

Master Plan Background Studies
And
Master Plan Elements

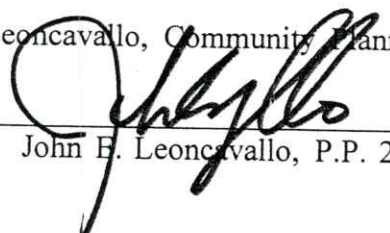
**Borough of Manville
Somerset County, New Jersey**

Adopted By Manville Borough Planning Board

August 24, 1994

Prepared By

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Borough of Manville

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INTRODUCTION

The Borough of Manville Master Plan is a general guide for the social, economic and physical development of the Borough. The Master Plan was developed in accordance with the Municipal Land Use Plan (N.J.S.A. 40: 55 D-1 et seq.) as amended through 1991 and is designed to guide development and redevelopment of the Borough in a manner which will promote and protect the public health, safety, morals and general welfare of present as well as future residents.

This Master Plan was initiated with the appointment of John E. Leoncavallo, Community Planning Consultant, to provide technical assistance with preparation of Basic Planning Studies and analyses and Master Plan text and mapping.

The Master Plan program also included updating a general base map of the Borough and tax maps on a lot by lot basis. Numerous County, State and Borough agencies were contacted for available information and data relative to population, transportation, utility services, solid waste management and other pertinent information about the Borough as of 1993. This data has been incorporated into the Basic Planning Studies and Master Plan text.

The Master Plan document is divided into two sections: Basic Planning Studies and Master Plan. The Basic Planning Studies section includes historical background; Existing Land Use, Community Facilities, Population and Natural Resources. The Master Plan includes a statement of Policies, Goals and Objectives; Land Use Plan; Housing Plan; Traffic Circulation Plan; Economic Plan; Recycling Plan; Recreation, Conservation and Open Space Plan; Community Facilities Plan and a Statement of Relationship to State, Regional and Area Plans.

EXISTING LAND USE

Primarily a small residential community, the Borough of Manville has a wide spectrum of existing land uses. Historically, the Borough had a national manufacturing industry which generated significant employment and ratables for the Borough.

Today, Manville contains bands of residential development parallel to Main Street and two railroad crossings. Commercial development consists of small to medium retail and office uses along Main Street with several satellite commercial and industrial nodes disbursed throughout the Borough. Large areas of open space remain along the floodplains of the Raritan and Millstone Rivers which serve as the town's north and east boundaries.

LAND USE CLASSIFICATION

Classification of land by use and function is important in analyzing development patterns and relationship. The classification of land uses for graphic presentation and analysis was accomplished in accordance with the following definitions. Commercial land uses were classified on the basis of the U.S. Standard Industrial Classification Manual of 1988.

| Land Use Classification | Description |
|------------------------------|--|
| Residential | All residential land use classified by type of enclosed dwelling units. A dwelling unit represents a household with the customary facilities necessary to accommodate one family. |
| Commercial/Business | This category includes commercial uses such as retail activities (ie. grocery stores, clothing stores, pharmacies, restaurants, hairdressers, personal services) and offices of professional or personal service nature. |
| Mixed Residential/Commercial | Enclosed residential dwelling units usually above first floor commercial/business activities. |
| Industrial/Rail | Buildings and/or property used for heavy and light industrial activities including warehousing, manufacturing and distribution. |

| | |
|--------------------------|---|
| Public | Any building or land devoted to public administration, health, safety or welfare including Borough and County buildings, schools, fire houses and parks and open space areas. |
| Quasi-Public | Buildings and/or property owned by an organization or institution which is generally open to the public, but usually requires some form of membership or affiliation such as churches, civic groups, lodges, cemeteries, etc. |
| Streets, Waterways, etc. | Areas not previously covered as developed lands but which cannot be listed as vacant primarily because of utilization factors. |
| Vacant | Lands classified as borough-owned vacant, privately owned vacant and agricultural/environmentally sensitive lands. |

RESIDENTIAL

Residential development is comprised primarily of single-family housing in the Borough. There are also a significant number of two-family units along with 3 to 5 multi-family residential structures. These have not been differentiated on the General Existing Land Use Map.

Residential development occupies approximately 697 acres, which represents 44 percent of the total land area of the Borough.

In recent years, "in-filling" of vacant residential lots with single family residences has occurred either by-right or through variance approval. The Borough also has approved several single family townhouse projects since adoption of a townhouse ordinance.

MIXED RESIDENTIAL/COMMERCIAL

Mixed residential/commercial land uses comprise 16 acres or 1 percent of the total land area of the Borough. Main Street is the primary concentration of this land use. The eastern portion of West Camplain Road was at one time a viable area for mixed residential and commercial uses. Several factors such as local economic trends, parking availability and market competition has transformed much of area in question to primarily residential uses.

COMMERCIAL/BUSINESS

Commercial/Business land uses in the Borough occupy 2 percent of the land area or 27 acres. This category includes retail, offices and personal service uses on Main Street. A decline in retail uses has been evident in the Borough for several years.

INDUSTRIAL/RAIL

The industrial/rail use make up approximately 12 percent of the Borough's land area, totalling 190 acres. Areas include the Johns Manville site along North Main Street and the industrial area along Kennedy Boulevard. The railroad right of ways and several other industrial type uses are scattered throughout the Borough.

PUBLIC

Public lands currently account for 148 acres or 9 percent of the land area.

QUASI-PUBLIC

Quasi-Public land uses in Manville Borough represent a total of 20 acres or about 1 percent of the land area. A cross section of religious denominations are included in this land use category.

STREETS, WATERWAYS, ETC.

This land use category encompasses all uses not classified previous but which is not considered to be vacant. 245 acres or 15 percent of the land area fall within this land use category. For graphic presentation on the existing land use map, this category is visually included with the residential land uses.

VACANT

Vacant lands equal 16 percent of the land area or 255 acres of the Borough. Within vacant land are the floodplain areas of the Raritan and Millstone Rivers.

Table EL-1
Existing Land Use
Borough of Manville - 1993

| Land Use | Acres | Percent of Total Land Use |
|--------------------------|--------------|---------------------------|
| Residential | 697 | 44 |
| Mixed | | |
| Residential/Commercial | 16 | 1 |
| Commercial/Business | 27 | 2 |
| Industrial/Rail | 190 | 12 |
| Public | 148 | 9 |
| Quasi-Public | 20 | 1 |
| Streets, Waterways, etc. | 245 | 15 |
| Vacant | 255 | 16 |
| Total | 1,599 | 100.0 |

Source: Tax Assessment Records & Field Survey
By J.E. Leoncavallo Associates, June 1993.

Background Studies

HISTORICAL BACKGROUND

The Borough of Manville is situated on the banks of the Raritan and Millstone Rivers. Including an area of approximately 2.5 square miles, it embraces Weston (an area west of Main Street) where during the days of the American Revolution many skirmishes were fought against the King's men. At the time of its early settlement, the County of Somerset was divided politically, as it is now, into townships, boroughs and towns. Manville was once part of Hillsborough Township as far back as 1692.

Starting in 1912 the town of Manville began to embark on a journey that would ultimately label Manville as the "most unique town in New Jersey." Businessmen from the Johns-Manville Company of New York were searching for a site to locate a new plant. After selecting the area the expanded plant was built and people were hired from the surrounding region. As this process continued, the population began to grow. In 1906, for example, the population of what is now Manville was 190 people.

As a small part of Hillsborough Township, the community of Manville, at times, was discontented because of non-reconcilable differences with the township's governing body. Finally after petitions were circulated for separation from Hillsborough, meetings were held and a bill creating the Borough of Manville was introduced in the State Legislature in April of 1929. On May 14, 1929 the first mayor and council were elected. Gustav Boesel was the first mayor and the first meeting of the council was held on May 21, 1929. The present municipal building was constructed in 1941 under the W.P.A. (Works Progress Administration) whereby the federal government paid all labor costs. In 1931 a municipal-owned water plant was built which was a rarity for the region at that time.

COMMUNITY FACILITIES

The Community Facilities study identifies public facilities located in the Borough and provides current information on their status and characteristics. The 1982 Master Plan included a similar study. This background report is an update of that information as provided through the Board of Education, Borough Engineer Gary Garwacke and the Borough of Manville.

Figure 2, The Community Facilities Plan, shows the location of existing community facilities as well as recreation areas. The scope of this background report includes schools, police, Borough Hall, fire, first aid, sanitary services, water, library and public works.

SCHOOLS

In 1990, the Board of Education developed a long range facilities plan in accordance with state educational requirements. Within that planning document is school enrollment trends and projections. The long range educational facilities plan provides the school district with a planning tool to accommodate its facility needs, both educational and physical, over a five-year period.

The Board of Education operates two elementary schools, the West School which accommodates grades K to 3 and the Alexander Batcho School which accommodates grades 4 to 6 and one high school, Manville High School, housing grades 7 to 12.

As of June of 1993, the district enrolled a total of 426 students in grades kindergarten through 3; 290 students in grades 4 to 6; 480 in grades 7 through 12 for a grand total of 1,196 students.

The Roosevelt School, listed in the 1982 Master Plan as an elementary school (K-5), is presently not being utilized by the district. It is rented for educational purposes by Somerset County. In general, the buildings at each facility are in need of maintenance and modernization.

The Weston School was built in 1962 with a total square footage of 46,500. It is located on a site of 6.4 acres. Within the school structure there are 23 instructional rooms plus a library, gymnasium/cafeteria and an auditorium. Replacement cost in 1990 was \$3,875,000. State-rated capacity equals 437 students.

The Alexander Batcho Intermediate School was erected in 1970 and is connected to Manville High School and jointly occupies 27 acres. The structure contains 22 classrooms, a library, cafeteria and multi-purpose room. The state-rated capacity is 291.

Manville High School was built in 1957 and has 37 classrooms with supporting rooms. The structure has an auditorium, internal courtyard, kitchen cafeteria, library and gymnasium. Its state-rated capacity is 706. Replacement cost is estimated at about \$7,000,000.

School enrollment history and projections are shown on Tables C-1 and C-2 and Figure 3 from the Educational Facilities Master Plan 1990 by University Associates for Manville Borough Board of Education. The history of total school enrollments from 1984 through 1990 indicate a small decline halfway through the five year period with a leveling off in the last several years. Grades 7-12 however, show a continued decrease of 38 percent from school year 1984-1985 to 1989-1990. Projections of the pupil population used a survival or cohort method to determine future enrollments. This methodology takes into account a number of factors such as in-migration and out-migration of pupils, influx to and from private and vocational schools, births, deaths, school dropouts and school detention policies as well as new, converted and abandoned housing in the Borough.

ENROLLMENT HISTORY*

3000

... Regular students not special education students

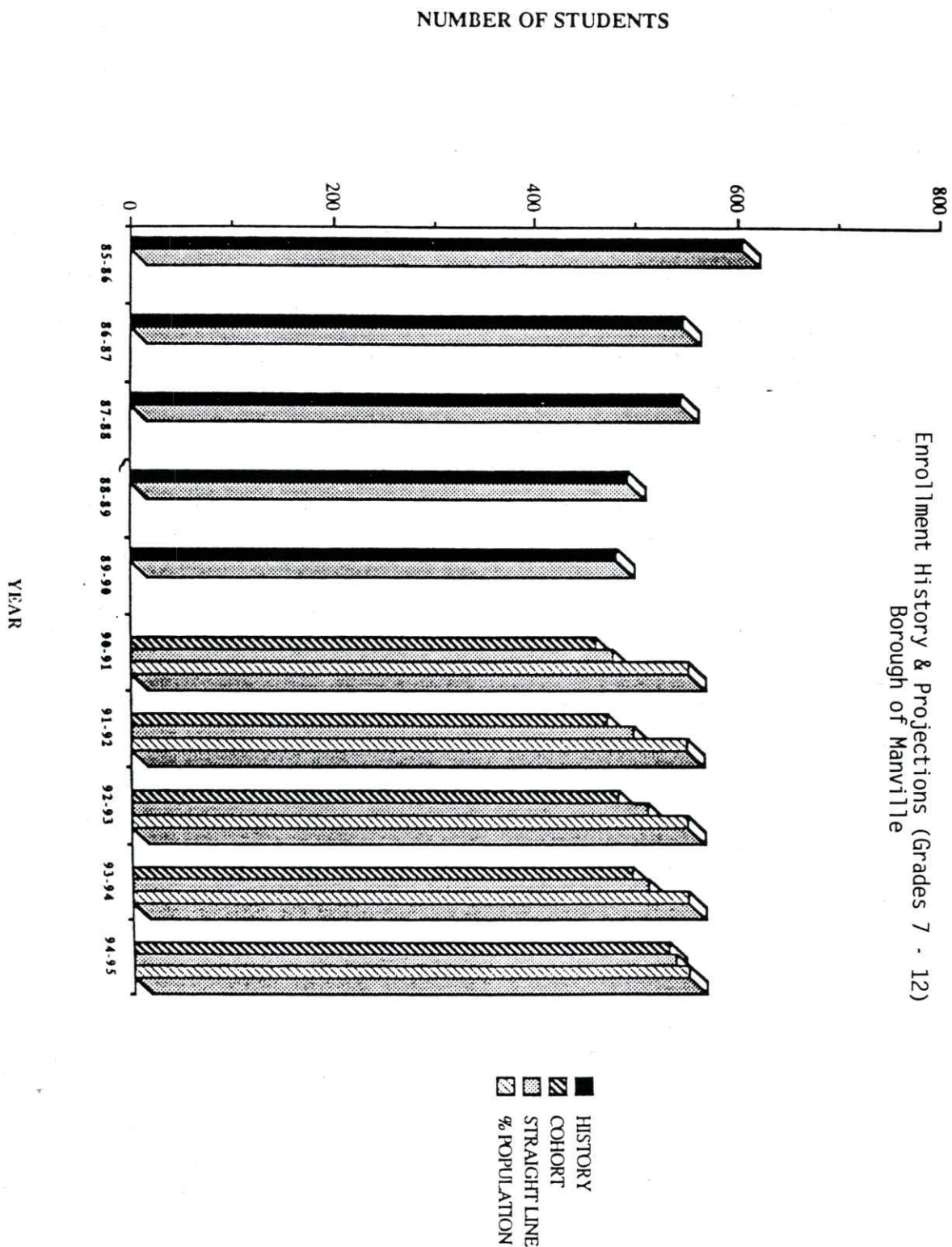
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Table C-2
Cohort Projection of Student Enrollment
Borough of Manville

