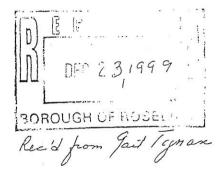
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BOROUGH OF ROSELAND

RE-EXAMINATION REPORT

Prepared By:

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November 4, 1988

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BOROUGH OF ROSELAND

RE-EXAMINATION OF MUNICIPAL PLANS AND REGULATIONS

Pursuant to:

CHAPTER 291, LAWS OF NEW JERSEY 1975

INTRODUCTION

The New Jersey Municipal Land Use Law (MLUL, Chapter 291, Laws of New Jersey 1975) requires that municipalities, at least once every six (6) years, re-examine their Master Plan and Development Regulations to ascertain whether or not these documents are still valid tools for guiding and implementing the growth and development of the Municipality.

Specifically, NJSA 40:55D-89 requires this re-examination report to state:

- a. The major problems and objectives relating to land development in the Municipality at the time of the adoption of the last re-examination report.
- b. The extent to which such problems and objectives have been reduced or have increased subsequent to such date.
- c. The extent to which there have been significant changes in the assumptions, policies and objectives forming the basis for the Master Plan or Development Regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition and recycling of designated recyclable materials, and changes in State, County and Municipal policies and objectives.
- d. The specific changes recommended for the Master Plan or Development Regulation, if any, including underlying objectives, policies and standards, or whether a new plan or regulations should be prepared.

The report must be adopted by Resolution of the Planning Board and distributed to the County Planning Board and the Municipal Clerks of the adjoining municipalities.

The Roseland Planning Board originally adopted a Master Plan for the Borough in 1962. This was reviewed, revised and updated in 1978 to comply with the requirements of the newly adopted MLUL. The 1978 revision provides background information on environmental constraints, utilities, and existing development. From this information, a new Land Use Plan was developed to reflect changes in land uses since 1962, changing growth patterns, and accelerating demands for land. Prominent among the changes were the inclusion of districts allowing garden apartments and townhouses and the expansion of the office districts.

The Master Plan was again reviewed and revised in 1982.

Development patterns were analyzed and minor changes made in the Land Use Element to reflect new development. A zone change was recommended for the R-5 zone along the west side of Eisenhower Parkway based on a specific report for this area ("Zoning Re-Study" for Block 20, Richard Browne Associates, April 1982). A new Energy Conservation Element was also added to the Plan in compliance with amendments to the MLUL.

The current re-examination, in addition to addressing the four requirements stated above, will add a Stormwater Management and Recycling Element to the Master Plan as required by recent MLUL amendments.

I. THE MAJOR PROBLEMS AND OBJECTIVES RELATING TO LAND DEVELOPMENT

The first section of the re-examination report requires a statement of the "major problems and objectives relating to land development in the Municipality at the time of the adoption of the last re-examination report."

The 1982 revision provides the following goals and objectives for the Borough:

GOALS AND OBJECTIVES

- Maintain the residential character of the Borough integrated with a variety of land uses.
- Provide a balance between continued growth of professional office uses and other existing land uses.
- Continue to provide a mix of high and low density housing types for residents.
- Concentrate commercial expansion in the defined business centers of the Borough to protect and strengthen these areas.
- Protect designated open space lands and flood areas from encroachment by development.
- Encourage private office and industrial growth to promote a viable fiscal base.
- Ensure the quality of education for Roseland residents while responding to population fluctuations.
- Ensure adequate fire and police protection, Municipal services, and utility services.

In addition, problems or issues were raised in the text including:

- Need for improvements to the water storage and distribution system.
- Sewer moratorium in effect since 1979.

- Impact of declining school enrollment on the use of school facilities.
- 4. Annexation of the R-3 zone south of Interstate 280, east of Livingston Avenue to the Township of Livingston.

A summary and conclusions are provided at the end of each section of the 1982 revision, providing a synopsis of the major changes, issues and/or needs related to that section.

Between 1978 and 1982 the Borough experienced growth in all zone districts, but especially in the OB, Office Business, zones. While the Borough remained predominantly residential, a major development shift to professional and administrative offices was beginning to appear. In the six year period, 117.8 acres were developed, 70% of which were in the OB zones. Of the residential uses, the majority of the development was multi-family instead of single family detached. This shift of land use raised questions in the 1982 Revisions related to the appropriate development of the remaining vacant land within the Borough; the adequacy of the Borough's roads and sewers to accommodate the development; and the management of the Borough's natural and community resources.

