it is presently being used (Figure II). The existing Land Use Map depicts the geographic location of the uses and their relationship to adjoining land uses. The location of one type of land use in relation to another is of great importance in understanding the circulation patterns, the compatibility of different uses, the intensity and concentrations of residents and extent of business and industry.

In order to facilitate the Existing Land Use Map Analysis, symbols and colors have been used to designate the various uses within the township. The land-marks have been depicted with symbols which coincide with the shape of the buildings. Residential uses have been depicted as follows:

| | | |
|---|---|---|
| Single Family Dwelling | = | black dot |
| Abandoned or Vacant Single Family Dwelling | = | white dot |
| Multi-family Dwelling | = | black triangle |
| Mobile Home | = | white triangle |

Houses under construction have been included as single family dwellings.

RESIDENTIAL:

The predominant source of dwelling units within the township consists of single family residential dwellings which are occupied year round. There are 358 single family units within the township, of which approximately 14 are substandard or abandoned. There are 7 mobile homes and 49 multi-family dwelling units housed in 21 buildings. Five buildings contain three or more dwelling units and they have been shown on Figure II as black triangles with the number of units designated. The remaining 15 multi-family dwellings are duplex units and are primarily found scattered along the New Jersey State Highway Route 15 corridor which traverses the older section of the township.

Farm residential dwellings have not been categorized in a separate category; however, where more than one farmhouse is located on the premises, a symbol for each farmhouse was given in order to denote the total number of dwelling units on a particular tract.

The geographic locations of farm land and wood land were considered to be beyond the scope of study and therefore have

not been depicted separately on the map. The total number of acres in Farm Qualified Assessment approximates 5,484 acres and represent a major source of potential future growth.

COMMERCIAL:

The commercial category applies to all retail outlets in the township. "Commercial" has been considered to include gas stations, professional offices, restaurants, antique shops, general stores and other uses of a similar nature. Existing Commercial Uses represent 26 acres within the township.

QUASI-PUBLIC LAND AND FACILITIES:

This category applies to uses which are generally service-oriented and available to the public as a whole. Quasi-Public lands and facilities are considered to include the cemetery, churches and church rectories and the Y.W.C.A. property. Quasi-Public Lands represent 7 acres within the township. The lands of Saint Anthony's Guild have not been included within the Quasi-Public Lands but consist of over 278 acres.

PUBLIC USES AND FACILITIES:

This general category has been considered to include the following uses: Firehouse, Post Office, Parking Lot, Municipal Building, Recreation Field, Newark Municipal Utili-

ties Authority, Sussex County Road Department Garage, New Jersey Department of Transportation Property and School Property. Public lands consist of 56 acres within the township.

INDUSTRIAL:

The township presently has 284 acres of industrial land in use. The industrial uses include the Schering Corporation, the United Telephone facility, Limestone Products Corporation of America, Hyper Humus, Hamm's Sanitation, Lansdell Contracting Company, Walter Keever's slaughter house and Lafayette Salvage.

OTHER USES:

Included on Figure II are three soil removal operations which have current soil removal permits: D. Stamato, in the vicinity of County Road (Route 648) and Lanterman Road, Classified Soils near Day Road, and Beaver Run Farms near DeKorte Road. The Beaver Run Farms operation extends into Hardyston Township, where the majority of the soil removal operation is planned.

Hamm Sanitation is operating a sanitary landfill site off Old Beaver Run Road. The landfill operation extends into an area of Carlisle Muck which is considered a wetland

The operation has not been approved by the Department of Environmental Protection but is licensed by the Public Utilities Commission. A soil removal operation is underway on the site to provide cover material for the landfill.

CONCLUSIONS:

The existing Land Use Map discloses that development to date has occurred along the roadway frontage as a result of minor subdivisions. The residential dwellings are scatted throughout the township on lots of generally two acres or more. The lot sizes within the older developed areas of the township tend to be one acre or less in size. Access to the properties in the southern portion of the township is primarily by county and state roads, while most of the land in the nothern area is serviced by township roads. Figure VIII, entitled "Roads and Drainage", depicts the improved and unimproved roads within the township. Here it can be seen that the roadway system in the northern section is not equal to the quality of roads in the southern portion of the township; and similarly it can be seen on Figure II that the development in the north is quite scattered and of very low density.

In considering the Existing Land Use Map, the most significant factor which should be noted is the enormous

quantity of white area within the township. The white areas of the map represent those portions of the community in which future growth may be expected. This area includes farm land, open wood land, and wetlands which display varying capacity for development based on the natural features of the land. In the following chapter a Natural Resource Inventory is presented along with a Building Constraints Map. The constraints represent natural features which display severe conditions for individual sewage disposal systems. There are no existing sewers within the township. Sewers for the Paulins Kill Basin are only in the early planning stages and therefore are not anticipated in the foreseeable future. The future Land Use Plan must therefore address the septic limitations of the land to support growth. The data presented in Chapter II will help illustrate how Lafayette Township has grown in the past and most importantly, how it should develop in the future.

# CHAPTER II

## RESOURCE INVENTORY

## CHAPTER II

## RESOURCE INVENTORY

### INTRODUCTION:

An inventory and analysis of natural features serve as the basis for comprehensive land use planning and the development of a proposed land use map. An inventory was conducted in order to investigate and document the information necessary to evaluate the natural capacity for development within the Township of Lafayette. The data considered includes surficial geology, surface hydrology and subsurface geology.

### SURFICIAL GEOLOGY:

Figure III, entitled "Natural Features", was prepared to inventory the Soil Conservation data into several groups of soils displaying similar characteristics. In grouping the soil characteristics primary concern centered on the suitability of the soils to accommodate individual sewage disposal systems. The land considered to have the least potential for development has been included on Figure III as muck and swamps. This category represents approximately 1,200 acres and consists of lands which are deep, nearly level, very poorly drained organic soils of primarily the Carlisle Series.

The muck and swamps are generally found along the Paulins Kill, the Papakating Creek and in a large area located between Old Beaver Run Road and Lafayette-Meadows Road. This large area represents approximately 40 percent of the muck areas.

Seasonable High Water Table:

Soils which are considered to have a seasonal high water table of 0 to 3 feet within the surface have been included in a group of the following soils series.

| Soil Series | Depth of Seasonal Water Table | |
|---|---|---|
| Albia | 1/2 - 1 1/2 | feet |
| Alluvial Land | 0 | feet |
| Chippewa | 0 - 1/2 | feet |
| Fredon | 0 - 1 | feet |
| Halsey | 0 | feet |
| Hero | 1 1/2 - 3 | feet |
| Livingston | 0 | feet |
| Lyons | 0 | feet |
| Middlebury | 1 - 2 1/2 | feet |
| Norwich | 0 | feet |
| Whitman | 0 | feet |

The soils subject to a seasonal high water table comprise approximately 2,680 acres and are distributed throughout the township.

Muck and soils with seasonal high water tables display severe limitations to development both from a construction and environmental standpoint.

Chapter 199 of the Laws of New Jersey requires that individual disposal systems be installed at least 4 feet above the ground water table. The above listed soils generally will not support high density development where septic systems are required.

Shallow Bedrock:

Soils which are considered to have a shallow bedrock of depth 0 to 3.5 feet below the surface have been placed in a group which includes the following:

| Soil Series | Depth To Bedrock |
|---|---|
| Nassau | 1 - 1 1/2 feet |
| Ognaga | 2 - 3 1/2 feet |
| Wassaic | 1 1/2 - 3 1/2 feet |
| Rock Outcrop | 0 feet |

Soils with shallow bedrock comprise approximately 3,430 acres and are generally distributed throughout the

upland area of the township and primarily north of New Jersey State Highway Route 15 and west of Old Beaver Run Road (County Route 661).

Shallow bedrock and rock outcrop also present limitations for construction of septic systems. Chapter 199 requires at least 10 feet between the bottom of a leaching field and the bedrock. Shallow bedrock also represents a limitation to the construction of building foundations, drainage improvements and roads and, therefore, generally will not support high density development.

Bedrock 4 Feet Or More:

The white areas on Figure III represent soils which have a depth to bedrock of 4 feet or more. The following are included in this category and are generally considered as suitable for septic systems.

| Soil Series | Minimum Depth To Bedrock |
|---|---|
| Bath | 4 feet or more |
| Vallois | 4 feet or more |
| Washington | 5 feet or more |

Several of these soils are considered to display moderate limitation when the slope exceeds15 percent and severe limi-

tation when the slope exceeds 25 percent. The Building Constraints Map, Figure V, has incorporated the 25 percent slope data, so that the areas with severe slope limitations within the group with a depth of bedrock of 4 feet or more are classified as a constraint. The amount of soils which are considered severe due only to topography is approximately 50 acres.

The total area mapped to display building constraints within the township is approximately 8,410 acres or 13.3 square miles. Also included in this figure are roughly 50 acres of ponds and lakes.

Well-Drained Soils:

Approximately 1,200 acres within the township are considered well-drained soils. The Hazen and Palmyra series consist of deep well-drained soil that are underlain by stratified sands and gravels formed by glacial outwash. The well-drained soils have been included on the Building Constraints Map because their high permeability rates can be a ground water pollution hazard if there is insufficient filter material between the leaching field and ground water table. The well-drained soils will be discussed later in this chapter in the Subsurface Geology section which relates primarily to the information presented on Figure IV, entitled The Geologic Features Map.

Flood Hazard Areas:

The flood hazard boundaries have been shown on the Future Land Use Map, Figure VI, and represent the boundaries established by the Department of Housing and Urban Development, Federal Insurance Administration Flood Hazard Boundaries Maps for Lafayette Township. The flood hazard areas represent over 800 acres of land which has already been shown to have building constraints in Figures III and V.

The preceeding discussions on soils and their septic suitability show that a large segment of the township, roughly 70 percent, is limited to varying degrees in its capacity to support high density development. The data presented cannot, in itself, substitute for actual field investigations to determine the onsite conditions of the land. However, the data serves to point out potential problems and can be most useful in helping the township to evaluate the future land use proposals.

Vegetation:

Although vegetative cover has not been mapped, it should be considered when reviewing subdivisions and site plans, particularly in areas with severe limitations to development. Vegetation effects storm water runoff in several ways. The foilage and its litter maintain the soil infiltration potential and transmission rates and are a prime deterrent to

direct runoff and peak discharge. Excessive clearing which is often required during construction in areas of steep slopes, represents a severe potential for soil erosion and excessive runoff.