| SCHOOL DISTRICT: MANVILLE | | CODE: 3000 | | | | | | | | | | | | | | | | | | |
|---------------------------|----------|------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|-------|-------|-----|-----|------|
| RATIO | 0.00 | 0.70 | 1.08 | 0.95 | 1.00 | 1.03 | 1.02 | 1.05 | 0.99 | 0.99 | 1.05 | 0.89 | 0.93 | 0.94 | 0.0517 | | | | | |
| SCHOOL YEAR | BIRTHS** | PRE-K*** | K | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | SPED. | TOTAL | K-3 | 4-6 | 7-12 |
| 1989-90 | 120 | 0 | 96 | 105 | 97 | 86 | 88 | 74 | 81 | 78 | 74 | 85 | 78 | 55 | 86 | 56 | 1,139 | 401 | 256 | 482 |
| 1990-91 | 101 | 0 | 71 | 104 | 100 | 97 | 89 | 90 | 78 | 80 | 77 | 78 | 76 | 73 | 52 | 55 | 1,120 | 389 | 270 | 461 |
| 1991-92 | 146 | 0 | 102 | 77 | 99 | 100 | 100 | 91 | 95 | 77 | 79 | 81 | 69 | 71 | 69 | 57 | 1,167 | 396 | 299 | 472 |
| 1992-93 | 139 | 0 | 97 | 110 | 73 | 99 | 103 | 102 | 96 | 94 | 76 | 83 | 72 | 64 | 67 | 59 | 1,195 | 397 | 315 | 483 |
| 1993-94 | 119 | 0 | 83 | 105 | 105 | 73 | 102 | 105 | 107 | 95 | 93 | 80 | 74 | 67 | 60 | 59 | 1,208 | 384 | 328 | 496 |
| 1994-95 | 126 | 0 | 88 | 90 | 100 | 105 | 75 | 104 | 110 | 106 | 94 | 98 | 71 | 69 | 63 | 61 | 1,234 | 402 | 303 | 529 |
| ** Five years earlier | | | | | | | | | | | | | | | | | | | | |

Source: Manville Board of Education; Educational Facilities Master Plan 1990

Figure 3
Enrollment History & Projections (Grades 7 - 12)
Borough of Manville



Source:

Manville Board of Education; Educational Facilities Master Plan 1990.

The projections show a moderate increase of the total student enrollment over a five year period of about 8 percent. Grades K-3 show about the same student enrollment over that time period. Grades 4-6 made a modest increase and grades 7-12 a similar modest increase. This data indicate at this time that the school district should have adequate facilities to house its students without overbuilding. This moderate increase in student population will be absorbed by reactivating Roosevelt School starting in 1994 with utilization of one classroom. If the recent increase in population continues at an annual increase of 5 percent, Roosevelt School will be used as a "safety value" to accommodate the increasing student population. It is further recommended that the projections be updated annually for the future facilities planning of the school system.

POLICE PROTECTION

Police protection and service is provided by a department made up of the following positions:

- Chief of Police
- Captain
- Lieutenants (2)
- Sergeants (4)
- Detectives (1)
- Juvenile Crime Investigator (1)
- Patrolmen (13)

Currently, Police Headquarters is located in the basement level of the municipal building on Main Street. As many other municipalities have experienced, Manville Police Department has outgrown its operational space and different scenarios to acquire more space are presently being studied. One alternative is to move other existing municipal offices to new office space to be built adjacent to the library and permit the Police Department to use the entire municipal building. Another option is to move the Police Headquarters to renovated space on the Johns-Manville property where police operations construction requirements could be facilitated easier than in the existing municipal structure.

In regard to criminal activity in the Borough, the Police Department responded to approximately 7,000 calls in 1992. According to the Uniform Crime Reporting Document, 1992 Crime in the United States, published by the U.S. Department of Justice, the level of crime in the Borough of Manville based on major offenses is very low relative to other municipalities in Somerset County and in the state as a whole. Most criminal behavior involves lesser impact offenses such as fraudulent activities, minor thefts, domestic violence and juvenile and drug offenses.

BOROUGH HALL

Borough administrative offices are located in the Borough Hall or municipal building on Main Street. As of 1993 additional commercial office space next to the municipal building was leased because of overcrowded conditions in the municipal building. The present building was built in 1941 and contains asbestos building products which makes major renovations to the structure cost prohibitive and impractical.

Borough officials are investigating the possibility of constructing an addition to the library which would create a new municipal complex between Washington Avenue and West Camplain Road. The proposed addition would provide administrative office space for all municipal functions including administrator's office, clerical, code enforcement, finance, health, municipal court, tax assessor, tax collector, violations, water and sewer and welfare. The police department would be located elsewhere in the Borough.

FIRE PROTECTION

The Borough is serviced by three fire companies which are manned by approximately 70 volunteers. The locations of the fire companies are shown on Figure 2, Community Facilities Plan. The fire companies collectively respond to about 120 calls per year; provide twenty-four hour coverage and have a mutual aid plan with neighboring communities.

Company No. 1 has the following equipment: One 1979 Continental 10000 GPM Pumper and one 1968 American La France Aerochief to articulated platform. Company No. 2 at North 13th Street and Washington Avenue has a 1982 Emergency One 1250 GPM Pumper. Last of all, Fire Company No. 3 uses a 1972 Hahn 1250 GPM Pumper scheduled for replacement in 1993-1994.

FIRST AID SQUAD

The First Aid Squad Building is located on South 3rd Avenue. Currently the squad has a membership of 23 volunteers all of whom are certified as Emergency Medical Technicians by the New Jersey Department of Health. In 1992, the First Aid Squad responded to between 1200 and 1400 calls. Emergency cases are transported to Somerset Medical Center for the most part, however, alternate and trauma cases are taken to Robert Wood Johnson Hospital. The squad is hoping to develop a 30 person auxiliary group in 1994. Each year a number of fund raiser events are held in town to promote the squad and collect operational funds. The squad has two Ford type ambulances; one search and recovery unit which will be retired in the coming year; one GMC light crash truck; one heavy extrication truck and two motorized row boats. The First Aid and Rescue Squad building is presently under a major renovation and expansion partially funded through state monies and grants.

LIBRARY

The Borough of Manville Free Public Library is a modern one-story structure built in 1978 and located on South 10th Avenue. The library has 60,000 shelved volumes with a 1992 total circulation of 39,642 volumes. The staff consists of one full-time head librarian, one senior full-time librarian, three part-time clerks, one part-time program coordinator and two part-time custodians.

SANITARY SEWERAGE

In June of 1992, Manville Borough connected into the Regional Sewerage System operated by the Somerset-Raritan Valley Sewage Authority (S.R.V.S.A.). Areas of the Borough are served by sanitary sewers.

Prior to this date, the Borough had one sanitary sewer plant and two pumping stations. The average flow in the mid 1980's was 1.5 million gallons per day. Manville's Sanitary Sewerage System is over 55 years old with the first construction starting in 1936. The system was operating at capacity and has severe inflow/infiltration problems which are presently being corrected. A number of rehabilitation measures will significantly reduce the inflow/infiltration problems in the system.

At this time, the system has one pump station located at South Arlington Street and Lincoln Boulevard and a new lift station off Dukes Parkway. At present, the Borough pumps approximately 1.3 million gallons per day into the regional system.

WATER FACILITIES

The Borough operates its own water distribution system and waterworks. During 1992, the yearly water demand was 320 million gallons or approximately 390,000 gallons per day from the Manville waterworks and 500,000 gallons per day from other sources.

The waterworks include four production wells; two located in Dukes Park and two located across the Raritan River in Bridgewater Township. The land in Bridgewater is leased under a long-term agreement with a private property owner. The production wells generate about 40 percent of the daily water demand. The remaining balance is provided by a bulk purchase of 500,000 gallons per day from Elizabethtown Water Company. Under this 30 year supplement agreement, the Borough will provide for any additional demand through its own wells.

Water is distributed through two holding tanks; one containing 500,000 gallons (at North 9th Street) and the other distributing 1,000,000 gallons (at North 19th Street). This system currently serves the entire Borough and two housing developments in Hillsborough Township.

With maintenance and improvements to the well fields and the long-term contract with Elizabethtown Water Company, the Borough system can supply enough water to meet yearly peak demands.

PUBLIC WORKS

The Public Works Department is located on the corner of Williams Street and Railroad Place. The main garage, storage garage and repair shop have a total floor area of 7,235 square feet.

The staff is currently made up of 17 full-time employees. The department's responsibilities include maintenance of all streets, parks and other Borough property as well as solid waste pick-up and recycling.

As of September 1993, the equipment and vehicle inventory list for the department includes the following:

| Vehicle # | Year | Condition |
|------------------------------|---------------------------------|------------------|
| Street Department | | |
| R-1 Ranger Pickup Truck | 1986 | Excellent |
| R-2 Mack Load Lugger | 1978 | Fair |
| R-4 Dodge Dakota Pickup | 1992 | New |
| *R-5 Ford F-700 Dump Truck | 1987 | Good |
| R-10 Rex Roller 4-6 Ton | 1973 | Fair |
| R-13 Elgin Sweeper | 1982 | Fair |
| R-17 Compressor | 1968 | Poor |
| R-16 Tree Bandit Chipper | 1990 | Excellent |
| R-20 Huber Grader | 1969 | Poor |
| R-21 Case Backhoe 580D | 1982 | Good |
| R-24 Leaf Loader | 1970 | Fair |
| *R-29 Ford F-700 Dump Truck | 1981 | Fair |
| *R-30 Ford F-700 Dump Truck | 1981 | Fair |
| *R-31 Dodge D-350 Dump Truck | 1981 | Very Poor |
| R-32 W-14 Case Payloader | 1981 | Fair |
| *R-33 Ford F-700 Dump Truck | 1986 | Good |
| *R-8 Ford F-350 Dump Truck | 1984 | Fair |
| R-27 Ford F-350 Stake Body | 1975 (Deadlined to go For Sale) | |
| Racyo Jr. Stump Gouger | 1986 | Fair |
| Garbage Department | | |
| G-5 Ford L-8000 Refuse Truck | 1978 | Fair |
| G-6 Ford L-8000 Refuse Truck | 1982 | Good/Fair |
| G-7 Ford L-8000 Refuse Truck | 1989 | Excellent |
| Park Department | | |
| *P-3 Ford 2910 Tractor | 1987 | Excellent |
| P-5 Ford 2000 Tractor | 1971 | Poor |
| P-6 Simplicity Tractor | 1982 | Fair |
| *P-8 Dodge D-350 Dump Truck | 1981 | Poor |
| Hudson Trailer 18 Ft. | 1991 | Excellent |

*** Denotes Snow Plow Equipped**

Snow Equipment

4 Gledhill 10 Ft. Medium Snow Plows
 3 Meyers 8 Ft. Hydraulic Angle Snow Plows
 2 Epoke TG210 Salt Spreaders
 1 Gilson 8 H.P. Snow Blower
 1 8 H.P. Sweepster

HISTORIC RESOURCES

Based on a Metal Truss Bridge Survey prepared in 1992 by A.G. Lichtenstein & Associates for the Somerset County Cultural and Heritage Commission, Manville Borough has portions of potentially historic truss bridges within its borders.

First, the 8-panel "Warren Thru Truss" Road Bridge on Bridge Street is a two lane residential bridge over six active railroad tracks. The bridge was built as a grade crossing elimination project by the Reading Railroad in 1918. The truss type was a frequent although not common pre-1940 selection for a long, wide bridge. The bridge is fairly well preserved and is historically important to the development of Manville. The consultant's recommendation is it is eligible for the National Register of Historic Places.

Second, the bridge over the Raritan River on the Johns Manville property is a two span pin-connected "Parker Thru Truss" Bridge. This truss type was favored by railroad because of its strength and economy of material. It was built by Reading Railroad in 1874. It ranks as one of the most significant rail-carrying thru truss bridges in the State because of its type, size, condition and age. It is eligible for the National Register.

Next is the 2-span "Baltimore Thru Truss" Bridge over the Raritan River at the north end of the busy Conrail yard in the Borough. The bridge is the longest of four (150 feet) similar spans built by the Lehigh Valley Railroad in the County between 1899 - 1902. The line was a major coal hauler and it developed this right of way, originally the Easton and Amboy Railroad in 1875. The Baltimore Truss is noted for its strength and rigidity and was thus appropriate for heavy freight lines. It is National Register eligible.

Last of all, is a 2-span "Pratt Thru Truss" Bridge built in 1891 and original to the development of the Port Reading Branch. This single track 2-span bridge is also located at the north end of the Conrail yard. The bridge is iron with steel used only for the eye bars and pins. Its length is 208 feet and is eligible for the National Register.

To facilitate preservation and/or further utilization of these bridge structures, a historic committee from the Borough should be organized and coordinate with the appropriate County officials for future status and determination.

POPULATION

The Borough of Manville population reached a peak in the late 1960's then declined in the 1970's and 1980's. Population has somewhat stabilized in the last few years and future growth is expected to be minimal depending on zoning/land use considerations. The most significant change has been and will be in the age composition of the population which influences long-term community facilities considerations.

A variety of factors obviously influence community population trends. The Borough is affected by national, state, regional economic, social and governmental policies. Declining birth rates, changing employment trends, consumer preferences in housing and other factors can affect the future population composition of Manville Borough. The Borough, however, can guide future development through selection of goals, objectives and policies for land development, community facilities and borough government services and functions.