II. THE EXTENT TO WHICH SUCH PROBLEMS AND OBJECTIVES HAVE CHANGED

Section II must address the "extent to which such problems and objectives have been reduced or have increased subsequent" to the last reexamination.

While changes in local development patterns since 1982 have addressed portions of the goals, objectives and problems stated in the last reexamination, many of the issues and concerns facing Roseland today were only beginning to emerge at that time.

Housing Development

The Borough has maintained its residential character, although the nature of this character appears to be changing. Recent housing construction has been mixed with more emphasis on multi-family projects, reflecting changes in local housing demands. This shift in demand is a result of changing demographics coupled with rising land and building costs, and higher housing and financing cost.

In response to the requirements of the Affordable Housing Act, the Borough has developed a Housing Element for its Master Plan and is currently in the certification process with the Council on Affordable Housing. The implementation of the Borough's fair share plan will further influence development toward multi-family on the few remaining large residential tracts.

Non-residential

The preponderance of recent office development has improved the balance between residential and non-residential uses thereby providing a very favorable tax base. It has also provided a substantial increase in local employment opportunities, exceeding

the Borough's capacity to provide a sufficient labor force. This substantial development has taken place, however, at a cost to the Borough of regular short duration traffic congestion and despite the sewer moratorium imposed in 1979 and reinforced with a greater restrictions in subsequent years.

Traffic

establishment of a Borough Traffic Study Committee which produced a Town-wide Traffic Study prepared by Garmen Associates in 1984. This study recommended a series of improvements to the circulation system based on existing and anticipated traffic with each phase becoming more complicated and costly.

The interim report recommended initial changes in the timing of traffic lights at key intersections, all under County jurisdiction. By and large, these changes were made and funded by the County. Phase II was to include \$1.3 million of intersection improvements to add lanes and turn slots within existing rights-of-way. Funds were to come from an Urban Development Action Grant which was never received.

Because the Study Committee felt that the Borough could not realistically build road capacity fast enough to accommodate the approved and proposed office development, it also recommended certain changes to the zoning ordinance which would reduce the impact of future development.

These recommendations included:

 reduce the amount of vacant, developable land presently devoted to office development by rezoning this land to less traffic intensive uses.

- where rezoning to a less intensive use is found to be impractical, restrictions of office building heights and lot coverage should be imposed.
- impose a new, lower employee parking-to-building square foot ratio in appropriately selected areas suffering from a lack of road capacity.
- include incentive provisions for developers to sponsor van pooling, encourage other forms of ride sharing, and stagger work hours, etc.
- set up a bank of developer-contributed off-site road improvements funds to use in improving corridors and intersections throughout Roseland.

Pursuing recommendations one and two, the Borough undertook a review of remaining vacant land in the community to determine the impact of its development not only on the problem of traffic congestion, but also on stormwater runoff and sanitary sewer demand. The result was a Zoning Review issued in May 1986 and amendments to the zoning ordinance adopted in June 1986, implementing recommendations of both the traffic and the vacant land studies.

Ordinance 20-1986 modified the zoning map to add a new conservation zone encompassing public park land and to change the property adjacent to the Morristown and Erie Railroad from an OB-2 Office Building District to an R-5 Single-family Residential District. The ordinance also substantially reduced the permitted floor area ratio in the office districts, limiting both the expansion of existing building and the construction of new projects.

The effect of these zone changes on the development potential in the Borough is analyzed in Section III below.

III. SIGNIFICANT CHANGES IN ASSUMPTIONS, POLICIES AND OBJECTIVES

Section III must address the "extent to which there have been significant changes in the assumptions, policies and objectives forming the basis for the Master Plan or Development Regulations as last revised, with particular regard to the density and distribution of population and land uses, housing conditions, circulation, conservation of natural resources, energy conservation, collection, disposition, and recycling of designated recyclable materials, and changes in State, County, and Municipal policies and objectives."

