

**PLAN ENDORSEMENT PETITION
UPPER TOWNSHIP
CAPE MAY COUNTY, NEW JERSEY**

**SUBMITTED TO THE
NEW JERSEY OFFICE OF SMART GROWTH**

**PREPARED FOR THE
TOWNSHIP OF UPPER PLANNING BOARD
AND THE
UPPER TOWNSHIP COMMITTEE**

**PREPARED AS PART OF THE ROUTE 9 CORRIDOR SMART
GROWTH STUDY FOR DENNIS, MIDDLE AND UPPER
TOWNSHIPS**

PREPARED BY



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INTRODUCTION

This Plan Endorsement Petition has been updated from the September 2005 Petition in response to the April 26, 2006 NJOSG letter regarding Upper Township's Petition for Initial Plan Endorsement – Consistency Issues. To respond to this letter, the Township entered into a Memorandum of Understanding with NJOSG with a defined Action Plan. Since May 2006, the Township has been working with the State Agencies to refine its Centers, to provide environmental protection mechanisms and other issues raised by the consistency report.

Plan Endorsement is the process established by the New Jersey Office of Smart Growth (NJOSG) to review municipal and regional plans for consistency with the New Jersey State Development and Redevelopment Plan. This process provides for development of a Planning and Implementation Agenda to coordinate planning activities and improvements with State Agencies and to provide priority permitting and funding for these activities.

The NJOSG has funded the Route 9 Corridor Smart Growth Study for Dennis, Middle and Upper Townships study as part of an intermunicipal planning effort to provide assistance in the Plan Endorsement Process. Both Middle and Upper Townships had previously been involved in, but had not yet completed the Centers Designation process with NJOSG. Dennis Township had begun to explore the process. This study follows the adopted NJOPG 2004 Plan Endorsement Guidelines for initial endorsement.

An important part of this study is the reassessment and refinement of the development Centers in each Township. These Centers, which are now regulated through the New Jersey Coastal Zone Management rules, were terminated as Coastal Area Facility Review Area (CAFRA) Centers in February 2005. Through this Plan Endorsement process with the NJOSG, Centers may be established and designated in the State Plan. The Centers concept is also strongly forwarded in the State Plan to develop livable, walkable 'communities of place' and to act as a fulcrum for development allowing for preservation and protection of the surrounding environs. For these three Cape May mainland communities, environmental protection and regulatory controls are paramount. The New Jersey Department of Environmental Protection (NJDEP) through CAFRA regulates development in all three municipalities and both Dennis and Upper Townships are also within the Pinelands Management Area. This is of critical importance to these three municipalities since only in the CAFRA Centers can more intensive development be concentrated.

Dennis, Middle and Upper Townships are linked through the transportation network with the focus of development along the Route 9 corridor, which parallels the Garden State Parkway. Each municipality has a number of Centers or areas for existing and future development with many of these Centers focused on the Route 9 corridor. (See Dennis Middle and Upper (DMUSA) Townships Study Area Map. Other Centers are located where communities have developed around commerce and transportation connections and civic institutions.

Upper Township as part of this Plan Endorsement Petition has identified four Centers of existing development and as locations for future growth. Two of the Centers, Marmora-Palermo-Beesley's Point Town Center and Seaville Town Center, are totally within CAFRA and are along the Route 9 corridor. The remaining two Centers, Petersburg Village Center and Tuckahoe Village Center are located within both CAFRA and the Pinelands Management Area. A discussion of each center and its consistency with the New Jersey State Development and Redevelopment Plan Centers Guidelines are further detailed in this Plan Endorsement Petition. Additionally other changes to the State Policy Plan map are included.

The Planning and Implementation Agenda includes a detailed action agenda of the next steps needed to put the Township's plans into action. This includes activities to be done by not only the Township but also County and State Agencies to coordinate and fund planning efforts.

THE PLAN ENDORSEMENT PROCESS

Petition Committee

A Township Petition Committee was appointed. Upper Township's Plan Petition Committee included representatives from the Township Committee, Township Planning and Zoning Boards, UT Representative to The Great Egg Harbor National Scenic and Recreational River Council, the Mayor, a Township Committee Representative, with technical assistance from the Planning Board Attorney and Township Engineer. Plan Petition Committee meetings were held during the course of the study to review and coordinate the study efforts.

Regional Plan Petition Meeting

A noticed public meeting was held on August 24, 2004 with representatives from Dennis, Middle and Upper Townships including invited Plan Petition Committee representatives. This meeting served as kickoff to the Plan Petition study. A survey was taken of each of the Township representatives to identify and rank key issues affected each Township locally and on a regional basis. The regional meeting agenda and minutes are included in Appendix C.

NJOSG Meetings

A Pre-Petition Meeting with NJOSG was held on November 23, 2004. Additional meetings were held with the Agency Plan Implementation Team on June 21, 2004 and July 26, 2004 to review the initial plan endorsement documents and the proposed Township Centers. Interim coordination also occurred with the NJOSG and the Agencies to address concerned and refine the plan through the process prior to the September 2005 Petition. Additional meetings have been held with NJOSG and the State Agencies on April 26, 2006 and June 8, 2006 together with phone and email coordination.

Adoption of Plan Endorsement Petition

The Planning Board held a public hearing on October 18, 2005 to review the Plan Endorsement Petition and recommended approval. On November 28, 2005, the Township Committee adopted a resolution recommending forwarding of the Plan Endorsement Petition to the NJOSG.

This revised Plan Endorsement Petition will reviewed at the Planning Board and forewarded to the Township Committee. Copies of meeting notices and minutes will be provided under a separate cover to NJOSG.

REPORT ORGANIZATION

This Plan Petition was crafted in accordance with the Plan Endorsement Guidelines approved by the State Planning Commission on April 28, 2004. The report is organized to address specific guideline requirements. The requirements are listed italics and the Township's actions or activities cited to address these requirements are listed below each requirement item in regular font. (not in italics). Many of the responses refer to the Existing Conditions Inventory (See Appendix B), which was prepared as a compilation of the planning documentation for the Township as part of this Plan Petition process. This Existing Conditions Inventory was submitted to the NJOSG for review by the State Agency Implementation Team in February 2005 together with electronic copies of all available planning documents. The Existing Conditions Inventory was previously updated from the initial submittal in February 2005 and subsequently updated in November 2006.

Under the Initial Plan Endorsement process, the requirements focus on the following items. First the existing planning documents of the Township, County, State and other related entities that establish the planning foundation of the Township's land use and development activities are identified. The compatibility of these documents and the Township's planning efforts with the State Plan goals and policies are considered in this petition.

Secondly a discussion of each Center and its consistency with the New Jersey State Development and Redevelopment Plan Centers Guidelines is further detailed in this Plan Endorsement Petition. Additionally other changes to the State Policy Plan map are included. These changes include but are not limited to items discussed in the Township's Cross acceptance response to the Draft 2004 State Plan and review of the 2006 Draft State Plan Policy Map.

Third is the Draft Planning Implementation Agenda ("PIA"). The PIA identifies activities to be undertaken by the Township, County, State and other Agencies to achieve the Township's vision for development. The PIA identifies the activity, the Township's role in the process, required assistance by other Agencies, and a projected time frame to complete the action. The PIA has been updated in the November 2006 Petition.

INITIAL PLAN ENDORSEMENT REQUIREMENTS

As indicated in the Plan Endorsement Guidelines, *"The Initial Plan Endorsement stage is designed to be a review of the petitioner's planning documents for consistency with the goals, policies and strategies of the State Plan, with the State Plan Policy Map, and with appropriate State statutes and regulations."* (page 10)

The following table identifies the applicable documents and the status of each. Copies of these documents were submitted electronically to the NJOSG in February 2005 as part of the plan endorsement process.

<u>Upper Township Plan Endorsement Documents</u>		
Document	Date of Document	
1 Master Plan	7/21/1994	
2 2006 Master Plan Land Use Plan Amendment	November 2006	
3 Master Plan Reexamination Report	November 2006	
4 Board of Education Five Year Facilities Plan	5/21/2001	
5 Adopted Capital Improvement Program		
6 County Comprehensive Farmland Plan or Municipal Farmland Preservation Plan	4/24/1990 No Municipal Farm Preservation Plan	
7 Existing Land Use Map	November 2006 Land Use Plan	
8 Current Zoning Map	1/12/2004	
9 Community Facilities Map	See 1994 Master Plan	
- Statement of facility capacity where applicable		
Existing and Proposed Affordable Housing		
10 Sites	November 2006 Housing Element and Land Use Plan	
11 Township Land Development Ordinance	6/25/2002	

Requirements for municipal petitioners are itemized in the NJOSG Plan Endorsement Guidelines. They are included below and Upper Township response follows each item.

Current Municipal Master Plan and any available sub-elements

- *Copy of adopted Master plan and any amendment including all master plan required elements and date of adoption.*

The 1994 Master Plan was previously provided in digital format to NJOSG. Required elements include the Land Use Plan, Goals and Policy Objectives, and a Statement of Compatibility with surrounding municipalities, the County Master Plan, the State Development and Redevelopment Plan, the Wild and Scenic River Act and the Pinelands Act.

The adopted 2006 Master Plan Reexamination Report and Land Use Plan Amendment will be provided to NJOSG. Drafts of the required Planning Reports were provided to NJOSG and the State Agencies in October 2006.

- *Status of any optional Master plan elements or other plans.*

Optional master plan elements in the 1994 Master Plan include the following:

- Housing Plan
- Circulation Plan
- Community Facilities Plan
- Recreation Plan
- Historic Preservation Plan
- Economic Plan
- Recycling Plan

These elements and accompanying maps were provided in digital format to NJOSG. The Township has prepared and expects to adopt the 2006 Housing Element and Fair Share Plan ("HEFSP"). Draft copies of this HEFSP have been provided to NJOSG. The plan when adopted will be provided to NJOSG.

- *Copy of any Master plan Reexamination Report adopted on or after the adoption date of the master plan and date of adoption.*

A copy of the 2001 Master Plan Reexamination Report was provided in digital format to NJOSG. The adopted 2006 Master Plan Reexamination Report will be provided to NJOSG.

- *Copy of any relevant Board of Education Five Year Facilities Plan.*

A copy of the 2001 Board of Education Five Year Facilities Plan was provided in digital format to NJOSG.

- *Analysis of any master plan elements that were not addressed in an existing master plan reexamination report.*

All Master Plan elements discussed in the 1994 Master Plan were addressed in the 2001 Reexamination Report.

- *Statement describing the petitioner's current and future planning and regulatory activities already committed to by the petitioner.*

The Township adopted the Upper Township Stormwater Management Plan on January 24, 2005. It will be incorporated into the Master Plan Reexamination Report and is expected to be adopted in November 2006. The Township has completed a Determination of an Area in Need of Redevelopment Study for a section of Beesley's Point. Including the B.L.England Electric Generation Plant. The Township has postponed further study of the area until the ownership and status of the plant is resolved.

- *Copy of adopted capital improvement program.*

A copy of the current Township Capital Improvement Program was provided in digital format to NJOSG.

- *County Comprehensive Farmland Plan or Municipal Farmland Preservation Plan.*

A copy of the 1990 Cape May County Farmland Preservation Plan was provided in digital format to NJOSG.

Statement of Community Vision and Public Participation

Petitioners are asked to submit a narrative of the visioning and public participation processes that were conducted, demonstrating how the public has been involved in the preparation of the master plan and other documents that shape the community vision.

The November 2006 Master Plan Reexamination Report, Land Use Plan Amendment, HEFSP, Natural Resources Inventory, and Stormwater Management Plan were prepared working with the Township representatives and an appointed subcommittee. The documents were reviewed by the Planning Board at a noticed public meeting on October 18, 2006 and will be reviewed and are expected to be adopted at a noticed public hearing on November 16, 2006.

The 2006 Master Plan Land Use Plan Amendment represents an update of the Township's 1975 Master Plan and the 1986 and 2001 Reexamination Reports. The Plan provides a detailed list of planning assumptions, which together with the Goals and Policy Objectives form the basis of the Master Plan and the overall vision of the future planning vision of the Township. This vision supports Centers based development within the four Township Centers and permits low density development outside of the Centers which range from rural lands to conservation areas within CAFRA and the Pinelands Management Areas.

Goal # 1 Improve the quality of life in Upper Township through sound land use planning.

Goal #2 Guide mixed use development and redevelopment into compact Centers

- Encourage higher density residential development within Township Centers to concentrate development into walkable pedestrian friendly Centers.
- Encourage mixed use development including residential and commercial uses within the Center core areas.
- Encourage creative development techniques to maintain the Township's rural character by guiding development to the Township Centers and limiting development in the Environs.
- Encourage creative land use techniques to minimize the impact of new development and to minimize conflicts between land use activities.
- Allow residential development outside of the Centers, but at a lower density through conservation residential cluster and density transfer of non-contiguous parcels and transfer of development rights to protect and preserve farmlands and open space.
- Maintain the existing residential character and scale of established residential neighborhoods including but not limited to the Strathmere community by requiring sufficient side, front and rear yards and providing that development will be in scale with surrounding uses.

Goal #3 Preserve the Township's natural resources which contribute to both the positive image and overall strength of the Township

- Continue to provide for the preservation of open space by protecting woodlands, open fields, stream corridors, tidal marsh, wetlands, floodplains, and bodies of water.
- Establish controls on the permitted disturbance of critical resources during land development.

- Retain natural vegetation in new construction to position new development into the landscape. Outside of the Centers, retain a scenic landscape edge along all roads to buffer and to maintain the unique scenic attributes of the Township's environment.

Goal #4 Preserve the Township's cultural resources to provide historical continuity and contribute to the unique vision of the Township.

- Promote development that is compatible with the historic nature of the Township especially within adopted Historic Districts and adjacent to listed national and state register historic structures.
- Preserve the Township's historic resources through the creation of historic districts, establishment of a Historical Commission, and implementation of a Historic Preservation Resource Ordinance.

Goal #5 Encourage creative land use techniques to minimize the impact of new development and to minimize conflicts between land use activities.

- Limit the encroachment of non-compatible uses into established residential neighborhoods, such as sand extraction operations and heavy industrial type uses.

Goal # 6 Assure decent homes to all present and future residents of the Township without regard to their economic status by providing for a full range of housing choices for all household income levels.

- Provide for affordable housing to meet the Township's obligation directing this housing into the Centers or as scattered infill housing units.
- Encourage variety in the type, design, and size of housing constructed.
- Provide for an attractive and ecological setting for residences while retaining and augmenting existing vegetation.

Goal #7 Provide diversity and strength to the local tax base.