Table P-1
General Population Characteristics
Borough of Manville

| | Manville Borough | New Jersey |
|-----------------------------|---------------------|------------|
| 1950 Population | 8,597 | 4,835,329 |
| 1960 Population | 10,995 | 6,066,782 |
| % Change 1950-1960 | 28% | 25.5% |
| 1970 Population | 13,029 | 7,171,112 |
| % Change 1960-1970 | 18% | 18.2% |
| 1980 Population | 11,278 | 7,364,823 |
| % Change 1970-1980 | -13% | 2.7% |
| 1990 Population | 10,567 | 7,730,188 |
| % Change 1980-1990 | -6.3% | 5.0% |
| Increase 1950-1990 | 2,000 | 2,894,859 |
| % Change 1950-1990 | 23% | 59.9% |
| % Change 1960-1990 | -4% | 27.4% |
| % Change 1970-1990 | -19% | 7.8% |
| Age Groups - 1990 | | |
| Under 5 | 6.0% | 6.9% |
| 5 - 17 | 13.0% | 16.4% |
| 18-64 | 65.0% | 63.4% |
| 65 & Over | 16.0% | 13.4% |
| Median Age | 36.1 | 34.5 (est) |
| Persons Per Sq. Mi. | | |
| 1950 | 3,438.8 | 652 |
| 1960 | 4,398.0 | 818 |
| 1970 | 5,211.6 | 967 |
| 1980 | 4,511.2 | 993 |
| 1990 | 4,266.8 | 1,042 |
| Land Area (Sq. Mi.) | 2.50 | 7,417 |
| <u>1990 Characteristics</u> | | |
| Average Household-Size | 2.57 | 2.70 |
| Total Households | 4,245 | 2,794,711 |

Source: U.S. Bureau of the Census

Prepared by: J.E. Leoncavallo Associates, 1993

Table P-2
Age Group Trends
Borough of Manville

| | 1970 | | 1980 | | 1990 | |
|------------|--------|-------|--------|-------|--------|-------|
| | Number | % | Number | % | Number | % |
| Under 5 | 1,139 | 8.7 | 574 | 5.4 | 631 | 6.0 |
| 5 - 18 | 3,813 | 29.0 | 1,761 | 16.5 | 1,494 | 14.1 |
| 19 - 24 | 1,118 | 8.5 | 1,406 | 13.1 | 866 | 8.2 |
| 25 - 34 | 1,701 | 12.9 | 1,656 | 15.5 | 2,120 | 20.1 |
| 35 - 44 | 1,794 | 13.7 | 1,222 | 11.4 | 1,422 | 13.5 |
| 45 - 54 | 1,876 | 14.3 | 1,530 | 14.3 | 1,081 | 10.2 |
| 55 - 64 | 996 | 7.6 | 1,565 | 14.6 | 1,283 | 12.1 |
| 65 + | 702 | 5.3 | 984 | 9.2 | 1,670 | 15.8 |
| Total | 13,139 | 100.0 | 10,698 | 100.0 | 10,567 | 100.0 |
| Median Age | 30.3 | | 32.6 | | 36.1 | |

Somerset County

| | 1970 | | 1980 | | 1990 | |
|------------|---------|-------|---------|-------|---------|-------|
| | Number | % | Number | % | Number | % |
| Under 5 | 15,329 | 7.8 | 11,088 | 5.6 | 16,862 | 7.1 |
| 5 - 18 | 57,607 | 29.3 | 46,035 | 22.7 | 36,607 | 15.4 |
| 19 - 24 | 13,804 | 7.2 | 18,987 | 9.5 | 17,879 | 7.6 |
| 25 - 34 | 25,072 | 12.7 | 30,807 | 15.3 | 48,028 | 20.1 |
| 35 - 44 | 28,184 | 14.3 | 27,720 | 13.7 | 40,891 | 17.0 |
| 45 - 54 | 26,280 | 13.3 | 26,341 | 13.1 | 28,739 | 12.1 |
| 55 - 64 | 16,142 | 8.2 | 21,439 | 10.7 | 23,260 | 9.8 |
| 65 + | 14,019 | 7.2 | 19,156 | 9.4 | 26,013 | 10.9 |
| Total | 198,372 | 100.0 | 203,129 | 100.0 | 240,279 | 100.0 |
| Median Age | 30.5 | | 32.8 | | 34.8 | |

Source: U.S. Bureau of Census

Prepared by: J.E. Leoncavallo Associates, 1993

Table P-1 shows a variety of characteristics of the population of the Borough and the state as a whole. The demographic features include;

1. In the fifties, the Borough population outpaced state growth. The 1960's saw a brisk local population rate the same as the state of New Jersey. In the 1970's the Borough's population began to decline while state population increased modestly. From 1980 to 1990 the Borough population has declined by about 666 persons (6.3%) while the state increased by about the same, percentage-wise (5.0%).
2. From 1970 to 1990 the population of the Borough declined by almost 20 percent while the state population increased by approximately 8 percent. A difference of 2.5 times.
3. The Borough has a lower percentage of children under 18 and a higher proportion of persons aged 65 and over than the state.
4. Population density in Manville is about four times higher than in the state as a whole. This is expected in a fully developed community.
5. The average household size in the Borough is 95 percent of the state household size. Approximately 56.5 percent of all households in the Borough, in 1990, are 1 to 2 persons.

Focusing closer to the local and county group trends, Table P-2 indicates the following characteristics:

1. In the pre-school population group, the Borough has a lower ratio in this group than does the County. However, both the Borough and the County experienced an increase in the size of this group since 1980. This increase may be attributed to the large proportion of persons in the prime household forming and childbearing ages of 25 to 44. It is this group or cohort, comprised of the baby boomers and boosted by migration, that experienced the most significant increase in Somerset County from 1980 to 1990. This "Baby Boom Echo" has resulted in increased demand for child care services and expansion of educational facilities in some areas of the County.
2. The number of school-age children dropped within the Borough and the County from 1980 to 1990. This reflects statewide trends as this age group declined by 9.7 percent in the 1980's.
3. From 1980 to 1990, the Borough and the County experienced a significant increase in the population aged 25-44. The increase in the pre-school population above often correlates with increases found in the 25-34 age group as formerly discussed.

4. The median age in both the Borough and the County increased slightly between 1980 and 1990. Although the higher increase occurred at the local municipal level.

NATURE OF POPULATION CHANGE

Population changes occur from births, deaths and migration (the movement of residents into and out of the Borough). The migration patterns out of the Borough were primarily responsible for the decrease in population during the 1960's and 1970's. This is indicated in Table P-3, Nature of Population Change: 1970-1990 and Table P-4, Natural Population Changes, 1965-1990 which shows the annual natural population changes.

During the 1970's the out-migration of residents accounted for a decrease of 1,171 persons or 66 percent of the 1,751 population change in the Borough. Natural increase, births minus deaths accounted for 580 or 33 percent of the population change.

In the 1980's the population change was due to a net out-migration much less than in the 1970's as well as an increase in the number of deaths for the decade as compared to the 1970's. There was also a 12.5 percent decrease in births between the 1970's and 1980's. The total population change between 1980 (11,278) and 1990 (10,567) coupled with a smaller 1980-1989 natural increase of 229 resulted in a net out-migration of 4.2 percent.

Table P-3

Nature of Population Change: 1970 - 1990
Borough of Manville

| | <u>1970 - 1979</u> | <u>1980 - 1989</u> |
|---------------------------|----------------------|----------------------|
| I. Base Population | 13,029 (1970) | 11,278 (1980) |
| II. Natural Increase | | |
| Total Births | 1,464 | 1,301 |
| Total Deaths | - 884 | -1,072 |
| Natural Increase | <u>580</u> | <u>229</u> |
| III. Net Migration | | |
| Total Population Change | -1,751 | -711 |
| Natural Increase | <u>580</u> | <u>229</u> |
| Net Migration | <u>-1,171</u> | <u>-482</u> |
| IV. Net Population Change | | |
| Base Population | 13,029 | 11,278 |
| Natural Increase | - 580 | - 229 |
| Net Migration | <u>-1,171</u> | <u>- 482</u> |
| Net Population | <u>11,278 (1980)</u> | <u>10,567 (1990)</u> |

Sources: U.S. Census of Population: 1970, 1980, 1990
New Jersey Department of Health,
Center for Health Statistics: 1970 - 1990

Prepared by: J.E. Leoncavallo & Associates, 1993

Table P-4
Natural Population Changes: 1965 - 1990
Borough of Manville

| Year | Births | Deaths | Natural Increase |
|-------------------|--------------|--------------|------------------|
| 1965 | 248 | 74 | 174 |
| 1966 | 234 | 83 | 151 |
| 1967 | 221 | 92 | 129 |
| 1968 | 199 | 95 | 104 |
| 1969 | <u>223</u> | <u>72</u> | <u>151</u> |
| Total 1965 - 1969 | <u>1,125</u> | <u>416</u> | <u>709</u> |
| 1970 | 209 | 90 | 119 |
| 1971 | 193 | 103 | 90 |
| 1972 | 165 | 80 | 85 |
| 1973 | 142 | 98 | 44 |
| 1974 | 128 | 79 | 49 |
| 1975 | 121 | 77 | 44 |
| 1976 | 128 | 101 | 27 |
| 1977 | 128 | 80 | 48 |
| 1978 | 122 | 94 | 28 |
| 1979 | <u>128</u> | <u>82</u> | <u>46</u> |
| Total 1970 - 1979 | <u>1,464</u> | <u>884</u> | <u>580</u> |
| 1980 | 140 | 101 | 39 |
| 1981 | 141 | 98 | 43 |
| 1982 | 130 | 111 | 19 |
| 1983 | 120 | 106 | 14 |
| 1984 | 121 | 105 | 16 |
| 1985 | 101 | 111 | -10 |
| 1986 | 147 | 113 | 34 |
| 1987 | 142 | 112 | 30 |
| 1987 | 123 | 101 | 22 |
| 1988 | <u>136</u> | <u>114</u> | <u>22</u> |
| Total 1980 - 1989 | <u>1,301</u> | <u>1,072</u> | <u>229</u> |
| 1990 | 145 | 89 | 56 |

Source: New Jersey Department of Health, Center for Health Statistics; 1965 - 1990

Prepared by: J.E. Leoncavallo & Associates, 1993

OTHER POPULATION CHARACTERISTICS

Sex - The male to female ratio in the Borough is 48.5 percent males to 51.5 percent females. Compared to a Somerset County figure of 49.1 percent males to 50.9 percent females and state figures of 48.3 percent males of 51.7 percent females.

Race - Manville Borough is a predominantly white population. The 1990 Census recorded a total of 19 blacks, which is 0.2 percent of the population. These figures contrast with the County percentage of 12.0 percent non-whites.

Education - The percentage of persons age 18 years and over who had completed high school was 74.0 percent and those who had completed four years of college was 9.0 percent in 1990. This compares with the County average of 86.2 percent who completed four years of high school and 36.0 percent who completed four years of college.

Employment - Employment trends and statistics are outlined in the Economic Plan Element of the Master Plan.

FUTURE POPULATION

Several factors indicate that the Borough of Manville will experience minor change in population during the next twenty years:

1. The Borough contains a limited amount of vacant developable land for single family housing.
2. Even with potential redevelopment of the Johns-Manville site off of North Main Street in the long term future, commercial employment opportunities created by such development and its complimentary increased housing demand will be satisfied by new residential development outside of Manville but within the County.
3. Average household size can be expected to continue to decrease. Although the number of housing units will increase slightly as the remaining vacant residential land is developed, the population will stabilize or decrease slightly.
4. It is anticipated that although the number of elderly will increase significantly, the growth will be moderated by an out-migration of those aged 65 years and over.

Table P-5

Population Projections: 1980 - 2010
Borough of Manville and Somerset County

| | 1980 Census | 1990 Census | 1995 | 2000 | 2005 | 2010 |
|---------------------|----------------|----------------|---------|---------|---------|---------|
| Borough of Manville | 11,273 | 10,567 | 10,364 | 10,211 | 10,354 | 10,513 |
| Somerset County | 203,120 | 240,279 | 252,863 | 259,304 | 270,896 | 276,662 |

Source: Somerset County Planning Board, 1992

Prepared by: J.E. Leoncavallo Associates, 1993

POPULATION PROJECTIONS

The Somerset County Planning Board has projected the population for the County and its municipalities through the year 2010. The municipal projections were calculated by taking into account population changes from 1980 to 1990, the number of building permits issued from 1970 to 1990 and known plans for development together with the effect of various state environmental regulations. Table P-5 shows the Somerset County projected population for Manville Borough to the year 2010 to be 10,513.

CONCLUSIONS AND RECOMMENDATIONS

The population in Manville is projected to decrease slightly in the next seven years to 10,211 by 2000. After that it will slightly increase again to the year 2010. The Somerset County estimates are adjusted for local conditions and it is recommended that those projections be used as a general guide for future growth. Potential land use and density changes in the proposed master plan may alter these projections in a positive manner, moderately. It is recommended that actual growth be monitored periodically to determine the rate of change within the Borough. Various indices can be monitored and accurately including birth and death records; building and demolition permits; school enrollments; and state, county and federal population estimates. The latter estimates are being developed jointly on the basis of a variety of component data including adjusted birth rates, sample surveys, vehicle registrations, building permit data, affordable housing counts and statistics and others. Close coordination with county, state and federal agencies can provide updated data to determine population trends in the Borough.

NATURAL RESOURCES

Although Manville is highly developed, environmental considerations will continue to influence future land use planning within the Borough. This section summarizes the key natural resources which will have an effect on the development of remaining vacant land areas as well as redeveloped areas.

TOPOGRAPHY

The topography of Manville is fairly level with gentle slopes in certain areas. There are no areas which are unsuitable for development because of excessive or steep slopes. The 1982 master plan contains a topography map (plate 4) which shows the ten-foot interval contours within the Borough. This mapping also shows the areas of the Borough that are subject to flooding at a one and one-half storm year frequency. These areas are along the Borough's north and easterly boundaries - the Raritan and Millstone Rivers.

SOILS

There are two basic soil groups in Manville Borough; the soils formed in material weathered mainly from shale but partly from conglomerate and argillite and soils formed in recent and old alluvium. Within these groups there are three soil associations in the Borough. A soil association is a landscape that has a distinctive proportional pattern of soils.

In the western portion of the Borough is the Penn-Klinesville-Redville Association, consisting of nearly level to very steep, moderately deep and shallow well drained to somewhat poorly drained loamy and shady soils underlain mainly by red shale. This association is on the uplands where the landscape is undulating and rolling. Depth to bedrock, steepness of slope and a seasonal water table may be limitations for community development. This soil association is approximately 25% of the Borough.