Slopes:

Steep sloping land is particularly susceptible to adverse impacts as a result of development. The clearing and grading normally associated with the construction of roads, parking lots and structures represents extensive disturbance to the land in hilly terrain. Slopes which are inclined away from the horizontal at greater than 15 percent are considered lands which display moderate limitation for high density development. Slopes in excess of 25 percent are considered soils with severe limitations for development. The moderate and severe slope conditions are presented in Figure IV. The area of the township with the most significant sloping land lies along the Statesville Quarry and Fox Hill Roads in the western portion of the township.

Hydrologic Condition:

Just as development on sloping lands can cause a major change in the time of concentration for storm water and greatly affect the rate of surface water runoff, the soil and its hydrologic condition can cause a major change in the volume of surface water runoff.

Several factors affect the hydrologic condition of the soil such as: moisture content, organic content and temperature. Low soil temperature during the winter season decreases the rate of infiltration and therefore increases the volume of runoff. Rains on frozen ground may cause the greatest runoff of the year. Winter conditions are a major concern when proposed storm drainage improvements include detention basins and drainage swale.

Special consideration should also be made when development is proposed in areas of high soil porosity (well-drained soils) for these soils can infiltrate water at a faster rate than soils of low porosity. Development on highly porous soils (rapid permeability) causes a greater increase in the amount of runoff because of the impervious cover associated with buildings and paved parking lots. Impervious cover also retards the ground water recharge capacity of soils with low runoff potential.

Hydrologic soil groups have been established by the Soil Conservation Service according to their infiltration and transmission rates and should be referred to during review of subdivisions and site plans.

Watersheds:

Storm water runoff from Lafayette Township ultimately

reaches the Delaware or Hudson Rivers. A great deal of emphasis is being placed on watershed management as exemplified by the recent enactment of the Federal Government 208 Program. Municipalities are experiencing new influences from different state and federal agencies based on watershed limits rather than township boundaries.

The major and minor watershed areas have been shown on Figure IV. The Township of Lafayette lies within three major watershed areas. The Papakating Creek and Wallkill River watershed areas contain the Papakating Creek and Beaver Run respectively and both flow north to the Wallkill and eventually to the Hudson River. Although the Papakating Creek is part of the Wallkill River Drainage Basin it has been identified as a major watershed because the 208 Program will address the Papakating as a separate project area. The third watershed is the Paulins Kill which is the largest in area and flows to the Delaware River.

SUBSURFACE GEOLOGY:

An inventory of subsurface geology has been presented on Figure IV and includes geologic formations, glacial deposits and a fault.

Physiography:

Lafayette Township is located in the Kittatinny Valley subprovince between the Kittatinny Ridge to the west

and the Reading Prong of the New England upland section in the east.

Geologic Formations:

The most extensive formation within the Kittatinny Valley is the Martinsburg Formation. Within Lafayette Township two Martinsburg Shale Formations, two Jacksonburg Limestone Lenses and two Kittatinny Limestone Formations extend northeast to southeast through the township. The Kittatinny Formation comprises 41 percent of the township while the Martinsburg and Jacksonburg Formation account for the remainder.

The Martinsburg Formation is an intensely crumpled and faulted sequence of shale, slate, sandstone and calcarous siltstone. The Martinsburg Formation has no primary porosity or permeability except in some of the sandstone beds. Nearly all the groundwater is contained within fractures. According to Mr. Joseph Miller, Jr., of the Department of Envrionmental Protection, domestic wells range from one-half gallon per minute (gpm) to 120 gpm with an average of 10-1/2 gpm.

The Kittatinny Formation like the Martinsburg Formation has no primary porosity or permeability. Groundwater

has to move through joints, fractures and solution cavities within the rock. The solution cavities or channels are distributed in an irregular pattern which is difficult to predict. Wells which intercept a solution channel can produce a large quantity of water. On the other hand, wells which encounter relatively unfractured limestone or dolomite will have low yields.

According to Mr. Miller, groundwater in the Kittatinny Formation is found under both water table and artesian conditions. The most successful wells have intersected large caverns between 50 and 300 feet. Below 600 feet the chances of obtaining a good supply from the Kittatinny Formation is generally slight. Wells drilled in the Kittatinny Formation range from 1/4 gpm to 120 gpm with an average of 14 gpm.

Overlaying portions of the Martinsburg and Kittatinny Formations are several stratified drift deposits and a recessional moraine which traverses the lower part of the township in an east-west direction. These deposits are a result of the glaciers which advanced into New Jersey three times during the Pleistocene Epoch. The stratified drift (Wisconsin Valley Train) is usually an excellent source of water, provided it contains enough coarse material. Even when there is insufficient thickness of sand and gravel for the development of a "sand well", this more permeable material allows more precipitation to percolate in the underlying rock. The

additional water circulation also weathers the bedrock to a greater depth than elsewhere so that the bedrock in areas covered by some sandy valley fill usually give better than average yields. Reported yields in stratified drift have ranged from 6 to 942 gpm with an average of 250 gpm.

The recessional moraine overlays approximately 840 acres with the township. The recessional moraine generally has lower permeability than stratified drift and is not considered important as an acquifer. The stratified drift deposits are scatterd throughout the township and overlay approximately 1,040 acres.

An extensive seismic study conducted in 1975 of the stratified drift within the Township of Sparta revealed that a prime acquifer extended north to south through the Germany Flats area adjacent to Lafayette Township. A subsequent survey of the stratified drift within the southern tip of Lafayette Township showedthat this deposit contributed to the Germany Flats acquifer. Since a large portion of this stratified drift is located within an active soil removal operation, special consideration of future land use within this area will be required to ensure that an adequate soil filter is available to protect the prime acquifer from ground water pollution.

## BUILDING CONSTRAINTS MAP AND CONCLUSION:

The conclusion of the Natural Resource Inventory is presented in graphic form on the Building Contraints Map, Figure V.

This map has taken into account the land characteristics presented in the Natural Features Map and the Geologic Features Map, which exhibit a limited natural capacity to support development. The most significant consideration has centered on the capacity to support individual sewage disposal systems (septic systems).

Lafayette Township has a large percentage of the total land form (roughly 70 percent) which displays limitations for septic systems due to either shallow bedrock, seasonal high water table or steep slopes. These areas are not to be thought of as unbuildable but rather are presented to aid the Planning Board in evaluating development proposals. High density development within areas of septic restrictions must be inhibited to ensure the maintenance of ground and surface water quality.

Included on the Building Constraints Map are areas of well-drained soil. These soils generally represent areas of direct acquifer recharge which are susceptible to ground water pollution because of the porous structure of the soil. It is of prime importance to protect the continued quality of

the potable water supply within the township. In areas of rapid percolation (5 minute-per-inch or less) additional depth of filter material should be provided between the bottom of a septic field and the ground water. A minimum depth of filter material in soils with high percolation rates should be at least 15 feet to ensure the continued quality of the ground water supply.

The available ground water within the township is limited and both the Department of Environmental Protection (Bulletin No. 73) and the County Master Plan has recommended large lot development in the Martinsburg and Kittatinny Formations in order to ensure an adequate water supply during periods of drought.

The geologic formations have not been depicted on the Building Constraints Map because the entire township is located over generally poor water-bearing strata. It should be pointed out, however, that the areas shown as well-drained soils, particularly the stratified drift deposits, represent the areas of highest potential for good well yields within the Martinsburg and Kittatinny Formations.

The Future Land Use Plan, presented in Chapter IV, was prepared utilizing the Building Constraints Map as a major factor in determining the proposed zone boundaries and corresponding recommended uses within each zone.

# CHAPTER III

## POPULATION STUDY

# CHAPTER III

## POPULATION STUDY

### TRENDS:

From 1960 through 1970 the population of Lafayette Township rose from 1,100 to 1,202 residents, which represents a percent of change of 9.3 percent. In contrast the township had experienced a percent of change of 31.6 percent during the 1950's when the population grew from 836 residents to 1,100 residents. Corresponding increases for Sussex County for the 1960's was 57.4 percent and for the 1950's, 43.1 percent.

### PROJECTIONS:

The data obtained from the Existing Land Use Survey has been used with demographic statistics based on types of housing units to estimate the 1977 population. The estimated population is 1,410 residents. This projection indicates that the township has experienced a gain in this decade of 24.6 percent and can expect a 1980 population of 1,500. This projection correlates well with data presented in the County Master Plan which is excerpted in Table I below.

TABLE I

Population Projections 1980 - 2000

| Growth Rate | 1980 | 1990 | 2000 |
|---|---|---|---|
| High | 1,572 | 1,976 | 2,313 |
| Medium | 1,498 | 1,797 | 2,066 |
| Low | 1,424 | 1,618 | 1,819 |

Source: Sussex County Master Plan Report #3 Population Table 17

POPULATION DENSITY:

The township population density based on a 1977 projection of 1,403 residents is 76.67 persons per square mile which is lower than most surrounding municipalities. As pointed out in the introduction, the density per square mile statistic can be misleading when compared with neighboring municipalities with higher density statistics. Several isolated lake communities such as Lake Neepaulin in Wantage Township, Culvers Lake and Lake Owassa in Frankford Township and Lake Mohawk in Sparta Township tend to inflate the density statistic for each of these communities and to distort their true rural nature.

POPULATION DISTRIBUTION BY AGE AND SEX:

In 1970, Lafayette Township had 1,202 residents and the breakdown of the composition of the population is shown in Table II below.

TABLE II

Population By Age And Sex 1970

| years | Male | Female | Total | Percent of Total Pop. | |
|---|---|---|---|---|---|
| | | | | Lafayette | Sussex Co. |
| under 5 | 48 | 63 | 111 | 9.23 | 9.7 |
| 5-14 | 124 | 112 | 236 | 19.63 | 22.0 |
| 15-24 | 104 | 93 | 197 | 16.14 | 13.4 |
| 25-34 | 71 | 72 | 143 | 11.9 | 14.1 |
| 35-44 | 69 | 65 | 134 | 11.14 | 12.0 |
| 45-54 | 74 | 82 | 156 | 12.97 | 11.0 |
| 55-64 | 61 | 47 | 108 | 8.97 | 8.5 |
| over 65 | 62 | 55 | 117 | 9.72 | 9.3 |
| | 613 | 589 | 1,202 | | |

Source: Sussex County Master Plan Population Appendixes A & B

The distribution of population reveals that 28.86 percent of the total population in 1970 was under the age of 14 and 9.72 percent was over the age of 65. The age group of 25 through 64 which can be considered the major contributor to the labor force and accounted for 44.96 percent of the township's population.