Development within Roseland in the last decade has forced the Borough to face critical issues and to take steps to address the changing growth patterns within the community. Lack of sewer capacity, growing traffic congestion, and particularly provision of affordable housing have all led to adopted or proposed changes to local regulations affecting vacant available land within the Borough. These new ordinances substantially change the land use and development potential of the significant vacant parcels identified in the RBA Group's 1986 Zoning Review.

Of the non-residential parcels identified by the RBA report, the Prudential and ADP tracts, in the OB-1 and OB-2 Zones respectively, are partially developed. Prudential has recently received approval for an additional phase. Total build-out of these two tracts will be less than previously anticipated because of the lower allowed floor area ratio adopted in 1986.

The vacant land west of Eisenhower Parkway both north and south of Interstate 280 appears as wetlands on the National Wetland Inventory Maps. Field verification and certification under the regulations of the New Jersey Department of Environmental Protection will be required to determine the full impact of the State and Federal building prohibition in wetland areas; however, preliminary information indicates this area to be severely constrained.

The fifth non-residential tract, known as the Belle Mead
Tract, was rezoned in 1986 to residential uses and is being
developed with 180 townhouse units, including 36 affordable units.

Of the three residential tracts identified, one (the Dankwerth/Caprio Tract) contains five acres in the R-4 Zone. This parcel has received conceptual approval for a six lot subdivision. The other two larger parcels are included in the Borough's affordable housing zones.

The Essex Glen Tract may be developed at six units per unconstrained acre. One hundred and two (102) units are anticipated including 22 affordable units. Similarly, the Bobst Tract (Winchester Development) should yield approximately 282 total units, including 56 affordable units.

The two remaining tracts identified are a small piece of the Bobst Tract that falls in the Manufacturing/Industrial Zone and the two-acre CEM Tract which is in the same M Zone adjacent to the railroad on Eagle Rock Avenue. The CEM tract has been proposed for parking for an expansion of the adjacent use.

Using the zoning and FARs adopted in 1986, the proposed Affordable Housing Ordinance and the NWI wetlands information, Table I from the RBA Zoning Review has been revised to reflect the change in anticipated development impacts.

A comparison of the revised impacts with those previously projected shows a substantial reduction in non-residential development, a substantial increase in residential units, and an overall decline in sewer demands and traffic generation (Table II).

The reduction in non-residential development is the result of two factors: the reduction of the FAR allowed and the estimation of the impact of wetlands restrictions. The increase in residential units is in response to the Borough's efforts to meet its obligation to provide affordable housing within the community. The net effect of these changes is a 30 percent reduction in sewer demand and approximately a 55 percent reduction in traffic generation, both total and peak hour.

Despite the success of the ordinance changes in reducing the infrastructure demands of potential future development, sewer capacity and traffic congestion will continue to be a problem. Ever after the mandated improvements to the Caldwell plant are completed additional capacity will be lacking, resulting in a critical impediment to the realization of the Borough's proposed Affordabile Housing Plan.

Traffic problems are primarily located on County roads; therefore, their correction is dependent on the joint effort of the Borough and the County. While past improvements were primarily financed and constructed by developers as part of their_total

Table I Revised
Borough of Roseland
Build-Out of Vacant Land Areas
Under Current Zoning (1988)

				•		
	Zone	Acreage	Build out potential	Sanitary Sewer Demand (GPD)	Traffic Ge trip end 24 hours	
Prudential Tract	OB-1	92.06	721,824 sq. ft.	90,228	8,871	1,579
ADP Tract	OB-2	51.24	558,000 sq. ft.	69,750	6,858	1,221
Eisenhower Parkway South	OB-3	16.29	* *	-	· _	-
Eisenhower Parkway North	OB-3	32.56	*	* -	-	-
Bobst Tract	М	4.70	51,183 sq. ft.	6,397	75	24
CEM Tract	М	2.04	22,215	2,777	33	10
Subtotals Non Residential		198.89	1,353,222 sq. ft.	169,152	15,837	2,834
						3
Belle Mead Tract	АН	30.30	180 du	72,000	1,188	126
Essex Glen Tract	AH	19.00	102 du	40,800	673	71
Bobst Tract	АН	69.72	282 du	112,800	1,861	197
Denkwerth/Caprio	R-4	5.12	6 du	2,400	- 60	6
Subtotal - Residenti	al	124.14	570	228,000	3,782	400
Total		323.03		397,152	19,619	3,234

^{*}Severely limited by wetlands. Buildable area not determined.