The other two associations found in alluvium materials are Dunellen-Rowland-Birdsboro Association and The Rowland-Birdsboro-Raritan Association. The latter association is nearly level to strongly sloping, deep, well drained to somewhat poorly drained loamy soils formed in alluvial sediment; on floodplains and terraces. These soils occupy a small portion of the Borough (about 5%) along the Raritan River in the north section of the Borough and along the Millstone River in the southern portion of town. Community development limitations include frequent flooding and perched seasonal water tables.

The former association - Dunellen-Rowland-Birdsboro Association consists of nearly level to strongly sloping, deep, well drained to somewhat poorly drained loamy soils formed in glacial outwash or alluvial deposits; on floodplains and terraces. These soils occupy mostly all the central and eastern sections of Manville totalling approximately 70% of the Borough. Frequent flooding can be a community development limitation in this soil association.

The 1976 Soil Survey of Somerset County, prepared by the U.S. Soil Conservation Service, contains general and specific soil information and mapping in reward to the soil associations described above.

GEOLOGY

Manville Borough is located within the Brunswick Formation of the Triassic Lowlands Basin of Central New Jersey in the Piedmont Physiographic Province. Four regions within the Brunswick Formation are the highlands; the Somerville lowlands; the Watchung highlands and the Sourland-Rocky Hill uplands. The Borough which lies on the Somerville lowlands is an area underlain mainly by red shale, sandstone and a little Kittatinny limestone. These geologic units are located south of the highlands province and is found in all portions of Somerset County except for Bernardsville, Bernards Township and Warren Township.

The Brunswick Formation, often called the Brunswick Shale, consist of shale interbedded with fine-grained red sandstone. It is estimated to be approximately six to nine thousand feet thick. Areas underlain by the Brunswick Formation exhibit a gentle rolling topography with limited relief and wide valleys. The low point in the County can be found in Franklin Township, adjacent to Manville Borough, along the Raritan River where the elevation is below ten feet above sea level.

Although the shale itself is virtually impermeable, it is moderately fractured and jointed with cracks intersecting at all angles permitting ground water to flow in many directions. Most cracks and fissures can be found within three hundred feet of the surface and the number tends to decrease with increases in depth. Where circulating water has enlarged small cracks and crevices, or where a fault is encountered, a better than average ground water yield is available. In general, the Brunswick Formation is a reliable water source for most domestic and industrial uses including public supply.

VEGETATION

The developed sections of Manville occupy nearly level or gently sloping land between the Raritan and Millstone River floodplains. Floodplains are well-defined, broad, flat, valley surfaces that are covered with water when a stream overflows its banks. The Raritan River in the area of Manville has a well formed floodplain as do its northern tributaries such as the Lamington River. The Millstone River which empties into the Raritan also has a wide floodplain area from Princeton to Manville.

Each of these floodplains illustrates the classic structure of this type of formation. The land on the outer part of the floodplain is slightly higher in elevation and better drained than the inner portion of the floodplain. The inner part is not usually as well drained because it is lower and receives seepage from higher adjacent terrace land and because its soil is less sandy in texture than that of the outer floodplain. Though the frequency, duration and depth of flooding of the floodplains may vary, the resulting condition of poorly drained land creates just about the same type of plant habitat as that of swampland of different origin.

On the better-drained outer sections of the floodplains of the Raritan and Millstone Rivers, the characteristics trees include the willow, river birch, sycamore and box elder. On the more poorly drained inner floodplains of these rivers, these tree species typical of the central New Jersey lowlands grow abundantly; these include the ash, pin oak, silver maple, swamp white

oak, red maple, elm and black gum with occasional representatives of the more upland species. The fragrant smelling spicebush is the most common shrub. On the floor of the forest among remains of fallen trees grow many herbs such as the sensitive fern, touch-me-not, may apple, jack-in-the-pulpit, spring beauties, trout lilies and the cardinal flower. In areas where forests have been disturbed by man or where trees have been downed by strong winds, vines are common and grow almost to treetops. These vines include poison ivy, Virginia creeper, Japanese honeysuckle, bittersweet and wild grape.

On the better-drained portions of the Raritan floodplain west of New Brunswick, trees typical both of swamps and of the upland intermingle and no species is so abundant that it can be called dominant. The result is a forest of unusual diversity, with representatives of all the trees mentioned above and a few additional species such as Norway maple, honey locust, sassafras, black cherry, sumac, ailanthus, mulberry and hawthorne. Shrubs include the spicebush, elderberry, several species of viburnum, Japanese barberry and the silky dogwood. In many places the herb bluebells forms a spring carpet.

Master Plan

POLICIES, GOALS AND OBJECTIVES

The Borough of Manville has the opportunity to embark into a period of new development which promises the potential of widespread community improvements and increased economic stability. The challenge is to seize the best of the opportunities offered, without loss of the social and aesthetic qualities which the Borough has strived to maintain.

In general, the Manville Borough Master Plan, as every municipal master plan, is based on the purposes and general objectives established by the New Jersey Municipal Land Use Law (N.J.S.A. 40:55D - 1 et seq.). These objectives include the following:

- To encourage Borough action to guide the appropriate use and development of all lands in the State, in a manner which will promote the public health, safety, morals and general welfare.
- To secure safety from fire, flood, panic and other natural and man-made disasters;
- To provide adequate light, air, and open space;
- To ensure that the development of Manville Borough does not conflict with the development and general welfare of neighboring municipalities, Somerset County and the State as a whole;
- To promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions plus preservation of the environment;
- To encourage the appropriate and efficient expenditure of public funds by the coordination of public development with land use policies;
- To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses plus open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens;
- To encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight;
- To promote a desirable visual environment through creative development techniques and good civic design and arrangements;
- To promote the conservation of open space and valuable natural resources, and to prevent urban sprawl and degradation of the environment through the improper use of land;

- To encourage planned unit development which incorporate the best features of design and relate the type, design and layout of residential, commercial, industrial and recreational development to the particular site;
- To encourage senior citizen community housing construction;
- To encourage coordination of the various public and private procedures and activities shaping land development with a view lessening the cost of such development and to the more efficient use of land;
- To promote utilization of renewable energy sources; and
- To promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling Plan goals and to compliment municipal recycling programs.

The Planning Board proposes four general policies which, together, form a statement which serves as a guide for the Borough's future. The general policies are of great importance since they form the basis for all that follows in this Master Plan. The four general policies are defined by eight goals which support the policies. Each planning goal is further defined by several objectives which will implement the specific planning goal.

GENERAL POLICIES

1. **SOCIAL:** The primary residential character and community cohesiveness of the Borough should be maintained and where possible, reinforced and expanded.
2. **AESTHETIC:** The ambiance and character of the Borough should be maintained and improved by emphasizing a desirable visual environment.
3. **ECONOMIC:** A healthy commercial community should be maintained and desirable business growth encouraged consistent with the Social and Aesthetic Policies. To accomplish this, it is necessary to maintain a stable tax and employment base.
4. **FUNCTIONAL:** Maintenance, and where necessary, expansion or improvement of community services, facilities and other physical infrastructure should be encouraged in support of the Social, Aesthetic and Economic Policies.

GOALS AND OBJECTIVES

The Planning Board proposes these Goals (general, long-term) and Objectives (more specific, short term) in a priority order as a basis for the Plan:

| Provides Major Support To This General Policy | | | | |
|---|--------|-----------|----------|------------|
| | Social | Aesthetic | Economic | Functional |
| GOAL 1 - PRESERVE EXISTING RESIDENTIAL NEIGHBORHOODS | | | | |
| <u>Objectives</u> | | | | |
| 1A. Examine all residential zone boundaries; recommend adjustments to protect residential uses | | X | X | |
| 1B. Expand residential uses and/or zones where desirable | | X | X | |
| 1C. Consider use of home professional offices in all residential zones | | X | X | |
| 1D. Emphasize the importance of vigorous code enforcement programs in the maintenance of viable residential neighborhoods | | | X | |
| 1E. Continue to emphasize curb, sidewalk and pavement rehabilitation programs in residential neighborhoods | | | X | |
| GOAL 2 - EXPAND RESIDENTIAL USES AND/OR ZONES WHERE DESIRABLE | | | | |
| <u>Objectives</u> | | | | |
| 2A. Expand residential zone districts into underutilized areas of non-residential zones where appropriate | X | X | X | |

| | Social | Aesthetic | Economic | Functional |
|---|--------|-----------|----------|------------|
| 2B. Encourage the provision of a variety of housing types and ownerships to accommodate a broad economic base | | X | | |
| GOAL 3 - REINFORCE THE RESIDENTIAL "SMALL TOWN" CHARACTER OF THE BOROUGH | | | | |
| <u>Objectives</u> | | | | |
| 3A. Implement appropriate design standards | | X | | |
| 3B. Implement appropriate sign control regulations | | X | | |
| 3C. Develop a concept and public image that Manville is a quality small community | | X | | |
| GOAL 4 - ENCOURAGE AN IMPROVED VISUAL ENVIRONMENT AND THE PRESERVATION OF THE PHYSICAL AND NATURAL ENVIRONMENT WHERE APPROPRIATE | | | | |
| <u>Objectives</u> | | | | |
| 4A. Review development regulations with respect to height, coverage, setbacks, landscaping and similar aesthetic items in order to produce an opportunity to achieve desirable development without artificial or arbitrary restrictions | | | X | X |
| 4B. Encourage planning and implementation of a "Main Street" Concept which will improve the physical and visual character of the business district | X | X | X | |
| 4C. Require curb, sidewalk and pavement rehabilitation whenever possible to improve visual character throughout the Borough | X | X | X | X |

| | Social | Aesthetic | Economic | Functional |
|--|--------|-----------|----------|------------|
| GOAL 5 - ENCOURAGE THE MAINTENANCE OF THE EXISTING BUSINESS COMMUNITY AND PROVIDE FOR DESIRABLE NEW COMMERCIAL DEVELOPMENT | | | | |

Objectives

- | | | | | |
|---|---|---|---|---|
| 5A. Develop a growth strategy to properly position the Borough with regard to anticipated regional growth and State Redevelopment | | | X | |
| 5B. Encourage economic reuse of existing structures where feasible | | | X | X |
| 5C. Identify desirable development areas and, particularly, pedestrian oriented development areas | X | | X | X |
| 5D. Encourage major visual improvements in business zone which will provide a pedestrian emphasis | X | | | X |
| 5E. Encourage new development which will not place unmanageable demands on the Borough's utility systems and/or will assume responsibility for required improvements in an equitable manner | | X | X | X |

GOAL 6 - PLAN AND IMPLEMENT THE EXPANSION AND IMPROVEMENT OF COMMUNITY FACILITIES AND PROGRAMS CONSISTENT WITH A STABLE REVENUE BASE

Objectives

- | | | | | |
|--|---|---|--|---|
| 6A. Develop detailed planning for new municipal facilities such as municipal police and administrative offices | | X | | X |
| 6B. Plan & implement senior citizens and youth recreation facilities | X | | | X |

| | Social | Aesthetic | Economic | Functional |
|--|--------|-----------|----------|------------|
| 6C. Plan & implement improvements to Borough parks and recreational facilities | X | X | | X |

GOAL 7 - PLAN & IMPLEMENT THE IMPROVEMENT OF CIRCULATION, UTILITIES AND OTHER INFRASTRUCTURE ELEMENTS CONSISTENT WITH A STABLE REVENUE BASE

Objectives

| | | | | |
|---|---|---|---|---|
| 7A. Develop workable proposals to provide adequate circulation/access in the Main St. business district | | X | X | X |
| 7B. Develop plans for continued improvement to Borough roadways and bridges where practical & economically feasible | X | X | X | |

GOAL 8 - PLAN AND IMPLEMENT MANAGEMENT, BUDGET AND FINANCIAL PROGRAMS TO ENCOURAGE ACHIEVEMENT OF THESE GOALS AND OBJECTIVES AND A STABLE REVENUE BASE

Objectives

| | | | | |
|--|---|---|---|---|
| 8A. Establish & maintain a viable capital improvement program budget | | X | X | |
| 8B. Consider the possibility of a special improvement district to finance major infrastructure improvements in defined areas | | X | X | |
| 8C. Continue to encourage maximum participation in available State and Federal programs | X | | X | X |

LAND USE PLAN ELEMENT

INTRODUCTION

The Land Use Plan is a dynamic planning document which is the cornerstone of the Master Plan and the Master Plan process. The Land Use Plan Element will serve as a guide for the Borough in making its land use/community planning decisions. The Plan will be the "framework" for zoning regulation and planning in the Borough. After the adoption of the Land Use Plan, the Planning Board should recommend zoning ordinance amendments to implement the Land Use Plan Element.

In the Land Use Plan, each land use district is described to provide a precise statement of the nature of land use which should be permitted in each district. In accordance with the requirements of the Municipal Land Use Law, a description is supplied of any general changes needed in the zoning ordinance to implement the Land Use Plan.

PLAN DESCRIPTION AND POLICY

This Land Use Plan divides the Borough into eleven suggested zoning districts with the following descriptions:

S 100 - Medium Density Residential: This district would remain unchanged in concept and mapping from the existing zoning ordinance except for R75 change in Weston area. The primary permitted use would be detached single family dwellings on a lot of 10,000 square feet or more. In establishing zoning district standards and reviewing requests for relief from the Ordinance, the lot frontage or width standard should be given high priority and maintained at a minimum of 100 feet.

S 80 - High Density Residential : This district would provide for single family homes and two-family dwellings on lots of not less than 6,000 square feet and 8,000 square feet, respectively. The lot size is consistent with established development patterns in the Borough.

The change recommended in the mapping of this district is to expand the district along West Camplain Road between 3rd Street and South 12th Street from the Commercial Zone.

S 75 - High Density Residential: This single family zone district category predominates the southern portion of the Borough and would be expanded to include the area along Royce Brook on the east side from North Greasheimer Street in a northern direction to East Frech Avenue and on the west side of the brook from the Borough boundary northeast to the intersection of Jefferson Terrace and Colorado Avenue because of varying lot size. Lot size of 7,500 square feet should be maintained.

S 60 - High Density Residential: This zone district consists of a small portion of the Borough located along East Camplain Road and the Reading Railroad property. The district permits single family homes on 6,000 square foot lots. The boundary of this district would remain the same as previous S-60 zoning descriptions except for the area between Brooks Boulevard and Chestnut Street West of the Manville High School. The recommended change in mapping this district is to add this additional area to the S-60 zone designation because many lots in the immediate area are 5,000 to 6,000 square feet.