School age children in 1970 represented 319 pupils or 26.54 percent of the total population. The number of school children during the 1976-77 school year increased to 399 students or 28.5 percent. The Lafayette School system consists of an elementary school with 274 students. Lafayette Township is a sender district to the High Point Regional High School and Sussex County Vocational High School with 92 students attending the regional high school and 33 students attending the vocational high school.

Lafayette Township has more males than females although the difference - 51 percent males to 49 percent females - is minimal and is opposite from the country distribution.

RESIDENTIAL LAND USE DISTRIBUTION:

Development until recently had primarily occurred within a one mile corridor along State Highway Route 15. Approximately 43 percent of the population presently resides within this corridor in 137 single family dwellings and 45 multi-family units.

The remaining development has occurred primarily through minor subdivision of frontage property on township and county roads and is scattered throughout the township.

IN-MIGRATION:

Lafayette Township is beginning to experience new development activity and can expect further developments similar to the "Tara Hills Estates" on Old Beaver Run Road the "Heron Park" on Lafayette Meadows Road in coming years. The County experienced an average annual in-migration rate since 1960 of around 35 percent and although external factors such an the energy shortages and recessions may alter the projections; Lafayette Township will experience in-migration during the next decade which may be as high as the over all County's experience in the last 20 years.

CONCLUSION:

The anticipated growth within Lafayette Township will bring about new pressures for capital expenditure and services. The school, roads, drainage, recreation, fire and public works needs will all require review to meet the expanded demand for services. In the "Circulation Plan and Drainage Element" recommendations will be presented to assist the municipality in planning to meet the future needs for roads and drainage.

In the next Chapter, entitled "Future Land Use Plan", the projected land use will directly affect the future population distribution within the township. Presently over 9,000 acres are zoned for 1 acre zoning with over half of the residential area zoned for duplex units. If all the residential land were to be developed at one acre the ultimate population could be expected to exceed 32,000 people or a density of 1,748 people per square mile. Additional consideration of potential for growth in population will be presented in the discussion of the Future Land Use Plan in Chapter IV, and will refine the projections based on the natural capacity of the land, available potable water and circulation.

# CHAPTER IV

## FUTURE LAND USE PLAN

# CHAPTER IV

# FUTURE LAND USE PLAN

## INTRODUCTION:

The Future Land Use Plan is a statement of goals and objectives for future land use and development within the Township of Lafayette. In the foregoing chapters of this report, a comprehensive analysis of existing natural and physical conditions relating to the township has been made. The purpose of this analysis has been to provide the basic foundation for the development of a Future Land Use Plan or "Master Plan". The Future Land Use Plan presented herein was formulated with due consideration of the existing Zoning Plan.

The Future Land Use Plan is concerned with proposals for future private development of land for residential, commercial and industrial purposes. The proposals for township roads and drainage improvements are presented in detail in the Circulation and Drainage Element, Part II of the Master Plan.

## EXISTING ZONE DISTRICTS:

The existing zoning map was prepared in 1972 and provides for five (5) zones: R-1 Residential, R-2 Residential, B-1 Neighborhood Business, B-2 Highway Commercial and M-1 Manufacturing.

The present zone districts include 7 acres of Neighborhood Business, 585 acres of Highway Commercial and 1,977 acres of Manufacturing. Over 9,000 acres are zoned for R-1 and R-2 Residential and Agricultural use.

Strict adherence to standard guidelines for the amount of Commercial and Industrial Zones, based on population, is not warranted because of the rural nature of the township. However, it is clear that the amount of zoned manufacturing use within the township is excessive. The present Manufacturing Zone consists of over 17 percent of the township with less than 15 percent of the zone presently committed to manufacturing uses. The Future Land Use Plan has reduced the size of the Manufacturing Zone and has altered the nature of the permitted Industrial Uses by providing for an additional Light-Industrial Zone.

The existing Highway Commerical Zones are primarily limited to the Route 15 corridor. A review of the physical and natural features revealed that some lands zoned for Highway Commercial Use were not suitable for the intended use. The Future Land Use Plan has modified the Commercial Zones including the emphasis on Neighborhood-Commercial Uses.

The R-2 Residential Zone provides for multiple dwelling groups as a conditional use. The Future Land Use Plan has

modified the extent of multiple dwelling groups by establishing a third Residential Zone which would incorporate the multiple dwelling group as a conditional use. The primary concern regarding the existing multi-family provisions of the R-2 Zone was the large portion of land which displayed severe limitations to development located within the R-2 Zone boundaries.

PROPOSED RESIDENTIAL ZONE DISTRICTS:

The Future Land Use Plan, Figure VI, has been based primarily on the inherent limitations imposed by the natural capacity for development which is presented on the Building Constraints Map. The Future Land Use Plan has also considered other parameters such as available potable water, the road system, existing land use and the County Master Plan in reaching the recommended Master Plan.

The Future Land Use Plan provides for the following eight zone districts:

"R-1" Residential And Agricultural District

The R-1 Zone has been established in recognition of the physical limitations and provides for single family residential development with a low density of 1 unit per 2 acres in cluster developments incorporating 10 percent open space and 1 unit per 3 acres for by-right development.

"R-2" Residential And Agricultural District

The R-2 Zone has been established to provide for single-family residential with a moderate density of 1 unit per acre. The proposed uses within the R-2 Zone would no longer provide for multiple dwelling groups as a conditional use.

"R-3" Residential And Agricultural District

The R-3 Zone has been provided to accommodate multiple dwelling groups as a conditional use. The zone requirements parallel the existing R-2 Zone including the density of 1 unit per acre for single family residential and the 4 units per acre density for multiple dwelling groups.

"C" Conservation District

The Conservation District was established in the area considered to be most sensitive to environmental harm and includes the Blue Heron Rookery. The district is intended to limit uses to farming, recreation, and very low density single family dwellings. The recommended density of cluster development is to be limited to 1 unit per 5 acres with a dedication of at least 30 percent open space. It is further recommended that conventional development be permitted at a density of 1 unit per 8 acres.

The zone boundary for the Conservation District has generally followed property lines, however, where the boundary departs property lines the 580 elevation contour line has been considered the limit of the Zone. An exception to this rule occurred in the north end of the Zone where the line has coincided,in part, with the proposed purchase of 288.84 acres under a Sussex-Warren Resource Conservation and Development Area entitled the "Lafayette Heronry Public Water-Based Fish and Wildlife Development".

PROPOSED COMMERCIAL ZONE DISTRICTS:

Two Commercial Districts have been indicated on the Future Land Use Plan: "B-1" Neighborhood Business and "B-2" Highway Commercial. The B-1 Zone is intended to provide for local retail sales and services and professional uses.

The existing permitted uses should be modified to include apartment units on the second floor of retail stores and service establishments. Apartment units are recommended with the following minimum floor areas:

| | |
|---|---|
| Efficiency | 550 square feet |
| 1 Bedroom | 700 square feet |
| 2 Bedroom | 850 square feet |
| 3 Bedroom | 1,000 square feet |

The Highway Commercial Zone disrict is intended to provide for highway-related services and business establishments which generally cater to the needs of residents from several communities.

The permitted uses in the Highway Commerical Zone should include those permitted in the Neighborhood Business Zone, supermarkets, lumber yards, department stores and wholesale businesses. Also included should be motels, sport centers, theaters, shopping centers, storage buildings and warehouses directly associated with retail or wholesale sales on the same property.

Service stations, public garages and new car sales establishments should be permitted as conditional uses.

No change in the lot requirements of the Commercial Zones is recommended.

PROPOSED MANUFACTURING ZONE DISTRICTS:

Two Manufacturing Districts have been designated on the Future Land Use Plan: "L-I" Light-Industry and "M-1" Manufacturing. The Light-Industry Zone is intended to encourage industrial park development and to provide for the following on a 2 acre minimum lot.

1. Office buildings for business, professional, executive and administrative purposes.

2. Light industrial uses. (Activity involves the fabrication or assembly of standardized parts as contrasted to a processing activity which would involve a physical or chemical process that would change the nature or character of the product or raw material).

3. Scientific or research laboratories devoted to research, design or experimentation and processing and fabrication incidential thereto.

4. The wholesaling of goods and services, including the warehousing or storage of goods, provided such activities and inventories are conducted entirely within an enclosed structures, or are conducted in open yard areas which are adequately screened from view from adjacent lots or roads.

5. Agricultural uses.

6. Uses permitted in the B-2 Zone.

The M-1 Manufacturing Zone is intended to provide for heavier industrial uses on a minimum of 5 acres:

1. All uses permitted in the Light Industry Zone.

2. Process of manufacture, fabrication, treatment or conversion of product.

3. Storage buildings, warehouses and wholesale distribution centers, fuel oil storage facilities, contractor and utility storage yards.

ZONE DISTRIBUTION:

The approximate acreage distribution of the Zone Districts has been listed in Table III.

TABLE III

Approximate Acreage Distribution of Zone Districts

| Zone District | | Approximate Acreage | Percent of Total |
|---|---|---|---|
| R-1 | Residential/Agricultural | 3,894 | 33.2 |
| R-2 | Residential/Agricultural | 4,877 | 41.7 |
| R-3 | Residential/Agricultural | 553 | 4.7 |
| C | Conservation | 985 | 8.4 |
| B-1 | Neighborhood Business | 171 | 1.5 |
| B-2 | Highway Commercial | 217 | 1.9 |
| L-1 | Light Industry | 494 | 4.2 |
| M-1 | Manufacturing | 521 | 4.4 |

Source: Planimetric Measure, Harold E. Pellow & Associates,Inc.

CONCLUSIONS:

The Future Land Use Plan represents a graphic statement of the goals for the development of the community with planned intensities to best promote the health, safety and general welfare of the residents of the Township of Lafayette. The projected development within the guidelines established for the various residential zones could ultimately result in a population of 17,000 residents.

To accommodate the potential growth and still maintain the general character of the community the Township of Lafayette has identified the following goals:

1. Maintain the rural nature of the Township.
2. Protect the quality of the environment.
3. Provide for safe and convenient traffic circulation.
4. Provide public facilities to meet the needs of the community.