- Foster a well integrated and balanced community with a mix of residential, commercial, agricultural, and other types of land uses and guide economic activities into compact Centers.
- Provide for a range of commercial activities in the Township Centers where the circulation, utility, and community service systems are best suited to handle the resulting volumes.
- Provide appropriate design controls for commercial development to minimize hazardous conditions and encourage good design and to ensure an attractive compatible appearance with the Township's vision and historic character.
- Promote the development of attractive and safe neighborhood commercial Centers through the use of site and building design guidelines.
- Provide on-premise sign regulations which promote safety and prevent sign proliferation.
- Strengthen performance and design standards to ensure that all industrial development provides adequate safeguards to protect the environment and to guard against incompatible adjacent uses.
- Discourage commercial development outside of the Centers with the exception of marine related activities and existing mining operations.
- Provide that mining establishments adopt long term reclamation plans to guide land use and future site configurations.

Goal # 8 Establish and maintain the level of community facilities and public services required to satisfy the needs of present and future residents of Upper Township.

- Allow for the well planned expansion of public facilities and services that does not exceed the carrying capacity of the land and the built systems.
- Provide for streets, utilities, schools, parks, police and fire protection, and other services sufficient to meet the needs of the community.
- Ensure adequate wastewater treatment capacity by encouraging the use of best management practices.
- Minimize off-site storm water runoff by encouraging the use of best management practices, which protect the character of the natural drainage systems.

- In the Town Centers, provide the opportunity for community wastewater treatment facilities to accommodate higher density housing and commercial development. Amend Wastewater Management plan to support this infrastructure within the Centers.
- Promote the extension of public water within the Township Centers and encourage existing properties to tie into new utility extensions. In general, provide for such utilities (especially public water) where new development can afford the costs of extending these services and where such extensions promote the logical and orderly extension of development adjacent to existing development.
- Encourage the maximum recycling effort from all Township residents as well as from all businesses in the Township.

Goal #9 Provide recreational facilities that meet the needs of current and future Township residents.

- Continue to support the Open Space/Recreation Fund to be used to purchase, construct, and maintain central, more extensive recreational lands and facilities.
- Develop a few larger concentrated municipal recreation areas for the establishment of sufficient athletic fields and recreation facilities to serve both existing and future residents.
- Maintain existing neighborhood park sites to serve the recreational needs of the community.
- Support the expansion of the Cape May National Wildlife Refuge by encouraging the private sale of tracts under consideration by the Federal government.

Goal #10 Provide a transportation network that supports existing and planned development compatible with the carrying capacity of the land and the built environment.

- Provide a road network which separates through traffic from local traffic and directs through traffic to the regional roadway network.
- Prevent the transformation and disruption of the Township's residential and historic Centers by providing for alternative routes for through traffic.
- Provide for the connection of new subdivisions by the extension of collector streets, sidewalks, and local roadways to promote the development of neighborhoods and to promote social interaction with the Township.
- Prevent hazardous traffic patterns and high congestion by limiting roadway connections and driveways accessing onto State and County roadways.
- Require street trees and open space buffers to enhance visual quality and to protect adjacent land uses from the noise, dirt and glare of traffic along all roads.
- Provide for the development of a walkway and/or bikeway system that will provide connections throughout residential neighborhoods of the Township by utilizing separated pedestrian walkways and bike paths along primary roadways and along the stream corridors, greenways and open space areas where possible.
- Encourage the campground operations to work with the Township and the County of Cape May to develop alternative transportation programs such as shuttle operations to serve campground visitors and to reduce summer vehicular traffic activity.

As described earlier, a Petition Committee was officially authorized by the Township to craft the Plan Endorsement Petition. A number of meetings were held with the Petition Committee during the course of the study. In addition, a Planning Board hearing was held to review the September 2005 Plan Endorsement Petition. This meeting provided additional opportunities for public input. The Planning Board's recommendations were forwarded to the Township Committee who at a public hearing adopted the Plan Endorsement Petition and authorized its submittal to the NJOSG. The same public review process will be held for the November 2006 Plan Endorsement Petition.

Statement Regarding Any Proposed Changes to the State Plan Policy Map

Proposed Changes in Planning Areas

Changes recommended to the Preliminary 2004 State Plan Policy Map (April 2004) were reviewed by the Township as part of the Cross Acceptance Process. The State Planning designations for the Township include PA2 (Suburban Planning Area), PA4 (Rural), PA5 and PA5B (Environmentally Sensitive /Environmentally Sensitive Barrier Island) and Parks and Natural Areas. The Pinelands Management Area is a separately designated Special Planning Area.

The draft 2004 State Policy Maps includes parks and open space areas and some revisions of the planning areas (typically from PA2 to PA5) These map changes have been reviewed by the Township and refined during this Plan Endorsement study process. The 2006 Preliminary State Plan Policy Map which was released in August 2006 had been reviewed as well. The Township has crafted its Future Land Use Plan to be compatible with the 2006 Policy Plan Map. Through the Plan Endorsement process, there has been a refinement of the Township's four Centers. These center boundaries are in accordance with the final NJDEP Center boundaries presented in Spring 2006. The environmental constrained areas (wetlands, C-1 Waters) within the Centers are not cropped out of the Centers. This is in keeping with the agreement with NJDEP that the adoption of environmental protection regulations can eliminate the need for these areas to be excluded from the Centers. Some of the areas on the 2006 Policy Map identified as subject to "Plan Endorsement" have been identified as remaining within the current planning area. Others have been redesignated into conservation areas. The 2006 Future Land Use Plan recommends zoning changes which reduced the impervious coverage within the rural and conservation areas to be compatible with lower intensity regulations of CAFRA.

The attached map entitled Proposed 2006 Preliminary State Development and Redevelopment Plan Policy Map reflects the Township 2006 Future Land Use overlay on the State Plan Policy Map. The quad maps have also been amended to reflect the changes requested in the 2006 Preliminary SDRP Policy Map.

The following summarizes remaining Township comments on the 2004 and 2006 Policy Map.

1. The Township objects to the inclusion of the B. L. England Generating Facility in the Parks and Natural Areas Designation on the 2004 State Plan Map. The facility is the only industrial facility in the Township and contributes to the Township's economy. It is felt that the facility would serve a more valid economic purpose, as an already developed site, for redevelopment and not conversion to open space. The Township is investigating redevelopment options. (See 2004 Cross Acceptance Report, Item #4, page 304).
2. The PA2 area outside of Seaville on Route 50 should be maintained as revised to include lands already either developed or planned and approved for commercial development. (This had been discussed with NJDEP and agreement reached on this item.)
3. Within the proposed Town Centers, the PA2 area should be retained even for those areas that are shown to be potential wetlands or have other environmental constraints. The Township will adopt environmental protection regulations and procedures to better protect these areas in all areas of the Township. (This had been discussed with NJDEP and agreement reached on this item.)
4. The Township continues to object to the inclusion of developed properties along Roosevelt Boulevard in Marmora in the PA5 designation. Based on the Superior Court of New Jersey Consent Order dated November 30, 2000 (Docket No. CPM-L-226-00), these existing properties should be included in the Cape May Water Quality Management Plan/Waste Water Management Plan. Thus they should be designated as PA2. (See 2004 Cross Acceptance Report, Item #7, page 305. Please note that the Township's 2006

Future Land Use Plan carves out these existing properties as Commercial CM2 land use surrounded by C Conservation land use areas.)

5. The Township recommends that the Policy Map remove the rail lines that extend into Ocean City and Strathmere. . (See 2004 Cross Acceptance Report, Item #10, page 305).

Future Land Use Plan

As part of this Plan Petition Process, the Township has reviewed and refined their prior CAFRA Centers, which expired in February 2005. This process of refinement was reviewed with the Petition Committee, Planning Board and Township Committee. In addition, a number of meetings were held with the State Agency Plan Implementation Team. For each Center, conceptual sketch plans were prepared to illustrate possible framework for circulation, pedestrian and bike facilities, parking, potential retrofit of selected areas within the four Centers. Design alternatives were reviewed presenting examples of comparable Centers to show ideas for the Planning Board to consider.

It should be noted that as part of this process of Centers refinement, it was agreed with the Agency Implementation Team that the Township would adopt regulations to ensure adequate environmental review of critical environmental conditions. These include but are not limited to wetlands, floodplains, critical environmental sites, C-1 waters, Natural Heritage Priority Program sites, and other features. The proposed Centers include lands within these categories. Because the detailed field investigation has not yet been done on these areas, it was felt that with an Environmental Review process and regulations established for the Township, negative impacts to these potential critical areas can be controlled. In addition, the Township has already prepared a Natural Resources Inventory ("NRI") which will be adopted as part of its Master Plan. These tools would ensure that all development, not just that development which falls under CAFRA direct oversight would be reviewed and proper protective measures engaged.

Four Centers are proposed in Upper Township. Each of these Centers is an existing concentration for residential and commercial development. They represent locations along the road corridors of existing population settlements including historic structures which attest to the long-term development in these Centers. Both Tuckahoe and Petersburg Centers are off the Route 9 corridor. They are both located within CAFRA and the Pinelands Management Area. This Plan Endorsement Petition only addresses that section of these Centers within CAFRA since the Pinelands Commission has certified the Tuckahoe Village and Petersburg Village. The Marmora-Palermo-Beesley's Point Town Center and the Seaville Town Center are located on Route 9 with excellent access to the Garden State Parkway. The Town Centers of Marmora and Seaville were designed to create higher density mixed use areas within the Core, but also reflects existing residential development patterns.

For lands outside of the Centers within Planning Area 4 – Rural Planning area, the impervious coverage is very low – 5 percent with 70 percent vegetation preservation of forested areas. These lands previously included areas in the previously named AR Agriculture & Residential District. This has been renamed Agriculture & Rural Residential District.

For lands outside of the Centers within Planning Area 5 – Environmentally Sensitive Planning area, the C Conservation District provides for impervious coverage at 3 percent with 70 percent vegetation preservation of forested areas. Most of the lands within Planning Area 5 Environmentally Sensitive lands were previously planned for very low density development. The C Conservation District includes state parks and wildlife management areas, the Cape May National Wildlife Refuge, County and Township lands. Most of these lands, both on the mainland and between the Garden State Parkway and the Strathmere barrier island along the intercoastal waterway are constrained. The Land Use Plan continues this planning approach and refines the Conservation District to generally include most lands within PA5.

This section of the Plan Endorsement Report presents the Buildout Analysis of the Township based upon the proposed zoning. Detailed information is presented on each of the Centers with a comparison to the NJOSG Centers guidelines criteria.

The proposed Township Centers are shown on the individual maps for each Center, which have utilized the 2002 aerials and included a mapping of critical environmental constraints and planned and approved development activity. In addition, conceptual sketch design plans were developed for the core areas of each of the Centers. (See Centers Maps and Conceptual Sketch Plans)

Buildout Analysis

A full buildout analysis was performed on lands within Upper Township to assess future development potential based upon the proposed Land Use Plan implementation. The following table provides a summary of this calculation. The buildout analysis assumes that all vacant lands, farmlands (not currently being preserved) and residential lands capable of further subdivision will be developed. It also considers portions of the proposed Town Center Core and Town Center zones as being revitalized and redeveloped in accordance with the recommendations in the Land Use Plan.

This analysis is based upon tax lot parcels overlain by environmental constraints (wetlands, C-1 waters with 300' buffers). The lands outside of environmentally constrained lands or uplands were used to assess the development potential at full build out. This is by its nature a 'gross calculation' of future buildout since it is not based upon an inspection of individual lot parcels which would be an massive task given the size of Upper Township. However, it provides a relative development scenario that may occur should development proceed based upon the proposed zoning and without public acquisition of parklands or farmland preservation. It should be noted that 1,684 acres are unclassified and not included in this analysis.

As indicated, 2,238 residential units are projected at full buildout within the residential districts. This includes residential lots potentially capable of further subdivision (659 lots) and affordable housing inclusionary residential developments (805 units) as proposed in the 2006 Housing Element and Fair Share Plan. In addition, the affordable housing growth share requirement of 1 affordable unit for every 25 jobs was separately assessed for non-residential development assuming that this COAH requirement will continue in the future. This results in an additional 431 residential units for a total residential buildout of 2,669 residential units.

About 757 units or 33 percent of the total projected residential units are located outside of the Centers and some may be transferred into the Centers based upon the proposed density transfer provisions or through TDR should this planning tool be implemented.

About 5,386,554 square feet of non-residential development could occur, with over 96 percent planned within the Centers.

Table 1 Buildout Analysis

	<u>Developable Land (Uplands)</u>	<u>Total New Residential Units</u>	<u>Total New Non-Residential Lots</u>	<u>Total New Non-Residential Lot Area</u>	<u>TOTAL Non-Residential Building Floor Area</u>	<u>TOTAL Affordable Housing Obligation</u>
TOTAL	3,551 acres = 158,745,941 sq. ft.	2,238	439	18,936,421	5,386,554 sq. ft.	431
Total Town Centers	980 acres = 46,750,349 sq. ft.	1,338	393	16,220,320	5,196,331 sq. ft.	416
Marmora-Palermo-Beeseley's Point Town Center	314 acres = 18,351,626 sq. ft.	556	93	4,949,290	1,529,800 sq. ft.	122
Seaville Town Center	528 acres = 22,396,588 sq. ft.	671	269	10,052,662	3,057,347 sq. ft.	245
Petersburg Village Center	125 acres = 5,429,107 sq. ft.	109				
Tuckahoe Village Center	13 acres = 573,029 sq. ft.	1	30	1,218,369	609,184 sq. ft.	49
Total Pinelands Villages	188 acres = 8,182,570 sq. ft.	158				
Petersburg Pinelands Village	144 acres = 6,273,908 sq. ft.	118				
Tuckahoe Pinelands Village	44 acres = 1,908,662 sq. ft.	40				
Total Outside of Town Centers & Pinelands Villages	2,383 acres = 103,813,022 sq. ft.	742	46	2,716,101	190,223 sq. ft.	15
Total Vacant & Farmland Assessed	1,993 acres = 86,799,185 sq. ft.	684	313	8,250,656 sq. ft.	1,964,762 sq. ft.	157
Total Existing Residential Lots	1,230 acres = 58,256,074 sq. ft.	659	126	2,931,815	801,141 sq. ft.	64

Note: This analysis represents the gross upper yield of Developable Lands. Calculations are based on Uplands (lands not constrained by NJ DEP identified Wetlands or a Buffer of 300' for Category-1 Waters). Vacant land includes lands classified as 1 - Vacant, 3A - Farm (Regular), & 3B - Farm (Qualified). Existing Residential Lots were selected that are subdividable with an area of 2.1 times the minimum lot area required by the Zoning Ordinance. New Residential units were calculated by dividing the gross developable land by the minimum lot size permitted by the Zoning Ordinance. Lots within commercial zones are assumed to be developed with commercial uses except as identified by the concept plans for the TC - Town Center & TCC - Town Center Core Zones within Marmora and Seaville Town Centers. Properties within Commercial Zones which are outside of the Centers were calculated using the permitted maximum building coverage, while those within TC and TCC Zones used approximated Floor Area Ratios.