TABLE II

COMPARISON OF IMPACTS

1986 TO 1988

	<u>1986</u>	<u>1988</u>		
<u> Acreage - Vacant</u>				
Non-residential Residential	229.19 93.84	198.89 124.14	+	30.30
TOTAL	323.03	323.03		
Build-out				
Square Footage Dwelling Units	4,008,541 162	1,353,222 570	-2, +	655,319 408
Sanitary Sewer Demand (GPD)				
Non-residential Residential	501,065 64,800	169,152 228,000	+	331,913 163,200
TOTAL	565,865	397,152	_	168,713
<u>Traffic</u>				
24-hour Non-residential 24-hour Residential	41,281 1,654	15,837 3,782	- +	25,444 2,128
TOTAL	42,935	19,619		23,316
Peak Hour Non-residential Peak Hour Residential	7,373 142	2,834	- +	4,539 258
TOTAL	7,515	3,234	-	4,281

project, present improvement needs are largely outside the developable area. The impact of new local and regional development on these existing problem areas is generally too diffuse to impose off-tract assessments, placing the burden of improvement on the County. County proposals for new improvements in line with those suggested by the Garmen report have met with limited local support and have therefore been shelved by immediate opposition.

Amelioration of the present and future traffic congestion will require improvement plans which meet not only the County's objectives but also the Borough's.

As the remaining vacant land in the Borough is developed, a major change in planning emphasis will be needed to deal effectively with the resulting change in development patterns. Open space and recreational opportunities previously taken for granted will become increasingly scarce and so must be actively planned for, protected and enhanced. By the same token, continued demand for limited land resources will create pressure for conversion of existing uses into "higher and better" uses as the market perceives them.

Over the years since the last re-examination, the Borough has actively responded to changes in development patterns, local problems, and State and Federal regulations. Detailed studies have resulted in ordinance changes specific to the problems analyzed. New ordinances addressing such issues as recycling have also been adopted. This re-examination study has identified additional areas which must be addressed to ensure the Borough's ability to deal effectively with land use issues over the next re-examination period. These are detailed in Section IV below.

IV. RECOMMENDATIONS

The last requirement for a re-examination report is the "specific changes recommended for the Master Plan or Development Regulations, if any, including underlying objectives, policies, and standards, or whether a new plan or regulations should be prepared."

Master Plan Revisions

The approaching full development of the Borough indicates a shift in planning emphasis from new development design and review to conservation, enhancement, and creative reuse of existing development. A new set of Goals and Objectives have therefore been developed to reflect this change; they are included in Appendix A.

Recent amendments to the MLUL also require the addition of three new elements to the Master Plan--a Recycling Element, a Stormwater Management Element, and a Housing Element, the first two of which are attached herein as Appendices B and C.

The Housing Element was originally prepared in 1986, and a draft copy presented in December of that year. Since then, the Borough has been involved in extensive mediation with several developers and the Council on Affordable Housing in an effort to obtain substantive certification for its Affordable Housing Plan. As a result of this process, the Housing Element has been revised and implementing ordinances prepared. This plan must be reviewed and certified by COAH, after which it must be adopted by the Borough.

Once accepted by the Planning Board, any changes or additions to the Master Plan must be presented for public hearing and adopted

by resolution of the Planning Board. Ordinances implementing these plan elements must then be adopted by the Borough Council.

Development Regulation Revisions

In 1987, the Borough undertook a complete revision to its
Land Development Ordinance. This ordinance has yet to be adopted;
however, prior to its adoption it should be thoroughly reviewed and
revised to incorporate those requirements mandated by recent changes
in the law and those changes resulting from this re-examination
process.

A. Mandated Changes

Recycling Amendments:

In addition to a Recycling Element of the Master Plan, the Mandatory Source Separation and Recycling Act requires amendments to the subdivision and site plan procedures to include provisions for recycling in larger scale new developments. The necessary amendments to Section 509, Solid Waste Disposal of the proposed Land Development Ordinances are attached as Appendix D.

2. Stormwater Management Amendments:

General provisions for stormwater management have been included in the proposed Land Development Ordinances. These should be reviewed prior to adoption to ensure that the goals of the Master Plan Element are met, that design standards are specific, and that they are applied to all applications for development.