To further the goals of the Township the following objectives have been set:

1. Encourage developemnt with proper relationship between Residential, Commercial and Industrial Land Use.

2. Preserve the rural scenic nature of roadways by maintaining the natural vegetaion.

3. Encourage the use of open space within development so as to preserve natural vegetation and water bodies such as lakes, ponds and streams.

4. Avoid disrupting enviornmentally sensitive areas such as flood plains, wetlands and steep slopes.

5. Promote community identity and check the deterioration of the town center which is evidenced by several blighted properties.

6. Upgrade circulation by incorporating improvements recommended in the Circulation Plans and Drainage Facilities Element of the Master Plan into a capital improvements program.

7. Provide the following public facilities to meet the needs of the community:

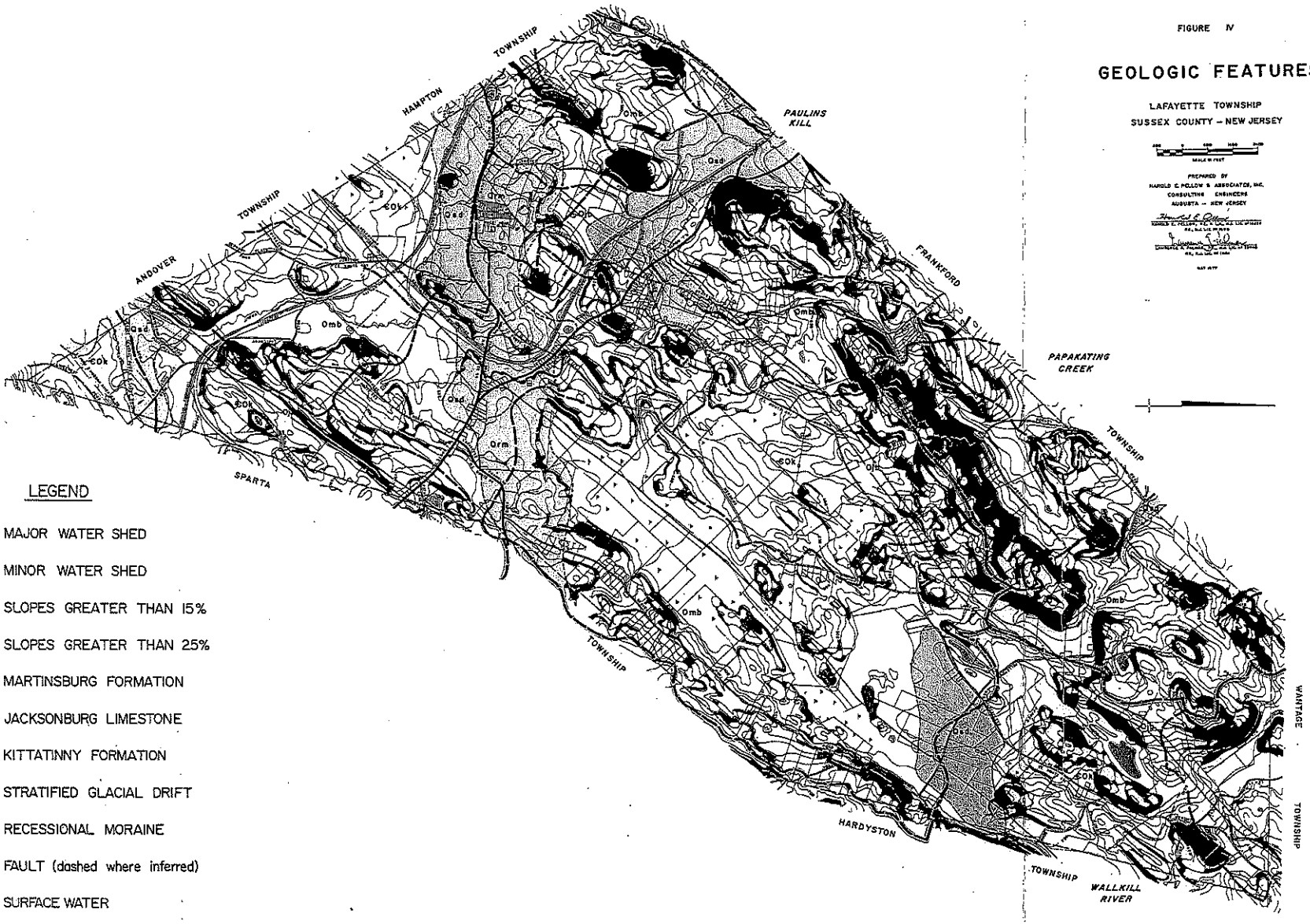
   a. A municipal garage.
   b. Off-street parking and provisions for pedestrian walks in the township center.
   c. Adequate parks and open space for active and passive recreation.

8. In view of the severe limitations for septic filter fields in a large portion of the township,it is recommeded that the Board of Health develop standards for primary and secondary sewage disposal sytems.

FIGURE IV

# GEOLOGIC FEATURES

LAFAYETTE TOWNSHIP
SUSSEX COUNTY – NEW JERSEY




LEGEND

- MAJOR WATER SHED
- MINOR WATER SHED
- SLOPES GREATER THAN 15%
- SLOPES GREATER THAN 25%
- Omb — MARTINSBURG FORMATION
- Ojb — JACKSONBURG LIMESTONE
- Eok — KITTATINNY FORMATION
- Qsd — STRATIFIED GLACIAL DRIFT
- Qrm — RECESSIONAL MORAINE
- FAULT (dashed where inferred)
- SURFACE WATER

PREPARED BY
HAROLD C. HOLLOW & ASSOCIATES, INC.
CONSULTING ENGINEERS
AUGUSTA – NEW JERSEY

FIGURE III

# NATURAL FEATURES

LAFAYETTE TOWNSHIP
SUSSEX COUNTY – NEW JERSEY

PREPARED BY
HAROLD E. PELLOW & ASSOCIATES, INC.
CONSULTING ENGINEERS
AUGUSTA – NEW JERSEY

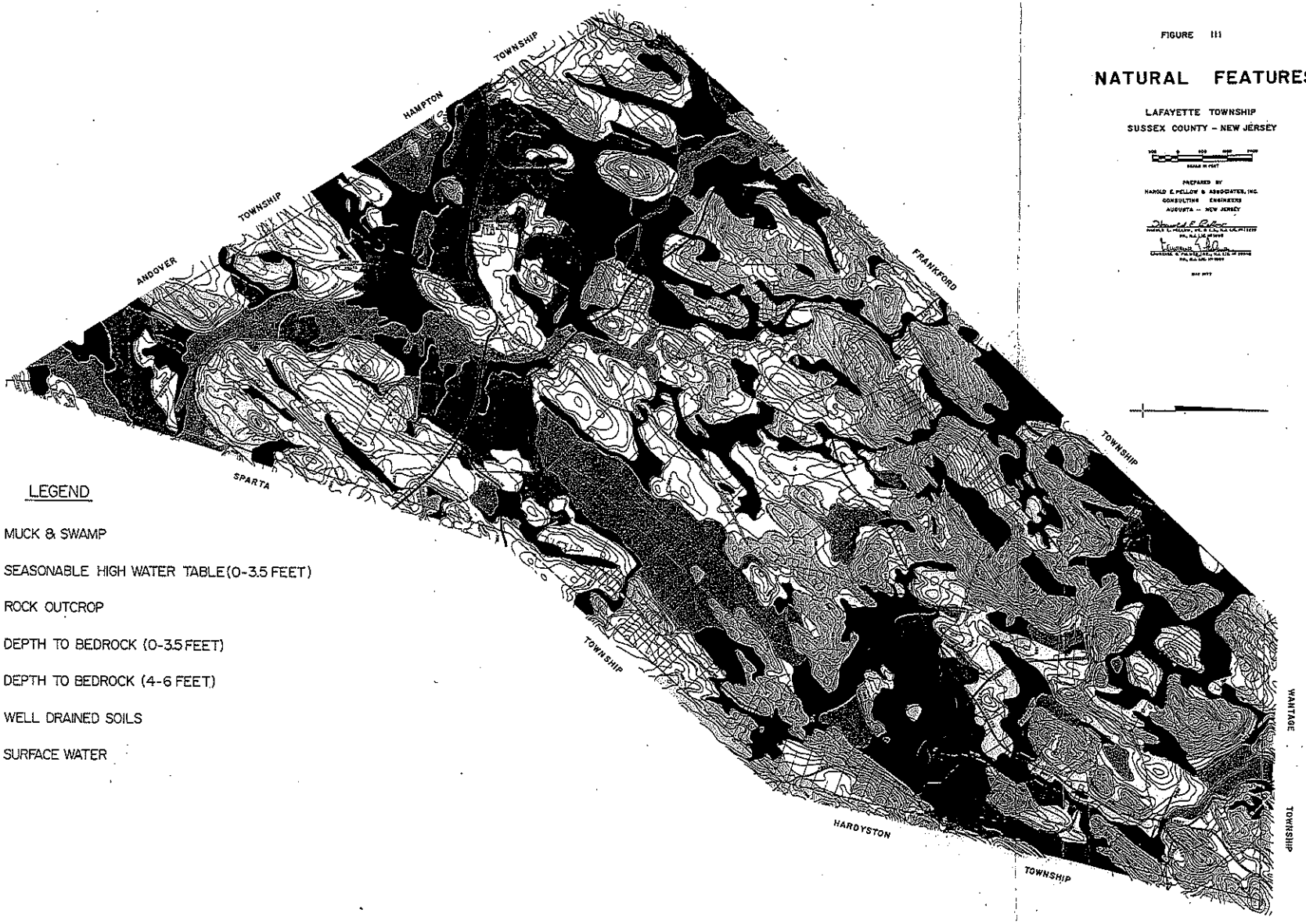
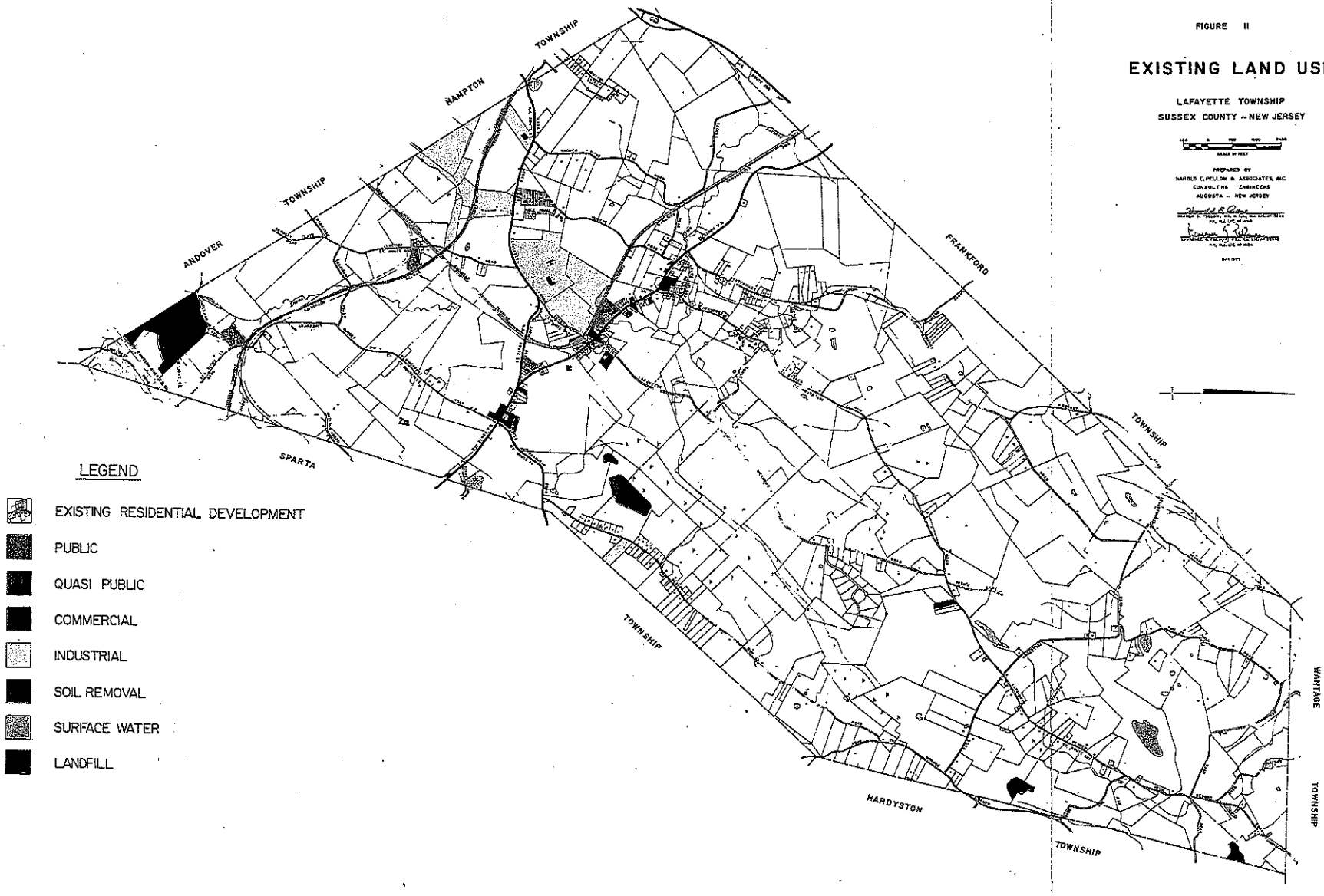


