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Master Plan for Bedminster, Pt. II

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Township of Bedminster

Somerset County New Jersey

Master Plan Program

August, 1982

Part II
Development Plan

PREPARED BY:

Richard Thòmas Coppola

and Associates

Princeton Junction, N.J.

License No. 1378

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Preface

PREFACE.

The Development Plan portion of the Township of Bedminster Master Plan represents the goals and policies of the municipality concerning the use and accessibility of its land and the provision of the facilities and services needed to support various land use activities, responsive to both local and regional social and environmental considerations.

The extent to which public policy can influence the physical development of the Township of Bedminster is dependent upon a number of considerations: existing land uses and the character of development which has already taken place; housing needs, both on a local and regional level; the need of community services and facilities to service the existing and future population; the problems and potentials of the existing transportation network; and, finally, the physical characteristics of the land, particularly in areas which are not served by public utilities. Information related to these concerns has been provided within the Background Studies which, taken together, offer a composite picture of the Township of Bedminster as it exists today. The information provided in the Background Studies forms the basis for the policies articulated in the Development Plan in the sense that it defines the capabilities, limitations and obligations of the Township's land area to absorb new development.

The formulation of the Development Plan for Bedminster Township may be considered to have commenced on December 13, 1979, when Judge Leahy of the Superior Court of Somerset County, New Jersey issued his Opinion that the zone plan of the Township was arbitrary and exclusionary, and therefore invalid. Because of the statutory relationship between a master plan and a zoning ordinance, Judge Leahy's Opinion effectively declared the 1979 Master Plan of Bedminster Township also invalid.

In March 1980, Judge Leahy followed his Opinion with an Order for the Township to rezone in accordance with specific guidelines under the direction of a Court appointed Master and instructed the Township to complete the rezoning process within a three (3) month time period. The fact that Bedminster Township was compelled to rezone before it was able to prepare a comprehensive master plan is the essential difference between Bedminster Township's current master plan process and the process prescribed in the Municipal Land Use Law (N.J.S.A.40:55D-1 et seq.). The current master plan process of Bedminster Township is following the adoption of zoning ordinance provisions; ordinarily, the master plan process is completed first, and then the appropriate ordinance provisions are adopted to implement the recommended development plan.

As ordered by the Superior Court, Bedminster Township adopted appropriate ordinance provisions satisfactory to the Township, the plaintiff, the Court appointed Master and the Court itself. The existing ordinance provisions of Bedminster Township have been certified by the Court to be balanced in terms of residential vs. non-residential land uses; to provide the opportunity for an appropriate variety and choice of housing types consistent with local and regional obligations; and to be in concert with County, State and regional plans for the Bedminster Township vicinity of New Jersey.

Therefore, the overriding purpose of the current master plan process of Bedminster Township is to analyze the adopted zone plan to assure that it prescribes the most appropriate method for the municipality's physical development and that its

provisions are appropriate, viable and sufficient to satisfy the long-term development needs and responsibilities of the Township while, at the same time, acknowledging the capacities and limitations of the Township to host the intended development. Additionally, the current master plan process of Bedminster Township must look ahead in terms of ancillary planning considerations including the need for additional community facilities and the need to ameliorate the existing and anticipated traffic difficulties within the Township, particularly within and around the Village of Pluckemin.

This document should be viewed in concert with the separately published "Part I: Background Studies" portion of the Township of Bedminster Master Plan. Both the Land Use Plan Element and the Traffic Circulation Plan Element are presented herein. It should be noted that the Bedminster Township Planning Board is currently preparing a Community Facilities Plan Element and an Energy Conservation Plan Element for eventual adoption as part of the Bedminster Township Master Plan.

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Goals and Objectives

GOALS AND OBJECTIVES

The Municipal Land Use Law, enacted by the State Legislature on January 14, 1976, empowers municipal governments with the right to control the physical development of the lands within their bounds. N.J.S.A. 40-55D-2 of the Municipal Land Use Law, as amended, lists fourteen (14) general purposes regarding the local planning process which are as follows:

- a. To encourage municipal action to guide the appropriate use of development of all lands in this State, in a manner which will promote the public health, safety, morals and general welfare;
- b. To secure safety from fire, flood, panic and other natural and man-made disasters;
- c. To provide adequate light, air and open space;
- d. To ensure that the development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the 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 and preservation of the environment;
- f. To encourage and appropriate and efficient expenditure of public funds by the coordination of public development with land use policies;
- g. To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational and commercial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens;
- h. 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 would result in congestion or blight;
- To provide a desirable visual environment through creative development techniques and good civic design and arrangements;

- j. To promote the conservation of open space and valuable natural resources and to prevent urban sprawl and degradation of the environment through improper use of land;
- k. To encourage planned unit developments which incorporate the best features of design and relate the type, design and layout of residential, commercial and recreational development to the particular site;
- 1. To encourage senior citizen community housing construction;
- m. To encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land; and
- n. To promote the conservation of energy through the use of planning practices designed to reduce energy consumption and to provide for maximum utilization of renewable energy sources.

Consistent with these general purposes which the Township of Bedminster embraces, the Township has extrapolated certain specific goals for its future development which are defined as follows:

- The Development Plan of Bedminster Township should build upon and refine the past planning decisions of the municipality, consistent with present local and regional needs, desires and obligations.
- 2. The identity of the Township as a totality and the integrity of individual neighborhood areas should be preserved, enhanced and created to the maximum extent possible.
- 3. The Development Plan should recognize the physical characteristics of the Township and acknowledge the inherent capabilities and limitations of the land to host different types of community development at appropriate densities and intensities.
 - a. Conservation of existing natural resources should be an integral part of the planning process, with special attention to the constraints of environmentally critical and sensitive areas;
 - b. Applicable facilities, basin and area wide plans, especially concerning the regional potable water supply, should be implemented in order to prevent adverse environmental impacts upon lands within adjacent municipalities and the general vicinity of the Township; and
 - c. Open space and farmland should be preserved to the maximum extent possible.

- 4. The rural and country atmosphere which prevails throughout most of the municipality should be maintained. In cooperation with the Somerset County Planning Board and consistent with the local (201) and regional (208) plans sponsored by the Federal Government to control the water quality in the Raritan River, the Township of Bedminster desires to preserve the headwaters of the Raritan River Basin in low density land use.
- 5. The Development Plan should strive to prevent the homogenous spread of suburban development throughout the municipality. The Court defined Route 202/206 corridor should continue to be designated for specific types of relatively dense residential uses offering a variety of housing opportunities, as well as relatively intense non-residential development, a sufficient component of which is to serve local needs.
- 6. The Development Plan should provide that the future higher density housing be planned as part of relatively large scale developments in order to insure that adequate roads, recreational areas, drainage facilities, public water and sewerage facilities and other infrastructural improvements are constructed commensurate with the residential development.
- 7. Retail shopping facilities should be provided within the Court defined Route 202/206 corridor to serve the needs of the existing and anticipated residential population of the Township, and such shopping facilities should be provided as an integral part of the large scale residential development in order to avoid the proliferation of vehicular shopping trips and to prevent the evolution of 'strip' commercial development.
- 8. Research and office acreage should be provided in balance with the planned residential and commercial development. The acreage designated for office and research development should be controlled with appropriate regulations, without denying the needs of modern office activities.
- 9. Improvements to the road network within the Township should be constructed commensurate with the type and degree of land development envisioned. The rural land uses outside of the Court defined corridor should continue to be served by similarly rural roadways, while the roads serving the dense and intense land uses within the Court defined corridor should be improved to accommodate the anticipated traffic volumes.

- 10. In addition to other evident traffic circulation problems, the traffic circulation difficulties within and around Pluckemin Village should be resolved in a manner which:
 - a. accommodates the planned physical development of the area;
 - b. preserves historic Pluckemin Village; and
 - c. does not create a visually urban appearance.
- 11. In concert with applicable facilities, basin and area wide plans, proper and adequate water supply and sewerage facilities should be provided within the Court defined Route 202/206 corridor in order to accommodate the planned physical development of the area. Regarding sewerage facilities, the capacity of such facilities must be evaluated in terms of the ability of the environment to support them. The quality of effluent discharge into the waterways must be continuously monitored and evaluated. Regarding the provision of an adequate potable water supply, the overall capacity of the Raritan River Basin must be considered in the context not only of the parochial needs of Bedminster Township, but also in light of regional demands.
- The community facility needs of the Township should be a major consideration of the Development Plan. To the greatest extent possible, the location of the necessary community facilities should be within the Court defined corridor. While it is recognized that a major burden and responsibility of the Township will be to acquire land for the necessary facilities and construct the facilities in order to meet the future needs of the residents and workers of Bedminster Township, it is also understood that the need for the community facility improvements is directly related to the land use development which will occur within the Court defined Route 202/206 corridor. Therefore, while the Township will assume its responsibilities for the provision of the necessary community facilities, appropriate legal mechanisms should be formulated and adopted to assess the appropriate amount of these costs upon the developments within the Court defined Route 202/206 corridor.