* The RR - Resort Residential Zone, which exists only in Strathmere, shows 43 existing residential parcels of 2.1 times the required minimum lot area (4,000 square feet) and 57 vacant parcels of the required minimum lot area (4,000 square feet). Due to the current issues with septic systems in Strathmere, it is assumed that existing residential lots are not subdividable and no new lots will be created from these existing lots.

Centers Design Criteria

Additionally, an analysis was performed to assess current conditions in each Center compared to the NJOSG Centers guidelines in the 2001 State Development and Redevelopment Plan. As noted in the 2001 State Development and Redevelopment Plan, *"These criteria are intended to be applied flexibly. For example, population fluctuations in seasonal communities should be taken into account, as should disparities between daytime and nighttime populations. Density criteria are relevant primarily to new Center and to the growth areas of existing Centers, and are less relevant to the built-up portion of existing Centers, except when conditions influencing development changes significantly."* (2001 SDRP, page 231)

**CENTERS DESIGN CRITERIA EVALUATION
UPPER TOWNSHIP CENTERS**

	Land Use			Population		Economy		Infrastructure	
	Function	Land area (square miles)	Housing	Number of people	Density (persons/sq mile net)	Job Base	Jobs-housing ratio	Capacity (general)	Transportation
Regional	Economic, social and cultural focal point. Variety of uses, services and housing types	1-10 sq miles	> 3 du / ac	>5,000	> 5,000 per sq mi	>5,000	2:1 to 5:1	Sufficient existing or planned infrastructure	Transit terminal, arterial intersection, or interstate
Town	Most everyday economic, government and cultural functions.	< 2 sq miles	> 3 du / ac	1,000-10,000	> 5,000 per sq mi	N/A	1:1 to 4:1	Sufficient existing or planned infrastructure	Arterial highway or public transit
Village	Mixed-residential with compact core of basic services and activities.	< 1 sq miles	> 3 du / ac	<4,500	> 5,000 per sq mi	N/A	N/A	Capable of being served by wastewater system.	Integration into network of communities.
Hamlet	Small-scale residential settlement with community functions.	10-50 acres, possibly 100 acres if wastewater system is not feasible	> 2 du / ac	25-250	N/A	N/A	N/A	May require small-scale water system.	Integration into network of communities.
Marmora-Palermo-Beesley's Point Town Center	Elementary school, civic institutions such as schools, commercial businesses and services, parks, residential uses, proposed for higher density retail and mixed use in center 'core' at Route 9/ Roosevelt Blvd/Tuckahoe Road intersection. Township is investigating redevelopment potential of Beesley's Point for mixed use waterfront related development.	3.4 sq. miles (gross) / 3.3 sq. miles (net)	6 du + , 1 du/ 40K infill residential	3505 (E) 5,430 (F)	1,646 persons	1092 (E) 4,272 (F)	2:1	Public water installed in sections of Marmora, Palermo and Beesley's Point; proposed wastewater service area; soils with minimal limitation for onsite community plants; existing wastewater treatment plant at B.L.England Plant.	Route 9 arterial, Garden State Parkway interchange #25 at Rt.623.
Seaville Town Center	Major community commercial center along Route 9/Route 50 intersection, fire department, existing residential neighborhoods, planned higher density residential and commercial uses.	2.9 sq miles (gross) / 2.5 sq. miles (net)	6 du - 15 du/ acre, 1 du/40K infill residential	3,337 (E) 6,106 (F)	2,901 persons	1092 (E) 7,207 (F)	3.4 :1	Public water available for extension south from Osprey Point and along Stagecoach Road; within proposed wastewater service area; soils have minimal limitation for onsite community wastewater treatment plants.	State Route 9 and State Route 50 arterials, Garden State Parkway interchange # 20S at Route 50/ Seaville Blvd.
Petersburg Village Center	Municipal Complex, Library, Amanda's Field recreation area , fire hall; primarily developed residential neighborhoods, with limited existing commercial uses along Route 50. Limited vacant developable lands for residential infill and commercial uses along the Route 50 center.	1.61 sq. miles (gross) / 1.43 sq.miles (net) CAFRA - 669 gross acres /617 net acres Pinelands 330 gross acres /263 net acres	1 du/ 40 K infill residential	967 (E) 1,612 (F)	1,127 persons	312 (E) 312 (F)	0.5:1	On site septic for future infill development; no plans to extend wastewater service area, no public water at this time.	State Route 50 major arterial serving Center with County Route 631(Tuckahoe Rd.) and Route 610 (Dennisville/Petersburg Road).
Tuckahoe Village Center	Tuckahoe Village includes Marshallville (which is on the National and State Register of Historic Places. Village mixed commercial along Route 50. Township plans for area rejuvenation with the planned Route 50 streetscape improvements and the renovated Tuckahoe Train Station and rail line extension.	0.54 sq. miles (gross)/ 0.21 sq. miles (net) CAFRA 99 gross acres /87 net acres Pinelands 236 gross acres/44 net acres	1 du/ac	1035 (E) 1,152(F)	5,486 persons	312 (E) 1,530 (F)	1.3:1	On site septic, or package treatment plants for future infill development; no public water at this time; future extension of public water to center desirable.	State Route 49 and Route 50 (across Tuckahoe River to Corbin City) are major state arterials; County Route 664 (Mt. Pleasant-Tuckahoe Road).

Notes:
2002 Economic Census- employment; 3119 jobs, 35% Seaville, 35% Marmora; 10% Tuckahoe, 10%Petersburg, 10% Outside of Centers
Marmora-Palermo-Beesley's Point - total housing units includes 370 seasonal/vacant housing unit. 2000 population estimates utilize total housing units X average household size per census tract
Population and housing estimates does not include private campgrounds which significantly increase density.
Land Area has been defined as gross acreage in the Center minus wetlands, C-1 waters and buffers and water bodies.
Tuckahoe and Petersburg include the CAFRA and Pinelands Centers

Centers

See the Appendix which included Centers and Concept Sketch Plans for the four proposed Township Centers.

Marmora-Palermo-Beesley's Point Town Center



This Center consists of three distinct areas, which are linked north/south by Route 9 from the Great Egg Harbor River and the Route 9 Bridge southward. The Garden State Parkway forms the eastern edge of this Center. The northern boundary is the Great Egg Harbor River. The western edge is variable. North of Roosevelt Boulevard (Route 623), the boundary is the railroad

right-of-way south of Route 623; the western boundary includes developed residential neighborhoods adjacent to Stagecoach Road. Butter Road is located at the southern boundary of this Center. County Route 623 provides full access to the Garden State Parkway at Exit 25 with a park and ride lot at the northwest side of the interchange.



Beesley's Point area at the northern end of the Center includes the B.L. England Generating Facility, which is a highly visible element of the landscape as one travels south on the GSP over the Great Egg Harbor River. There is a municipal beach and boat launch at this northern terminus. The Tuckahoe Inn, a historic building now serving as a restaurant and the Beesley's

Point Seadoo represent the few commercial uses at this northern end of the Township. In 2005, the Township adopted an *Area in Need of Redevelopment Designation for the Beesley's Point* area. However, the ultimate decision on redevelopment plan has been placed on hold since the purchase of the power plant has been recently announced.



Residential areas skirt Route 9 traveling south through Beesley's Point to Marmora which is centered at the Route 9 and Route 623 intersection. There are a public primary school and elementary school in Marmora north of Route 623, recreational facilities, a Fire Station plus other quasi-public institutions including houses of worship. Along Route 623 and southward, there is a mixed of retail commercial and office/service uses including a large Verizon office facility and a number of auto dealerships on either side of the corridor, together with banks, a new Super Wawa, gas stations, medical and business offices, the Marmora Post Office and other uses. Most of the retail facilities are small one-

story buildings. There are three private campgrounds and the Pine Hill Mobile Home Park located within the Center; all have access to Route 9. Palermo is located at the southern end of the Center and it is primarily residential development.

There currently is public water serving this Center through New Jersey American Water including portions of Beesley's Point, Marmora along Route 9 and Stagecoach Road. There is no public sewer except for a limited sewerage treatment facility serving the B.L. England facility.

The planned Marmora-Palermo-Beesley's Point Center is larger than the expired CAFRA center and includes older established neighborhoods on either side of Route 9. The Center totals 2,118 acres or 3.4 square miles in area. Currently there are about 3,500 persons living within the boundaries of the Center. Based upon the Future Land Use Plan, at builtout there may be up to 5,300 persons within the Center.

Much of the Center is already developed; however, there are opportunities for infill development. The area at the Route 623/Route 9 intersection in Marmora is the future 'core' of this Center. Currently within the core are retail, business and professional offices, restaurants, light industrial/storage uses, car dealerships, two motels, gas stations, and civic uses. The recent closure of the car dealerships at Marmora provides a potential opportunity for private redevelopment on three key properties at the Tuckahoe Road and Route 9 intersection. There are other vacant lands and underutilized properties that may likewise be privately redeveloped with the designation of this Center.

This area is not currently conducive to pedestrian activity and is not a 'walkable' Center. There are limited sidewalk sections in the Center; an overall pedestrian sidewalk plan is needed. There are no integrated design elements that visually coordinate the diverse buildings in the Center. Signage for most uses is of excessive size and is auto-oriented. Most of the development is setback from the roads with parking in front. There are limited or no interconnections between uses and most are directly accessed via Route 9. Changes in land use, circulation, area and bulk standards and design standards are needed to create a Center that will meet the Township's goals.

Surrounding the Town Center core, the lands within the Center are predominately developed as residential uses with lots ranging from small lots of less than 5,000 s.f. in the older Marmora and Beesley's Point neighborhoods to 40,000 s.f. or larger lots for newer development to accommodate on-lot septic systems. Infill residential development will continue to occur in these established neighborhoods. Potential private redevelopment of the campgrounds or trailer park is a possibility in the future. Residential development should maintain the minimum 40,000 s.f. lots to be compatible with existing uses; however, within planned sewer service areas, planned adult retirement communities at a density of 6 du/acre will be permitted.

Marmora Palermo Beesley's Point Town Center Core

Future Land Use Plan designates two districts: the TCC Town Center Core District and the TC Town Center District. These districts will accommodate higher density mixed use development within the Marmora-Palermo-Beesley's Point Center in accordance with the goals and objectives of this plan. It is focused in the Marmora section of the Center. Also a small mixed use zone is proposed at the existing commercial area in Beesley's Point along the Great Egg Harbor River area near the Route 9 bridge. The TCC District is about 194 acres in area; the TC District is about 198 acres.

These districts should be developed for mixed uses including retail, offices, civic uses, personal services and higher density housing. With the recent closure of car dealerships along Route 9, there are new opportunities for redevelopment and revitalization of these large properties within the Marmora core.

To accommodate higher density development, the Wastewater Management Plan must be amended to accommodate community package treatment plants as properties are developed. The Township does not plan to provide public sewer. Water service is available through the NJ American Water; sufficient allocation capacity is currently available to serve both Town Centers at full-buildout.

Within the TCC District, mixed development with housing and offices above first floor retail uses should be permitted. A residential density bonus is recommended which would encourage and permit residential density transfer from the conservation and rural areas to both the TCC and TC Districts. Affordable housing should be encouraged within the Town Center Core.

As indicated on the table of Centers Guidelines Comparison Table, Marmora-Palermo-Beesley's Point meets some but not all of the guidelines. Its land area is larger than the guidelines, which reflects that this Town Center is comprised of three separate village areas. It is generally consistent with the number of residents, jobs to housing ratio. The population density is low because most of the Center is already developed and the development density reflects lack of sanitary sewer infrastructure and low-density development. New development with infrastructure will provide opportunity for higher density commercial and residential development.

Seaville Town Center

The Seaville Town Center is centered at the Route 50 and Route 9 intersection. Exit 20 of the GSP provides only southbound exit and entrance ramps to the Parkway at this point. The Center is focused along the Route 9 corridor with commercial development west from Route 9 along Route 50. There is shopping center north of the Route 50 with an Acme supermarket and other retail commercial/service uses. Residential neighborhoods are on either side of Route 9. There are some commercial lots that have older structures that are underutilized for the area and will eventually be privately redeveloped. There are two campgrounds and three mobile home parks within the Center.



development could be constructed.

The Seaville Town Center extends along the Route 9 corridor beginning about 2000 feet south of Butter Road southerly to within ½ mile from the Dennis Township municipal boundary. The Seaville Center extends from the Garden State Parkway westward with Peach Orchard Road and Cambridge Road forming the western most boundaries. At its widest point from Route 9, the Seaville Center is about 1½ miles in width. The Seaville Center totals 1,800 acres or 2.9 square miles in area. Currently there are about 3,300 persons living within the boundaries of the Center. Based upon the Future Land Use Plan, over 6,100 residents and over 3,057,000 square feet of non-residential

Seaville TCC Town Center Core and TC Town Center Districts



Similar to the prior discussion on the Marmora Palermo Beesley's Point Town Center and keeping with the land use plan goals and objectives, the Seaville Town Center should be developed for mixed uses including retail, offices, civic uses, personal services and higher density housing. There are lands within this area which are vacant or marginally developed. It is expected that properties will be privately redeveloped and likely lots combined to create suitable development opportunities. The Seaville Fire Company is a civic anchor along Route 50 in the Center. To accommodate higher density development, the Township's Wastewater Management Plan must be amended to accommodate community package treatment plants as properties are developed. The Township does not plan to provide public sewer. Public water is available through the New Jersey American Water and could be extended to serve this Center. There is currently surplus water allocation within this system to serve this Center at full buildout.



The TCC Town Center Core District is focused on the Route 9 and Route 50 intersection. Core extends about ½ mile from the intersection to accommodate pedestrian movement. Mixed use buildings should be encouraged in this area with internal roads, linked driveways and upper story housing and office uses. Sidewalks and streetscape amenities are encouraged. Housing should be either affordable units or units can also be transferred from the rural and conservation area into the Core. The TCC Core totals 184 acres.