3. Affordable Housing Amendments:

Once the Affordable Housing Plan has been approved by COAH and the Housing Element adopted by the Planning Board, the implementing ordinance amendments must be adopted. Amendments to the present ordinance have been introduced by Council as Ordinance #17-1988. The proposed new Land Development Ordinance when adopted must include these same provisions.

The location of the designated AH zones results in two small parcels of land isolated from their original zone district. It is recommended that the parcel located north of the railroad adjacent to the M zone along Harrison Avenue be encorporated into that M zone; and that the parcel south of the AH zone on Livingston Avenue be included in the adjacent OB-2 zone.

4. Wetlands Amendments:

Although wetlands regulations under the jurisdiction of the US Army Corps of Engineers have been in effect for nearly a decade, the recent shift in enforcement to the New Jersey Department of Environmental Protection has brought these regulations more forcefully to the attention of local reviewing agencies. Several areas in Roseland are severely impacted by wetlands restrictions, particularly west of

Eisenhower Parkway. While much of this area is already protected by inclusion in the Essex County Park System, some is still in private ownership, both there and in other portions of the Borough.

The Land Development Ordinance should be revised to require developers to address the wetlands question and where necessary to provide a certified delineation as part of their development application.

B. Other Proposed Changes

1. Conservation/Recreation District:

As part of Ordinance 20-1986, a new Conservation District was established to include the areas of the Borough currently under the jurisdiction of the Essex County Park System. The purpose of this zone was to recognize the limited development potential of this open park land and to protect its environmentally sensitive areas. The rapid disappearance of vacant land in the Borough dictates that a second, conservation/recreation, zone be created to include sufficient open space and recreation areas to service the Borough's future anticipated needs for active recreation. This zone should include areas suitable or developed for active recreation, both private and public, and other areas under public or quasi-public ownership.

New development should be encouraged to provide active and passive recreation opportunities on site or aid in the improvement of neighborhood facilities.

Critical areas within such developments should be restricted by conservation easements or where appropriate merged with adjoining public lands.

Recreational trails, walkways, and bike paths should be developed to join neighborhoods with community facilities and parks, including such natural corridors as the abandoned Morristown and Erie Railroad right-of-way.

Every effort should be made to preserve, enhance and expand the open space and recreational opportunities within the Borough as the community approaches full development.

Business Districts:

The Zoning Ordinance currently depicts
one business zone, B-1, including both the central
business area along Eagle Rock Avenue between Cortland
and Freeman Streets and a highway business zone on
Eisenhower Parkway at its intersection with Eagle Rock
Avenue. Because these two commercial areas have
different characteristics, development patterns, and
design parameters, it is recommended that they be
divided into a B-1, Central Business District, and a
B-2, Highway Business District.

The proposed B-1 Zone would maintain the existing B-1 Zone standards, while the B-2 standards would be modified to include the newly designated highway commercial zone.

In addition to reclassifying the highway business zone to B-2, it is recommended that this zone be extended northward from Eagle Rock Avenue along the east side of Eisenhower Parkway to encompass the existing non-residential uses located between Eisenhower Parkway and First Avenue. This extension would exclude the two lots fronting on Cooper Street and the municipal lot immediately to their rear.

It is also recommended that the B-l zone on the northwest corner of Eagle Rock Avenue and Eisenhower Parkway be redesignated OB-3 in keeping with its existing development.

To recognize the growing need to retail facilities it is recommended that shopping centers be included in the M-Manufacturing Zone as a conditional use. The required conditions should be related to building coverage, parking, buffering, and particularly to traffic and access.

3. Residential Uses

The residential rezoning of the Belle Mead tract on the north side of Eagle Rock Avenue increases the viability of the six small residential lots carved out of the OB-2 zone on the south side of the street. It is recommended that these six lots be rezoned residential from their current OB-2 designation. As OB-2, these lots are non-conforming as to both use and lot size. Redesignation to R-2 makes the lots and the use conforming, thereby eliminating the necessity of appeal to the Board of Adjustment for every small change to the house or property.