Land Use Plan Element

LAND USE PLAN ELEMENT

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LAND USE PLAN ELEMENT

INTRODUCTION

A Master Plan represents the goals and policies of a municipality concerning the use and accessibility of its land and the provision of the facilities and services needed to support various land use activities.

The Land Use Plan Element focuses on the physical development of the municipality, but must, by statute, take into consideration the other elements of a Master Plan. A Land Use Plan Element is described in the Municipal Land Use Law (N. J. S. A. 40:55D-28 a.(2)) as:

- (a) taking into account the other master plan elements and natural conditions, including, but not necessarily limited to, topography, soil conditions, water supply, drainage, flood plain areas, marshes, and woodlands;
- (b) showing the existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, agricultural, recreational, educational and other public and private purposes or combination of purposes; and,
- (c) including a statement of the standards of population density and development intensity recommended for the municipality.

The extent to which public policy can influence the physical development of the Township of Bedminster is dependent upon a number of considerations: existing land uses and the character of development which has already taken place; housing needs, both on a local and a regional level; the need for community services and facilities to service the existing and future population; the problems and potentials of the existing roadway system; and, finally, the physical characteristics of the land, particularly in areas not served by public utilities. Information related to these concerns has been provided within the Background Studies which, taken together, offer a composite picture of the Township of Bedminster as it exists today. The information provided in the Background Studies forms the basis for the policies articulated in the Land Use Plan Element in the sense that it defines the capacities, limitations and responsibilities of the Township's land area to absorb new development.

As documented in the Background Studies, Bedminster Township's current Zoning Ordinance provisions permit a significant amount and diversity of residential and non-residential development, certified by the Superior Court to satisfy the Township's regional obligations as a "developing municipality". Specifically, within the Court defined Route 202/206 corridor alone, and including only those parcels of land most probable for future development, the Zoning Ordinance provisions permit approximately 4,900 multiple family dwelling units; approximately 1,000,000 sq. ft. of retail/office commercial space; and approximately 555,500 sq. ft. of office/research space.

Summarily, the Background Studies have reaffirmed that the adopted Ordinance provisions governing the physical development of Bedminster Township are appropriate, considering both existing and anticipated development needs and responsibilities. Conversely, no new information has become available to require modifications to the adopted zone plan of the Township.

LAND USE PLAN DISTRICT AREAS

The Land Use Plan map includes a total of six (6) residential districts and one (1) office/research district. Additionally, four (4) types of multiple-family planned developments are included as optional development alternatives. The Land Use Plan map should be viewed in conjunction with the Critical Areas map which delineates the flood plain and steep slope areas within the Township as defined in Section 13-605 of the Land Development Ordinance of the Township of Bedminster.

Residential Areas:

The Bedminster Township Land Use Plan provides for a range of housing types to meet a wide variety of needs, inclinations and economic circumstances. In addition to providing a range of housing types, an overall theme of the Plan is to provide the required moderate and high density residential development within the Court defined Route 202/206 corridor, while maintaining the country and rural atmosphere prevailing elsewhere throughout the Township. Since the predominant amount of future residential construction will occur within the Court defined corridor, future residents may be provided community facilities and services at a lesser cost than would be the case for a comparable population scattered homogenously throughout the Township.

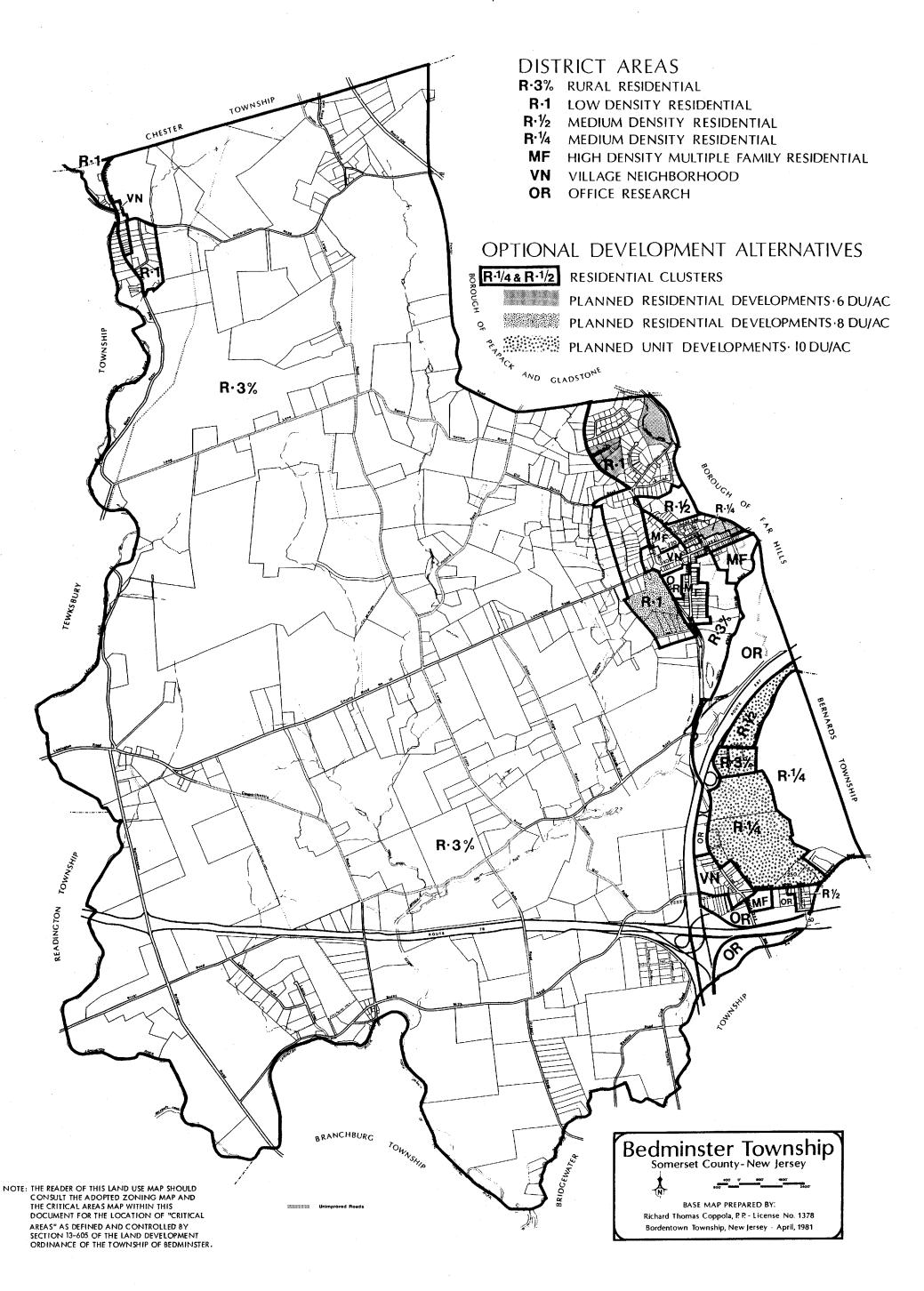
The designated residential district areas within Bedminster Township are as follows:

"R-3%" Rural Residential

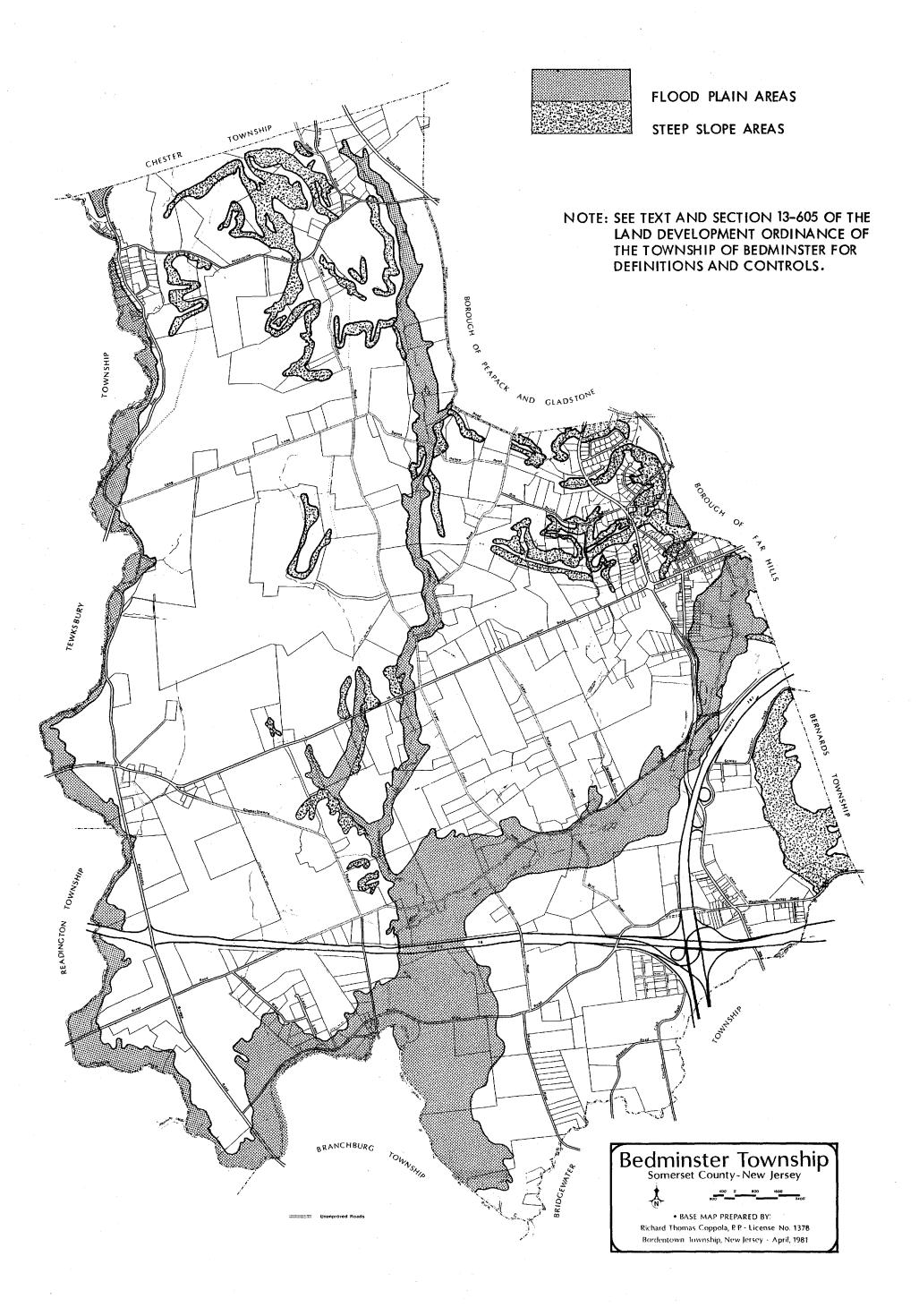
The "R-3%" Rural Residential District has been established primarily in recognition of the inherent limitations imposed by the geologic formations and soil characteristics throughout the Township and the need to protect the potable water supply from septic effluent contamination. This is particularly important because Bedminster Township is situated at the headwaters of the Raritan River Basin which is a natural water supply resource for a significant portion of north-central New Jersey. Since most of the designated land areas are without existing or proposed services of public sewers or public water supplies, the physical attributes and constraints of the land must be used as the benchmark for the residential density which can be appropriately and safely provided.

The major types of activities proposed within the "R-3%" Rural Residential District areas include farming, recreation and low density residential construction similar to, and compatible with, the prevailing rural country atmosphere. It is recommended that the minimum lot size for residential construction be approximately three (3) acres.

Land Use Plan APRIL, 1982



Critical Areas



In addition to conventional detached dwelling construction on individual lots, two (2) types of cluster options are permitted within the "R-3%" District on tracts of land at least twenty-five (25) acres in area. Both semi-detached dwelling clusters and detached dwelling clusters are proposed at respective densities of approximately one-third and one-half dwelling units per acre, although a lesser number of dwelling units may result due to the configuration of a tract of land, the minimum lot size requirements as currently specified in the Land Development Ordinance, traffic circulation needs and approval by the Township Board of Health for individual septic systems.

The primary purpose for the cluster options within the "R-3%" District area is to provide a degree of flexibility in the planning and development of lands which abut major roadways and/or which contain particularly environmentally fragile areas.

"R-1" Low Density Residential
"R-1/2" Medium Density Residential
"R-1/4" Medium Density Residential

These areas have been established primarily in recognition of the existing densities of residential development within specified areas of the Township. While some of the vacant acreage available within these designated areas are on individual lots intermixed with developed parcels, there are a number of large contiguous land areas which can best be developed in a clustered format, thus providing preservation of flood plains, steep slope areas, needed open space and recreational facilities, and setbacks from neighboring arterial and collector roadways.

The principal permitted uses within these district areas are single family detached dwelling units on minimum lot sizes of one-acre within the "R-1" District area, one-half acre within the "R-1/2" District area and one-quarter acre within the "R-1/4" District area. Additionally, as described below, "Residential Clusters" are permitted within the "R-1/2" and "R-1/4" District areas.

"MF" High Density Multiple Family Residential

The "MF" District areas have been designated in recognition of the possible need for relatively small scale multiple family developments at relatively high densities. Specifically, it is recommended that the "MF" District areas permit garden apartment and/or townhouse residential development on tracts of land at least three (3) acres in area and at a maximum density of twelve (12) dwelling units per gross acre of land, although it is recognized that tracts of land including a significant amount of critical land will yield a lesser number of dwelling units.

"VN" Village Neighborhood

The "VN" District areas have been established in recognition of the Villages of Pluckemin, Bedminster and Pottersville. These areas of Bedminster Township are unique, both in terms of their historical significance as well as the existing pattern of development. Consisting of many older structures situated on relatively small lots, the Village areas are significant assets to the municipality and should be protected and preserved to the greatest possible extent so that the prevailing architectural themes will remain a part of Bedminster Township and the State of New Jersey.

It is suggested that the symbiotic relationship of the residential and non-residential uses within the Village areas be continued. It is recommended that

detached dwelling units be permitted on lots at least 6000 sq. ft. in area; two-family dwelling units be permitted on lots at least 7500 sq. ft. in area; and local, retail and service activities, restaurants, banks and professional offices be permitted on lots at least one-quarter (1/4) acre in area.

Commercial Areas:

In addition to the "VN" Village Neighborhood area which permits a variety of retail and office uses, and the retail and office uses within permitted planned unit developments as described below, the Land Use Plan map includesone (1) other type of non-residential district area as follows:

"OR" Office Research

The "CR" District areas are proposed for the location of research as well as office activity. The designated areas have direct road access to State Route 206 within the Court defined corridor. Excepting the existing sites of Research-Cottrell and the AT & T Long Lines complex, the other designated "CR" areas about Interstate Routes 287 or 78.

OPTIONAL DEVELOPMENT ALTERNATIVES

The designated Land Use Plan includes areas where optional planned developments may be constructed according to specific criteria, when functioning public sewerage and water facilities are present. The essential purpose of the planned development concept is to foster the optimum development of an overall tract of land while providing the opportunity for the preservation of open space and the respect of particularly environmentally fragile or aesthetically pleasing site features. Generally, the objectives of the planned development concept are as follows:

- 1. To provide for greater variety in the type, design and layout of housing;
- To provide convenient open space and recreational facilities within easy access to all residents within the development;
- 3. To provide for the necessary community facilities and infrastructural improvements, both planned and executed as part of the overall site design;
- 4. To provide for non-residential uses as may be appropriate to the specific planned development;
- 5. To provide for a harmonious relationship between residential and non-residential uses, both existing and proposed.

Summarily, the planned development concept allows a municipality to experience development in a balanced fashion and primarily at the developer's expense. This often relieves a municipality of the cost of providing facilities such as drainage improvements, recreational improvements, water and sewer services, and even the land sites for the location of necessary community facilities. The planned

development concept permits controlled growth of the economic base of the municipality by developing commercial sites concurrently with the residential development. Scattered developments, with isolated pockets of relatively high densities of population, do not afford these planning opportunities.