FIGURE II

# EXISTING LAND USE

LAFAYETTE TOWNSHIP
SUSSEX COUNTY — NEW JERSEY

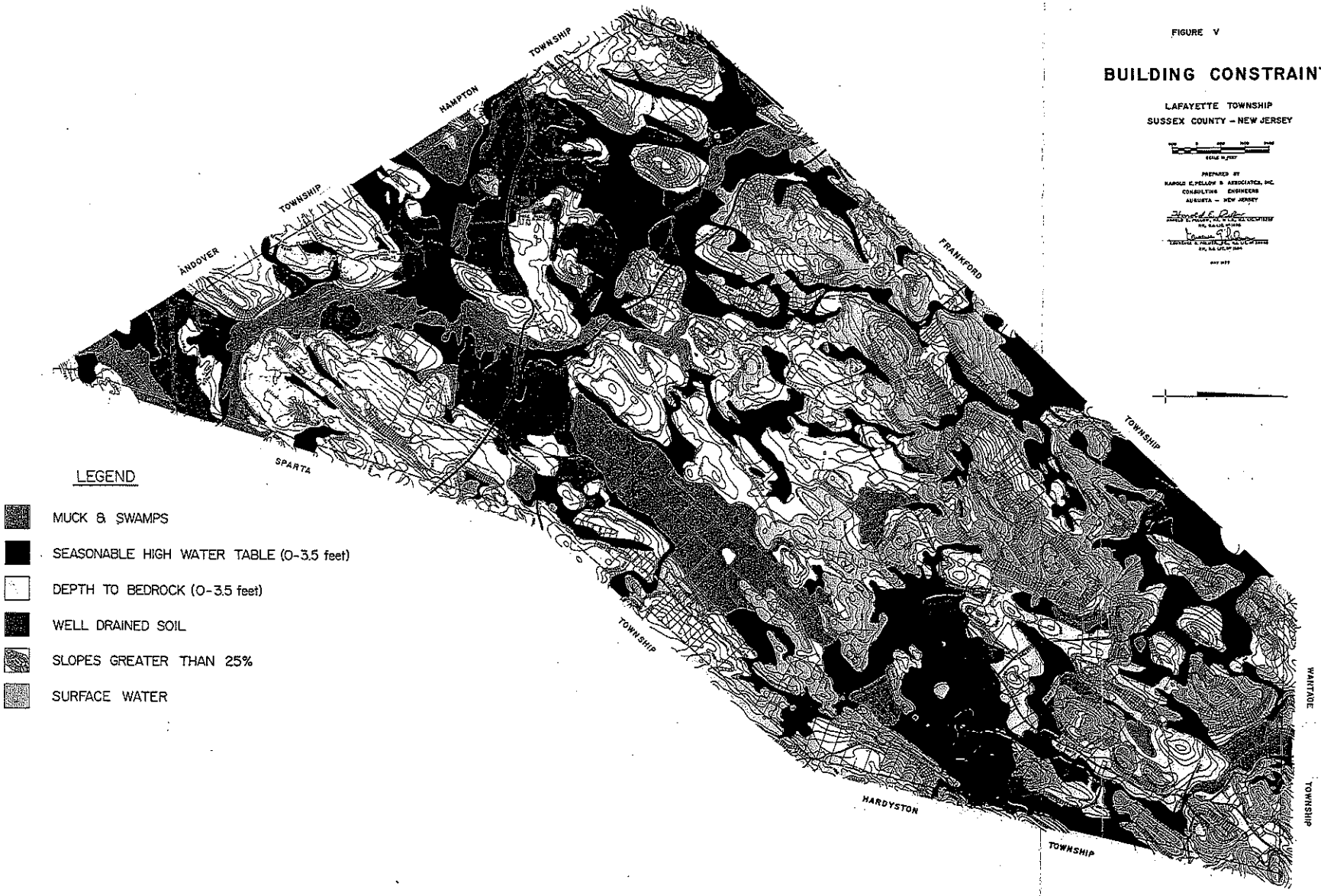



PREPARED BY
HAROLD E. YELLOW & ASSOCIATES, INC.
CONSULTING ENGINEERS
AUGUSTA — NEW JERSEY

FIGURE V

# BUILDING CONSTRAINTS

LAFAYETTE TOWNSHIP
SUSSEX COUNTY – NEW JERSEY




PREPARED BY
HAROLD E. PELLOW & ASSOCIATES, INC.
CONSULTING ENGINEERS
AUGUSTA – NEW JERSEY

FIGURE VI

# FUTURE LAND USE

LAFAYETTE TOWNSHIP
SUSSEX COUNTY – NEW JERSEY

SCALE IN FEET

PREPARED BY
HAROLD E. POLLOW & ASSOCIATES, INC.
CONSULTING ENGINEERS
AUGUSTA – NEW JERSEY

DATE 1977


LEGEND

- R-1 RESIDENTIAL
- R-2 RESIDENTIAL
- R-3 RESIDENTIAL
- B-1 NEIGHBORHOOD BUSINESS
- HIGHWAY COMMERCIAL
- L-1 LIGHT INDUSTRIAL
- MANUFACTURING
- C CONSERVATION
- ZONE BOUNDARY
- FLOOD HAZARD BOUNDARY

# PART II

# CIRCULATION PLAN AND DRAINAGE FACILITIES ELEMENT

## FORWARD

The Township of Lafayette has undertaken the development of a Circulation Plan and Drainage Facilities Element to serve as a guide for decision making on matters relating to the development of the Township.

The Element is a study of the township roads and drainage facilities and is intended to set forth recommendations for community development specifically with respect to subdivisions and site plans.

# CHAPTER V

## ROADS AND DRAINS

# CHAPTER V

# ROADS AND DRAINS

## INTRODUCTION:

The Township of Lafayette has conducted a survey of the township roads and drainage facilities in order to document existing conditions and in order to provide recommendations for improvement to promote the health, safety and general welfare of the traveling public within the township.

The township has also undertaken to document the roads and drains in order to guide and direct the future development. The Municipal Land Use Law provides that development may be required to comply with adopted portions of a Master Plan with respect to road design and drainage rights-of-way. It also provides that the township is not required to pay for roads and drainage rights-of-way which are deemed essential to the development of the land within a subdivision.

In the absence of an Official Map the Circulation Plan and Drainage Facilities Element is intended to fulfill the need for documenting the approximate locations of roadway and drainage rights-of-way as well as required on-tract and off-tract improvements.

The scope of this Element of the Master Plan has been limited to consideration of township roads since the County Master Plan concentrated on County, State and Federal highways.

EXISTING ROADS AND DRAINS:

The township has approximately 25.3 miles of roads with 14.5 miles improved and 10.8 miles unimproved. The improved roads are almost entirely oil and stone surface.

Presented in Table IV is a summary of the status of the various township roads including length, existing average roadway width and recommended right-of-way width.

There are over 130 cross drains and drainage structures providing drainage along the township roads. The condition of the existing drainage infrastructure is good and well maintained.