The TC Town Center District extends west along Route 50 and along Route 9 south of the Core. It has extended beyond the existing commercial district to include lands between Route 9 and Corson’s Tavern Road to better accommodate future development and totals 188 acres. The TC Town Center District should permit retail, offices and public and civil uses. Freestanding multifamily housing and attached housing could be permitted to address both the HEFSP affordable housing obligation and accommodate residential units through density transfer from low density districts. Age restricted housing could be permitted as a conditional use in the TC District.

As in Marmora, pedestrian access is critical through sidewalk connections. A streetscape plan should be developed in detail to expand on the framework as shown on the concept plan. This would include street trees, lighting, building architectural guidelines, signage standards and other measures.

Surrounding the Town Center core, the lands within the Center are predominately developed as moderate density single family residential uses with lots 40,000 s.f. or larger lots to accommodate on-lot septic systems. Infill residential development will occur in these established neighborhoods. In accordance with the Housing Plan recommendations, two properties fronting Stagecoach Road are proposed for senior housing and group homes. This includes Township owned property and County lands surrounding the Senior Center. In addition, lands adjoining the Shore Acres Mobile Home Park are proposed for expansion to provide affordable housing. In addition, one property within the Township Core is also proposed as an inclusionary affordable housing mobile home site. This property is shown to the north of Kruk Road with access off both Route 9 and Route 50.

As indicated on the Centers Guidelines Comparison Table, Seaville meets some but not all of the guidelines. It is generally consistent with land area, number of residents, jobs to housing ratio. The population density is low because most of the Center is already developed and the development density reflects lack of sanitary sewer infrastructure. New development with infrastructure will provide opportunity for higher density commercial and residential development. (See Seaville Town Center Concept Sketch).

Petersburg Village Center



Petersburg Village Center is a split center within both the CAFRA and the Pinelands Management Area. The northern boundary is County Route 631 on which is located the Township Municipal Building, the Cape May County Library, the Township Rescue Squad and the Middle School. Backing up to the Municipal Building and Library is the Amanda’s Field recreation complex which has frontage on Upper Bridge Road. The NJDOT maintenance yard is at the intersection with Route 50 and County Route 631. State Route 50 is the major arterial serving the Center and linking Seaville and Tuckahoe. County Route 631 links at its eastern end with Marmora and ties into Route 50 at the western end of

the Center. County Route 610 (Dennisville/Petersburg Road) provides north/south access through the Center.

The Petersburg Village Center is significantly developed with residential lots and has limited vacant developable lands remaining for infill residential uses. The Center totals 669 acres or slightly over 1 square miles in area within the CAFRA zone. The Petersburg Pinelands Village encompasses 330 acres. Currently there are about 950

persons living within the boundaries of the Center. The Land Use Plan recommends that the Petersburg Village Center in the CAFRA zone be planned for R Residential Center District uses. About 227 additional residences could be developed in this Center.

Between Upper Bridge Road and the railroad right-of-way area are vacant tracts that may be suitable for infill residential development at the current density of 40,000 s.f. lots. The R Residential Center District use requirements should be similar to that previously proposed for Marmora and Seaville Centers. Within the Pinelands, residential lots require a minimum of 1 acre per lot within the Pinelands Village district. Limited vacant uplands remain in this area.



Within the Petersburg Village Center District, a design concept plan has been developed to illustrate possible improvements that will improve the overall circulation network. (See Petersburg Village Center Concept Sketch Plan.) There are no sidewalks currently within the Center. Sidewalks would provide pedestrian access in the village including access to the Middle School and the County Library. There is a natural trail through the woods from the library to Amanda's Field. There needs to be a defined sidewalk or pathway system to link the community facilities with each other and to the residential neighborhood. Additionally there should be a walkway connection to the Tuckahoe Village which

is about 1 ½ miles to the west along Route 50.

The Concept Plan recommends traffic calming on the major roads within the Center including Route 631, Route 610 and State Route 50. This should include appropriate signage to slow down traffic within the Center, defined crosswalks, and pedestrian signals at Route 50 and Route 610 intersections in addition to sidewalks. Entrances to the Petersburg Village Center should have gateway treatments announcing that this is a pedestrian area.

As indicated on the Centers Guidelines Comparison Table, Petersburg Village Center meets some but not all of the guidelines. It has a core of basic services and activities centered on the Municipal Complex and recreation center. The population density is low because most of the Center is already developed and the development density reflects lack of sanitary sewer infrastructure requiring larger lots. It is an existing Center that should be designated to provide opportunity for funding for sidewalks, additional recreation facilities, and other improvements to provide better linkages within the Center.

Tuckahoe Village Center



The Tuckahoe Village Center is a split center within both the CAFRA and the Pinelands Management Area. It is located on both sides of Route 49 and Route 50. The northern edge of the Center along Route 49 abuts the Tuckahoe Riverfront District area which provides for protection of the lands along the Tuckahoe River which are in the Great Egg Harbor Wild and Scenic River

Management Area. The Village extends about ½ mile along Route 49.

Route 50 crosses north over the Tuckahoe River into Corbin City in Atlantic County. There is a boat works and marina along the Tuckahoe River east of the Route 50 Bridge and outside of the boundaries of the Tuckahoe Village Center. The intersection of Route 49 and Route 50 is an important gateway and focal point for the Village. The Center extends about one mile south along Route 50 from this intersection. The Center totals 335 acres with 99 acres within the CAFRA zone. Currently there are about 1,035 persons living within the boundaries of the Center.



Route 50 runs north and south through the Tuckahoe Village commercial center which includes small scale businesses, banks, residences, the Tuckahoe Methodist Church, the Tuckahoe Fire Hall and Post Office. On the edge of the center is the Tuckahoe River Park and Beach. There is a Township park and public works facility within the Tuckahoe Pinelands Village District between County Route 664 and Route 50.

Buildings within the Center are close to the road and reflect the historic character and ambience of the Center. The Methodist Church is an important landmark of the Center. There are many historic properties identified in Tuckahoe that are important to the fabric and appearance of the Village. Marshallville is on the National and State Register of Historic Places. These properties are listed in the 2006 *Natural Resources Inventory*.



The Tuckahoe train station has been renovated. Excursion rail service between Tuckahoe and Richland commenced in 2005 through the Cape May Seashore Line. Eventually rail service will be extended south to link to Cape May City. The stretch of rail line through Dennis and Upper Township will need to be replaced. Long term future rail connections north to the Atlantic City railroad should continue to be pursued on a regional level.

The Village has many interesting historic buildings, but there are vacancies and the condition of many buildings is poor. The Greater Tuckahoe Area Management Association has been formed to plan and coordinate efforts to revitalize the Village. During the summer season, there is major traffic congestion through the Village with vehicles traveling to the Shore. Improvements to the Village will better attract tourist dollars and strengthen the economy of the area.



The NJDOT is in the process of designing Route 50 improvements. These improvements should be designed to provide a solid infrastructure framework to support business improvements. Within the Village, buildings are close to the streets. On-street parking should be designed as part of these road improvements to support a pedestrian oriented Village. Sidewalk improvements, crosswalks, pedestrian traffic signals are needed. Traffic calming strategies should be used to slow down traffic in the Village so motorists will stop and shop.

Streetscape improvements should be planned as part of a comprehensive design and development strategy for the Village. Where land is available, off street parking should be planned or coordinated between businesses to accommodate customers. Off-street parking areas should be linked with alternative connections to the local roads to better distribute customer and resident traffic within the village.

The renovated train station is an important amenity for the Village that should be accommodated with parking and links provided with public sidewalks between the train station area and the Village commercial area. Wayfinding signage is important to direct visitors to the train station and parking. These recommendations should be developed as part of the detailed design plan for the Village. The area around the train station should be considered for complementary uses including small scale retail businesses, bed and breakfast operations, and live/work units with limited retail services. This should be considered as part of future planning for Tuckahoe Village Center.

There are about 57 acres of developable uplands in Tuckahoe Village Center within the Pinelands and CAFRA areas. Based upon the Future Land Use Plan, this could potentially yield about 41 residential units and 609,000 square feet of non-residential development. Within the Tuckahoe Village Center District, a concept sketch plan has

been developed to illustrate possible improvements that will improve the circulation network and highlight sidewalk, gateways and other improvements. (See Tuckahoe Village Center Concept Sketch Plan.)

Tuckahoe Village Center includes TV Tuckahoe Village commercial uses along the Route 50 frontage. It is recommended that the land uses be augmented to provide a broader range of uses to support economic development activities within the Village Center. No public sewer or water is proposed within the Village. Uses will be of small scale and small building footprint since most of the properties acreage is limited. The building setbacks should be consistent with the older structures in the Village and be located close to the street. Off-street parking should be provided at the rear of the structures and parking areas linked. Design standards in keeping with the Village character are needed and should be developed as part of the design guidelines and expanded Center design plan. Expansion of public water for both public safety and health should be considered.

The planned Route 50 Bridge to Corbin City and streetscape improvements under design by NJDOT would provide needed improvements. Other improvements including sidewalks, street furniture, and a bikeway connecting to Petersburg and Woodbine will bolster improvements in the Center. A Strategic Plan should be formulated to consider a full range of actions to encourage redevelopment and new development, and a marketing strategy. A "Train Station" services zone within 1,000 feet of the Tuckahoe train station should be a future planning study to evaluate permitting limited retail services, restaurants, small inns, live /work units, and parking to service the train station visitors. This area is within the Pinelands Management Area.

As indicated on the table of Centers Guidelines Criteria Evaluation Table, Tuckahoe Village Center meets some but not all of the guidelines. It is consistent with land area and the number of residents. The population density is low because most of the Center is already developed and the development density reflects lack of sanitary sewer infrastructure.

For lands outside of the Centers within Planning Area 5 – Environmentally Sensitive Planning area, the C Conservation District provides for impervious coverage at 3 percent with 70 percent vegetation preservation of forested areas. Most of the lands within Planning Area 5 Environmentally Sensitive lands were previously planned for very low density development. The C Conservation District includes state parks and wildlife management areas, the Cape May National Wildlife Refuge, County and Township lands. Most of these lands, both on the mainland and between the Garden State Parkway and the Strathmere barrier island along the intercoastal waterway are constrained. The Land Use Plan continues this planning approach and refines the Conservation District to generally include most lands within PA5.

Statement of Planning Coordination

- *A statement of consistency of current land use related regulations with the municipal master plan, county master plan; applicable regional plans, such as wastewater management plan, Pinelands Comprehensive Management Plan, New Jersey Meadowlands master plan, Delaware and Raritan Canal Commission plan and state agency plans; open space recreation plan, a housing element and fair share plan currently before or certified by COAH if applicable, agricultural smart growth plan, Metropolitan Planning Organization (MPO) Regional Transportation Plans; and regulations, such as Coastal Area Facility Review Act (CAFRA).*

The 2006 Master Plan Land Use Plan Amendment documents consistency with policies of other agencies. The Township is consistent with the Pinelands Management Plan as was approved by Pinelands Resolution PC-04-20 approved on March 12, 2004. The Township has adopted regulations to implement ordinances to comply with the Great Egg Harbor Wild and Scenic River Management Plan which is incorporated in the 2006 Land Use Plan

Amendment. The 2006 Land Use Plan Amendment provides for future land use patterns consistent with both the Township's vision of growth within the Centers and protection of the environs in accordance with the State Plan.

- *A description of any planning coordination that has been undertaken with the adjoining jurisdictions;*

The Township participated in the Watershed Management Planning, which was terminated by the NJDEP. The Township has participated on the Pinelands Municipal Council. Also the Township shares a radar vehicle with Dennis Township and Woodbine Borough. The Township Emergency service providers have mutual aid agreements with Ocean City and Sea Isle City to serve Strathmere. The Township is interested in pursuing regional planning issues which have been identified in the PIA. The County would be the appropriate agency to take the lead on these efforts to improve planning coordination between municipalities.

- *A description of any outreach efforts to include other municipalities or counties in the initial petition, or an explanation of why no such efforts were undertaken in the initial petition, or an explanation of why no such efforts were undertaken.*

The Township is working with Dennis and Middle Townships as part of this Plan Endorsement Petition Study.

- *A description of coordination activities, if any, with relevant Boards of Education.*

The Township is part of the regional school district with Ocean City. In 2001, the Board of Education presented their five-year plan to the Township Planning Board for review.

- *A statement detailing any ongoing local or regional planning or development activities by any level of government and the level of development activity by the private sector; and*

The NJDOT has two road improvement projects underway within Tuckahoe Village. These plans have been coordinated with the Township.

The 2006 HEFSP documents historic development trends. Over the past 10 years there have been 534 residential units constructed and about 150,000 square feet of non-residential development. Recently the Township approved a ShopRite Supermarket and retail center of over 80,000 square feet and the 149 unit Osprey Point Active Adult Community. Also a 100 unit active adult community was approved in Seaville.

- *A description of potential conflict of petitioner's vision with existing or projected planning and regulator efforts by other agencies.*

The Township wants to extend public sewer to include those developed properties along Roosevelt Blvd to connect to the public sewer line in Ocean City. Upper Township and the County Municipal Utility Authority but not Ocean City, have supported this sewer service extension. The 2000 Consent Order addresses this extension but it should be confirmed through the PIA.

Upper Township does not support the new alignment of Route 55 to serve regional traffic from the west (Cumberland County, Salem, Pennsylvania etc. to serve shore related seasonal traffic.) The Township supports other improvements as identified in the Route 47/Route 50 Shore Connections Report.

The Strathmere area of Upper Township, which is a barrier island, has numerous small lots (4,000 s.f.). Public water has been extended to serve the island and address health issues. Should the Township decide to extend public sewer, the island should be designated as a Center. At this time, NJDEP specifically requested that

Strathmere not be included as a center. The Township holds the right to reconsider this decision and come back for Centers designation should a sewer extension be necessary.

County or Municipal Agriculture Plans

- ❑ *Agriculture Retention Plan*
- ❑ *County Comprehensive Farmland Preservation Plan or Municipal Farmland Preservation Plan*

The 1990 Cape May County Farmland Preservation Plan was provided in digital format to NJOSG. The Township does not have an Agriculture Retention Plan. The 2006 Master Plan Reexamination Report recommends that a Farmland Preservation Plan be prepared. This is included in the PIA.

Planning and Implementation Agreement

The Planning and Implementation Agreement has been prepared to identify planning activities to be addressed by the Township. The PIA includes a brief description of local activities (municipal activities) and other agency actions needs to affect these activities. There are also regional based activities that have been identified through the regional meeting and discussions with the Township. These activities would be led by either the County of Cape May or various State Agencies.