S 50 - High Density Residential: This zone district category is dominate in the "Lost Valley" area of the Borough and in the northern portion of town along 7th, 8th and 9th Streets; north of Brooks Boulevard. The district permits single family homes on 5,000 square foot lots with lot widths of 50 feet. Expansion of the zone district from the existing zoning ordinance is recommended for the industrial zone in this area.

S 80A - High Density Residential: This new zone district category provides for multi-family housing in a new area west of South Main Street. At the present time, the area has been zoned commercial which permits dwelling units on a second story or above. Commercial activity is nil and it is recommended that the use concept of apartment development at a maximum density of 12 units per acre for apartments be adopted. A maximum height of 3.5 stories is suggested as a design standard. It is further suggested that a study be prepared to select lots which could become Borough parking lots. These lots would serve the nearby commercial areas during the day and potential apartment dwellers at night. One possible payment strategy would be to trade off other Borough owned residential lots with property owners in or near the proposed zone district.

C - Commercial: The Commercial districts consists of a primary central business district along Main Street, two small satellite/convenience districts in residential neighborhoods in the southern portion of the Borough and one linear extension area along West Camplain Road. The primary central business district land use objectives are to preserve the pedestrian shopping scale of development along Main Street and to avoid land uses which conflict with commercial development patterns and the long-term viability of the Commercial Zone. After adoption of the Master Plan, zoning regulations should be reviewed to minimize impact on adjacent residential areas.

With existing circumstances of the Johns-Manville Inc. property, a window of opportunity exists at this time to expand the Commercial District along North Main Street(north of Lehigh Valley Railroad property) in a village or hamlet setting serving mixed land uses in a high quality design concept.

The following map changes have been included in this Land Use Plan Element:

1. Remove the commercial designation along West Camplain Road from South 5th Street to midblock between South 11th and 12th Streets.
2. Remove the commercial designation in the area of 3rd & 4th Streets and South & Dakota Streets and Washington & Filax Avenues.

3. Expand the commercial zone north of the Lehigh Valley railroad along easterly North Main Street with an average depth of approximately 670 feet.

I - Industrial: The Industrial Zone District is shown in the same locations as is presented in the existing zoning ordinance, with the exception of the Johns-Manville property in the northeastern portion of the Borough and Lost Valley Industrial Zone. The purpose of the industrial district should be to provide an area in which the remaining industrial type uses (namely railroad activity and other commercial/ industrial operations) can be carried out in the Borough.

BP 1 - Business Park: This new use designation is shown in the area previously zoned industrial and located on property under present or previous ownership of Johns-Manville Corporation. The objective of this zone district is to permit business related uses in a "business park" environment that offers a variety of development criteria as to lot coverage, building height and development intensity. General commercial activities such as golf centers; health spa/clubs; sports recreational centers and other non-retail commercial services which may normally be permitted in a highway commercial zone should be permitted in this district. Other service uses such as day care facilities should also be permitted. Large lot size of 1 to 2 acre minimum is recommended.

It is also recommended that the BP-1 land use area be considered for a "Park and Ride" facility in conjunction with the establishment of a new commuter railroad station. Given potential for expanding rail service along the Conrail freight lines in Manville and to the east, a cost-effective method of increasing transportation capacity is rail extensions to the Raritan Valley Line which presently provides service to Newark and New York City. A railroad station compliments many uses contemplated for the proposed BP-1 district and may be the key to developing a viable expanded center as suggested in the State Development and Redevelopment Plan Goals and Strategies.

With the proposal of a collector road through the Johns Manville site, location of appropriate acreage outside the floodplain but adjacent to existing rail sidings is plausible and should be further studied and investigated. One possibility suggested in the 1987 Somerset County Master Plan is the utilization of the Leyland Railbus, which has a proven record in Great Britain for providing rail service to lower density areas. All of Southern Somerset County would be easily accessible to this location in the Borough.

BP 2 - Business Park: This new use designation compliments the above BP 1 zoning district by requiring larger lots of 3 to 4 acre ~~minimum~~ for business park development. Retail and wholesale warehousing and distribution with exceptions would be permitted as well as administrative offices of industrial or business concern.

SC - Senior Center: This zone district is recommended as a way of providing for senior citizen housing opportunities in the central business district area of the Borough. It is recommended that a 10 acre site be developed on the Johns-Manville property for two story apartments at 12 dwelling units per acre or for a 3 to 4 story midrise apartment at 20 dwelling units per acre. The proposed site could provide 120 to 200 units of senior citizen housing convenient to the Manville business district.

RECREATION, CONSERVATION AND OPEN SPACE PLAN ELEMENT

The Borough of Manville has a more than adequate amount of land devoted to park, recreation and open space. Table R-1, Public Recreation & Open Space, provides the components of recreation and open space lands in the Borough.

In terms of recreational needs assessment, there are two generally accepted standards for the amount of land devoted to active and passive recreation at the local municipal level. The New Jersey Council of Affordable Housing and the State Planning Commission as well as the Somerset County Parks Commission use a standard of three percent of land area for long term needs or goals. In the recent Somerset County 1992 Recreation & Open Space Master Plan, a commonly used population ratio standard is eight to ten acres per 1,000 population. The land area of the Borough in acres is 1,600. The three percent standard yields 48 acres as the long term objective or goal to be met. The standard of ten acres per 1,000 population would call for approximately 106 acres of recreation and open space based on the 1990 population of 12,567 for short term recreational goals.

The Borough has a total of about 116 acres of land devoted to parks, recreation and open space. This includes a ten acre area (Gerber field) leased from Johns-Manville Corporation. Of the 116 acres, approximately 56 acres is developed with the remainder being undeveloped. The Borough meets the recreation and open space standard on the basis of three percent of land area. There is a small surplus of ten acres on the population ratio standard. Most municipalities which have a high population density similar to the Borough's are not able to meet the population-based standard and use the land area standard as a long term objective. In communities like Manville, consideration should be given for extensive floodplain areas which are available for relaxation even if they are not public lands. The estimated amount of floodplains in the Borough is about 210 acres.

It is recommended the Borough initiate a program of limited park development throughout the town. Manville Borough should coordinate park development with the parks/recreation director and Commission as well as other Borough agencies. The Borough should coordinate park development with other expenditures through capital improvements programming. It is further recommended that a recreation, park and open space sub-element be created in 1994 that would inventory and assess all recreation, park and open space lands and make specific recommendations for expansion design of existing parks; acquisition of additional open space and method of financing such projects. The "Greenways Network" proposed in the Somerset County Parks, Recreation and Open Space Master Plan should be reviewed and incorporated into the Borough's recreation, park and open space sub-element plan.

Table R-1
Public Recreation & Open Space
Borough of Manville

| Public Park Facility | Acres Developed/Undeveloped | Total |
|---|--------------------------------|-------|
| Community Parks | | |
| Veteran Memorial Park | 3.2/30.0 | 33.2 |
| Dukes Park | 12.9/.1 | 13.0 |
| Lincoln Park | 9/11 | 20.0 |
| Neighborhood Parks | | |
| Papawick Memorial Park | 3.5/12.4 | 15.9 |
| Haran Avenue Playground | .5/.36 | .86 |
| Cooper Street Park | 1/6.2 | 7.2 |
| Weston School Playground | 2.5/0 | 2.5 |
| Roosevelt School Play Area | 1.0/0 | 1.0 |
| Main Street Gazebo Area | .5/0 | .5 |
| Play Fields | | |
| Manville High School & Alexander Batcho Intermediate School Playfields | 12/0 | 12.0 |
| Gerber Field (Lease Agreement) | 10/0 | 10.0 |
| | 56.1/60.1 | 116.2 |

Prepared By: J.E. Leoncavallo Associates, 1993

COMMUNITY FACILITIES PLAN ELEMENT

Existing community facilities are described completely in the background studies. The Community Facilities Map and related text in the Basic Planning Studies section are adopted heretofore as the Community Facilities Plan of the Master Plan.

RELATIONSHIP OF THE BOROUGH OF MANVILLE MASTER PLAN TO STATE, REGIONAL AND AREA PLANS

The Borough of Manville Master Plan and Land Use Districts have been compared with the adopted New Jersey State Development and Redevelopment Plan, The 1987 Somerset County Master Plan, The Somerset County Solid Waste Management Plan and The Land Use districts of adjacent municipalities.

NEW JERSEY STATE DEVELOPMENT AND REDEVELOPMENT PLAN

In 1980 the New Jersey Department of Community Affairs updated the 1977 State Development Guide Plan to provide a framework for State policy decisions with respect to future growth patterns within New Jersey. The adopted 1992 State Development and Redevelopment Plan, which is the work product of this on-going planning process, includes a summary of existing conditions and emerging growth trends, an identification and analysis of major natural resource characteristics and current development patterns, and a statement of major planning goals which attempt to achieve a balance between conservation and development.

Under the State Plan management structure, five types of "centers" and five general "planning areas" are envisioned. The centers include: urban centers; towns, regional centers, villages and hamlets. Planning areas are Metropolitan Planning Areas (PA1); Suburban Planning Areas (PA2); Fringe Planning Areas (PA3); Rural Planning Areas (PA4) and Environmentally Sensitive Planning Areas (PA5).

The Borough of Manville is noted as an existing "Town Center" in the Plan. Based on the Plan's planning policies and criteria, the Manville Borough Master Plan is compatible and complements the Plan. One facet of implementation of the State Plan will be through a "Center Designation Process." The purpose of this process is to recognize centers noted on the State Plan and give "Designated Centers" priority for discretionary State funding as well as coordinated permit review. It has been recommended in the Borough Master Plan that Manville apply for this recognition to the Office of State Planning. The 1993 Borough Master Plan will provide much of the required information and facilitate the process.

1987 SOMERSET COUNTY MASTER PLAN

The Master Plan elements for Manville Borough have been developed in accordance with the Somerset County Master Plan wherever feasible. The County Master Plan proposes the Borough as a "Community Settlement" because of its concentration of retail and business services and as a "Growth Management Area" because of its variety of housing types, job center, public facilities, environmental conditions and infrastructure access.

HOUSING PLAN ELEMENT

The Housing Plan Element of the Master Plan is a required element along with the Land Use Plan of the Borough's Master Plan. Through 1992, the Borough's identified indigenous need was zero units based on the provisions of the Fair Housing Act. Its reallocated present and prospective need numbers were also zero. This was due primarily to the lack of available, vacant and developable land in the Borough and to the fact that a large portion of the Borough's housing stock is affordable to low and moderate income households.

The housing numbers from the Council on Affordable Housing (C.O.A.H.) from 1993-1999, dated February 3, 1993, include the following for Manville Borough:

| | |
|-------------------------------|---------|
| Actual Deteriorated Units: | 36 |
| Indigenous Need: | 36 |
| Reallocated Present Need: | 5 |
| Present Need 1993: | 41 |
| Prospective Need 1993-1999: | 25 |
| Total Need 1993-1999: | 66 |
| Prior Cycle Prospective Need: | 2 |
| Demolitions: | 2 |
| Filter: | -18 |
| Conversions: | -26 |
| Rehabilitation: | -1 |
| Reduction: | 0 |
| Credits: | 0 |
| Undeveloped | |
| Land Cap: | 0 |
| 20% Cap: | 0 |
| Calculated Need: | 25 |
| Vacant Land: | 0 acres |

*income, upland use
summers!*

According to C.O.A.H., the housing numbers may be revised by December of 1993, with new C.O.A.H. rules for the period 1993 to 1999 being presented in March of 1994. Administratively, municipalities are afforded the opportunity of having housing elements and implementing ordinances certified by C.O.A.H. The certification would indicate that the identification of need and the plan for meeting that need meets the standards of C.O.A.H. This offers municipalities a certain degree of protection in the event of a legal challenge of the municipality's response it provides is that it establishes a "presumption of validity" which must be overcome by any party challenging the housing element. Municipalities are not obliged to seek this certification from C.O.A.H., but are obliged to adopt a Housing Element.

The indigenous need identified for Manville Borough is 36 units and the calculated need calls for 25 units. Due to lack of available, vacant and developable land meeting the criteria of C.O.A.H., only the indigenous need is addressed herein.

Currently the Borough's Welfare Department administers the H.U.D. Section 8 Rental Assistance Program for the Borough. The Borough has not undertaken any other affordable housing programs to date. Upon preparation of a new Borough zoning ordinance, other potential ordinances relating to achieving affordable housing need through appropriate accessory ordinances and restrictions will be investigated thoroughly. Appropriate model ordinances from Somerset County Coalition on Affordable Housing will be reviewed and utilized.

The following information and tables are updates from the 1990 Census concerning the Borough's housing stock inventory:

INVENTORY OF HOUSING STOCK

AGE: Of the total housing units reflected in the 1990 census, almost half (49.5%) were built between 1940 and 1959. Development continued briskly in the 1960's but began to be less significant as land diminished in the 1970's. In the 1990's, residential development has been minimal, totalling less than one percent of all units built to date.

CONDITION: Table H-1 shows several characteristics of housing conditions based on municipal census tract information. In the Borough, almost all units have public sewers, public water and complete plumbing facilities. Housing units which do not have complete kitchen facilities equal about one percent of all units. Almost 72 percent of all occupied units are heated by natural gas with the remainder being serviced primarily by fuel oil and electricity.

HOUSING VALUE: Table H-2 indicates housing values for owner and rent occupied units based on 1990 census files. The median value of owner occupied units was \$143,500 and the median gross rent for rental units was \$651 per month. The data shows approximately 70 percent of the all units were valued at between \$100,000 and \$174,999. About 15 percent were valued under \$100,000 and the remaining 15 percent were valued between \$175,000 and \$300,000.

The rental units data shows that approximately 60% of renters pay between \$600 to \$1,000 per month. The remaining rent occupied units, about 498 units, or 41.2% of all rental units pay under \$600 per month for rental housing. Additionally, about 25 percent of renter's pay between \$300 to \$549 per month.