4. Traffic

Although the Borough spent considerable time and effort studying the traffic and circulation problems of the community, only a small portion of the final recommendations of the Garmen Report have been implemented. Changes in the development potential of the remaining land will reduce the total traffic generation previously anticipated, which will help moderate the decline in level of service. However, improvements are still necessary to reverse the congestion on local streets. In addition, the extension of Eisenhower Parkway has been stalled and no immediate plans for further construction are apparent.

A two pronged program is therefore needed to revitalize the Borough's efforts to relieve local congestion. The joint Traffic Study Committee had considerable success in identifying local traffic problems; a similar joint committee is needed to insure the implementation of necessary improvements. Such a committee, composed of County officials and members of the Borough Council and Planning Board, can choose from a variety of proposed alternatives those best suited to local community needs and circumstances.

Additionally a concerted effort must be made to restart the Eisenhower Parkway project to insure its completion northward. Extension of the Parkway to County Route 506 and beyond will have a substantial effect in reducing the impact, particularly of through traffic, on local roadways, thereby reducing the need for local improvements.

APPE'NDIX A

GOALS AND OBJECTIVES

A. LAND USE

1. Residential

- a. Retain the existing residential character of the Borough.
- b. Maintain and enhance the quality of the existing housing stock and residential neighborhoods.
- c. Protect residential neighborhoods from the intrusion of non-residential traffic.
 - d. Provide a variety of housing opportunities on the remaining vacant residential land to meet local housing needs, including the Borough's affordable housing obligation.

2. Office and Manufacturing

- a. Provide for the controlled growth of office uses to minimize the adverse impacts on the Borough and surrounding communities.
- b. Maintain and enhance the viability of existing manufacturing activities within the Borough.

3. Business

- a. Concentrate commercial expansion in defined centers of the Borough.
- b. Enhance accessibility and parking for commercial centers to encourage increased use.
- c. Provide for the expansion of necessary ancillary services to the office uses.

d. Protect abutting residential neighborhoods from a disorderly expansion of commercial uses.

4. Conservation/Recreation

- a. Limit development in environmentally sensitive areas, including strict adherence to applicable flood plain and wetlands regulations.
- b. Encourage protection of these sensitive areas by donation/acquisition of such areas for public preservation.
- c. Maintain and enhance the recreational opportunities within the local community.
- d. Preserve existing active recreational areas, both public and private, and encourage additional facilities as part of new development projects.

B. CIRCULATION

- 1. Regional Traffic Circulation
 - a. Implement the appropriate recommendations of the

 Town-wide Traffic Study by Garmen Associates to improve peak hour traffic flows through the Borough.
 - b. Work towards the completion of Eisenhower Parkway and develop alternate traffic strategies for the interim period.
 - c. Cooperate with abutting municipalities to develop methods to handle regional traffic problems.

2. Local Traffic Circulation

- a. Maintain the integrity of residential neighborhoods by discouraging the development of through traffic patterns "by-passing" peak hour bottlenecks.
- b. Improve accessibility and parking for the town center to maintain and increase its commercial viability.
- c. Ensure adequate local/regional accessibility for new development, particularly any commercial development outside the town center.

C. UTILITIES/SERVICES

1. Sewer

Review and analyze alternate opportunities for providing sewage disposal to the Borough

2. Water

Implement necessary upgrading of the local distribution system to maintain satisfactory water service to the Borough

- 3. Municipal Services
 - Ensure adequate fire and police protection and municipal and community services.
- 4. Education

Ensure the quality of education for Roseland residents while responding to fluctuations in student population.

- 5. Recycling
 - in accordance with any District recycling plan and State recycling goals.

b. Expand the recycling program to include all non-residential uses within the Borough.

6. Stormwater Management

- a. Prohibit development of wetlands and flood areas to the full extent of present and future State and Federal regulations pertaining to these areas.
- b. Undertake an evaluation of the existing storm sewer system to assess current problems, capacities and impacts of new development.
- c. Develop and adopt procedures and design standards for all new developments and existing developments requiring development approval in accordance with the methods and procedures outlined in the "Guide to Stormwater Management Practices in New Jersey," New Jersey Department of Environmental Protection, April 1986.