Upper Township Planning and Implementation Agenda

<u>ACTIVITY</u>	<u>LOCAL RESPONSIBILITY</u>	<u>AGENCY ASSISTANCE</u>	<u>TIME FRAME</u>
LAND USE			
1 Achieve Plan Endorsement with Centers Designation for the Seaville, Marmora-Palermo-Beesley's Point, Petersburg and Tuckahoe Centers.	Petition Committee, Planning Board, Township Committee.	NJOSG	Winter 2006
2 Prepare Zoning Ordinance to implement Master Plan Land Use Plan.	Township Committee adopts zoning amendments; referred to Planning Board.		Short
3 Adopt design guidelines to support and enhance centers development. Provide design guidelines suitable for each unique Township Center. Create user friendly design guidebook to inform on guidelines. Incorporate guidelines into LDO.	Township Planning Board initiates effort in keeping with Master Plan recommendations and design sketches. Township Committee with review of Planning Board adopts Design Regulations in LDO.	NJOSG Smart Future Planning Grant	Short
4 Promote Tuckahoe Village Center Revitalization through coordinated planning efforts with business and property owners. Develop plans for revitalization of Tuckahoe Village to support economic development initiatives including façade and rehabilitation grant program, wayfinding signs, coordinated marketing efforts, etc. Evaluate land use and Zoning for Train Station area.	Township Committee will lead this effort working with the Greater Tuckahoe Merchants Association.	NJOSG Smart Future Planning Grant Main Street NJ Technical Assistance, Historic preservation trust grants and revolving loan program.	Medium
TRANSPORTATION			
5 Install full interchange at Exit 20 of the Garden State Parkway. This is the highest priority Township transportation improvement project to reduce congestion.	Township Committee coordinates with NJ Highway Authority (NJHA)	NJHA funding /NJDOT*/SJTPO TIP	Medium
6 Implement Route 47/Route 55 Corridor Study improvements to reduce congestion (except a Route 55 bypass)	Township Committee coordinates with NJHA	NJHA funding /NJDOT*/SJTPO TIP	On-going
7 *Plan and implement regional shuttle service in coordination with mainland municipalities campgrounds and County. Shuttle service will provide transit service between campgrounds, mainland attractions and barrier island destinations. This needs to be coordinated by the County.	Township Committee will coordinate Upper Township's role in this effort.	County to take lead in the regional planning and implementation of a regional shuttle service between campgrounds and beaches and other recreational activities in coordination with the mainland municipalities. Request funding through NJ Transit for system planning and purchase of shuttle vans (which can be used off season for other transit services (seniors, van pools, dial a ride programs); coordinate with SJTPO on TIP.	Medium
8 Prepare updated Circulation Plan Element of the Master Plan	Township Planning Board		Medium
9 *Expand rail line connection from Tuckahoe to Hammonton. This rail line which will provide connection to the Atlantic City Rail Line and NJTransit/PATCO service to Philadelphia should be forwarded to enable alternative travel modes reducing congestion for summer visitors. (The rail line is also part of the excursion rail line link from Cape May to Tuckahoe Village.)	Township Committee coordinates with NJTransit and County on these efforts.	NJTransit shall take the lead in this effort to promote extension of rail to connect to Atlantic City Rail Line. County should coordinate efforts with municipalities.	Long

Time Frame
 Short 1-2 years
 Medium >2-5 years
 Long >5 years or longer

* Regional Project

Upper Township Planning and Implementation Agenda

<u>ACTIVITY</u>	<u>LOCAL RESPONSIBILITY</u>	<u>AGENCY ASSISTANCE</u>	<u>TIME FRAME</u>
10 *Complete rail line between Cape May City and Tuckahoe Village. Excursion rail service will support planned economic development activities around restored Train Station and Tuckahoe Village.	Township Committee coordinates with NJTransit and County on these efforts.	Cape May Seashore Line shall take the lead in this effort. NJDOT funds for rail line improvements; Transportation Enhancement funds*	Medium
11 *Implement Route 9 Cape May County Access Management Plan to reduce congestion along corridor.	Township Committee will coordinate Upper Township's role in this effort to implement a cooperative Access Management Plan for the Route 9 Corridor.	County to coordinate regional access plan with Cape May mainland municipalities. NJDOT Local Planning Assistance funds*.	Medium
12 Revise the Township's LDO to comply with the MLUL requirement that municipal zoning to provide for the regulation of land adjacent to State highways in conformity with the State Highway Access Management Code.	Township Committee, Planning Board	NJDOT technical assistance*.	Short
13 Construct Petersburg /Woodbine /Tuckahoe bike path. Secure funding to design and construct bike path to connect to Woodbine from Amandas Field and connecting north to Tuckahoe Village.	Township Committee	NJDOT Transportation Enhancement funds; NJDOT Bicycle and Pedestrian funds*, NJDEP wetlands permits.	Medium
14 Design and construct Palermo bike path along inactive NJTransit rail line from Route 9 to the Inland Waterway.B9	Township Committee	NJDOT Transportation Enhancement funds; NJDOT Bicycle/Pedestrian funds*, NJDEP permits	Medium
15 Construct Tuckahoe train station link to Main Street. In coordination with County, design and construct sidewalk improvements along Reading Avenue from Route 50 to the Tuckahoe Train Station to support economic development efforts.	Township Committee	NJDOT Bike and Pedestrian funds; NJDOT Local Aid funds*.	Short
16 Construct Tuckahoe streetscape and Route 50 bridge improvements. as key to revitalization of the Tuckahoe Village. Extend improvements to the section of Route 49 within Village center.	Township Committee support	NJDOT project under design; provide funds and fast track improvements to support Tuckahoe Village economic development efforts. Request additional Transportation Enhancement and/or NJDOT Local Aid for Centers of Place funds for to extend streetscape improvements along Route 49 and to provide streetscape enhancements in the Village*.	Short
17 *Undertake regional dredging effort, obtain funding for equipment, and identify spoil sites as part of an overall regional plan.	Township Committee support	County coordination of regional plan. NJDEP assistance with funding and site selection.	Medium
INFRASTRUCTURE			
18 Expand sewer service area to include Roosevelt Blvd developed properties Township agreed to exclude these properties from the Marmora Center in lieu of extending public sewers to serve this area which has failing septic systems. Consent Order provides for the sewer service area extension.	Township Committee	NJDEP permits for sewer extension to service existing development.	Medium

Time Frame
Short 1-2 years
Medium >2-5 years
Long >5 years or longer

* **Regional Project**

Upper Township Planning and Implementation Agenda

<u>ACTIVITY</u>	<u>LOCAL RESPONSIBILITY</u>	<u>AGENCY ASSISTANCE</u>	<u>TIME FRAME</u>
19 Prepare Wastewater Management Plan Amendment to facilitate sewer series areas with the two Town Centers.	Township Committee. Township Planning Board	NJDEP permits.	On-going
20 Encourage water line extensions by New Jersey American Water Company within Centers to support increased development density and to improve fire suppression capabilities. Work with utility to plan and improve waterline network.	Township Committee	NJDEP permits.	Long
HOUSING			
21 Prepare and adopt Housing Element and Fair Share Plan. Petition COAH for substantive certification.	Township Planning Board prepares and adopts Housing Plan. Township Committee adopts Fair Share Plan regulations, Developer Fee regulations, etc..	COAH technical assistance.	Short
HISTORIC PRESERVATION			
22 Update Historic Preservation Plan of the Master Plan. Coordinate efforts with Upper Township Historic Preservation Society.	Township Committee authorizes historic properties update.		Medium
23 Promote awareness of historic resources of Township through design guidelines to encourage preservation and appropriate rehabilitation of properties and compatible infill. Develop design guidelines in coordination with Historic Preservation Society for the Tuckahoe and Petersburg villages. Adopt guidelines as part of LDO.	Planning Board prepares and adopts Historic Facilities Element of Master Plan including design guidelines. Township Committee adopts LDO changes.		Medium
24 Develop procedures to ensure Historic Preservation Society input for any development application or permit that affects identified historic properties.	Township Committee adopts LDO regulations.		Short
CONSERVATION			
25 Prepare and adopt Recreation and Open Space Plan as updated Master Plan element. Use Plan to prioritize open space acquisition efforts. Prioritize acquisition of open space in coordination with State and Federal agencies and not-for-profit groups. Prepare Recreation and Open Space Inventory (ROSI) and submit to NJDEP to enable funding.	Township Planning Board undertakes effort as part of Master Plan.	NJDEP Green Acres funds.	Medium
26 Adopt Environmental Review regulations to protect environmental sensitive lands as a condition of Plan Endorsement. Provide environmental maps for Township Construction and Zoning officials to use to identify critical land and to inform public.	Township Committee adopts regulations.	NJDEP technical assistance.	Short
27 Prepare and adopt a Farmland Preservation Plan. Coordinate efforts with County Farmland Preservation plan.	Township Planning Board undertakes effort as part of Master Plan.	NJ Dept. Of Agriculture assistance	Medium

Time Frame
Short 1-2 years
Medium >2-5 years
Long >5 years or longer

* **Regional Project**

Upper Township Planning and Implementation Agenda

ACTIVITY

LOCAL RESPONSIBILITY

AGENCY ASSISTANCE

TIME FRAME

* "When requested, NJDOT will give priority consideration to providing technical assistance consistent with program requirements and subject to the availability of state resources."

CAFRA Coastal Area Facilities Review Act
COAH Council on Affordable Housing
LDO Land Development Ordinance
NJDEP New Jersey Department of Environmental Protection
NJDOT New Jersey Department of Transportation
NJHA New Jersey Highway Authority
NJOSG New Jersey Office of Smart Growth
NJTransit New Jersey Transit
ROSI Recreation and Open Space Inventory
SJTPO South Jersey Transportation Planning Organization
TIP Transportation Improvement Program

Time Frame
Short 1-2 years
Medium >2-5 years
Long >5 years or longer

* **Regional Project**

Present and Future Population, Households and Employment Projections

- ❑ *Existing population, households and estimated job opportunities as indicated in the Census 2000 and Department of Labor Statistics;*

See Appendix B Existing Conditions Inventory, Section 1.2 Population, Housing and Employment.

- ❑ *Growth or decline of population, households and employment over the last 20 years as indicated by the trends in Census 2000 data.*

See Appendix B Existing Conditions Inventory, Section 1.2 Population, Housing and Employment.

- ❑ *State and county projections for local population, household and employment for the horizon year 2025 and an analysis of differences with local projections, if any;*

See Appendix B Existing Conditions Inventory, Section 1.2 Population, Housing and Employment.

- ❑ *Future growth targets indicating how much of the state's forecasted or projected population and employment the county expects to absorb based upon existing forecasts or projections used by the respective MPO in whose area the county is located, accompanied by a map or visual description of the areas targeted for growth. The use of forecasts or projections other than those of the MPO should be justified.*

Based upon the New Jersey Department of Labor and SJTPO forecasts, Cape May County is expected to absorb 1.2 % or 20,741 persons and 1.1% or 9,363 new jobs of the total 2025 forecast of 1,366,550 persons and 861,393 new jobs for the State. Based upon the SJTPO forecasts, Upper Township is expected to absorb 13% or 2,720 persons (957 housing units) and 13% or 1,219 of the 2025 forecast jobs in Cape May County. The Upper Township HEFSP projects over 1,300 residential units may be constructed within the next 8 years or so. This includes up to 791 planned affordable and market rate residential units through inclusionary developments and 100% affordable developments to meet the Township's affordable housing obligations.

The HEFSP projects 613 jobs from 2004 to 2014 which is higher than the 2025 SJTPO estimate of 488 jobs. The higher Township estimate is based upon historic trends and known development applications.

- ❑ *Municipal growth targets should be aligned with county or regional growth targets, whether or not the municipality is participating in a county or regional strategic plan. If the municipal growth targets are not aligned, a detailed justification for the reasons for the disagreement should be included.*

The Township growth targets are higher than the SJTPO given the HEFSP planned affordable projects.

Upper Township is projecting a majority of the growth will take place within the four designated Centers, with Seaville Village and the Marmora-Palermo- Beesley's Point Center accounting for most of the growth. This anticipated growth is due in part by the accessibility to major roads and services as well as physical conditions suitable for septic systems and planned expansion of wastewater service areas to allow for community wastewater treatment systems.

- ❑ *If a Housing Element and Fair Share Plan have been submitted to the Council on Affordable Housing for third round substantive certification, municipal residential and employment growth targets should be consistent with growth projections submitted to COAH and should include ten-year projections of probable residential and employment growth.*

A Housing Element and Fair Share Plan has been prepared and is expected to be submitted to COAH. It includes 10 year growth projections which exceed that of SJTPO.

Existing Land Use Inventory and/or Zoning Maps

- ❑ *A map or aerial depicting existing land uses.*

An existing land use map and description is included in the NRI.

- ❑ *Current zoning map.*

A current zoning map was submitted in digital format with the Zoning Ordinance to NJOSG. The 2006 Master Plan Land Use Plan Amendment provides the Future Land Use Plan and Proposed Zoning Changes Map.

- ❑ *Community Facilities Map providing information concerning the location of community facilities and services, e.g. municipal and county buildings, community colleges, schools, libraries, police and fire protection, etc. Please include a statement of facility capacity where applicable.*

The 1994 Master Plan includes a Community Facilities Plan, which was updated in the 2001 Master Plan Reexamination Report.

- ❑ *Existing and proposed affordable housing sites in a Housing Element and Fair Share Plan currently before or certified by the Council on Affordable Housing, if applicable.*

The 2006 Housing Element and Fair Share Plan will be provided to NJOSG.

- ❑ *Digital municipal block and lot data, if available.*

Municipal block and lot data is available through Cape May County GIS services.

Natural Resources Inventory

- ❑ *Habitat for threatened, endangered and priority species, including critical habitat as defined under CAFRA; areas identified as necessary to protect, sustain or restore plant or animal populations identified in state or federal recovery or management plans;*
- ❑ *Areas of critical water supply concern including but not limited to important water supply areas, Category 1 drainage areas, wellhead protection areas, aquifer recharge areas, source water protection areas and shellfish transition or buffer areas defined under Freshwater Wetlands Protection Act and coastal wetlands act;*
- ❑ *Open space, public lands, including natural areas and private conservation areas or wildlife refuges, and conservation easements, including those entered pursuant to the farmland preservation program;*
- ❑ *Natural features such as steep slopes (including coastal bluffs), beaches and dunes, geology, soils, forest cover, and hydrography, including Wild and Scenic River data.*
- ❑ *Watershed boundaries (HUC14);*

- ❑ *Critical Environmental Sites as identified by the State Planning Commission.*

A NRI has been prepared for the Township. It has been reviewed and deemed satisfactory by NJDEP as meeting their requirements. A digital copy of the NRI has been submitted to NJOSG.