In Bedminster Township, four (4) types of planned developments are proposed. It is specifically intended that the implementing Ordinance provisions governing the construction of planned developments include appropriate language guaranteeing the construction of least cost and/or subsidized housing units in order to meet the requirements mandated by the Court.

Residential Clusters

In addition to the permitted conventional lot-by-lot development, it is recommended that Residential Clusters be permitted on tracts of land at least five (5) acres in area within the "R-1/4" and "R-1/2" Districts. Three (3) types of residential dwelling units are to be permitted within a Residential Cluster, including single family detached dwelling units on lots at least 6000 sq. ft. in area; two family dwelling units on lots at least 7500 sq. ft. in area; and townhouse multiple-family dwelling units. The overall number of dwelling units permitted in a Residential Cluster is to be equal to two (2) dwelling units per acre on non-critical lands in the "R-1/4" District or four (4) dwelling units per acre on non-ditical lands in the "R-1/4" District plus, in each instance, a transfer of an additional one-fifth (1/5) dwelling unit per acre from the critical lands in the tract to the non-critical lands.

Planned Residential Developments - 6 DU/AC

Planned Residential Developments (6 du/ac) are proposed on tracts of land at least five (5) acres in area where indicated on the Land Use Plan map. The maximum number of dwelling units to be permitted is equal to six times (6x) the number of total acres within the tract, although it is recognized that tracts of land including a significant amount of critical land will yield a lesser number of dwelling units. It is recommended that single family detached dwelling units be permitted on lots at least 6000 sq. ft. in area; semi-detached dwelling units on lots at least 3750 sq. ft. in area; two-family dwelling units on lots at least 7500 sq. ft. in area; and townhouse multiple-family dwelling units.

Planned Residential Developments - 8 DU/AC

Planned Residential Developments (8 du/ac) are recommended on tracts of land at least five (5) acres in area where indicated on the Land Use Plan map. Provisions of the PRD (8 du/ac) are proposed to be identical to those noted above for the PRD (6 du/ac) except that the maximum number of dwelling units permitted will be eight times (8x) the number of total acres within the tract, and garden apartment dwelling units are suggested to be included as a dwelling unit type.

Planned Unit Developments

Planned Unit Developments are recommended on tracts of land at least ten (10) acres in area where indicated on the Land Use Plan map. Both residential and commercial uses are permitted, and it is specifically intended that sufficient retail and office development be provided to satisfy the needs of the intended population within the PUD as well as the nearby population in neighboring municipalities.

Single family detached dwellings (6000 sq. ft. lots); semi-detached dwelling units (3750 sq. ft. lots); townhouses and garden apartments are to be permitted, provided that the total number of dwelling units is no more than ten times (10x) the number of total acres within the tract, excluding those acres devoted to the permitted commercial activities.

FUTURE LAND USE PLAN CONSIDERATIONS

During the preparation of the Land Use Plan Element portion of the Bedminster Township Master Plan, a number of concepts and techniques were discussed relative to the ultimate development of lands within the "R-3%" District outside the Court defined Route 202/206 corridor. Certain of these concepts and techniques include methods of preserving the existing agricultural lands; modifications to the cluster options currently permitted within the "R-3%" District; utilization of transfer of development rights (TDR) and/or transfer of development credits (TDC) techniques for density distribution and control; and the utilization of spray irrigation land application techniques on appropriate land areas.

Since many of these concepts and techniques are interrelated, it is suggested that they be analyzed as part of a comprehensive program of study. Additionally, since many of the concepts and techniques mentioned above, including spray irrigation, are in their embryonic stage of technical review and understanding, it is suggested that any study program at the Township level be coordinated with other analyses conducted at the regional and State levels.

Traffic Circulation Plan Element

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TRAFFIC CIRCULATION PLAN ELEMENT

INTRODUCTION

In accordance with N.J.S.A.40:55D-28 of the Municipal Land Use Law, the Traffic Circulation Plan Element of a municipal Master Plan shows "the location and types of facilities for all modes of transportation required for the efficient movement of people into, about and through the community".

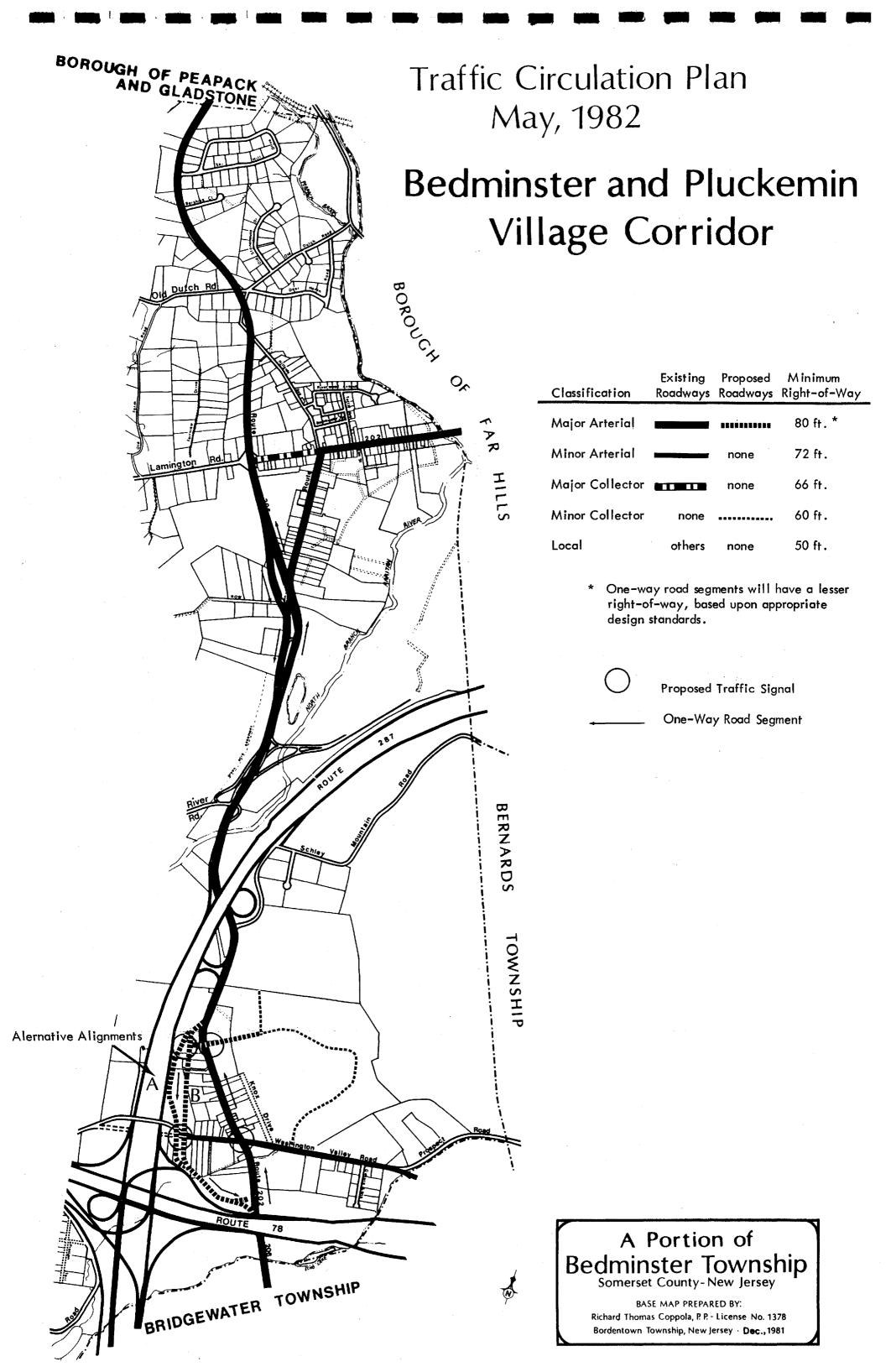
The Traffic and Circulation Background Study described certain problems associated with the circulation of vehicular traffic within Bedminster Township; particularly within the Route 202/206 Bedminster and Pluckemin Village corridor in the eastern portion of the Township. The focal point of the problem is the necessity to embrace a design solution to the traffic difficulties within and around the Village of Pluckemin.