Table H-1
Housing Conditions
Borough of Manville

| Year Structure Built | Number | % |
|---|--------------|--------------|
| Before 1940 | 859 | 20.2 |
| 1940 - 1949 | 688 | 16.2 |
| 1950 - 1959 | 1,413 | 33.3 |
| 1960 - 1969 | 854 | 20.1 |
| 1970 - 1979 | 190 | 4.5 |
| 1980 - 1984 | 93 | 2.2 |
| 1985 - 1988 | 132 | 3.1 |
| 1989 through March 1990 | 16 | .4 |
| Subtotal 4/1/90 | 4,245 | 100.0 |
| Housing Units By Plumbing Facilities | | |
| Complete plumbing facilities | 4,223 | 99.0 |
| Lacking complete plumbing facilities | 22 | 1.0 |
| Public sewers | 4,239 | >99.0 |
| Septic, cesspool, other | 6 | <1.0 |
| Public water system | 4,220 | 99.0 |
| Well, other | 25 | 1.0 |
| Housing Units by Kitchen Facilities | | |
| Complete kitchens | 4,201 | 99.0 |
| Lacking complete kitchen facilities | 25 | 1.0 |
| Occupied Housing Units By Heating Fuel | | |
| Utility gas | 2,954 | 71.7 |
| Bottled, tank or Lp gas | 17 | .4 |
| Electricity | 169 | 4.1 |
| Fuel oil, kerosene, etc. | 933 | 22.7 |
| Coal | 0 | 0.0 |
| Wood | 25 | .6 |
| Solar energy | 0 | 0.0 |
| Other fuel | 11 | .3 |
| No fuel used | 10 | .2 |
| New Units Authorized by Building Permits, Less Demolitions | | |
| 1980 | 16 | |
| 1981 | 17 | |
| 1982 | 3 | |
| 1983 | 14 | |
| 1984 | 33 | |
| 1985 | 69 | |
| 1986 | 21 | |
| 1987 | 4 | |
| 1988 | 12 | |
| Total | 189 | |

Source: 1990 U.S. Census
Prepared by: J.E. Leoncavallo Associates, 1993

Table H-2
Housing Value
Borough of Manville

| Owner-occupied | Units | % |
|-----------------------|--------------|---------------|
| Less than \$15,000 | 0 | 0.0 |
| \$15,000 - \$19,999 | 0 | 0.0 |
| \$20,000 - \$24,999 | 9 | 0.4 |
| \$25,000 - \$29,999 | 0 | 0.0 |
| \$30,000 - \$34,999 | 0 | 0.0 |
| \$35,000 - \$39,999 | 0 | 0.0 |
| \$40,000 - \$44,999 | 0 | 0.0 |
| \$45,000 - \$49,999 | 0 | 0.0 |
| \$50,000 - \$59,999 | 66 | 2.6 |
| \$60,000 - \$74,999 | 73 | 2.9 |
| \$75,000 - \$99,999 | 237 | 9.3 |
| \$100,000 - \$124,999 | 334 | 13.2 |
| \$125,000 - \$149,999 | 743 | 29.3 |
| \$150,000 - \$174,999 | 702 | 27.7 |
| \$175,000 - \$199,999 | 279 | 11.0 |
| \$200,000 - \$249,999 | 87 | 3.4 |
| \$250,000 - \$299,999 | 6 | 0.2 |
| \$300,000 - \$399,999 | 0 | 0.0 |
| \$400,000 - \$499,999 | 0 | 0.0 |
| \$500,000 or more | 0 | 0.0 |
| Total | 2,536 | 100.0% |

Median Value \$143,500

**Gross Rent
Renter Occupied Units**

| | | |
|-----------------|--------------|--------------|
| \$0 - \$99 | 0 | 0.0 |
| \$100 - \$149 | 0 | 0.0 |
| \$150 - \$199 | 0 | 0.0 |
| \$200 - \$249 | 26 | 2.0 |
| \$250 - \$299 | 25 | 2.0 |
| \$300 - \$349 | 51 | 4.2 |
| \$350 - \$399 | 10 | .8 |
| \$300 - \$449 | 61 | 5.0 |
| \$450 - \$499 | 26 | 2.0 |
| \$500 - \$549 | 152 | 12.6 |
| \$550 - \$599 | 89 | 7.5 |
| \$600 - \$649 | 131 | 10.8 |
| \$650 - \$699 | 151 | 12.5 |
| \$700 - \$749 | 168 | 14.0 |
| \$750 - \$999 | 195 | 16.2 |
| \$1,000 or more | 66 | 5.6 |
| No cash rent | 58 | 4.8 |
| Total | 1,209 | 100.0 |

Median Contract Rent \$651

Source: 1990 U.S. Census
Prepared by: J.E. Leoncavallo Associates, 1993

OCCUPANCY CHARACTERISTICS: The data on Table H-3 indicates about 3 percent of the units in the Borough were unoccupied in 1990. The percentage of owner-occupied units in 1990 was 68.6% and renter-occupied units made up about 28.5% of all occupied housing units. Manville Borough's overall vacancy rate was 2.97 percent in 1990. The vacancy rate for sales housing was a very low .75 percent. The data shows a rental vacancy rate of 4.43 percent. The rule of thumb for a healthy, flexible housing market is an overall vacancy rate of between 3 to 5 percent. Rental housing vacancy rates, typically, run 3 to 4 points higher than the rate of ownership housing. The low rates in Manville are typical of the small developed boroughs in the County as opposed to the larger developing townships where vacancy rates run at high levels due to new residential construction.

The Borough from a housing unit type prospective is still mostly detached, 3 bedroom single family dwellings (63.8) percent. However, there are approximately 951 two family units on the Borough in 1990 (22.4 percent of all housing units). The Borough is still characteristically a mix of small single family and two family dwellings as described in the 1982 Master Plan. 1990 census data shows about 55 percent of the housing units have five rooms or less. Dwellings with four to five rooms total 43 percent of the housing units in the Borough.

In 1980 there were 1,264 two to four family units or 32 percent of all housing units. In 1990 the count was 1,258 two to four family units or 29.6 percent. This change in percentage is probably due to more development in the 1980's occurring from other housing types. In the mid to late 1980's, approvals for a small number of attached single family units were granted by the Borough. The number of attached single family units as of 1990 was 107 or 2.5 percent of the Borough's housing. This number is not expected to increase significantly in the 1990's due to lack of developable land.

Table H-3
Occupancy Characteristics & Types
Borough of Manville

| Housing Units | Number | % |
|-----------------------------------|------------|------------|
| Total | 4,245 | 100.0 |
| Occupied | 4,119 | 97.0 |
| Owner-occupied | 2,910 | 68.6 |
| Renter-occupied | 1,209 | 28.5 |
| Vacant | 126 | 3.0 |
| For Sale | 22 | |
| Vacancy Rate - Sales | | 0.75 |
| For Rent | 56 | |
| Vacancy Rate - Rentals | | 4.43 |
| Rented or sold, not occupied | 20 | 0.5 |
| For Occasional Use | 5 | 0.1 |
| Other | 23 | 0.5 |
| Housing Units: Number of Rooms | | |
| 1 Room | 84 | 2.0 |
| 2 Rooms | 77 | 1.8 |
| 3 Rooms | 332 | 7.8 |
| 4 Rooms | 785 | 18.5 |
| 5 Rooms | 1,046 | 24.6 |
| 6 Rooms | 1,115 | 26.3 |
| 7 Rooms | 427 | 10.1 |
| 8 Rooms | 224 | 5.3 |
| 9 Rooms | <u>155</u> | <u>3.7</u> |
| Total | 4,245 | 100.0 |
| Number of Bedrooms | | |
| No Bedroom | 63 | 1.5 |
| 1 Bedroom | 512 | 12.1 |
| 2 Bedrooms | 1,179 | 27.8 |
| 3 Bedrooms | 1,751 | 41.2 |
| 4 Bedrooms | 625 | 14.7 |
| 5 Bedrooms | <u>115</u> | <u>2.7</u> |
| Total | 4,245 | 100.0 |
| Housing Unit Type | | |
| 1; Detached | 2,707 | 63.8 |
| 1; Attached | 107 | 2.5 |
| 2 | 951 | 22.4 |
| 3 or 4 | 307 | 7.2 |
| 5 to 9 | 69 | 1.6 |
| 10 to 19 | 42 | 1.0 |
| Mobile Home | 0 | 0.0 |
| Other | <u>62</u> | <u>1.5</u> |
| Total | 4,245 | 100.0 |

Source: 1990 U.S. Census
Prepared by: J.E. Leoncavallo Associates, 1993

GENERAL HOUSING CHARACTERISTICS

Table H-4, Housing Characteristics, shows the trend in total housing units in the Borough and Somerset County and provides a comparison with the number of units authorized by building permits from 1970 to 1990. Also shown on the Table are the latest occupancy and vacancy figures from the 1990 Census. The following information highlights certain details of the Table (H-4):

1. The Census figures indicate a net gain between 1970 and 1990 of 430 housing units in the Borough. However, research of building permit records show a net gain of only 189 units after demolitions. This is a difference of about 128 percent. The differential is hard to pinpoint, but in most cases differences between Census counts and building permit records may be due to some combination of Census error, illegal conversions or inaccurate tracking of housing unit loss through demolition, conversion, etc.
2. A somewhat more accurate correlation appears at the County level with a difference of 80 percent between Census counts and building permit data. The situation suggests an error in the Census or an incidence of illegal conversions throughout Somerset County.
3. The "For Sale" vacancy rate of .75 in the Borough shows a very tight sales market as of 1990. There is an optimum vacancy rate for sales housing of about 1.0 to 1.5 percent. Below that number, the market is considered to be relatively inflexible with few choices for prospective purchasers and artificially inflating housing values. Above that range, the market softens, supply exceeds demand, and housing prices can decline.

Table H-4
Housing Characteristics
Number of Units and Vacancy Rates
Borough of Manville

| | Borough of Manville | Somerset County |
|--------------------|---------------------|-----------------|
| 1970 Housing Units | 3,815 | 58,310 |
| 1980 Housing Units | 3,949 | 69,774 |
| 1990 Housing Units | 4,245 | 92,653 |
| Net Gain 1970-1990 | 430 | 34,343 |
| % Gain 1970-1990 | 11% | 59% |

| | | |
|---|---------|--------|
| 1980 - 1991 | | |
| Units authorized by building permits | 197 | 19,461 |
| Demolitions or other losses | 8 | 418 |
| Net Gain | 189 | 19,043 |
| Difference Between Census & Building Permit Data | +127.5% | +80.3% |

| | | |
|---------------------|-------|--------|
| 1990 Census | | |
| Total Housing Units | 4,245 | 92,653 |
| Occupied | 4,119 | 88,346 |
| Owner-occupied | 2,910 | 66,561 |
| Renter-occupied | 1,209 | 21,785 |
| Vacant | 126 | 4,307 |
| For Sale | 22 | 1,563 |
| For Rent | 56 | 1,292 |
| Other | 48 | 1,452 |
| Vacancy Rates | 2.97% | 4.65% |
| Sales | .75% | 2.29% |
| Rental | 4.43% | 5.60% |

Source: U.S. Bureau of Census
N.J. Dept. of Labor & Industry For Building Permit Data

Prepared by: J.E. Leoncavallo Associates, 1993

FAIR SHARE DETERMINATION & CAPACITY ANALYSIS

According to the most recent published Fair Share Numbers by C.O.A.H., Manville Borough has an indigenous need of 36 units and a reallocated present and prospective need of 25 units.

The study of existing land use in the Borough revealed that insufficient vacant and developable land exists to accommodate any new construction for low and moderate income housing. The basic starting point for consideration of appropriate sites which are suitable is that the site contain at least two acres which are not constrained by wetlands, flooding or steep slopes.

The only properties which are vacant and over two acres in size, based on the map records, are located in the floodplains of the Raritan or Millstone Rivers.

FAIR SHARE PLAN

The Borough of Manville will continue to implement the Housing Rehabilitation Program as its administrative mechanism for any Fair Share Plan. The rehabilitation of 25 units over a six year period averages to approximately four units per year. The potential units would come from the actual existing deteriorated housing units in the Borough. The source of funding for rehabilitation will be the H.U.D. Community Development Program if available.

TRAFFIC CIRCULATION PLAN ELEMENT

Transportation and traffic planning for Manville Borough is limited since the Borough is mostly developed and major roadways such as Main Street (County Route 533) are under Somerset County jurisdiction.

North and South Main Street has been utilized as a shortcut connection to other arterial roadways in the County for the past two decades.

Future county road improvements to Route 533, according to the engineering department of Somerset County, are limited in the short and long-term because of funding priorities and budgetary problems. No extensive widening plans for Rt. 533 are anticipated. In 1993, the County Engineering Department did submit a long-term project for 1995-1999 state funding which involved a segment of Rt. 533 from Wilhousky Street through Manville to Foothill Road in Bridgewater Township. The project is to provide a closed loop fiber optic interconnect computer system for traffic signalization. This improvement would link traffic signals along Main Street in the Borough into a closed loop system which would facilitate better management of the traffic flow along the roadway and therefore improve traffic flow efficiency along the road segment. All work would be completed within the existing road right of way and the cost of construction is estimated at \$750,000 in 1995. Approval of the project is pending state Department of Transportation review.

Another pending County road improvement in the Borough is the Wilhousky Street/Weston Canal Bridge and Raceway rehabilitation scheduled for construction in 1994-1995. This project involves the reconstruction of the bridge and raceway to a pavement width of forty feet and repaving and new signalization and signage from the intersection of South Main Street and Wilhousky Street to Weston Canal Road in Franklin Township (Rt. 623).

According to the Somerset County Engineering Department the average daily traffic counts (A.D.T.) for South Main Street (Route 533) and Wilhousky Street (Route 623) were as follows in March, 1991;

1. A.D.T. = 12,256 South Main Street (North of Wilhousky St.)
2. A.D.T. = 11,650 South Main Street (South of Wilhousky St.)
3. A.D.T. = 4,964 Wilhousky St. (West direction from Franklin Twp.)
4. A.D.T. = 4,630 Wilhousky St. (East direction from Manville Borough)

Wilhousky Street Bridge construction is estimated to take one year and cause additional traffic problems because of the significant diversion of traffic through Manville Borough.

It should be noted that recently the County completed the final report of the Somerset County park-n-ride study. The report suggests three park-n-ride facilities in Manville. These facilities would be located at The Rustic Mall, The Yellow Rose and The John Manville property.