Figure VII entitled "Roads and Drains" presents the following information regarding the existing roadways:

1. State highways
2. County highways
3. Improved township roads.
4. Unimproved township roads
5. Location of poor vertical curve alignment

6. Location of poor horizontal alignment.
7. Poor sight distance at intersections.
8. Poor sight distance due to embankment.
9. Poor sight distance due to brush along roadway.
10. Tree hazards in roadway.
11. Existing pavement width and recommended right-of-way width.
12. Length of roadway (scaled).
13. Approximate location of drainage improvements.
14. Size of existing drains.
15. Condition of drain.

STATUS OF ROADS AND RECOMMENDATIONS:

Presented in Appendix "A" entitled Roads and Recommendations is a status report for each road presented in alphabetical order. The recommendations coincide with the symbols for the various hazards which were documents in Figure VII.

TABLE IV

SUMMARY OF TOWNSHIP ROADWAY STATUS

| | | Improved Length | Unimproved Length | Total Length | R.O.W. Recommended | Existing Pavement Width |
|---|---|---|---|---|---|---|
| 1. | Day Road | | 0.50 | 0.50 | 50 | 13 |
| 2. | Decker Road | 0.35 | 0.99 | 1.34 | 50/66 | 13 |
| 3. | DeKort Road | 0.64 | | 0.64 | 66 | 20 |
| 4. | Dennis Road | | 0.70 | 0.70 | 50 | 12 |
| 5. | Father John's Lane | 0.21 | | 0.21 | 50 | 11 |
| 6. | Fox Hill Road | 0.17 | 2.05 | 2.22 | 50 | 13/16 |
| 7. | Garrison Road | 0.55 | | 0.55 | 66 | 20 |
| 8. | Germany Flats Road | | 0.26 | 0.26 | 50 | 13 |
| 9. | Gorney Road | 0.05 | 0.55 | 0.60 | 50 | 12 |
| 10. | Hampton Heights Road | 0.55 | | 0.55 | 50 | 13 |
| 11. | Ice Plant Road | 0.35 | | 0.35 | 50 | 13 |
| 12. | Lafayette Meadows Road | 2.85 | | 2.85 | 66 | 16 |
| 13. | Lantz Road | | 0.38 | 0.38 | 50 | 12 |

TABLE IV (Continued)

SUMMARY OF TOWNSHIP ROADWAY STATUS

| | | Improved Length | Unimproved Length | Total Length | R.O.W. Recommended | Existing Pavement Width |
|---|---|---|---|---|---|---|
| 14. | Lewisburg Road | | 0.5 | 0.5 | 50 | 16 |
| 15. | Limecrest Road | 0.38 | | 0.38 | 66 | 26 |
| 16. | Little Road | 0.09 | 0.32 | 0.41 | 50 | 14 |
| 17. | McCloud Road | | 0.27 | 0.27 | 50 | 14 |
| 18. | Monroe Corner Road | | 1.07 | 1.07 | 66 | 10/13 |
| 19. | Old Beaver Run Road | 1.28 | 1.42 | 2.7 | 66 | 19/21 |
| 20. | Old Statesville Quarry Road | | 0.40 | 0.40 | 50 | 11 |
| 21. | Pelletown Road | 2.56 | | 2.56 | 66 | 18/25 |
| 22. | Snover Road | 1.17 | | 1.17 | 66 | 18/23 |
| 23. | Statesville Quarry Road | 2.95 | | 2.95 | 66 | 19/21 |
| 24. | Valley View - Mud Cut Road | 0.30 | 0.75 | 1.05 | 50 | 16 |
| 25. | Van Sickle Road | | 0.67 | 0.67 | 50 | 13 |
| | Total | 14.45 | 10.83 | 25.28 | | |

## CONCLUSIONS

The existing township roads reflect the severe building constraints which were presented in the Land Use Plan Element. The severe topography, rock outcrop and wetlands resulted in traveled ways which conformed to the terrain. The traveled ways served the needs of this rural community when automobiles were slower and vehicle traffic movements were few. However, the traveled ways have been improved with oil and stone surfaces with little change in the original alignment.

It is important that consideration be given to upgrading several township roads such as Old Beaver Run Road, Lafayette Meadows Road and the road to Monroe Corner.

The following are additional recommendations which were not presented in Appendix "A".

1. Traffic counts should be performed on major township roads to establish traffic volumes. Realignments for several roads should be established based on field survey.

2. In the absence of the new New Jersey Highway Route 15 the Department of Transportation should

be asked to survey the intersection of New Jersey Highway Route 15 and 94 for improvements to improve traffic flow at this intersection.

3. Street name signs should be provided at intersections.

4. Walkways should be provided between the municipal ballfield and the center of town.

5. Parking should be provided in the municipal recreation field area and in the center of town.

FIGURE VII

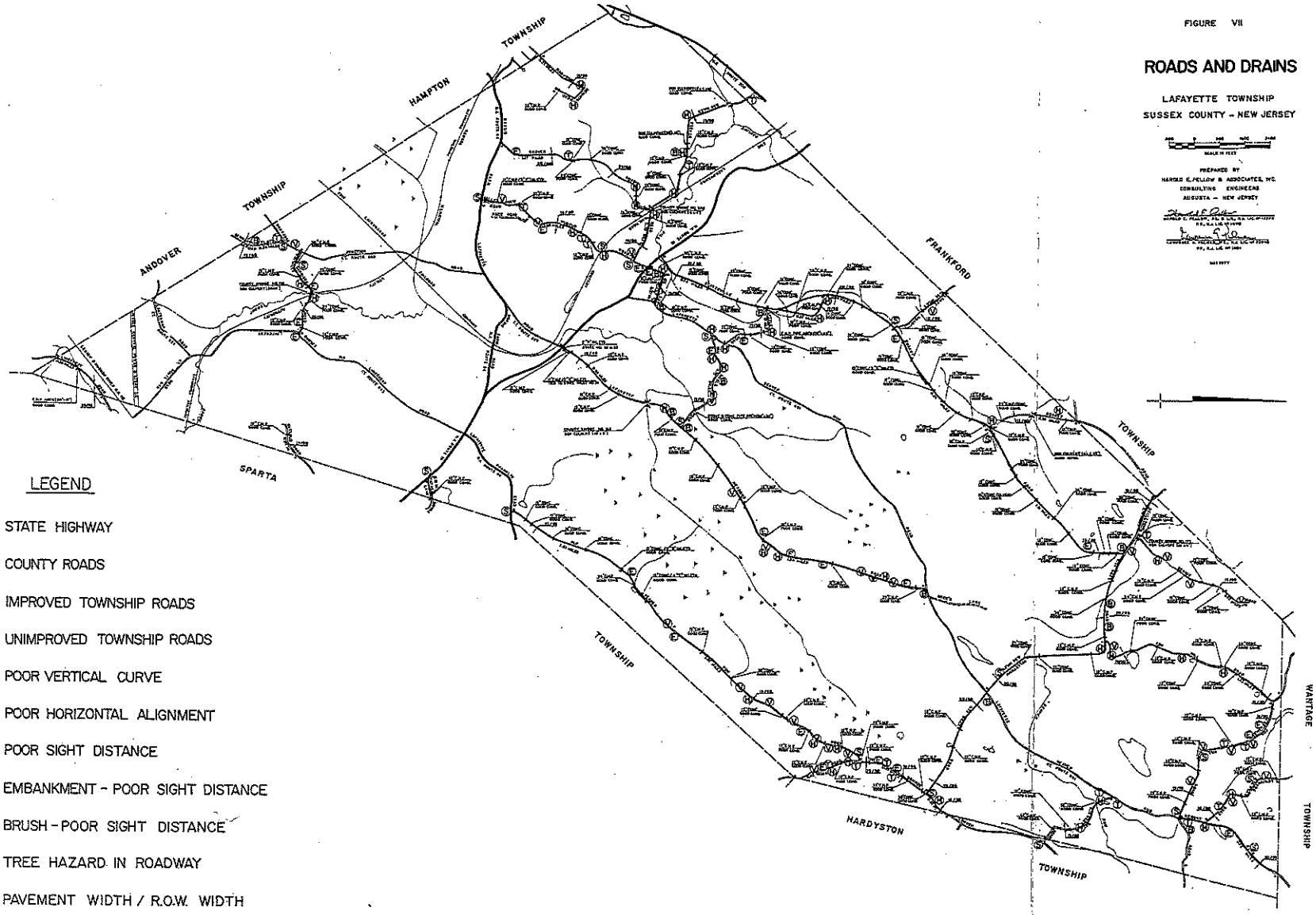
# ROADS AND DRAINS

LAFAYETTE TOWNSHIP
SUSSEX COUNTY - NEW JERSEY

SCALE IN FEET

PREPARED BY
HAROLD E. PELLOW & ASSOCIATES, INC.
CONSULTING ENGINEERS
AUGUSTA - NEW JERSEY

MAY 1977




LEGEND

- STATE HIGHWAY
- COUNTY ROADS
- IMPROVED TOWNSHIP ROADS
- UNIMPROVED TOWNSHIP ROADS
- POOR VERTICAL CURVE
- POOR HORIZONTAL ALIGNMENT
- POOR SIGHT DISTANCE
- EMBANKMENT - POOR SIGHT DISTANCE
- BRUSH - POOR SIGHT DISTANCE
- TREE HAZARD IN ROADWAY
- PAVEMENT WIDTH / R.O.W. WIDTH

# METHODOLOGY

## METHODOLOGY

The information presented in Parts I and II of the Master Plan was primarily obtained from the following sources:

Books


1. Miller, Joseph W. Jr., Geology and Ground Water Resources of Sussex County and the Warren County Portion of the Tocks Island Impact Area, Bulletin No. 73, New Jersey Department of Environmental Protection, January 1974.
2. Soil Conservation Service, Engineering Field Manual, United States Department of Agriculture, Soil Conservation Service.
3. Soil Conservation Service, Soil Survey of Sussex County, United States Department of Agriculture, Soil Conservation Service, August, 1975.
4. Subitzky, Seymour, Editor, Geology of Selected Areas in New Jersey and Eastern Pennsylvania; New Brunswick, New Jersey, Rutgers University Press, 1969.
5. Sussex County, Interim Master Plan, Volumes 1-11, Department of Planning, Conservation and Economic Development, August, 1976.

Maps, Survey and Photos

1. Department of Interior Geologic Survey, Newton East and Branchville Quadrangle Maps, Washington D.C. 1971.
2. Harold E. Pellow and Associates, Incorporated, Field Survey of Township of Lafayette of Existing Land Use, Properties, Roads and Drainage, Spring 1977.
3. Robinson Aerial Surveys, Inc., Lafayette Township 1973.
4. Township of Lafayette, Tax Maps, revised 1977.