Additional problems associated with the circulation of vehicular traffic along Route 206 within Bedminster Township were cited by the New Jersey State Department of Transportation in a June 1982 draft report which addressed the Route 206 corridor between Bridgewater and Roxbury Townships. The concern of the Department of Transportation is multi-facted; however, the degree and intensity of the development permitted within the corridor, the relationship of residential and non-residential development, and incentives for increased ride-sharing are major considerations. Bedminster Township has a moral obligation to be mindful and responsive to the recommendations of the State Department of Transportation in its efforts to mitigate the ever increasing problems of traffic flow along the State roadway. The "Executive Summary" and "Recommendations for Future Action" portions of the June 1982 report are included in the Addendum to this plan element.

The Traffic and Circulation Background Study also documented the Somerset County Planning Board's intentions for the improvements of certain roadways under their jurisdiction west of the Court defined Route 202/206 corridor. Bedminster Township's intention for roadways outside of the Court defined corridor and under its jurisdiction is to improve the roads only to the degree necessary to provide safe and convenient access to the existing and planned residential development within the rural portion of the municipality.

THE PLAN

Commensurate with the Court ordained and Township embraced policy of concentrating intense non-residential and dense residential development within the Route 202/206 corridor, the Traffic Circulation Plan Element of the Bedminster Township Master Plan focuses its attention to the traffic problems existing and anticipated within



the Route 202/206 Bedminster and Pluckemin Village corridor portion of the municipality. The Traffic Circulation Plan, dated May 1982, indicates five (5) roadway classifications as follows:

Major Arterial Roads

State Routes 202 and 206 are classified as major arterial roadways on the Traffic Circulation Plan. The major component of the Traffic Circulation Plan involves that portion of State Routes 202/206 between Interstate Route 287 to the north and Interstate Route 78 to the south, commonly known as the Pluckemin Village area of Bedminster Township. It is on this concentrated area of land that the major portion of future development will occur. As documented in the Regional Analysis Background Study, more than 3,000 multiple family dwelling units and more than $1\frac{1}{2}$ -million sq. ft. of retail commercial, office and research space is zoned to be developed within the Pluckemin Village area of Bedminster Township.

Since the early 1960s, the Bedminster Township Planning Board has recognized the necessity of by-passing Pluckemin Village proper in order to accommodate anticipated traffic volumes while maintaining the prevailing historic and architectural character of development. Both an easterly and westerly by-pass have been considered, although the 1965 and 1977 Master Plans indicate an easterly by-pass, possibly utilizing the Knox Avenue right-of-way. The easterly alignment was included by the Planning Board in its May 21, 1981 approval resolution of the Phase I Preliminary Plans of The Hills Development Company Planned Unit Development; however, the action by the Planning Board was subject to concurrence to the by-pass scheme by the Township Committee. Concurrence to the by-pass scheme not forthcoming because of the lack of a funding mechanism, an easterly by-pass on The Hills Development PUD property was not implemented.

A Traffic Impact Study was prepared for Bedminster Township by Edwards & Kelsey on April 2, 1981. The report indicated by-pass alternatives in addition to an easterly by-pass. One of these alternatives was a westerly one-way couplet scheme, directing northbound traffic along the existing alignment of Route 202/206 and southbound traffic along a new two-lane roadway to be constructed between Interstate 78 to the north and Interstate 287 to the south. During the Planning Board's review of a site plan submitted by City Federal Savings and Loan, discussion regarding the westerly by-pass continued. Frost Associates was commissioned by the Township to analyze the site plan and also the broader issue of projected traffic volumes within and around the Pluckemin Village portion of Bedminster Township.

In consideration of all the available facts and possibilities, the Traffic Circulation Plan map includes a westerly one-way by-pass couplet scheme proceeding from the proposed jughandle between State Route 202/206 and Hills Drive, southward through the vacant land area between existing Route 202/206 and Interstate 287, across Burnt Mill Road, through the Township owned Pluckemin Schoolhouse property, and thereafter through the southern portion of the City Federal Savings and Loan property to an intersection with State Route 202/206 just north of its crossing with Interstate Route 78.

Since engineered details for the exact location of the southbound segment of the one-way couplet scheme have yet to be designed, alternative alignments are indicated on the Traffic Circulation Plan map. However, the preferred alignment would have the roadway proceed southerly from the proposed jughandle with Hills Drive as close as feasible to the Interstate 287 right-of-way, and then across Burnt Mill Road to an alignment as close as possible to the Interstate Route 78 right-of-way, to an ultimate "T" intersection with State Route 202/206. This alignment will have the least impact on the properties through which the roadway will pass and will serve to provide added traffic accessibility to those same land areas.

As noted on the Traffic Circulation Plan map, the right-of-way for the one-way segments of Route 202/206 are anticipated to be significantly less than the otherwise required eighty foot (80') right-of-way width for two-way traffic flow elsewhere along State Routes 202 and 206 in Bedminster Township.

In addition to State Routes 202 and 206, that portion of Hills Drive intended to provide access to the non-residential portion of the Planned Unit Development also is designated as a major arterial road.

The addendum to this Traffic Circulation Plan includes a May 17, 1982 memorandum to the Bedminster Township Committee from Marshall Frost covering his May 4, 1982 letter to the New Jersey Department of Transportation and a May 14, 1982 letter to Mayor Paul Gavin from Frank S. Parker, Chief Design Engineer of the New Jersey Department of Transportation. As indicated, the State Department of Transportation has conceptually approved the proposed one-way westerly couplet by-pass scheme.

Minor Arterial Roads:

Washington Valley Road and that portion of Burnt Mill Road east of the proposed one-way couplet are recommended, in concert with the Somerset County Planning Board, to have rights-of-way of seventy-two feet (72') and appropriately designed cartways and intersection improvements.

Major Collector Roads:

Again in concert with the recommendations of the Somerset County Planning Board, that portion of Lamington Road between State Routes 202 and 206 is designated as a major collector roadway with a right-of-way of sixty-six feet (66'). Additionally, as future development occurs in the vicinity of the Lamington Road/Route 206 and Lamington Road/Route 202 intersections, appropriate road widening, realignment and traffic signaling improvements should be designed and constructed.

Minor Collector Roads:

That portion of Hills Drive not providing access to the non-residential development within the PUD and the connecting road between Hills Drive and the property to the north are designated as 'minor collectors' with a proposed right-of-way of sixty feet (60'). Both Hills Drive and the north-south connective roadway have been approved as part of the site plan submission of The Hills Development Company.

Local Roads:

The Traffic Circulation Plan does not recommend the location of any new local roadways. All local roadways are intended to be planned and approved during the site plan and subdivision review process of the Bedminster Township government. It is specifically recommended that local roads not be planned and constructed in a manner that will encourage their being used for anything but access to the residences and other permitted uses fronting upon them; therefore, long, straight roadways are to be discouraged.

Although no specific proposals for improvements to the local road network within Bedminster Township are proposed as part of the Traffic Circulation Plan, it is specifically recommended that the Township continually monitor the design standards and needs of the local road network and make whatever improvements are necessary in order to maintain safe and sufficient traffic flow along the roadways.

ROADWAY DESIGN RECOMMENDATIONS

The following roadway design recommendations are highlighted because of their importance to the ultimate construction of an efficient, workable and safe traffic network throughout Bedminster Township:

- Where possible, local roads should be looped or cul-de-saced in order to avoid unnecessary vehicular trips within residential neighborhoods.
- 2. Arterial and collector roads should be curbed within all large projects and, wherever feasible, no direct driveway access should be permitted from the roadways to individual lots and buildings.
- 3. Either reverse frontage or marginal access roads should be provided adjacent to all arterial roads and major collector roads.
- 4. Street lighting and signing should be provided at all major intersections and the intensity of the lighting should be greater at the intersections than along other portions of the roadways.
- 5. Curbs along roads should be used only at intersections and elsewhere, where needed, to provide storm drainage control; otherwise, the edges of roadways should be constructed with appropriately stabilized shoulders.
- 6. The right-of-way of all new local roads should be fifty feet (50'), unless the cartway within the street right-of-way will be used for parking, in which case the road right-of-way should be a minimum of sixty feet (60') in width.