BOROUGH STREETS

The Borough is mostly made up of minor streets which have existing rights of way of fifty feet. The 1982 Master Plan includes a fairly comprehensive review of traffic circulation in the Borough. This report summarizes and carries forward the primary components of that report as appropriate to the update of this Master Plan. The 1982 Master Plan identified roadway function using major streets; collector streets and minor streets. The major streets include Main Street, Dukes Parkway, West Camplain Road and Wilhousky Street. Collector streets are East Camplain Road, North and South Bridge Street, Whalen Street, Kennedy Boulevard, Brooks Boulevard, Raritan Avenue and North and South 13th Avenue.

In 1982, the intersections recommended for study and safety improvements included:

1. Kyle Street and South Main Street
2. South Main Street and Camplain Road
3. Washington Avenue and South Main Street
4. West Camplain Road and South 13th Avenue
5. Whalen Street and Roosevelt Avenue

Intersection improvements under this Master Plan update recommended for possible State and/or County transportation funding after 1993 are as follows:

1. Washington Avenue and South Main Street
2. Brooks Boulevard and 13th Avenue
3. West Camplain Road and South 13th Avenue
4. South Main Street and Kyle Street
5. Whalen Street and Roosevelt Avenue

ADDITIONAL RECOMMENDED TRAFFIC IMPROVEMENTS

Upon review of local and regional traffic circulation as well as traffic volume generators in the Borough, the following improvements are proposed as additional Traffic Circulation Plan recommendations for long term consideration:

1. Limit traffic to one way in only for parking lot driveway entrance at Rustic Mall off of East Camplain Road.
2. Improve the Kyle Street railroad underpass to allow two-way traffic flow.
3. Make necessary safety improvements to bridge structure at Bridge Street.
4. Convert railroad bridge structure on Johns Manville property to vehicular bridge in addition to development of new collector road through Johns Manville site for service of proposed zone changes.
5. If possible, provide second railroad grade crossing in western section of the Borough along Lehigh Valley Railroad.

ECONOMIC PLAN ELEMENT

Many factors precipitate change in small urbanized communities. These factors include social conditions, land use, housing, government financing and the municipal business economic base. The Borough of Manville has experienced significant change in the past twenty years to its economic base. This report will review several components of the business economic base including employment, trends, labor force characteristics and types of industry and occupations existing in the Borough presently.

COVERED EMPLOYMENT TRENDS AND CHARACTERISTICS

Table E-1 shows annual covered employment data for the Borough and Somerset County from 1975 to 1991, the last year available at this time. A review of these employment figures is important since it is the only general available source of information on comparative economic activity at the municipal level as gauged by the number of jobs in that community.

In 1976 the Borough experienced significant job growth and made up about four and three quarters percent of the County covered employment jobs. Moderate growth in the Borough occurred in 1977 while substantial job growth occurred at the County. From 1979, when the Borough was about four percent of the County job level, there has been a sustained downward spiral of job loss in the Borough. From 1980 to 1990, the Borough lost about 1,600 covered jobs. For clarity, a covered job is the monthly count by the state of New Jersey of full-time and part-time employees, who earn wages during the pay period including the 12th of each month, as reported quarterly by employers covered by the New Jersey Unemployment Compensation Law. In 1991 covered employment was 806, an additional loss of 118 jobs. With general continued job growth at the County level, Manville is now only .68 percent of the County job employment base for 1991.

While a large percentage of the job decline in the Borough is obviously attributable to the closing of the Johns-Manville Corporation, the Borough is experiencing decreases in other private sector industries. Table E-2, 1982 and 1987 Census of Retail Trade, shows a 30 percent decline in the number of retail trade establishments in the Borough in a five year period. The loss in sales during this time was approximately 4.5 million dollars.

Through a specific strategy of commercial revitalization and re-zoning of unique properties in the Borough, the decreasing rate in job growth can be curtailed and stabilized at some acceptable mid-point level.

Table E-3, Commuting Patterns, indicates that over two-third of the work force in Manville work within the County and 16 percent of that number work within the Borough. This is opposite of the County as a whole where the majority of the general work force are employed in New Jersey but outside Somerset County.

Table E-4, Means of Transportation to Work, shows almost all of the work force in the Borough use a vehicle to commute to work and only 1.2 percent of the Borough work force

use public transportation. Since most of the commutation for Borough labor force is within the County, the lack of convenient viable public transportation is a major factor for this characteristic.

The information on Table E-5, Industry Type, illustrates that over 50 percent of the Borough's labor force currently work in the manufacturing and service sectors. The manufacturing sector has 26.5 percent of the labor force, the highest percentage in the Borough. This characteristic is unusual since most small urban communities have low employment figures in manufacturing as a result of loss of manufacturing activities in New Jersey. It should be noted that a strong third in the rankings is retail and wholesale trade with about 21 percent of the labor force.

Any plan for promotion of economic stability should facilitate the encouragement of retail but especially wholesale trade growth given the Borough's unique access to rail and highway transit.

Finally, Table E-6, Occupation for Resident Labor Force, points to the fact that presently the Borough work force is mostly made up of people in technical, sales and administrative support (36.4 percent) and operators/fabricators and laborers (20.0 percent) which supplements the County work force consisting mostly of managerial and professional specialties and very few operators, fabricators and laborers.

The unique characteristics of Manville's labor force coupled with its location and ancillary infrastructure assets make the Borough suitable for promotion of wholesale and retail trade establishments if the right environment is provided.

PLAN RECOMMENDATIONS

1. The Borough should continue to strive for downtown revitalization as a means of providing economic stability. The downtown design plan should be finalized and included in the Master Plan. All future design projects in the downtown area should be coordinated and incorporated as amendments into the Borough Master Plan.
2. Municipal-owned parking should be considered after further study. Amenities such as convenient parking will encourage retail trade establishments to locate in the Borough.
3. The Borough should apply to the N.J. Office of State Planning for center designation in accordance with State Planning Rules and the State Planning Commission.
4. Additional commercial zoning should be established off of Main Street.
5. A business complex should be developed on the J-M site to facilitate wholesale trade and warehousing uses, taking full advantage of the convenient local work force and sophisticated infrastructure in the Borough and the region.

Table E-1

Private Sector Covered Employment 1975 - 1991
Borough of Manville and Somerset County

| Year | Covered Employment | | Borough as % of County |
|------|------------------------|-----------------|---------------------------|
| | Borough of Manville | Somerset County | |
| 1975 | 2,886 | 63,130 | 4.57 |
| 1976 | 3,014 | 63,154 | 4.77 |
| 1977 | 3,089 | 70,529 | 4.38 |
| 1978 | 3,021 | 75,159 | 4.02 |
| 1979 | 3,161 | 79,890 | 3.96 |
| 1980 | 2,532 | 79,324 | 3.19 |
| 1981 | 2,204 | 82,496 | 2.67 |
| 1982 | 1,990 | 82,957 | 2.40 |
| 1983 | 1,750 | 90,501 | 1.93 |
| 1984 | 1,636 | 91,867 | 1.78 |
| 1985 | 1,549 | 100,441 | 1.54 |
| 1986 | 927 | 104,249 | 0.89 |
| 1987 | 892 | 111,060 | 0.80 |
| 1988 | 964 | 119,648 | 0.81 |
| 1989 | 964 | 118,223 | 0.82 |
| 1990 | 924 | 118,982 | 0.78 |
| 1991 | 806 | 119,366 | 0.68 |

Source: N.J. Department of Labor; Somerset County Planning Board 1993.

Prepared by: J.E. Leoncavallo Associates, 1993

Table E-2

1982 & 1987 Census of Retail Trade
Borough of Manville

| | Borough of Manville | |
|---------------------------------|---------------------|--------------------|
| | Number | Sales (\$1,000) |
| All Incorporated Establishments | | |
| 1982 | 81 | 35,893 |
| 1987 | 61 | 31,362 |
| Change 1982 - 1987 | 20 (-32.8%) | 4,531 (-14.5%) |

Source: U.S. Bureau of Census

Prepared by: J.E. Leoncavallo Associates, 1993

Table E-3
Commuting Patterns, Resident Labor Force
Borough of Manville & Somerset County

| Place of Work | Manville | | Somerset | |
|---------------------------------|----------|---------|----------|---------|
| | Number* | Percent | Number* | Percent |
| In Somerset County | 3,832** | 69.0 | 61,452 | 45.7 |
| In New Jersey, Outside Somerset | 1,667 | 30.0 | 65,305 | 48.6 |
| Outside New Jersey | 58 | 1.0 | 7,633 | 5.7 |

* Workers 16 years and older

** 16% (629 Workers) work in Manville Borough

Source: U.S. Bureau of the Census, 1990

Prepared by: J.E. Leoncavallo Associates, 1993

Table E-4
Means of Transportation to Work, Resident Labor Force
Borough of Manville & Somerset County

| Means of Transportation | Manville | | Somerset | |
|-------------------------|--------------|---------------|----------------|---------------|
| | Number* | Percent | Number* | Percent |
| Car, Truck or Van: | 5,305 | 95.5 | 122,063 | 90.8 |
| (Drove Alone) | (4,668) | | (109,485) | |
| (Carpooled) | (637) | | (12,578) | |
| Public Transportation: | 67 | 1.2 | 5,262 | 39.2 |
| (Bus) | (41) | | | |
| (Subway) | (18) | | | |
| (Railroad) | (8) | | | |
| Motorcycle | 15 | 0.27 | 86 | 0.06 |
| Bicycle | 25 | 0.45 | 258 | 0.19 |
| Walked | 93 | 1.67 | 2,639 | 1.96 |
| Other Means | 30 | .54 | 477 | 0.36 |
| Worked at Home | 22 | .40 | 3,605 | 2.68 |
| Total | 5,557 | 100.0% | 134,390 | 100.0% |

Source: N.J. Department of Labor, 1990 Census

Prepared by: J.E. Leoncavallo Associates, 1993

Table E-5
Industry Type, Resident Labor Force
Borough of Manville

| Industry | Manville Borough | |
|---|------------------|---------|
| | Number | Percent |
| Agriculture, Forestry & Fisheries | 19 | .3 |
| Mining | 13 | .2 |
| Construction | 304 | .5 |
| Manufacturing | | |
| Nondurable & Durable Goods) | 1,506 | 26.5 |
| Transportation | 353 | 6.2 |
| Communications and Other Public Utilities | 219 | 3.9 |
| Wholesale Trade | 448 | 7.9 |
| Retail Trade | 758 | 13.4 |
| Finance, Insurance & Real Estate | 367 | 6.5 |
| Services | 1,435 | 25.3 |
| Public Administration | 250 | 4.4 |
| Total | 5,672 | |

Source: U.S. Department of Labor, 1990 Census

Prepared by: J.E. Leoncavallo Associates, 1993

Table E-6
Occupation, Resident Labor Force
Borough of Manville & Somerset County

| Occupation | Manville | | Somerset | |
|---|--------------|--------------|----------------|--------------|
| | Number | Percent | Number | Percent |
| Managerial & Professional Specialty | 995 | 17.5 | 54,346 | 39.7 |
| Technical, Sales & Admin. Support | 2,058 | 36.4 | 48,136 | 35.2 |
| Service Occupations | 609 | 10.7 | 9,964 | 7.29 |
| Farming, Forestry & Fishing Occupations | 46 | .8 | 1,322 | 0.97 |
| Precision Production, Craft & Repair Occupations | 822 | 14.6 | 11,108 | 8.1 |
| Operators, Fabricators & Laborers | <u>1,142</u> | <u>20.0</u> | <u>11,885</u> | <u>8.7</u> |
| | 5,672 | 100.0 | 136,761 | 100.0 |

Source: U.S. Department of Labor, 1990 Census

Prepared by: J.E. Leoncavallo Associates, 1993

RECYCLING PLAN ELEMENT

The Borough of Manville in accordance with the New Jersey Solid Waste Management Act (N.J.S.A. 13:1e-1 et seq.); The 1987 New Jersey Statewide Mandatory Source Separation & Recycling Act and the New Jersey Municipal Land Use Law has established a recycling plan as part of its municipal management practices.

In August of 1986 the Borough Council adopted an ordinance for the mandatory separation and collection of the following materials from the waste stream:

1. Newspapers
2. Glass and aluminum

All residential dwellings and commercial establishments in the Borough were required to follow specific regulations for the recycling of stated materials and fix penalties would be assessed for violations of the ordinance.

Presently, in concert with the recycling goals of the state and Somerset County to achieve a 60% recycling rate by 1995, the Borough also recycles the following additional materials:

- a. Corrugated cardboard
- b. Plastics and tin/bi-metal can
- c. Textiles
- d. Household dry cell batteries

To facilitate the recycling process the position of Recycling Coordinator for the Borough has been established. Mr. Phillips Heathcote, Borough Administrator, has taken on the duties and responsibilities of the Recycling Coordinator.