Environmental Justice Inventory

- ❑ *Facilities that submit a Release and Pollution Prevention Report under the Worker and Community Right to Know Act 34:5A and the Worker and Community Right to Know Regulations N.J.A.C. 7:1G;*
- ❑ *Facilities that submit an Emission Statement under the Air Pollution Control Act N.J.S.A.26:2c-1 TO -25.2 and N.J.A.C. 7:27-21;*
- ❑ *Facilities regulated under the Toxic Catastrophe Prevention Act (TCPAP, N.J.S.A. 13:1K-19 to – 35 and N.J.A.C. 7:31;*
- ❑ *Facilities regulated under Spill Compensation and Control Act N.J.S.A. 58:10-23:11 and the Discharge Prevention Control and Countermeasure Regulations (DPCC) N.J.A.C.7:1E;*
- ❑ *Hazardous Waste Treatment Storage and Disposal (TSD) facilities under the Solid Waste Management Act 13:1E-1-48 and the Hazardous Waste Regulations N.J.A.C. 7:26G;*
- ❑ *Brownfields, as identified by Brownfield and Contamination Site Remediation Act, N.J.S.A. 58:10B-1 etc.. seq.; and*
- ❑ *The Known contaminated Sites, as identified on the Department of Environmental Protection Known Contaminated Sites List.*

A listing of Known Contaminated Sites is included in the NRI.

Housing

- ❑ *Provide information describing the existing availability and opportunities to create diverse housing opportunities, including affordable housing;*

The Township has developed as primarily single family housing; in fact, in from 1990 to 1999, all 454 building permits were for single-family housing. Since 2000, there has been substantial interest in age-restricted housing. The Osprey Point age restricted housing development was recently completed.

In addition, the Township has seasonal campground sites (which provide housing for up to nine months per year).

The HEFSP provides detailed information on housing conditions including affordable housing.

- ❑ *Provide information that demonstrates a commitment to plan for housing that is appropriate to the scale, capacity and environmental resources of the community, including opportunities for affordable housing; and*

The Township has prepared a Housing Element and Fair Share Plan which it expects to petition COAH for substantive certification. Given the lack of public sanitary sewers and public water, future affordable housing will be

limited to the Centers especially Seaville and Marmora-Palermo-Beesley's Point which have suitable soils for on-site disposal of community package treatment plants is proposed.

- *Provide information on how residential zoning looks to create a coordinated planning effort by creating linkages to other neighborhoods and business Centers such as; bike and pedestrian pathways and sidewalks.*

As part of revised design standards, sidewalks will be incorporated into the design of the Centers to improve walkability within the Centers. Planned improvements in Tuckahoe to link the Tuckahoe Train Station and the Route 50 business area together with planned streetscape improvements. Additional sidewalks and bicycle paths are planned but need funding. In addition, design for the Centers will emphasize pedestrian linkages and traffic calming measures.

Transportation

- *If the petitioner has a circulation element, please submit the document as part of the application. If not, they may provide instead a general overview of existing and proposed transportation infrastructure and an assessment of its ability to accommodate projected development. This overview should consider all transportation modes..... and should reflect the goals and objectives of the respective MPO Regional Transportation Plan.*

See Appendix B Existing Conditions Inventory, Section 1.6.

- *The State Planning Commission ask that the petitioner demonstrate compliance with the Municipal Land Use Law (MLUL) requirement that the municipal zoning ordinance provides for the "regulation of land adjacent to State highways in conformity with the State Highway Access Management Code, " at C.40:55D-62.d.*

The Township will review and modify its zoning regulations to comply with access management requirements along State highways. This will include Route 9, Route 50 and Route 49. It will be included in the PIA. In addition, there are two NJDOT projects, Route 49 Cape May Branch Bridge and the Route 50 Section 2E#B under design. These projects are in the area of the Tuckahoe Village Center. Any future development within the project limits will be compatible with the design of these projects.

- *For those municipalities with a public use airport, the State Planning Commission asks that the transportation information indicate the municipality's compliance with the Airport Safety Zoning Act, as required by the MLUL, C.40:55D-28b(2)(c).*

The private airport on Route 9 has been abandoned and the site recently been approved for residential development.

Infrastructure

- *If the petitioned has a utility service plan element of the master plan, please submit that as part of the petition. In addition, the State Planning Commission asks that the petitioners provide any available information on the existing infrastructure, including extent and location of municipal, county, state, and federal roads, wastewater collection systems, stormwater collection systems and discharge points, and public water supply systems, including conveyance, and any well, surface water intake, treatment facilities, and discharge location. The submission of this information in digital GIS data sets is encouraged.*

See Appendix B Existing Conditions Inventory, Section 1.7.

EVALUATION OF PLAN PETITION

The Plan Endorsement Guidelines provide criteria used to evaluate Plan Petition applications. (Pages 33-34) based on consistency with the goals of the State Plan as measured by the Indicators and Targets as set forth and updated in the State Plan.

Consistency with the State Plan Goals

The State Plan lists eight goals. The following section looks at each overall goal relevant to Upper Township and how the current or planned Township's planning activities is consistent with these actions.

Goal #1 – Revitalization of the State's Cities and Towns

The development of the four Upper Township Centers would support this goal. The Centers will provide for additional infill development, affordable housing and provide opportunities for revitalization or redevelopment in this context.

Goal #2 - Conserve the State's Natural Resources and Systems

About 47% or over 20,000 acres of the Township are public lands. The Township has approximately 24% of its total land mass covered by freshwater wetlands and another 24% constrained by tidal wetlands. There are large areas of land within the Township that are owned and managed by State and Federal agencies for the protection of threatened and endangered species and wildlife habitats. These areas represent a significant amount of undeveloped land consisting of the Tuckahoe Wildlife Management Area, Belleplain Forest and the Great Cedar Swamp Wildlife Refuge.

The western section of the Township is located within the Pinelands Management Area and development is limited except for the Pinelands Villages of Tuckahoe and Petersburg. Through the 2006 Land Use Plan Amendment, the Township has reevaluated the zoning within the CAFRA areas as to better preserve lands under private ownership with reduced density coverage requirements and to encourage conservation residential cluster and other development tools to direct growth.

Goal #3 - Promote Beneficial Economic Growth, Development, Renewal for all Residents of New Jersey

The Township is engaged in promoting appropriate balanced economic growth consistent with the carrying capacity of the land and available infrastructure. There are no public sewers available in the Township, although private package treatment plants are permitted. Public water is limited to Strathmere and sections of Marmora-Palermo-Beesley's Point. The lack of sewers and public water has limited growth along the Route 9 corridor. The Route 9 corridor is developed and large vacant tracts of lands are limited. The next wave of development will be infill on the remaining vacant lots and redevelopment of existing developed and underutilized properties. The planned Centers will serve as a location for more dense development with privately constructed sewer treatment facilities along the Route 9 corridor Centers. Limited growth is expected in the Tuckahoe and Petersburg Centers. Both are located partially within the Pinelands, which require larger lots to accommodate septic treatment on lands with high groundwater conditions.

For Tuckahoe, the Township desires to improve this area as a low scale historic village with commercial uses to support tourism especially tied to the renovated Train Station. Plans for revitalization of the Village through streetscape improvements, marketing, funding of building improvements will be pursued. For the Beesley's Point Center, the Township is may investigate redevelopment of the B.L .England Power Plant (Atlantic City Electric) to promote mixed-use waterfront development along the Great Egg Harbor River and Bay depending upon the eventual disposition or sale of the power plant property.

Goal #4 - Protect the Environment, Prevent and Clean Up Pollution

The Township will adopt an Environmental Review process to ensure that all future development (including those developments not under CAFRA jurisdiction) will appropriately consider significant environmental resources. The Environmental Review regulations, checklist, and procedures will support this statewide goal to protect the environment. It will also achieve a stronger level of local regulation that will shoulder projects that fall beneath the CAFRA thresholds. The NJDEP has approved the proposed environmental protection measures and checklist.

Goal #5 - Provide Adequate Public Facilities and Services at a Reasonable Cost

The Township supported the extension of public water to address contaminated wells in Strathmere and Marmora. The extension of public water will be encouraged in the Centers. The Township is encouraging the use of community package sewage treatment facilities to support more intensive development in the Marmora-Palermo-Beesley's Point and Seaville Centers.

Goal #6 - Housing at a Reasonable Cost

The Township has prepared a Housing Element and Fair Share Plan that will address the Township Prior Rounds Obligations and the Third Round Growth Share obligation.

Goal #7 - Preserve and Enhance Areas with Historic and Cultural, Open Space and Recreational Value

The Township already has met this goal given the extent of open space preserved in the Township for public use. The Township proposes to prepare an Open Space and Recreation Plan, which will further prioritize remaining privately owned environmentally constrained land, and to work with the State and Federal government for acquisition. The Township has many historic properties which are not protected. The Township will create a mechanism to ensure proper review of identified cultural sites with the assistance of the Upper Township Historical Preservation Society. Design guidelines and regulations will be put in place to support historic preservation efforts.

Goal #8 - Ensure Sound and Integrated Planning and Implementation Statewide

The Township will be working with Dennis and Middle Townships and the County to identify and address regional problems especially related to transportation. Given the tremendous growth in summer visitor traffic, a number of activities have been identified such as regional shuttle, improved rail service, improved transit services and construction of transportation improvements as identified in the Route 47/Route 50 corridor study.

The Pinelands Management Area in Upper Township has been deemed consistent with the Pineland Management Plan with its regulations approved by the Pinelands Commission in March 2004.

Upper Township's Planning Area Consistency

The Township planning policies, as evidenced by the 2006 Master Plan Land Use Plan Amendment are overall highly consistent with the State Plan goals and objectives. The following section summarizes the statewide planning goals for each planning area in Upper Township and provides documentation of the Township's current and planned efforts to achieve consistency with the plan. The designated Centers policies compliance is addressed in another section.

PA2 Suburban Planning Area

The PA2 Suburban Planning Area is located generally along the Route 9 corridor running north/south through the Township. It is substantially developed area with residential neighborhoods and commercial development along the Route 9 and Route 50 corridors. There are pockets of vacant lands and areas of older structures, which are potential opportunities for private redevelopment. Two Town Centers – Marmora-Palermo-Beesley's Point to the north and Seaville at the Route 50 intersection are within this planning area. Both have interchange access to the Garden State Parkway.

PA 2 SUBURBAN PLANNING AREA	
Planning Area/Policy	Upper Township Compliance
<p>Land Use:</p> <ul style="list-style-type: none"> - Guide development and redevelopment into more compact forms. - Plan and zone a wide range of land uses to achieve more balanced communities. - Better integrate different land uses. - Encourage densities capable of supporting transit. - Preserve the Environ as parkland, farmland or partially developed low-density uses 	<ul style="list-style-type: none"> - Centers have been planned that will provide increased density to absorb planned growth and protect the environs. Seaville and Marmora-Palermo-Beesley's Point will provide greatest growth area with limited environmental constraints. Mixed-use development is proposed in the 'core' of these Centers. Some private redevelopment is likely on underutilized lots in the Centers. Affordable housing, senior housing, and commercial services at a scale in keeping with the character of the area. - The environs have been preserved in through the conservation and low density zoning in the Pinelands. The zoning will be further assessed for areas around the Centers. Sanitary sewer facilities will be restricted outside of the Centers to encourage greater density in the Centers.
<p>Housing:</p> <ul style="list-style-type: none"> - Provide a full range of housing choices primarily in Centers at appropriate densities to accommodate projected growth. - Insure housing, particularly affordable, seniors, special needs, family housing, is developed with access to a full range of services. - Focus multifamily and higher density single- family housing in Centers. - Any housing in Environs should be planned to maintain existing character. 	<ul style="list-style-type: none"> - Although most of the Township is single-family residential, multifamily residential and attached housing will be encouraged in the Centers with mixed-use apartments over stores in Town Center Core areas. Affordable housing options will be focused in the Town Centers. This will provide access to a full range of services. - Existing housing in the PA2 is primarily developed with low-density one-acre lots. Limited infill development will occur.

PA 2 SUBURBAN PLANNING AREA	
Planning Area/Policy	Upper Township Compliance
<p>Economic Development:</p> <ul style="list-style-type: none"> - Guide economic development opportunities into Centers or existing pedestrian and transit supportive single use areas and target new jobs to these locations. 	<ul style="list-style-type: none"> - The Township through the planned LDO revisions will review commercial development standards to accommodate higher intensity commercial development (greater impervious coverage/FAR standards) in the Centers and ensure lower intensity commercial development in selected areas outside of the Centers in keeping with CAFRA standards. Jobs will be targeted to the Centers. - The Township is considering a Redevelopment Plan for Beesley's Point to encourage mixed-use waterfront oriented development in this area including the B.L England Plant site should the plant not continue. - Renovation of the Tuckahoe train station should encourage complementary businesses supportive of tourist-based uses. The zoning for this area in Tuckahoe will be reassessed.
<p>Transportation:</p> <ul style="list-style-type: none"> - Maintain and enhance a transportation system that links Centers and large existing single use areas to each other. - Emphasize the use of public transit and alternative modes where appropriate. - Maximum circulation and mobility options. - Encourage significant redevelopment and intensification around existing and planned rail stations, along transit corridors. - Promote flexible transit and support employer shuttle service. - Preserve general aviation airports and complementary uses. 	<ul style="list-style-type: none"> - Route 9 is the major state route through the Township and a regional effort will be implemented to develop corridor access management plan for this road which experiences heavy congestion in the summer months. - Road management and traffic calming will need to be assessed within the villages together with other tools to provide circulation links within the Center cores and to adjacent residential areas. - A regional shuttle service is proposed for further study that will support summer visitors and have other year round applications. - Expansion of the rail line as an excursion rail from Cape May City to Tuckahoe is proposed. The line has been activated from Tuckahoe to Richland. This can encourage revitalization efforts in Tuckahoe Village. This rail line can be further expanded to serve Philadelphia and Atlantic City rail uses and should be pursued. - There are no general airports in Upper Township now. - Planned bicycle paths will provide links from the Centers and recreation opportunities for residents.