APPENDIX B

RECYCLING PLAN ELEMENT

The New Jersey Statewide Mandatory Source Separation and Recycling Act, P.L. 1987, C.102 requires that municipal master plans include a recycling element which promotes the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices incorporating State recycling goals for solid waste. Moreover, municipal development regulations concerning site plan and subdivision approval must include provisions which will ensure conformity with a municipal recycling ordinance and with the district solid waste management plan developed by the County.

This element of the Master Plan describes the existing recycling activities of the Borough of Roseland and recommends additional recycling activities and the adoption of subdivision and site plan regulation amendments to ensure that future development is designed to accommodate the recycling of solid waste.

Goals

The goals of the Borough's recycling program are as follows:

- 1. Increase the type and percentage of materials recycled in accordance with any district recycling plan and State recycling goals.
- 2. Expand the recycling program to include all non-residential uses within the Borough.

Borough Recycling Program

The Borough adopted Ordinance No. 28-1986 on October 21, 1986, which mandated the recycling of certain designated materials. Prior

to the adoption of this ordinance, the Borough lacked an active recycling program.

Effective on adoption of the Ordinance, the Borough has required that all occupants of residential properties separate glass bottles and jars, aluminum cans, and newspapers for recycling. Newspapers must be tied or bundled for recycling and cannot include any other paper or other material, unless specifically permitted by the collecting organization or agency. The newspaper bundles cannot exceed 12 inches in height nor weigh more than 30 pounds.

Newspapers are presently collected at curb-side two times per month by the Essex County Occupation Center and transported to a paper recycler.

All glass containers must be washed and separated by color and all aluminum cans must be rinsed. Because the Borough presently does not have curb-side pickup for glass containers and aluminum cans, residents must bring these items to the Recycling Center located at the rear of the Public Works Building at 300 Eagle Rock Avenue. The Recycling Center is currently open on weekdays from 8:00 a.m. to 3:00 p.m.

The Borough has designated a Recycling Coordinator with the authority to promulgate rules and regulations for the separation, sorting, transportation and marketing of recyclable materials. Such rules and regulations are subject to review and approval by the Mayor and Borough Council.

A violation of separation requirements will result in a maximum fine of \$50.00. Unauthorized collectors are subject to a maximum fine of \$500.00.

Leaves are collected at curb-side by the Department of Public Works starting at the end of September and continuing through mid-November. The Borough maintains its own New Jersey Department of Environmental Protection approved composting site and shares the necessary equipment to manage the composting site with several adjoining towns. The composted material is made available to local residents at the end of the composting process.

With the exception of curb-side newspaper pickup, the Borough utilizes Department of Public Works personnel for the Borough recycling program. The Borough is considering hiring one full-time laborer to assist in the daily operation of the Borough Recycling Center.

The requirements of the Borough recycling program are enforced jointly by the Roseland Board of Health and the Roseland Police Department.

Recommendations

With few exceptions, the Borough has met or exceeded the requirements of the Act in its recycling efforts. To ensure complete compliance the following actions are recommended:

1. To further the goals of the Borough recycling program and to ensure that future development is designed to accommodate recycling, the Borough's Land Development Ordinance should be revised as follows:

- a. Development proposals for 50 or more units of single-family housing or 25 or more units of multifamily housing must provide adequate provisions for recycling including the designation of specific areas for the storage of recyclable materials.
- b. Development proposals for non-residential use which involve 1,000 square feet or more of land area must also provide adequate provisions for recycling. Plans should specify at a minimum the proposed location of storage areas, quantity of recyclable material generated, and method and frequency of recyclable material collection. These provisions should apply equally to new development and to existing development requiring development approval.
- To increase the type and percentage of materials recycled, the method of collection of recyclables should be reviewed regularly.
 - a. For residential uses, alternate methods of collection such as curb-side pickup of glass and aluminum, may be needed if there is insufficient compliance under the current drop-off system.
 - b. For existing office and commercial uses, recycling plans should be developed by each building manager/landlord, to be implemented by each use and reviewed, monitored and enforced by the Borough.

Conformity

This recycling element has been prepared in conformance with the New Jersey Statewide Mandatory Source Separation and Recycling Act.

A district recycling plan has not yet been prepared for Essex

County, however, substantial conformity between this element and any proposed district plan is anticipated.