ADDITIONAL RECOMMENDED PROVISIONS FOR RECYCLING








To assure that any significant future development is designed to accommodate the recycling goals and objectives of the State and the Somerset County District Solid Waste Management Plan, the recycling, site plan and/or subdivision ordinances of the Borough should be amended to require the following:

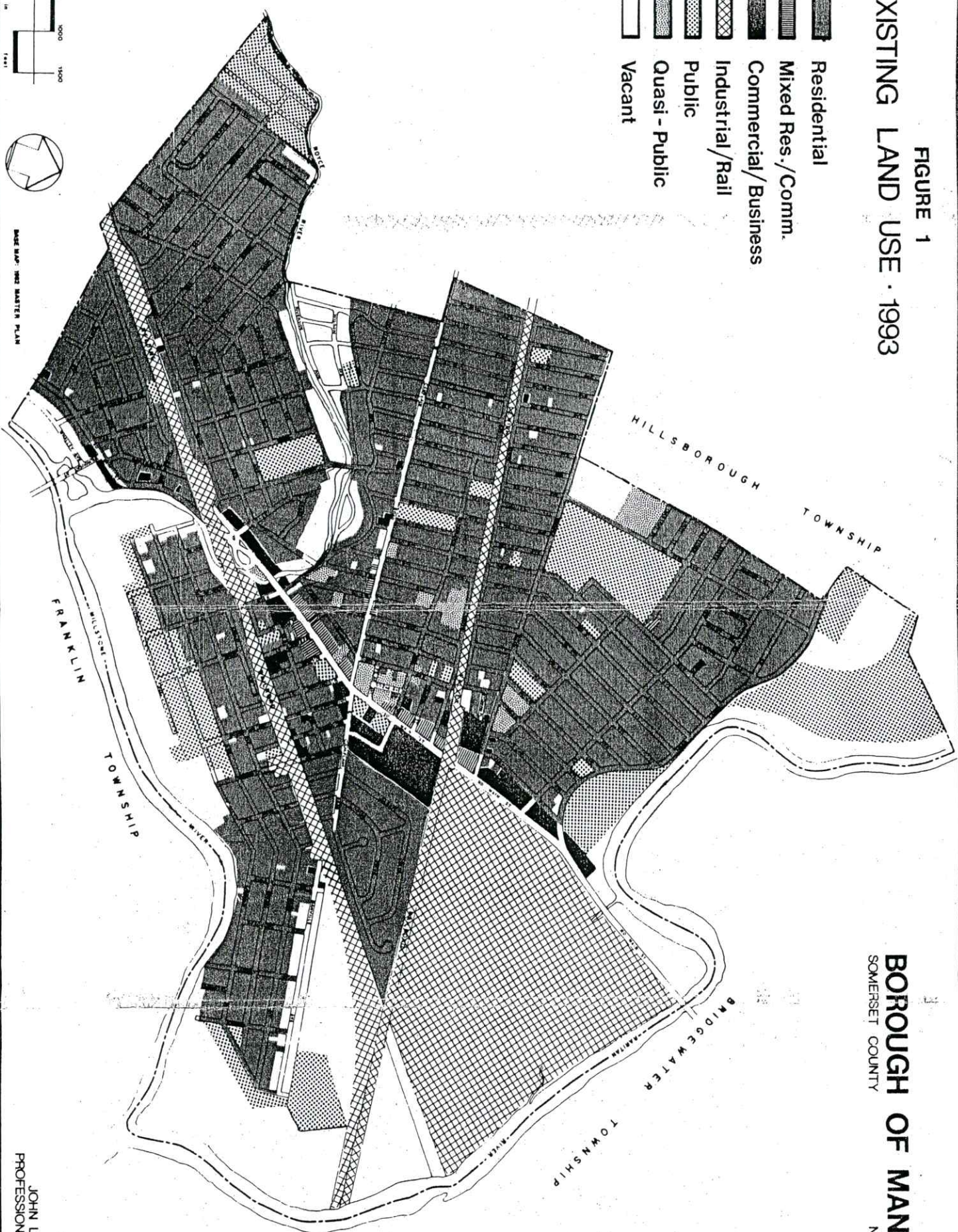
1. Each application for residential development of six or more units of multi-family housing must include provisions for the collection, disposition and recycling of solid waste materials. A single family unit or two-family dwelling should provide at least 12 square feet of floor area conveniently arranged and located as a holding area for a four week accumulation of recyclable materials. Such an area may be within an enclosed laundry room, basement or garage.

2. Each application for a non-residential use must include provisions for the collection, disposition and recycling of solid waste materials. An applicant shall quantify the amount of recyclable material that will be generated at some appropriate time interval. Such waste stream items as newspaper, high-grade paper, glass, aluminum, cardboard, tin/bi-metal cans, lead acid batteries, mercury, silver-oxide and nicad batteries, used motor oil, wood and asphalt/concrete and masonry are required by regulation to be listed. The applicant shall provide a storage area sized to contain a one week accumulation of recyclable materials. The storage area shall be accessible to pickup vehicles with appropriate screening measures taken if the area is located outside a building.
3. Large scale commercial, industrial and institutional uses must be required to prepare waste audits and waste reduction plans to the Borough.
4. Landscape management strategies which encourage backyard composting and natural grass cuttings decomposition should be incorporated under appropriate site plan design standards.
5. Large scale commercial, industrial and institutional uses must report their recycling operations at least quarterly to the Borough Recycling Coordinator.

FIGURE 1
EXISTING LAND USE - 1993

BOROUGH OF MANVILLE
SOMERSET COUNTY
NEW JERSEY

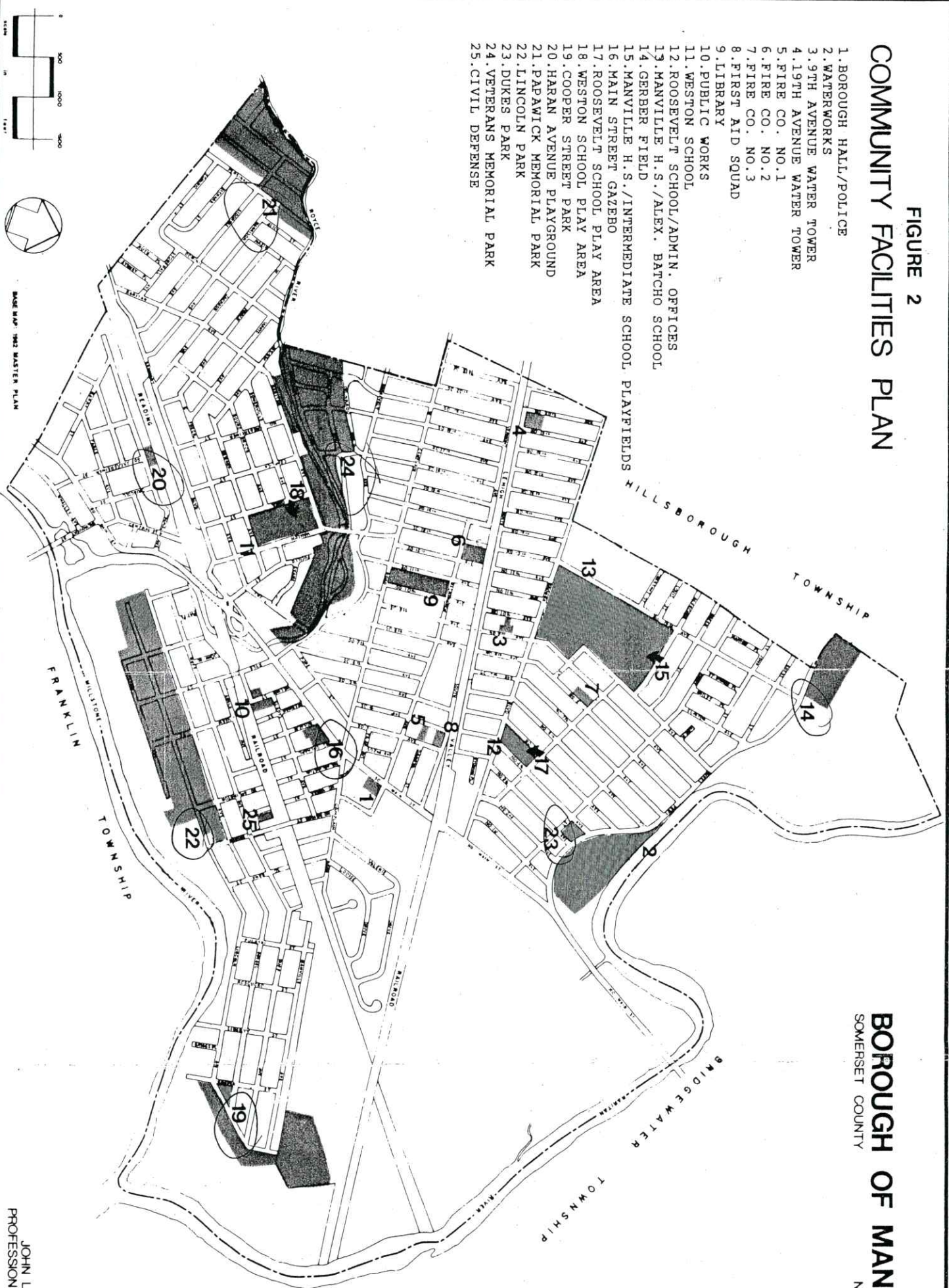
-  Residential
-  Mixed Res./Comm.
-  Commercial/Business
-  Industrial/Rail
-  Public
-  Quasi - Public
-  Vacant



JOHN LEONCAVALLO
PROFESSIONAL PLANNER

FIGURE 2
COMMUNITY FACILITIES PLAN

1. BOROUGH HALL/POLICE
2. WATERWORKS
3. 9TH AVENUE WATER TOWER
4. 19TH AVENUE WATER TOWER
5. FIRE CO. NO. 1
6. FIRE CO. NO. 2
7. FIRE CO. NO. 3
8. FIRST AID SQUAD
9. LIBRARY
10. PUBLIC WORKS
11. WESTON SCHOOL
12. ROOSEVELT SCHOOL/ADMIN. OFFICES
13. MANVILLE H.S./ALEX. BATCHO SCHOOL
14. GERBER FIELD
15. MANVILLE H.S./INTERMEDIATE SCHOOL PLAYFIELDS
16. MAIN STREET GAZEBO
17. ROOSEVELT SCHOOL PLAY AREA
18. WESTON SCHOOL PLAY AREA
19. COOPER STREET PARK
20. HARAN AVENUE PLAYGROUND
21. PAPAWICK MEMORIAL PARK
22. LINCOLN PARK
23. DUKES PARK
24. VETERANS MEMORIAL PARK
25. CIVIL DEFENSE

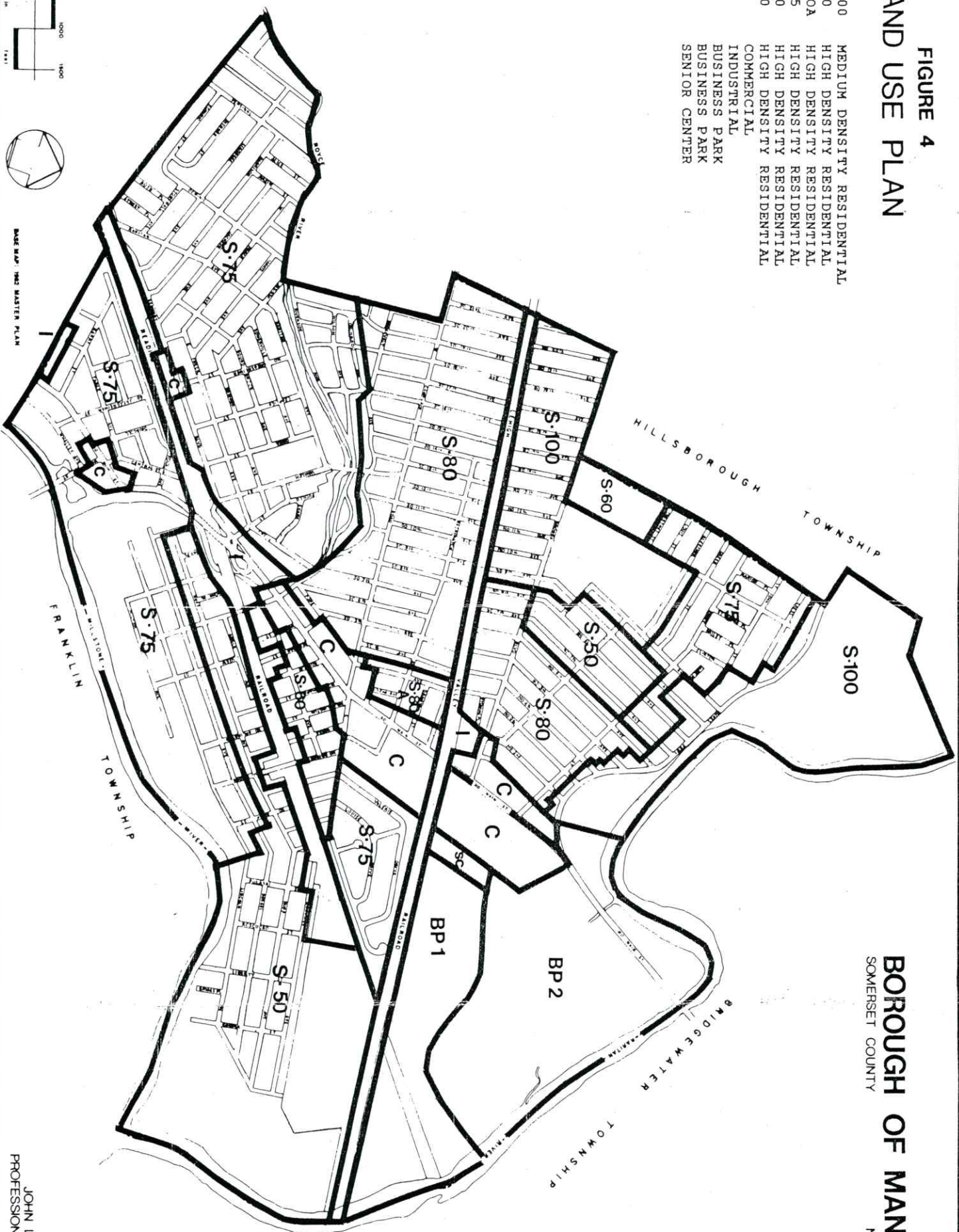


BOROUGH OF MANVILLE
SOMERSET COUNTY
NEW JERSEY

JOHN LEONCACCIO
PROFESSIONAL PLANNER

FIGURE 4
LAND USE PLAN

- | | |
|-------|----------------------------|
| S-100 | MEDIUM DENSITY RESIDENTIAL |
| S-80 | HIGH DENSITY RESIDENTIAL |
| S-80A | HIGH DENSITY RESIDENTIAL |
| S-75 | HIGH DENSITY RESIDENTIAL |
| S-60 | HIGH DENSITY RESIDENTIAL |
| S-50 | HIGH DENSITY RESIDENTIAL |
| C | COMMERCIAL |
| I | INDUSTRIAL |
| BP1 | BUSINESS PARK |
| BP2 | BUSINESS PARK |
| SC | SENIOR CENTER |



BOROUGH OF MANVILLE
SOMERSET COUNTY
NEW JERSEY

JOHN LEONCAYLLO
PROFESSIONAL PLANNER

FIGURE 5
TRAFFIC CIRCULATION PLAN

BOROUGH OF MANVILLE
SOMERSET COUNTY
NEW JERSEY

- Arterial
- ||||| Collector
- ==== Local
- Intersection Improvement