PA 2 SUBURBAN PLANNING AREA	
Planning Area/Policy	Upper Township Compliance
<p>Natural Resource Conservation:</p> <ul style="list-style-type: none"> - Conserve contiguous natural systems, strategically locate open space and buffer critical environmental sites. - Use open space to reinforce neighborhood and community identity. - Protect natural linear systems that link into other planning areas. 	<ul style="list-style-type: none"> - Most of the Township is located within PA5 or the Pinelands. Approximately 47% of the Township is in public ownership. The AR Agriculture Residential and Conservation zones about the Centers and provide Environs of lower density development to create a growth edge around the Centers. - Through the planned Environmental Review regulations, the Township will enable greater control over development affecting more sensitive wetlands, C-1 waters, natural heritage priority sites, cultural resources etc. - The Township has prepared an NRI for public review of critical resources. Maps of critical environmental resources will also be provided for public viewing and use in coordination with development activity review.
<p>Agriculture:</p> <ul style="list-style-type: none"> - Guide development to ensure continued viability of agriculture and retention of productive farmland. - Promote new agricultural enterprises. 	<ul style="list-style-type: none"> - Currently five farms totally 77 acres have been preserved in the Township. There are other farm properties that can be preserved either through farmland preservation or use of conservation residential cluster or density transfer. The large vacant agricultural tracts are generally located outside of PA2 and the Centers.
<p>Recreation:</p> <ul style="list-style-type: none"> - Provide and maintain active and passive recreation opportunities and facilities at the local and regional levels by concentrating rehabilitation of existing park and open space while expanding system. - In underdeveloped areas of PA2, acquire and improve parkland within or easy access to Centers. 	<ul style="list-style-type: none"> - The Township has an adopted Parks and Recreation Master Plan which identifies many parks, tot lots, athletic fields throughout the Township within most concentrated in the planned Centers. Many smaller recreation areas are part of residential developments. The Township's recreational efforts have focused on larger multi-use facilities in centralized locations including the Amanda's Field athletic complex behind the Township municipal complex in Petersburg. - Future plans include development of bike paths from Petersburg to Tuckahoe and Woodbine and Palermo to the Inland Waterway. Within the Centers, public spaces will likely be planned.
<p>Redevelopment:</p> <ul style="list-style-type: none"> - Encourage redevelopment efforts in existing Centers and single use areas which can be redeveloped into mixed - use areas and areas within walking distance of train stations or other major public transit facilities. - Redevelop at transit supportive densities, while creating pedestrian-oriented environments. Take full advantage of the opportunities available under the state's redevelopment statutes to promote new Centers and retrofit existing areas with mixed-uses and higher densities. 	<ul style="list-style-type: none"> - Upper Township has adopted a Determination of an Area in Need of Redevelopment Study for the Beesley's Point area. Preparation of a Redevelopment Plan for the area will be dependant upon future use of the B.L. England Plant facility. - Within the Town Centers, private redevelopment or retrofit of underutilized properties will likely occur within the Town Centers.

PA 2 SUBURBAN PLANNING AREA	
Planning Area/Policy	Upper Township Compliance
<p>Historic Preservation:</p> <ul style="list-style-type: none"> - Encourage the preservation and adaptive reuse of historic or significant buildings, Historic and Cultural Sites, neighborhoods and districts in ways that will not compromise either the historic resource or the area's ability to develop or redevelop. - Coordinate historic preservation with tourism efforts. 	<ul style="list-style-type: none"> - The Township Historic Plan Element of the Master Plan has identified many historic properties. The PIA recommends implementation of stronger design standards to better protect these resources. The Historic Preservation Plan has been recommended for updating in the 2006 Master Plan Reexamination Report and this PIA.
<p>Public Facilities and Services:</p> <ul style="list-style-type: none"> - Phase and program the extension of public facilities and services to support development in Centers and ensure adequate levels of public and private services. - Encourage jurisdictions to locate community facilities in or in proximity to Centers. - Central facilities serving a wide population should be located in or near Cores. 	<ul style="list-style-type: none"> - Expansion of public water supply is encouraged in the Centers. - Privately developed sanitary sewer facilities within the Centers are supported by the Township. - The Township has been looking into public sanitary sewers in Strathmere; this effort has been put on hold by the Township as documented in the 2006 Land Use Plan Amendment. - Municipal facilities, the county library branch are centered in Petersburg Center together with a large athletic complex and the middle school. There has also been a new Community Center building leased from the County on Route 50 in Tuckahoe. - There are four volunteer fire companies located in Strathmere, Marmora, Tuckahoe and Seaville. The Township Rescue Squad is located in Petersburg. - All three Township schools are located within planned Centers; the (K-2, and elementary in Marmora, and a middle school in Petersburg. Development of a high school site in Petersburg (at the edge of the Center) is on hold.
<p>Intergovernmental Coordination:</p> <ul style="list-style-type: none"> - Establish regional approaches to the planning and provision of facilities and services. - Create public/public and public/ private partnerships to locate, facilitate, coordinate and implement new development and redevelopment in Centers. 	<ul style="list-style-type: none"> - Through this PIA, a number of regional efforts have been identified that will affect the mainland municipalities. This includes transportation items such as a Route 9 Access Management Plan, campground shuttle services, and expanded excursion rail service.

PA 4 Rural Planning Area

PA4 Rural Planning Area is located along the Route 50 and Route 49 corridors. The Petersburg Village Center and Tuckahoe Village Center are located within PA4 (for those areas outside of the Pinelands).

PA 4 RURAL PLANNING AREA	
Planning Area/Policy	Upper Township Compliance
<p>Land Use:</p> <ul style="list-style-type: none"> - Enhance economic and agricultural viability and rural character by guiding development and redevelopment into Centers. - In the Environs, maintain and enhance agricultural uses, and preserve agricultural and other lands to form large contiguous areas and greenbelts around Centers. - Use creative land use and design techniques to ensure that it does not conflict with agricultural operations, does not exceed the capacity of natural and built systems and protects areas where public investments in farmland preservation have been made. - Development and redevelopment in the Environs should maintain or enhance the character of the area. 	<ul style="list-style-type: none"> - Centers have been planned that will provide increased density to absorb planned growth and protect the environs. Petersburg and Tuckahoe are located within the PA4 planning area (within CAFRA). - About 1,237 acres are in farmland use. Prioritize farmland preservation and acquisition efforts in the Township in coordination with the County. Refine zoning tools to encourage conservation residential cluster, noncontiguous density transfer and other tools to maintain farmland equity and provide development options are proposed in the 2006 Land Use Plan Amendment. - Public land holdings provide large contiguous greenbelts through the center of the Township. Limited large vacant and developable farmland parcels are left and these are generally outside of the Centers. Development in the environs will be low-density development including recreation and conservation uses. - Within the PA 4 Planning Area outside of the Centers, the proposed AR Agriculture and Rural Residential Zone will provide for minimum 3 acre lots with reduced impervious coverage compatible with CAFRA standards. - The Pinelands rural areas are consistent with these goals and provide for low-density development...

PA 4 RURAL PLANNING AREA

Planning Area/Policy	Upper Township Compliance
<p>Housing:</p> <ul style="list-style-type: none"> - Provide a full range of housing choices primarily in Centers at appropriate densities to accommodate projected growth. - In the Environs, maintain and enhance agricultural uses, and preserve agricultural and other lands to form large contiguous areas and greenbelts around Centers. - Insure housing, particularly affordable, seniors, special needs, family housing, is developed with access to a full range of services. - Focus multifamily and higher density single- family housing in Centers. - Any housing in Environs should be planned to maintain or enhance the cultural and scenic qualities and with minimum impacts on agricultural resources. 	<ul style="list-style-type: none"> - Although most of the Township is single-family residential, Tuckahoe Village provides for with mixed-use buildings in the Tuckahoe Village zone. - Density of development will be limited due to lack of public sewer, poor soils, and limited vacant and developable lands in the Tuckahoe and Petersburg Centers. - At this time, alternative community wastewater treatment methods are not proposed within Tuckahoe and Petersburg. - Public lands form a greenbelt corridor through the Township and preserve the Environs. - Design guidelines will be prepared as part of the PIA to ensure that new housing is design compatible with existing cultural resources in the Centers.
<p>Economic Development:</p> <ul style="list-style-type: none"> - Promote economic development activities within Centers that complement and support the rural and agricultural communities and that provide diversity in the rural economic and opportunities for off-farm income and employment. - Encourage tourism related to agriculture and the environment, as well as the historic and rural character of the areas. - Support appropriate recreational and natural resource-based activities in the Environs. - Any economic development in the Environs should be planned and located to maintain or enhance the cultural and scenic qualities and with minimum impacts to agricultural resources 	<ul style="list-style-type: none"> - Renovation of the Tuckahoe train station should encourage complementary businesses supportive of tourist-based uses. The zoning for this area in Tuckahoe will need to be reassessed. - A detailed plan should be developed for Tuckahoe Revitalization to capitalize on its assets. Economic development targeted to the Tuckahoe Village will need to be compatible with scale of the Village, sanitary sewer facilities limitations, and historic assets. Tourism related activities related to the state and federal open space, the Tuckahoe River, and agriculture should be identified. These may be expanded water related opportunities or small scale businesses, bed & breakfast home inns, and farm vacation and farm market activities.

PA 4 RURAL PLANNING AREA

Planning Area/Policy	Upper Township Compliance
<p>Transportation:</p> <ul style="list-style-type: none"> - Maintain and enhance a rural transportation system that links Centers to each other and to the Metropolitan and Suburban Planning Areas. - Provide appropriate access of agricultural products to markets, accommodating the size and weight of modern agricultural equipment. - In Centers, emphasize the use of public transportation systems and alternatives to private cars where appropriate and feasible, and maximize circulation and mobility options through. - Support the preservation of general aviation airports as integral parts of the state's transportation system. 	<ul style="list-style-type: none"> - State highways Route 9, Route 49, Route 50 and County roads link the Tuckahoe and Petersburg Centers to each other and to the outside areas. Improvements have been identified in the Route 47/Route 50 Corridor Plans that should be installed to address deficiencies. - Limit bus transit is currently available to the two Centers in PA4. - Planned expansion of the Cape May Seashore Excursion Rail line from Cape May Courthouse to Tuckahoe and then to Richland provides a new tourist destination. Future expansion of the rail line to connect to the Atlantic City rail line will expand rail tourism opportunities. - Within the two Centers, improved sidewalks are proposed and funding sought to encourage development of pedestrian facilities. - Development of a bike path linking Petersburg to Woodbine and potentially north to Tuckahoe should be reviewed. - A regional shuttle service is proposed for study that will support summer visitors and have other year round applications. - There are no general airports in Upper Township now.
<p>Natural Resource Conservation:</p> <ul style="list-style-type: none"> - Minimize potential conflicts between development, agricultural practices and sensitive environmental resources. - Promote agricultural management practices and other agricultural conservation techniques to protect soil and water resources. - Protect and preserve large, contiguous tracts and corridors of recreation, forest or other open space land that protect natural systems and natural resources. 	<ul style="list-style-type: none"> - The Township has prepared a NRI which will help to identify critical resources within the Township. - Through the planned Environmental Review regulations, the Township will enable greater control over development affecting more sensitive wetlands, C-1 waters, natural heritage priority sites, cultural resources etc. - The 2006 Land Use Plan Amendment provides for appropriate planning tools to protect open space such as conservation residential cluster or non-contiguous parcel transfer. This is a key tool to be used within the AR zone in the rural areas. - Thorough development of a Recreation and Open Space Plan (as identified in the PIA) lands for protection and preservation can be identified and prioritized.

PA 4 RURAL PLANNING AREA

Planning Area/Policy	Upper Township Compliance
<p>Agriculture and Farmland Preservation:</p> <ul style="list-style-type: none"> - Guide development to ensure continued viability of agriculture and retention of farmland in agriculture areas. - Encourage farmland retention and minimize conflicts between agricultural practices and the location of Centers. - Ensure the availability of adequate water resources and large, contiguous tracts of land with minimal land –use conflicts. - Actively promote more intensive, new-crop agricultural enterprises and meet the needs of the agricultural industry for intensive packaging, processing, value-added operations, marketing, exporting and other shipping through development and redevelopment. 	<ul style="list-style-type: none"> - Currently five farms has been preserved in the Township. There are other farm properties that can be preserved. The large vacant agricultural tracts are generally located outside of PA2 and the Centers in PA4 and PA 5.
<p>Recreation:</p> <ul style="list-style-type: none"> - Provide maximum active and passive recreational and tourism opportunities at the neighborhood and local levels by targeting the acquisition and development of neighborhood and municipal parkland within Centers. - Provide regional recreation and tourism opportunities by targeting parkland acquisition and improvements that enhance large contiguous open space systems and by facilitating alternative recreational and tourism uses of farmland. 	<ul style="list-style-type: none"> - The Township has an adopted Parks and Recreation Master Plan which identifies many parks, tot lots, athletic fields throughout the Township within most concentrated in the planned Centers. Many smaller recreation areas are part of residential developments. - Future plans include development of bike paths from Petersburg to Tuckahoe and Woodbine and Palermo to the Inland Waterway. Within the Centers, public spaces will likely be planned. - Township should identify, prioritize and plan for additional recreation services.

PA 4 RURAL PLANNING AREA

Planning Area/Policy	Upper Township Compliance
<p>Redevelopment:</p> <ul style="list-style-type: none"> - Encourage appropriate redevelopment in existing Centers and existing developed areas that have the potential to become Centers, or in ways that support Centers-based development to accommodate growth that would otherwise occur in the Environs. - Redevelop with intensities sufficient to support transit, a broad range of uses, efficient use of infrastructure, and design that enhance public safety, encourage pedestrian activity, reduce dependency on the automobile and maintain the rural character of the Centers. 	<ul style="list-style-type: none"> - Conceptual sketch plans have been developed for the Centers. More detailed plans and design guidelines are needed especially for Tuckahoe Village. Future development will likely occur as retrofit or infill development within the Centers.
<p>Historic Preservation:</p> <ul style="list-style-type: none"> - Encourage the preservation and adaptive reuse of historic or significant buildings. Historic and Cultural Sites, neighborhoods and districts in ways that will not compromise either the historic resource or the area's ability to develop or redevelop. - Outside of Centers, coordinate historic preservation needs with farmland preservation efforts. - Coordinate historic preservation with tourism efforts. 	<ul style="list-style-type: none"> - The Township Historic Plan Element of the Master Plan has identified many historic properties. The PIA recommends implementation of stronger design standards to better protect these resources. - These historic resources provide opportunities for tourism especially in the Tuckahoe Center which can be capitalized through an integrated Main Street type planning process to protect, rehabilitate and renovate these resources in a compatible manner and encourage comprehensive marketing, design and amenities planning program to facilitate the economic upturn for this Center.