APPENDIX C

STORMWATER MANAGEMENT ELEMENT

The purpose of stormwater management is to:

- reduce flood damage, including damage to life and property;
- minimize stormwater runoff from any new land development where such runoff will increase flood damage;
- reduce soil erosion from any development or construction project;
- 4. assure the adequacy of existing and proposed culverts and bridges;
- 5. induce water recharge into the ground where practical;
- 6. prevent, to the greatest extent feasible, an increase in non-point pollution; and
- 7. maintain the integrity of stream channels for their biological functions, as well as for drainage.

Existing conditions within the Borough of Roseland dictate a multiple approach to stormwater management to achieve the above objectives.

There are certain areas within the Borough which are currently subject to flooding during heavy and/or prolonged rains including the following:

- 1. Along the Passaic River at the west end of the Borough.
- 2. Along Foulertons Brook and along the north branch of Foulertons Brook tributary to the Passaic River.
- 3. Along Canoe Brook at the east end of the Borough, adjacent to West Orange.

Frequent flooding and surface water ponding in these areas is due to low soil permeability, a high degree of development, and less than adequate storm drains.

These flood zones have been delineated by the Federal Emergency Management Agency (FEMA) and are subject to regulation at both the Federal and State levels. Any encroachment of development into the flood zone and adjacent flood fringe area reduces the flood-carrying capacity of the plain and increases flood elevations. This in turn increases the flood hazard to areas beyond the encroachment area.

Because the New Jersey Department of Environmental Protection regulations provide for "zero net fill" within any part of the flood plain of the Central Passaic River Basin, it is proposed that any construction or filling within the flood plain and/or floodway as determined by the FEMA maps or other acceptable delineation be prohibited.

In addition, development in areas delineated as wetlands in accordance with applicable State and Federal regulations is already prohibited by these regulations, which should be strictly enforced.

For the developed areas of the Borough, an evaluation of the existing stormwater management system should be undertaken to assess existing capacities, problem areas, and improvement needs.

Location, type, size, and direction of flow of all drain pipes and inlets should be mapped; existing problems identified and prioritized; and a capital improvement program developed.

This evaluation will help determine the extent to which additional stormwater runoff can be channeled through the system without detrimental flooding effects. Where necessary, the system should be upgraded either by private developers as a condition of

subdivision/site plan approval or by the Borough where future development is not possible or allowed.

For the remainder of the undeveloped land within the Borough, the intent of stormwater management is to manage the increased rate and velocity of surface water runoff created by changes in the ground cover and natural runoff patterns resulting from the development of land. Stormwater management plans shall therefore be required for each and every application for development, unless otherwise exempt by Ordinance. These plans shall be designed in accordance with the objectives stated in this Stormwater Management Element, the standards found in the Land Development Standards, and any other applicable County, State or Federal regulations.

Recommendations

To ensure compliance with the goals and objectives above, the following actions are recommended:

- Development of wetlands and flood areas should be prohibited to the full extent of present and future State and Federal regulations pertaining to these areas.
- 2. Evaluation of the existing storm sewer system should be undertaken to assess current problems, capacities, and impacts of new development.
- 3. All developments requiring development approval should submit stormwater management plans in accordance with the methods and procedures outlined in the "Guide to Stormwater Management Practices in New Jersey," April 1986, published by the New Jersey Department of Environmental Protection.
- 4. The procedures and design standards proposed in the Land Development Ordinance prepared by the RBA Group should be adopted after review by the Borough Engineer.

APPENDIX D

Land Development Ordinance (proposed) Section 509, Solid Waste Disposal

Amended:

- D. Recycling. Requirements set forth in the Borough of Roseland Municipal Ordinance Number 28-1986 and the New Jersey Statewide Mandatory Source Separation and Recycling Act and all subsequent revisions shall be complied with. Specifically, all Subdivision and Site Plan Applications submitted to the Borough involving 50 or more units of single-family housing or 25 or more units of multifamily housing and any commercial or industrial development which uses 1,000 square feet or more of land must provide adequate provisions for the recycling of designated materials. The following items should be addressed:
 - 1. Identify materials to be collected.
 - 2. Identify proposed recyclable material storage locations.
 - 3. Identify locations where recyclable materials are to be picked up.
 - 4. Identify frequency of collections.
 - 5. Identify quantity of recyclable materials expected to be generated.
 - 6. Where outdoor storage is proposed, the storage area shall be suitably screened from view.