To document the information available from the many sources listed above, a Base Map was prepared using U.S.G.S. Maps and the Tax Map of the Township of Lafayette. Three Base Maps at 1 inch = 800 feet are available which depict the following:

1. Roads and surface water.
2. Property map.
3. Property and topographic contour lines at 20 foot intervals.

# APPENDIX "A"

## ROADS AND RECOMMENDATIONS

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | DAY ROAD | | |
| **STATUS:** | Unimproved | **CLASSIFICATION:** | Minor |
| **LENGTH:** | 0.5 miles | **WIDTH:** | 13 feet |

**LOCATION:** Day Road extends from Lafayette Beaver Run Road (County Route 661) to the road to Monroe Corner in Hardyston Township. Day Road is located in the northeastern section of the township.

**RECOMMENDATIONS:**

1. Realign the horizontal curve in the vicinity of the new 42 inch cross drain just east of Route 661.

2. Realign the broken back curves approximately mid-point along Day Road.

3. Improve the sight distance at the intersection of the road to Monroe Corner. The intersection is located within Hardyston Township.

4. Remove trees on either side of the intersection with Route 661 which are limiting property sight distance.

5. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** DEKORT ROAD | |
| **STATUS:** Improved-good condition | **CLASSIFICATION:** Collector |
| **LENGTH:** 0.64 miles | **WIDTH:** 20 feet |

**LOCATION:** DeKort Road extends from the intersection of Lafayette Beaver Run Road to the Wantage Township line where the road is known as Clark Road. DeKort Road is located in the northeast end of the township.

**RECOMMENDATIONS:**

1. Remove a deteriorated farm structure at the intersection of Route 661, DeKort Road and Fox Hill Road.
2. Cut back hedge overhanging the top of a wall on north side of Route 661 just east of intersection with DeKort Road.
3. Shift horizontal alignment of DeKort Road east at Lewisburg Road.
4. Cut back of embankment on east side of DeKort Road north of Lewisburg Road.
5. Remove tree in roadway just north of Route 661.
6. Right of way width 66 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | DENNIS ROAD | | |
| **STATUS:** | Unimproved | **CLASSIFICATION:** | Minor -Deadend |
| **LENGTH:** | 0.7 miles | **WIDTH:** | 12 feet |

**LOCATION:** Dennis Road extends north from Pelletown Road and is located in the northwest part of the township.

**RECOMMENDATIONS:**

1. Relocate evergreen tree on Block 24, Lot 1 just west of the intersection with Pelletown Road. Tree is obstructing the sight distance west on Pelletown Road.

2. A 15 inch diameter cross drain should be checked for required maintenance.

3. Alignment of roadway is poor at three vertical curves. Due to few number of potential dwellings served by Dennis Road a major realignment of this deadend road is not warranted.

4. Vertical curve in the vicinity of Block 24, Lot 3D should be cut off and filled in north of the knoll.

5. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | FATHER JOHN'S LANE | | |
| **STATUS:** | Improved | **CLASSIFICATION:** | Minor |
| **LENGTH:** | 0.21 miles | **WIDTH:** | 16 feet |

**LOCATION:** Father John's Lane extends from New Jersey Highway Route 15 to the Sparta Township line. The road primarily serves the Township of Sparta residents and is not a significant road to Lafayette Township. Father John's Lane is located north of Route 15 and is in the eastern part of the township.

**RECOMMENDATIONS:**

1. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** FOX HILL ROAD | |
| **STATUS:** Improved/Unimproved | **CLASSIFICATION:** Minor |
| **LENGTH:** 2.22 miles | **WIDTH:** 13 - 16 feet |

**LOCATION:** Fox Hill Road is improved for 0.17 miles north of the intersection with Pelletown Road with an oil and stone surface. The remaining 2.05 miles is unimproved north to Spreen Road in Wantage Township then east to the intersection of Lafayette Beaver Run Road. Fox Hill Road is located in the northern end of the township.

**RECOMMENDATIONS:**

1. Horizontal realignment to adjust an "S" curve in the vicinity of Block 24, Lot 4-C.

2. Horizontal realignment to straighten roadway in the vicinity of Block 25, Lob 3-B.

3. The east-west portion of Fox Hill Road serves a remote portion of the township. There are various vertical curve and horizontal alignment problems and ultimate alignment should be set based on field survey.

4. Two trees should be removed from roadway.

5. Remove a deteriorated farm structure at the intersection of Route 661, DeKort Road and Fox Hill Road.

6. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | GARRISON ROAD | | |
| **STATUS:** | Improved | **CLASSIFICATION:** | Minor |
| **LENGTH:** | 0.55 miles | **WIDTH:** | 20 feet |

**LOCATION:** Garrison Road extends from Sunset Limecrest Road (County Route 625) to Warbasse Junction Road (County Route 663). Garrison Road is located in the southern end of the township.

**RECOMMENDATIONS:**

1. Shift the horizontal alignment west of the County Bridge #156 to the east to provide for an improved horizontal curve.

2. Cut back embankment at several locations including the east side of Sunset-Limecrest Road just south of the intersection with Garrison Road.

3. Replace a 12 inch Corrugated Metal Pipe just west of the Sunset-Limecrest Road intersection and evaluate repairs or maintenance to a 15 inch and 24 inch Corrugated Metal Pipe noted in poor condition.

4. Vertical curve located on Warbasse Junction Road between Garrison Road and Germany Flats Road should be cut down. Improvement to county road would benefit both intersections.

5. Right of way width 66 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | GERMANY FLATS ROAD | | |
| **STATUS:** | Unimproved | **CLASSIFICATION:** | Minor |
| **LENGTH:** | 0.26 miles | **WIDTH:** | 13 feet |

**LOCATION:** Germany Flats Road extends from Warbasse Junction Road (County Route 663) southeast to the Andover Township line where the name of the road changes to Pierce Road. Germany Flats Road is located just south of Garrison Road in the southern end of the township.

**RECOMMENDATIONS:**

1. Relocate the intersection at Warbasse Junction Road south to provide for a "T" intersection.

2. Maintain the brush cutback along the southside of the road in the vicinity of the farm house located on Block 3, Lot 1.

3. Vertical curve located on Warbasse Junction Road between Garrison Road and Germany Flats Road should be cut down. Improvement to county road would benefit both intersections.

4. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | GORNEY ROAD | | |
| **STATUS:** | Unimproved | **CLASSIFICATION:** | Minor |
| **LENGTH:** | 0.60 miles | **WIDTH:** | 12 feet |

**LOCATION:** Gorney Road extends 0.60 miles from the Statesville Quarry Road to the intersection of Fenwick Road in Frankford Township. Gorney Road is located in the northwest part of the township

**RECOMMENDATIONS:**

1. Realign the roadway in the vicinity of Block 20, Lot 1-A to improve the "S" curve.
2. Realign the roadway at the end of the paved portion to provide for a proper horizontal curve.
3. Twelve (12) inch Corrugated Metal Pipe cross drain near Fenwick Road intersection is in poor condition.
4. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | HAMPTON HEIGHTS ROAD | | |
| **STATUS:** | Improved | **CLASSIFICATION:** | Minor-deadend |
| **LENGTH:** | 0.55 miles | **WIDTH:** | 13 feet |

**LOCATION:** Hampton Heights Road extends north from the Hampton Township line. The access to Hampton Heights Road is from Sid Taylor Road in Hampton Township which extends from U.S. Route 206 to New Jersey Highway Route 94.

**RECOMMENDATIONS:**

1. A cross drain is needed in the vicinity of Block 5, Lot 8-C. A drainage easement would be required across Lot 8-C.
2. Existing horizontal alignment is poor but due to few properties served by Hampton Heights Road no improvements are recommended.
3. Roadway surface needs sealing.
4. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | ICE PLANT ROAD | | |
| **STATUS:** | Improved | **CLASSIFICATION:** | Minor |
| **LENGTH:** | 0.35 miles | **WIDTH:** | 13 feet |

**LOCATION:** Intersection of New Jersey Highway Route 15 to Lafayette Beaver Run Road (County Route 661).

**RECOMMENDATIONS:**

1. Install a catch basin "E" type at bend in the vicinity of Block 16, Lot 1-A.
2. Cut back brush north of intersection with Lafayette Beaver Run Road (County Route 661).
3. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** LAFAYETTE MEADOWS ROAD | |
| **STATUS:** Improved-oil&stone | **CLASSIFICATION:** Major-Collector |
| **LENGTH:** 2.85 miles | **WIDTH:** 16 feet |

**LOCATION:** Lafayette Meadows Road extends from the center of town and New Jersey Highway Route 15 north to Lafayette Beaver Run Road.

**RECOMMENDATIONS:**

1. A realignment in the vicinity of Block 14, Lot 15 is required to alter vertical curve, embankments and horizontal curves. Broken back curve should be altered to provide for a horizontal curve by shifting the roadway east at Block 14, Lots 15 and 11-C.

2. Embankment north of the major subdivision access road at Heron Park must be cut back on Block 14, Lot 13 . Work on this recommendation is presently underway by developer.

3. Several horizontal and vertical curve realignments are needed in the vicinity of Block 14, Lots 11-A and 10-C and Block 22, Lot 1-A.

4. Vertical curve in vicinity of Block 22, Lot 20-A should be cut down.

5. Right of way width 66 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** LANTZ ROAD | |
| **STATUS:** Unimproved-gravel | **CLASSIFICATION:** Minor |
| **LENGTH:** 0.38 miles | **WIDTH:** 12 feet |

**LOCATION:** Lantz Road extends from Statesville Quarry Road, at a point approximately 1 1/2 miles north of New Jersey Highway Route 15, west to the Frankford Township line where Lantz Road is named Skyline Drive.

**RECOMMENDATIONS:**

1. Alignment of roadway at intersection of Statesville Quarry Road should be shifted north for an improved alignment and better sight triangle.
2. Vertical curve west of farm dwelling on Block 18, Lot 1-A could be cut down.
3. Due to limited traffic no immediate work is needed on this roadway.
4. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | LEWISBURG ROAD | | |
| **STATUS:** | Unimproved | **CLASSIFICATION:** | Minor |
| **LENGTH:** | 0.5 miles | **WIDTH:** | 16 feet |

**LOCATION:** Lewisburg Road extends from DeKort Road, at a point approximately 1,000 feet north of the intersection of DeKort Road and Lafayette Beaver Run Road, to the Wantage Township line where Lewisburg Road is known as Beaver Run Road. There is also a Lewisburg Road in Wantage Township which runs between their Beaver Run Road (Lewisburg in Lafayette) and Spreen Road which is known as Fox Hill Road in Lafayette Township.