OTHER TRANSPORTATION RECOMMENDATIONS

In addition to the roadway design recommendations highlighted above, certain other methods of accommodating the need of individuals to be transported from place-to-place should be implemented, including the following:

- 1. Transportation System Management (TSM) techniques such as ride sharing, staggered work hours and the utilization of corporate vans to transport workers should be an integral part of any large scale office-research development.
- 2. The use of public bus transportation should be encouraged with the construction of bus stop shelters in appropriate locations.
- 3. The use of the bicycle as a means of transportation, particularly within the Court defined Route 202/206 corridor wherein both residential and non-residential uses are intended to be developed in close proximity to each other, should be encouraged with the design of appropriate bikeway paths and the provision of bike racks.

ADDENDUM

TO: Bedminster Township Committee

FROM: M. Frost

RE: Pluckemin By-pass

DATE: May 17, 1982

Enclosed please find copies of my letter to Mr. Bruce Brumfeld dated May 4, 1982, and a responce to Mayor Gavin dated May 14, 1982. In summary, based upon discussions to date with the Department they are approving the concept for a one-way by-pass to the west of Pluckemin Village. Specifically, the concept incorporates a one-way road from the jughandle for Hills Development south paralleling I-287 and ending in a "T" intersection at the southerly end of City Federal's property. This roadway, two lanes wide, would not be designed to Department standards but would require their review and approval of some modification of the Department's standards. It is my opinion that it will be possible to construct this roadway within the original estimate of \$3 million.

I would envision once the project had been constructed, the Department of Transportation would take jurisdiction over the newly constructed roadway and they may look to upgrade the pavement section at their own expense in the future.

Based upon the letter of May 14, 1982, and the numerous discussions I have had with Department officials, I can forsee no problem in developing the by-pass roadway. Further, I think the Department of Transportation's letter reflects an understanding of the problems involved and I would anticipate continued cooperation between the Department and the Township. Assuming that the Township Committee decides to proceed with the by-pass, I would recommend that the Township immediately proceed with further discussions with the Department and the develoment of a preliminary design so that a detailed review can be completed by the Department.



FROST ASSOCIATES

CONSULTING ENGINEERS

BOX 657 • CHATHAM, NEW JERSEY 07928 • (201) 635-1250

May 4, 1982

Mr. Bruce Brumfeld Supervising Engineer New Jersey Department of Transportation 1035 Parkway Avenue Trenton, NJ 08618

RE: Route 202/206
Pluckemin Village

Dear Mr. Brumfeld

As we discussed, the Township of Bedminster has been attempting to develop a solution for the traffic problems expected to occur with anticipated development along Route 202/206 in Pluckemin. In the immediate future, the Township must decide whether to proceed with the implementation of a proposal developed over the past few months. This letter is to provide a brief background of the problems and explain the proposed solution. Since implementation is dependent on acceptance by the New Jersey Department of Transportation, we are hopeful that you can provide us with a response in the near future.

Over the past few years, zoning in Bedminster has undergone significant change as a result of litigation. For the past 18 months, the Township has been dividing its efforts between reviewing various applications for housing and commercial development and overall planning for the Pluckemin plain. One of the principal issues addressed with regard to overall planning has been traffic and improvements within the Route 202/206 corridor.

Historically, Bedminster has included in the Township Master Plan a by-pass around Pluckemin. As part of the Hills Development Application (Allen Deane) an easterly by-pass was studied along with various alignments between the village of Pluckemin and Route 287. As a result of that study it was decided not to pursue a by-pass to the east of Pluckemin. In 1981, an application by City Federal caused the Township to study further the concept of a westerly by-pass and the Township Committee must shortly decide whether to implement such a plan.

Various alignment studies were performed by Edwards and Kelsey in 1980 and these studies concentrated on a realignment of Route 202/206. The alternate realignments were designed to New Jersey Department of Transportation standards, with an operating speed of 50 mph. The resulting geometry caused significant impacts on existing land uses within the village of Pluckemin and/or severely reduced the value of certain undeveloped properties. Because of the high cost of construction and the impact on existing and future development, the Township could not recommend implementation.

Mr. Bruce Brumfeld Page 2 May 4, 1982



Since November of 1981, the Township has been evaluating alternates to a realignment of Route 202/206. The study has concentrated on developing a scheme which would allow projected traffic to access ultimate development within the village and accommodate through traffic in the corridor. In addition to developing an alternate that would accommodate traffic in a satisfactory manner, the plan had to minimize the impact on existing land uses and have a cost that could be funded by the municipality (with repayment to the Township by developers).

Given these and other considerations, the Township is now actively pursuing a plan for a one-way by-pass of Pluckemin Village. As will be obvious, without concurrance by the New Jersey Department of Transportation this plan cannot be implemented.

As depicted on the enclosed drawings, the plan being considered by the Township is to develop a one-way couplet with Route 202/206 northbound using the existing roadway and Route 202/206 southbound using a new roadway paralleling I-287. Based on studies of the proposal, the resulting system would accommodate the anticipated growth in through traffic and provide improved access to existing and proposed development within Pluckemin Village. Based on this schematic alignment, the Township has investigated the feasibility of implementation, and with one notable exception (lands owned by City Federal) the Township feels that it can obtain all necessary rights of way to construct the by-pass.

City Federal owns the property in the southwest quadrant of Route 202/206 and Burnt Mills Road. They are currently proposing an office facility at this location. Consequently, to allow development of this property any alignment of a by-pass through the City Federal property must allow for development of the remainder of the property to occur. This restricts the land available for right of way for the by-pass.

The proposed plan is to construct a thirty-two foot by-pass (two twelve foot lanes and two four foot shoulders) along the general alignment shown on the attached plan. The roadway would have a posted speed limit of 30 mph, and would carry southbound Route 202/206 traffic. The northern terminus would be incorporated into a jughandle being constructed for access to Hills Drive. The intersection of the new roadway with Burnt Mills Road would be STOP controlled on Burnt Mills Road. The southern terminus would be a "T" intersection with existing Route 202/206 just north of the I-78 underpass.

Normally a "T" intersection would not be incorporated into a one-way couplet. However, if the southern terminus was constructed to accommodate a 30 mph operating speed, the impact on the City Federal property would prohibit use of the property as zoned after litigation. Since Route 202 and Route 206 north of Pluckemin already have stop conditions in existence, the introduction of another stop condition should not preclude construction of the by-pass.

Mr. Bruce Brumfeld Page 3 May 4, 1982



The Township is proposing to construct the southbound segment with municipal funds, to be repaid by developers as applications for development are approved by the Township. The Township would either own and maintain the roadway, or turn it over to the New Jersey Department of Transportation. In either case it would be necessary to sign the roadway as southbound Route 202/206. This procedure is being proposed since construction to New Jersey Department of Transportation standards would result in costs far exceeding the funds available to the municipalit If requested, the municipality could provide additional right of way and the design could reflect possible future modification to be made by the Department of Transportation if they assume jurisdiction.

Admittedly, the proposal is not to the highest possible design standards. However, if taken in the context of the area being served by existing Route 202/206, the proposed design is considered to be acceptable. Further, it is an improvement that can be implemented. Finally, it would appear to be the last opportunity to upgrade the corridor.

Existing Route 202/206 through Pluckemin is a substandard two lane facility. Traffic studies prepared by applicants, the Township and Department of Transportation all indicate serious problems resulting from development within Pluckemin and outside the area. Proposed improvements, because of existing development, will result in substandard lane widths (10 or 11 feet), no shoulders, and alignment problems. Turning movements at the intersection of Route 202/206 and Burnt Mills Road as well as access to abutting properties will seriously affect traffic flow along the roadway. Because of existing land uses along Route 202/206 the Township has already requested the speed limit be reduced to 25 mph.

While the proposal will not eliminate all of these problems, the resulting traffic flow should be greatly improved. Access to and from the one-way couplet should have less of an impact on through traffic. The turning movements anticipated at the Burnt Mills intersection with Route 202/206 can be accommodated without major reconstruction of the intersection and the resulting impacts on adjacent properties. Finally, the overall capacity of the corridor should be improved. While the proposal will not provide a high level arterial through the area, this is already being provided by I-287. Consequently, the inability to provide for continuous through traffic due to the STOP condition at the southern end of the couplet is not considered a major flaw in the proposal.

In conclusion, the Township feels that this proposal is a realistic solution to the traffic problems that will result from development in the corridor. The Township must make a decision within the next few weeks to proceed with the project. At this point, the Township feels that it is possible to obtain the needed funding and necessary right of way can be acquired. (The major stumbling block in obtaining the right of way is the City Federal property but the Township feels that this problem can be resolved.)

Mr. Bruce Brumfeld Page 4 May 4, 1982



To proceed, the Township needs an indication from the State that the proposal as outlined above, is acceptable. Specifically, that the State would agree to allow the roadway to be constructed in accordance with the typical section shown, would sign the roadway for Route 202/206 southbound traffic and would accept the STOP condition at the southern end of the one-way couplet. Further, although no final decision is necessary at this time, it would be helpful to know if the State would want to assume jurisdictional control of the roadway and what right of way widths would be required.

On behalf of the Township, I want to indicate our appreciation for the cooperation provided to Bedminster in the past and I will be available to meet with you as necessary to discuss the proposal.

Very truly yours,

Marshall Frost

cc: Paul Gavin, Mayor
William Scher, Planning Board Chairman
John Cilo, Township Engineer
Richard Cappola, Township Planner
Edward Bowlby, Township Attorney



State of New Jersey

DEPARTMENT OF TRANSPORTATION

1035 PARKWAY AVENUE P.O. BOX 101 TRENTON, NEW JERSEY 08625

COPY FOR

Hay 14, 1982

Honorable Paul Gavin Hayor, Bedminster Township Hillside Avenue Bedminster, New Jersey 07921

Dear Mayor Gavin:

The Department has been involved in discussions with representatives of Hills Development Corporation and City Federal Savings concerning the proposed Piuckemin Bypass and is aware of the traffic problems that will occur as these and other developments generate more and more traffic on Route 202/206.

Additionally we are aware of the current problems at the intersection of Route 202/206 with Washington Vailey Road/Burnt Mills Road and the need for signalization. Our analysis of the area indicates a requirement for four lanes of traffic on Route 202/206 with major improvements to all four legs of the intersection. This type of improvement would have a significant impact on the Village of Pluckemin.

Department representatives have reviewed the alternate concept as proposed by Mr. Marshall Frost in his letter of May 4, 1982 to Mr. Bruce Brumfield and find the concept to have some merit. Assuming that the engineering, including typical sections, can be satisfactorily developed, the concept of a two lane southbound bypass from the proposed Hills jughandle to the Route 1-78 crossing of Route 202/206 may mitigate some of the current and anticipated traffic problems in the Village. It would also allow us to leave the existing width of pavement in the Village.

Our raview of this concept was considered on the basis of no cost of any kind to the Department for right-of-way, engineering, or construction and a final design that is acceptable to the Department. Eventually, an agreement between this Department and the municipality may have to be drawn up.

Yery truly yours, ORIGINAL SIGNED FRANK S. PARKER

Frank S. Parker Chief Engineer, Design

BRB:ala

cc Messrs. J. Freidenrich, W. Caddell
Marshall Frost (Frost Associates)

Route 206 Corridor Study Bridgewater to Roxbury

> Draft Report June, 1982

New Jersey Department of Transportation

Executive Summary

The Route 206 corridor between Route 22 in Bridgewater and Interstate 80 in Roxbury is experiencing very rapid development which will have profound transportation repercussions. Future transportation needs in the corridor will be heavily influenced by the pattern and intensity of future development, and the potential exists for moderating the increase in future transportation demands. This study documents the impact local land use decisions can have in determining the future transportation requirements of the corridor. Through a more efficient organization of development and increased vehicle occupancies, the amount of future highway improvements in the corridor could be significantly reduced. Other benefits include maintenance of open space, lower levels of air pollution, and savings in future transportation costs.

This summary presents the major findings, conclusions, and recommendations of the NJDOT report on transportation in the Route 206 corridor. Emphasis will be placed on traffic conditions and highway requirements along Route 206 for various future time periods, as well as the impact of various Transportation System Management (TSM) strategies on future traffic conditions.

Current P.M. peak hour traffic conditions in the Rt. 206 corridor indicate that the highway is operating near or over capacity from Chester Boro north. Traffic flow also experiences ocassional delays between Rt. 202 in Bedminster and Peapack and also through sections of Bridgewater. The only project committed to improve traffic flow on Rt.206 through 1988 consists of a 11.2 mile resurfacing and minor lane widening from the Somerset County line north through Roxbury.

Traffic projections for 1990 were estimated by considering the impact of developments proposed or under construction as of early 1981. Employment in the corridor is projected to increase by 36,000 jobs as a result of these new developments, an increase of 110% over current (1980) levels. Approximately 12,000 new housing units are also planned for the study area, representing a 37% increase in dwelling units. As a result of the imbalance in growth between corridor housing and jobs, by 1990 a large amount of commuting into the corridor from other areas of the state will occur. This commuting will be primarily via Interstates 78, 80, and 287 along with state Routes 10,22, and 202.

This large increase in corridor employment will have a major impact on peak hour traffic conditions along Rt. 206 in 1990. The entire length of Rt. 206 is projected to experience major traffic delays, longer travel times, and 30 mile per hour highway speeds during both the morning and evening peak hours. Two-way traffic volumes are estimated to increase by 50-100% over current peak hour levels, with the highest volumes expected through Mt. Olive and Chester Boro. Alternate county and local roads will also experience increased traffic volumes.

An improvement of Rt. 206 to a four lane facility would improve traffic conditions so that no delays and an acceptable highway level of service would prevail from Bridgewater to Interstate 80 in 1990. However traffic projections for the year 2000 indicate that Rt. 206 would operate with occasional delays in the peak direction north of Chester Boro even with this improvement to four lanes.

The full development of existing municipal master plans would result in a 400% increase in corridor employment (127,000 jobs), while the total number of housing units in the corridor would increase by 125% (42,000 units). This would result in a ratio of 2.1 jobs per housing unit, almost double the 1980 statewide average of 1.1 jobs per unit. This contrasts with a 1980 corridor average of 0.9 jobs per unit.

With the full development of the corridor according to existing master plans, peak hour volumes on Rt. 206 are estimated to increase by 430-500% over current traffic volumes. Provision of an acceptable level of highway service without major traffic delays would require a 6 to 8 lane Rt. 206 north of the Interstate 287 interchange in Bedminster. Through Mt. Olive, Roxbury, and a portion of Bedminster 8 lanes would be needed to accomodate master plan volumes, with 6 to 7 lanes necessary in other sections. Between Rt. 22 and Interstate 287 in Bedminster, a 4 lane facility would be necessary, except south of Garretson Road where 6 lanes are needed. In addition to Rt. 206, many county roads in the corridor are projected to require capacity improvements to accomodate master plan volumes, particularly Rt. 24 through Chester and Washington.

The report analyzes several strategies to reduce the traffic impacts generated by future development in the corridor. This includes Transportation System Management (TSM) strategies such as ridesharing, staggered work hours, and minor highway improvements; also alternate land development patterns which involve increasing the density and mixing the land uses of new development in the corridor.

The impacts of increased ridesharing in reducing projected peak hour traffic volumes assumed the achievement of two levels of ridesharing at new nonresidential development in the corridor. Ridesharing equal to that achieved at AT&T Long Lines in Bedminster represented the "maximum" level of ridesharing (50-67% employee participation). Ridesharing at 50% of the AT&T Long Lines level represented the "minimum" achievable level (30-45% employee participation) of ridesharing.

Ridesharing at the maximum (AT&T) level would reduce projected 1990 Rt. 206 traffic volumes by 5-16%. However this would have only a minor effect in improving peak hour traffic conditions, and a 4 lane facility would still be necessary to reduce congestion to an acceptable level.

Ridesharing at either the minimum or maximum achievable levels outlined in the report would have a major positive impact in reducing projected master plan or full development traffic volumes on Rt. 206. Traffic volumes would be reduced by 15-20% if the "minimum" level of ridesharing were to be achieved. A 24-36% reduction in peak hour volumes would occur if the "maximum" (AT&T) level of ridesharing were attained at all new employment sites.

An alternative pattern of future land development in the corridor was analyzed for its impact on master plan traffic conditions. This strategy assumed an improved balance between corridor employment and housing, with a ratio of 1.5 jobs per housing unit. This contrasts with a ratio of 2.1 jobs per housing unit in existing master plans.