**RECOMMENDATIONS:**

1. Tree hazard in roadway south bound lane, in the vicinity of Block 30, Lot 6,should be removed.

2. A vertical curve and horizontal alignment at Block 29, Lots 5 and 6 represents a major limitation to the ultimate capacity of the road. Existing dwelling on Lot 6 will represent a major obstacle to any realignment.

3. Vertical curve and horizontal alignment in the vicinity of Block 29, Lot 3-C also will limit capacity of road and existing dwellings represent a constraint just as in Item #2. Due to remote location of the road and the few dwellings served no improvements are recommended.

4. Right of way 50 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | LIMECREST ROAD | | |
| **STATUS:** | Improved-paved | **CLASSIFICATION:** | Major-Collector |
| **LENGTH:** | 0.38 miles | **WIDTH:** | 22 feet |

**LOCATION:** Limecrest Road resulted from a major re-alignment in the vicinity of the Limecrest industrial complex. The new road by-passed the center of the industrial quarry and processing plant and was improved in part in Sparta,Andover and Lafayette Townships. The road has assumed a major roll in providing traffic flow from the Newton area to the New Jersey Highway Route 15 arterial highway in the Township of Sparta.

**RECOMMENDATIONS:**

1. Right of way width 66 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** LITTLE ROAD | |
| **STATUS:** Unimproved | **CLASSIFICATION:** Minor |
| **LENGTH:** 0.41 miles poor condition | **WIDTH:** 14 feet |

**LOCATION:** Little Road extends from Statesville Quarry Road, at a point approximately 0.74 miles north of New Jersey Highway Route 15, to Lafayette Beaver Run Road (County Route 661).

**RECOMMENDATIONS:**

1. The intersection with Lafayette Beaver Run Road should be realigned north to provide for an improved approach to the intersection for sight triangle.

2. The embankment at Block 21, Lot 42-D located on the north side of the road should be cut back. Note: Work is underway on this improvement.

3. Horizontal alignment in the vicinity of Block 19, Lot 1-I should be provided to improve the bend in the road. A minimum horizontal curve radius of 180 feet should be provided.

4. Brush should be cut back at the intersection of Statesville Quarry Road south of Little Road.

5. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | | | |
|---|---|---|---|
| **NAME:** | MCCLOUD ROAD | | |
| **STATUS:** | Unimproved | **CLASSIFICATION:** | Minor/Deadend |
| **LENGTH:** | 0.27 miles | **WIDTH:** | 14 feet |

**LOCATION:** McCloud Road access is from Demarest Road in the Township of Sparta which extends from Houses Corner Road to New Jersey Highway Route 15.

**RECOMMENDATIONS:**

1. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** MONROE CORNER ROAD | |
| **STATUS:** Unimproved-poor condition | **CLASSIFICATION:** Minor |
| **LENGTH:** 1.07 miles | **WIDTH:** 10 - 16 feet |

**LOCATION:** Road to Monroe Corner extends from the Township of Sparta in the vicinity of Monroe Corner northwest to the Hardyston Township line. Two major collector roads are connected by this road which indicated that in the future this roadway could serve as a collector road between Old Beaver Run Road and Pelletown Road.

**RECOMMENDATIONS:**

1. Roadway should be surveyed to establish future alignment in consideration of the numerous vertical curve, horizontal curve and embankment hazards existing along full length of road.
2. Several trees located in the roadway should be removed.
3. A 12 inch Corrugated Metal Pipe just north of Old Beaver Run Road intersection should be upgraded.
4. Right of way width 66 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** OLD BEAVER RUN ROAD | |
| **STATUS:** Improved/Unimproved | **CLASSIFICATION:** Collector |
| **LENGTH:** 2.7 miles | **WIDTH:** 19 - 21 feet |

**LOCATION:** Old Beaver Run Road extends from New Jersey State Highway Route 94 at a point approximately 500 feet west of the Sparta Township line, north to the road to Monroe Corner.

**RECOMMENDATIONS:**

1. The embankment along the north bound lane in the vicinity of Block 32 Lots 18 and 19-A should be cut back.

2. The vertical curve and embankment at the end of the improved portion of the road should be cut down.

3. Roadway in the vicinity of Block 32, Lot 7-A should be realignment east to provide for proper vertical curves and to improve embankment with extensive outcrop.

4. Roadway should be surveyed from Block 32, Lot 8 north to the road to Monroe Corner to establish the future alignment for Old Beaver Run Road. There are numerous vertical curve, horizontal curve and embankment problems associated with the north end of road.

5. Right of way width 66 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** OLD STATESVILLE QUARRY ROAD | |
| **STATUS:** Unimproved-poor condition | **CLASSIFICATION:** Minor |
| **LENGTH:** 0.40 miles | **WIDTH:** 11 feet |

**LOCATION:** Old Statesville Quarry Road is a portion of the original alignment of Statesville Quarry Road which was by-passed when the roadway was improved. The road is located just north of the intersection with Little Road.

**RECOMMENDATIONS:**

1. The roadway services farmland and a single farm house. At present traffic loading no recommendtaions are required. However, if future use of roadway is increased the alignment of the north intersection with Statesville Quarry Road must be realigned south to provide for a proper "T" intersection. Embankment and vertical curve would both have to be cut down.

2. Horizontal alignment of bend in road should be modified to provide for a horizontal curve with a minimum radius of 100 feet.

3. A 24 inch Corrugated Metal Pipe in poor condition should be replaced with a 36 inch Corrugated Metal Pipe to conform with upstream size of cross drain on Statesville Quarry Road.

4. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** PELLETOWN ROAD | |
| **STATUS:** Improved-good condition | **CLASSIFICATION:** Collector |
| **LENGTH:** 2.56 miles | **WIDTH:** 18 - 25 feet |

**LOCATION:** Pelletown Road extends from the Frankford Township line where it is named Losey Road to the road to Monroe Corner. The roadway intersects with several roads as it extends from west to east across the township. The roads intersecting with Pelletown Road include the following: Lafayette Beaver Run Road at Hopkins Corner, Fox Hill Road, Statesville Quarry Road and Dennis Road.

**RECOMMENDATIONS:**

1. Brush should be cut back north and south of Pelletown Road along Lafayette Beaver Run Road. A small cedar should be cut down which blocks most of the sight distance to the south for west bound traffic. Rose-of-Sharon bushes located on Block 26, Lot 8 should be cut back to provide sight distance to the north for west bound traffic on Pelletown Road.

2. A horizontal curve with a radius of 208 feet should be provided east of Fox Hill Road.

3. Vertical curve west of Statesville Quarry Road should be cut down. Brush at intersection should be cut down from southwest corner.

4. Brush should be cut down on north side of roadway in the vicinity of Block 24, Lots 5 and 8.

5. Evergreen tree at intersection with Dennis Road should be relocated (See Dennis Road recommendations).

6. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** SNOVER ROAD | |
| **STATUS:** Improved-good condition | **CLASSIFICATION:** Collector |
| **LENGTH:** 1.52 miles | **WIDTH:** 18 - 23 feet |

**LOCATION:** Snover Road extends from New Jersey Highway Route 94, at a point approximately 2,000 feet northeast of the Hampton Township line, to the intersection of Decker Road.

**RECOMMENDATIONS:**

1. Three horizontal curves in the vicinity of Decker Road should be incorporated into one horizontal curve alignment extending from Block 6, Lot 1-A on Decker Road to Block 6, Lot 5 on Snover Road.
2. Remove a tree hazard along south bound lane of the roadway in the vicinity of Block 5, Lot 8-A.
3. Cut back embankment south of roadway at Block 5, Lot 10-A.
4. Abandoned Erie Lackawanna railroad bridge abutments should be removed (see Decker Road).
5. Right of way width 66 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** STATESVILLE QUARRY ROAD | |
| **STATUS:** Improved - good condition | **CLASSIFICATION:** Collector |
| **LENGTH:** 2.95 miles | **WIDTH:** 19 - 21 feet |

**LOCATION:** Statesville Quarry Road extends from New Jersey Highway Route 15 north to Pelletown Road. Little, Lantz and Gorner Roads are served from this roadway.

**RECOMMENDATIONS:**

1. Embankment should be cut back 6 to 8 feet on Block 21, Lot 33-A.
2. Embankment should be cut back on Block 23, Lot 4.
3. Right of way width 66 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** VALLEY VIEW - MUD CUT ROAD | |
| **STATUS:** Improved/Unimproved | **CLASSIFICATION:** Minor |
| **LENGTH:** 1.05 miles | **WIDTH:** 16 feet |

**LOCATION:** Mud Cut Road extends from New Jersey Highway Route 15 south to New Jersey Highway Route 94. The road is Valley View Road and improved for approximately 0.30 miles within a development area. Mud Cut Road is unimproved and serve few residents.

**RECOMMENDATIONS:**

1. The roadway in the vicinity of the Erie Lackawanna Railway Company right of way should be surveyed to establish a future alignment.

2. Several vertical curves and embankments are not acceptable but in consideration of low traffic volume and the difficulty to get proper right of way in the development area no improvements are recommended.

3. Right of way width 50 feet.

# ROADS AND RECOMMENDATIONS

| | |
|---|---|
| **NAME:** VAN SICKLE ROAD | |
| **STATUS:** Unimproved-poor condition | **CLASSIFICATION:** Minor |
| **LENGTH:** 0.67 miles | **WIDTH:** 13 feet |

**LOCATION:** Van Sickle Road extends from Lafayette Beaver Run Road (County Route 661) east to Lafayette Meadows Road.

**RECOMMENDATIONS:**

1. The intersection of Van Sickle Road and Lafayette Beaver Run Road should be relocated north to provide for a "T" intersection.

2. Horizontal realignment should be altered. Recent subdivision (Tubito) provided for new alignment for two horizontal curves just west of the bridge.

3. Road should be surveyed to establish a future alignment.

4. Intersection at Lafayette Meadows Road is poor due to vertical alignment. Brush north of Van Sickle Road must be kept cut back due to low approach of Van Sickle Road to intersection.

5. Right of way width 50 feet.