The alternative pattern of land development clustered non-residential uses at higher densities; however the total amount of such uses remain as indicated in each municipality's master plan. Residential densities adjacent to current and future employment centers and transit stations were also significantly increased, resulting in an increase in the number of housing units in the corridor. The concentration of development in a smaller land area combined with a greater mixing of office, commercial and residential uses produces greater opportunities for alternative forms of transportation (walk, carpool, transit) and shorter auto trips. The result was an estimated 2-11% decrease in projected peak direction master plan traffic along significant sections of Rt. 206. The achievement of other community goals such as open space and farmland preservation are also enhanced by this alternate land use pattern.

A combination of increased ridesharing and an alternate pattern of land development throughout the Rt. 206 corridor would reduce master plan high-way requirements and improve corridor air pollution levels.

Achievement of the "minimum" level of ridesharing along with an alternate land use pattern would reduce master plan highway requirements for Rt. 206 from 8 to 6 lanes through Mt. Olive, Roxbury, and part of Bedminster. Through Peapack and part of Chester Twp. a reduction from 6-7 to 5 lanes would be possible. Regionwide air pollution levels would exhibit modest reductions in CO and Hydrocarbons.

Achievement of the "maximum" (75-100% of AT&T) level of ridesharing, increased transit usage, and an alternate pattern of land use would reduce projected Rt. 206 highway requirements to a 4 lane facility from Bridgewater to northern Chester Twp; and a 5-6 lane facility between Interstate 80 and northern Chester Twp. and the section adjacent to AT&T Long Lines in Bedminster. Regionwide CO and hydrocarbon pollution level are projected to improve by almost 25% over master plan levels.

The report describes several methods that local municipalities could implement to accomplish the reduction in projected traffic volumes indicated by TSM and land use strategies. Among the methods detailed to encourage ridesharing and staggered work hours are setting maximum offstreet parking requirements; using lot coverage and floor-area ratios to reduce parking at new developments; and adoption of performance zoning standards to limit the amount of new development to a highway's capacity unless a developer can demonstrate shifting of traffic to less congested time periods and/or provide ridesharing and transit incentives. Methods to encourage an alternate land use pattern include allowing Transfer Development Credits (TDC), zoning new growth into "Development Districts" which provide a mix of land use types at higher densities while reducing densities elsewhere in a municipality, and zoning standards to permit greater balance and proximity among employment and housing.

Alternative financing mechanisms and right-of-way standards are provided for the discussion of any possible improvements to Route 206. The financing mechanisms discussed provide alternatives to traditional federal and state funding of roadway improvements and include local transportation assessment districts and developer constribution to roadway improvements. In addition, standards for the dedication of right-of-way along Route 206 to allow for any future improvement are described for various highway designs.

Following are a listing of recommendations for both state and local governmental action in the Route 206 corridor.

RECOMMENDATIONS FOR FUTURE ACTION

- A. Recommendations for State and Joint State, Local and Private Sector Action
 - 1. NJDOT should conduct a feasibility study of an improvement of Route 206 to a four-lane divided highway. This would include the environmental, social, and economic impacts of any improvement as well as possible alternative route selection.
 - 2. Before the approval of any Route 206 improvement plan by NJDOT, agreement should be reached between NJDOT and all corridor municipalities on a traffic and growth management master plan. The agreement would cover municipal master plan changes, strategies, and incentives required to ensure that in the future an improved, four lane Route 206 will operate efficiently and not exceed its capacity. The cooperation and agreement of all municipalities impacted by Route 206 are necessary before any improvement would be implemented.
 - Cooperation between NJDOT, local governments and the private sector to develop alternative methods to finance intersection and roadway improvements as part of any Route 206 improvement program that is One recommended approach would be for each municipality adopted. to establish a special Transportation Improvement Assessment District. These districts could raise funds dedicated to transportation purposes by assessing all new development a share of the local cost of new roadway improvements resulting from such development or establish a district-wide assessment based on proximity to any planned improvements. The revenues raised by the local assessment districts would be provided to NJDOT as a funding source to implement any Route 206 improvement program that is eventually decided.
 - 4. Coordination and agreement between local and state governments on access standards and right of way requirements for approval of new development impacting on Route 206. This agreement would include standards for the number and spacing of access points to an improved Route 206, frontage road and accelleration lane requirements, signal spacing, right of way needed and type of median design.
 - 5. Right of Way Requirements

To provide for a potential four-lane facility the buildings of any new development on Rt. 26 should be setback at least 100 feet from the existing 80 foot Rt. 206 right of way (ROW), or 120 feet from the existing pavement. Any new development abutting Rt. 206 should required to dedicate a minimum of 20-35 feet of land on each side of the existing highway ROW. This dedication would provide a 120-140 highway with a median barrier and no frontage roads.

Frontage roads at certain points are also recommended to allow access to local development while not impeding the overall flow of traffic and level of service on mainline Rt. 206 with numerous conflicting merge movements. A minimum right-of-way of 175-185 feet is required to provide for frontage roads in the future along with four lanes and a median barrier. This option should be preserved along Rt. 206. Thus the preferred right-of-way a dedication along Rt. 206 is 50-55 feet on each side of the highway. Both State and local government should work toward this minimum right-of-way standard with the standard increased if a grass median design is selected.

- 6. Further investigation by the counties and NJDOT's Bureau of Traffic Engineering of the short term TSM improvements (signals, turn lanes) recommended in the body of this report so that these improvements will be implemented before major traffic problems arise.
- B. The following are recommended actions for local governments:
- 1. A reduction in off-street parking requirements for new office and industrial construction to encourage ridesharing. A maximum number of parking spaces should be set for all new construction employing 150 or more employees or larger than 40,000 sq. ft. As an interim measure, a maximum of 2.9-3.1 parking spaces per 1,000 sq. ft. of office space and 1.1-1.2 spaces per 1,000 sq. ft. of industrial space should be established in municipal zoning ordinances. A developer would have to prove he could not meet this requirement through ridesharing etc. Alternately, this reduction in parking could be accomplished through use of low lot coverage requirements.
- 2. Adoption of performance zoning standards to reduce the traffic impacts of new development. These standards would require that any new development demonstrate a reduction in traffic impacts on adjacent roadways through a combination of staggered work hours, ridesharing, reserved carpool spaces, contribution to off-tract roadway improvements and right-of-way dedication.

In order to ensure continued compliance with these standards into the future, a deed restriction regarding traffic controls could be required as a condition of development. Lower floor area ratios (FAR) and lot coverage requirements should be adopted as an interim measure, with a developer receiving bonus floor area or lot coverage through the provision of measures to reduce or spread traffic or increase highway capacity.

3. Adoption of zoning techniques to encourage mixed use development and greater concentration of development in specific areas of each municipality. A recommended approach is the establishment of development zones in each municipality with floor-area ratios double or triple current zoning, and with net residential densities of 3-10 units/acre. A minimum and maximum amount of residential and non-residential development would be set for each zone, with a balance between jobs and new residential units. Greater flexibility in the design and types of residential housing would also be allowed, with a range in the densities, setbacks, and street requirements.

- 4. Concentration of most public investment in these development zones for roads, sewers, etc. The higher densities in these development zones can be encouraged through Transfer Development Credits (TDC), which would allow the shifting of potential growth from areas outside the development zones. Areas outside the development zone would allow for low-density residential uses at densities of 1 unit per 5-20 acres of land.
- 5. Revision of zoning ordinances to allow for a greater balance between residential and non-residential growth. Currently, there are 0.9 jobs per housing unit in the corridor, but this will rise to 1.4 jobs/unit in 1990 and 2.1 jobs/unit by master plan development, compared to a state average of 1.1 jobs/unit. It is recommended that municipal master plans allow for a potential no greater than 1.2 1.5 jobs/housing unit. Municipalities should also allow for greater housing opportunities through higher density housing closer to employment centers.
- 6. Adoption and Agreement of a Capacity Allocation Method among all corridor municipalities if Rt. 206 is improved. This capacity allocation process would enable each municipality to judge the traffic impacts of development in other municipalities on its major roads like Rt. 206, Rt. 24, and county roads. The capacity allocation system would be agreed to as a guide by all or groups of municipalities to track the traffic impacts of new development and would serve as a check to avert future traffic problems. The methodology suggested in this report could be used as a starting point for municipal discussion.

The recommendations outlined in this section will require several mechanisms to implement. One such mechanism is the establishment of a more formal structure to resolve the questions dealing with joint state/municipal/county action. It appears appropriate that the Corridor Advisory Committee should continue to fill that role, possibly by structuring it on a regional basis so that agreements between the involved parties would be easier to reach. Another approach would be a cooperative regional council.