PA 4 RURAL PLANNING AREA

Planning Area/Policy	Upper Township Compliance
<p>Public Facilities and Services:</p> <ul style="list-style-type: none"> - Phase and program for construction as part of a dedicated capital improvement budget or as part of a public/private development agreement the extension or establishment of public facilities and services, particularly wastewater systems, to establish adequate levels of capital facilities and services to support Centers; to protect large contiguous areas of productive farmlands and other open spaces; to protect public investments in farmland preservation programs; and to minimize conflicts between Centers and surrounding farms. - Encourage private investments and facilitate public/private partnerships to provide adequate facilities and services, particularly wastewater systems, in Centers. - Make community wastewater treatment a feasible and cost-effective alternative. 	<ul style="list-style-type: none"> - Expansion of public water supply is encouraged in the Centers. Privately developed sanitary sewer facilities are not proposed within Tuckahoe or Petersburg at this time. . - Municipal facilities, the county library branch are centered in Petersburg Center together with a large athletic complex and the middle school. There has also been a new Community Center building leased from the County on Route 50 in Tuckahoe. - There are four volunteer fire companies including that located in Tuckahoe. The Township Rescue Squad is located in Tuckahoe. - All three Township schools are located within planned Centers; the (K-2, and elementary in Marmora, and a middle school in Petersburg. Development of a high school site in Petersburg (at the edge of the Center) is on hold.
<p>Intergovernmental Coordination:</p> <ul style="list-style-type: none"> - Coordinate efforts of various state agencies, county and municipal governments to ensure that state and local policies and programs support rural economic development, agriculture, and the rural character of the area by examining the effect of financial institution lending, governmental regulation, taxation, and other governmental policies and programs. <p>-</p>	<p>Through this PIA, a number of regional efforts have been identified that will affect the mainland municipalities. This includes transportation items such as a Route 9 Access Management Plan, campground shuttle services, and expanded excursion rail service.</p>

PA 5 Environmentally Sensitive Planning Area

Planning Area 5 includes environmentally constrained wetlands and C-1 waters on properties in private ownership in the central section of the Township west of Route 9. These properties are generally located adjacent to the public lands including the Great Cedar Swamp Division of the National Wildlife Refuge and the Lester G. McNamara Wildlife Management Area. No Centers are proposed in PA5.

PA 5 ENVIRONMENTALLY SENSITIVE	
Planning Area/Policy	Upper Township Compliance
<p>Land Use:</p> <ul style="list-style-type: none"> - Protect natural systems and environmentally sensitive features by guiding development and redevelopment into Centers and establishing Center Boundaries and buffers and greenbelts around these boundaries. - Maintain open space networks, critical habitat and large contiguous tracts of land in the Environs by a variety of land use techniques. - Development and redevelopment should use creative land use and design techniques to ensure that it does not exceed the capacity of natural and infrastructure systems and protects areas where public investments in open space preservation have been made. - Development and redevelopment in the Environs should maintain and enhance the natural resources and character of the areas. 	<ul style="list-style-type: none"> - Over 47% of the Township is protected as public lands. This open space network runs north south through the Township to the Tuckahoe River. The Pinelands Management area provides protection of these areas. The extent of open lands and the limitations for development support this policy. - Open space acquisition through purchase of key properties should be prioritized working with the State, County and Upper Township to identify these lands. - Centers have been planned that will provide increased density to absorb planned growth and protect the environs of PA5. - Using scenic road setback consistent with that of the Pinelands in the C Conservation Zone will maintain the character of the area. - Development where permitted in PA5 provides for Conservation Zoning with low-density residential uses at 1 dwelling unit per 10 acres. Options such as conservation residential cluster and density transfer are promoted in the 2006 Land Use Plan to protect these areas.
<p>Housing:</p> <ul style="list-style-type: none"> - Provide for a full range of housing choices primarily in Centers at appropriate densities to accommodate projected growth. - Ensure housing, particularly affordable, seniors, special needs, family housing is developed with access to a full range of services. - Focus multifamily and higher density single-family housing in Centers. - Any housing in Environs should be planned to maintain or enhance the cultural and scenic qualities and with minimum impacts on environmental resources. 	<ul style="list-style-type: none"> - Housing in the Environs in the PA5 within the C Conservation areas is very low density with a 1-unit/10 acres. Cluster or density transfer of housing from the C Conservation Areas into the Town Centers is encouraged. - The Pinelands areas are consistent and provide for low- (3 acres/ lot and 10 acres/lot) density and very low density (25 acres/lot) development outside of the Pinelands Villages.

PA 5 ENVIRONMENTALLY SENSITIVE	
Planning Area/Policy	Upper Township Compliance
<p>Economic Development:</p> <ul style="list-style-type: none"> - Support appropriate recreational and natural resource-based activities in the Environs and locate economic development opportunities that are responsive to the needs of the surrounding region and the travel and tourism industry in Centers - Any economic development in the Environs should be planned and located to maintain or enhance the cultural and scenic qualities and with minimal impact on environmental resources. - Guide economic development opportunities into Centers or existing pedestrian and transit supportive single use areas and target new jobs to these locations. 	<ul style="list-style-type: none"> - Existing uses in PA5 support recreation, marinas, conservation and limited residential development. Limited large farms are located in this area. - Recreational tourism would be the prime economic component directed at the public lands for hunting, fishing and other recreational activities with supportive services directed to the Centers. - No Centers are planned in the PA5 area.
<p>Transportation:</p> <ul style="list-style-type: none"> - Maintain and enhance a transportation system that protects the Environs and from scattered and piecemeal development and links Centers to each other within and between Planning Areas. - Encourage alternatives to the single – occupancy vehicle whenever feasible. - Accommodate the season demands of travel and tourism that support recreational and natural resource-based activities. - In Centers, emphasize the use of public transportation systems wherever feasible. - Accommodate the seasonal demands of travel and tourism that support recreational and natural resource-based activities. - In Centers, emphasize the use of public transportation systems and alternatives to private cars where appropriate and feasible and maximize circulation and mobility options throughout. 	<ul style="list-style-type: none"> - Route 50 is the main state highway through this area with Route 50 and County Route 50 traversing this planning area linking development in Petersburg and Tuckahoe. - Access management regulations will be implemented on the Township level will support the State Access Management Code requirements in accordance with the MLUL. - A regional shuttle service is proposed for study that will support summer visitors and have other year round applications. - Expansion of the rail line as an excursion rail to Tuckahoe is proposed. This can encourage revitalization efforts in Tuckahoe Village. This rail line can be further expanded to serve Philadelphia and Atlantic City rail uses and should be pursued. - Planned bicycle paths will provide links from the Centers and recreation opportunities for residents. - There are no Centers within PA5.

PA 5 ENVIRONMENTALLY SENSITIVE	
Planning Area/Policy	Upper Township Compliance
<p>Natural Resource Conservation:</p> <ul style="list-style-type: none"> - Protect and preserve large, contiguous tracts and corridors of recreation, forest or other open space land that protects natural systems and sensitive natural resources, including endangered species, ground and surface water resources, wetland systems, natural landscapes of exceptional value, critical slope areas, scenic vistas and other significant environmentally sensitive features. 	<ul style="list-style-type: none"> - The Township has prepared a NRI which will help to identify critical resources within the Township. - Approximately 47% of the Township is in public ownership. The conservation of environmentally sensitive sites will be protected the current conservation based zoning which limited development of private properties within the Conservation zone and FA25 zone. - Through the planned Environmental Review regulations, the Township will enable greater control over development affecting more sensitive wetlands, C-1 waters, natural heritage priority sites, cultural resources etc.
<p>Agriculture:</p> <ul style="list-style-type: none"> - Promote agricultural practices that prevent or minimize conflicts with sensitive environmental resources. - Guide development to ensure continued viability of agriculture and retention of farmland in agriculture areas. - Encourage farmland retention and minimize conflicts between agricultural practices and the location of Centers. - Ensure the availability of adequate water resources and large, contiguous tracts of land with minimal land –use conflicts. - Actively promote more intensive, new-crop agricultural enterprises and meet the needs of the agricultural industry for intensive packaging, processing, value-added operations, marketing , exporting and other shipping through development and redevelopment. 	<ul style="list-style-type: none"> - Currently five farm has been preserved in the Township. There are other farm properties that can be preserved either appropriate zoning tools. The 2006 Master Plan Reexamination Report recommends preparation of a Farmland Preservation Plan to prioritize farmland acquisition.
<p>Recreation:</p> <ul style="list-style-type: none"> - Provide maximum active and passive recreational and tourism opportunities at the neighborhood and local levels by targeting the acquisition and development of neighborhood and municipal parkland within Centers. - Provide regional recreation and tourism opportunities by targeting parkland acquisition and improvements that enhance large contiguous open space systems. - Ensure meaningful access to public lands. 	<ul style="list-style-type: none"> - The Township has an adopted Parks and Recreation Master Plan which identifies many parks, tot lots, athletic fields throughout the Township within most concentrated in the planned Centers. Many smaller recreation areas are part of residential developments. The Township's recreational efforts have focused on larger multi-use facilities in centralized locations including the Amanda's Field athletic complex behind the Township municipal complex in Petersburg. - Future plans include development of bike paths from Petersburg to Woodbine and Tuckahoe along a railroad right of way. This provides an opportunity for improved access to state lands.

PA 5 ENVIRONMENTALLY SENSITIVE	
Planning Area/Policy	Upper Township Compliance
<p>Redevelopment:</p> <ul style="list-style-type: none"> - Encourage environmentally appropriate redevelopment in existing Centers and existing developed areas that have the potential to become Centers, or in ways that support Centers-based development to accommodate growth that would otherwise occur in the Environs. - Redevelop with intensities sufficient to support transit, a range of uses broad enough to encourage activity beyond the traditional workday, efficient use of infrastructure, and physical design features that enhance public safety, encourage pedestrian activity and reduce dependency on the automobile to attract growth otherwise planned for the Environs. 	<ul style="list-style-type: none"> - Existing mining areas within PA5 and the Pinelands should be planned for future use. - More intensive development will be directed to Tuckahoe and Petersburg Village Center. -
<p>Historic Preservation:</p> <p>Encourage the preservation and adaptive reuse of historic or significant buildings. Historic and Cultural Sites, neighborhoods and districts in ways that will not compromise either the historic resource or the area's ability to develop or redevelop. Outside Centers, coordinate historic preservation needs with open space preservation efforts. Coordinate historic preservation with tourism efforts.</p>	<ul style="list-style-type: none"> - The Township Historic Plan Element of the Master Plan has identified many historic properties. The PIA recommends implementation of stronger design standards to better protect these resources.

PA 5 ENVIRONMENTALLY SENSITIVE	
Planning Area/Policy	Upper Township Compliance
<p>Public Facilities and Services:</p> <ul style="list-style-type: none"> - Phase and program for construction as part of a dedicated capital improvement budget or as part of a public/private development agreement the extension or establishment of public facilities and services, particularly wastewater systems, to establish adequate levels of capital facilities and services to support Centers; to protect large contiguous areas of productive farmlands and other open spaces; to protect public investments in farmland preservation programs; and to minimize conflicts between Centers and the Environs. - Encourage private investments and facilitate public/private partnerships to provide adequate facilities and services, particularly wastewater systems, in Centers. - Make community wastewater treatment a feasible and cost-effective alternative. 	<ul style="list-style-type: none"> - No Centers are proposed in PA5.
<p>Intergovernmental Coordination:</p> <ul style="list-style-type: none"> - Coordinate efforts of various state agencies, county and municipal governments to ensure that state and local policies and programs support environmental protection by examining the effects of financial institution lending, governmental regulation, taxation, and other governmental policies and programs. 	<ul style="list-style-type: none"> - Through this PIA, a number of regional efforts have been identified that will affect the mainland municipalities. This includes transportation items such as a Route 9 Access Management Plan, campground shuttle services, and expanded excursion rail service. - Other efforts should include coordination with the NJDEP to identify and prioritize land acquisition efforts to protect and expand the conservation lands. - A regional dredging plan should be coordinated with funding and spoil sites identified.

PA5B Environmentally Sensitive Barrier Island Planning Area

The PA5B Planning Area includes the Strathmere, which is a barrier island community. There is no direct access to Strathmere from the Upper Township; road access is through Ocean City and Sea Isle City. Strathmere has approximately 175 year round residents which expands to 4,000 summer visitors. Public water has recently been installed to address potential health issues caused by the existing small residential lots (4,000 s.f. minimum) with on-site septic systems. For a number of years, the Township has investigated public sewer system for the island. This has meet with mixed response by residents and the NJDEP. Many residents and the NJDEP are concerned that public sewer will increase development pressure.

PA 5B ENVIRONMENTALLY SENSITIVE/BARRIER ISLAND PLANNING AREA	
Planning Area/Policy	Upper Township Compliance
<p>Land Use:</p> <ul style="list-style-type: none"> - Guide development and redevelopment into more compact forms-Centers and former single-use developments that have been retrofitted or restructured, to accommodate mixed-use development and redevelopment, services and cultural amenities. Promote redevelopment and development in areas with existing infrastructure that maintains the character, density and function of existing communities. - Ensure efficient and beneficial use of scarce land and resources to strengthen the unique character and compact nature of barrier island communities. 	<p>Strathmere is the only barrier island community in Upper Township.</p>
<p>Housing:</p> <ul style="list-style-type: none"> - Provide for housing choices through redevelopment, new construction, rehabilitation, and adaptive reuse. - Preserve the existing housing stock through maintenance, rehabilitation and flexible regulations. 	<ul style="list-style-type: none"> - Housing in Strathmere is primarily single-family detached housing on small lots. Development has been primarily tear-downs and rehabilitation of existing homes. The 2006 Master Plan Land Use Plan Amendment recommends that current zoning and design standards should be evaluated to ensure compatibility of new development and renovations with the existing housing stock.
<p>Economic Development:</p> <ul style="list-style-type: none"> - Support historically important coastal industries, recreation, and natural resource-based and associated activities, recognizing the dual (year-round and seasonal) nature of barrier community economies and locating economic development opportunities within areas of existing infrastructure and avoiding adverse impacts to natural resources. 	<ul style="list-style-type: none"> - Strathmere provides for RC Resort Commercial small retail and service establishments along Commonwealth Avenue and Ocean Drive. Without public sewer, development is limited.

PA 5B ENVIRONMENTALLY SENSITIVE/BARRIER ISLAND PLANNING AREA	
Planning Area/Policy	Upper Township Compliance
<p>Transportation:</p> <ul style="list-style-type: none"> - Maintain and enhance a transportation system that links coastal barrier communities with the mainland and to each other, without compromising the integrity of natural resources. - Accommodate the seasonal demands of travel and tourism that support recreational and natural resource-based activities. - Emphasize the use of public transportation systems and alternatives to private cars where appropriate and feasible and maximize circulation and mobility options. 	<ul style="list-style-type: none"> - Access to Strathmere is through Ocean Drive from Ocean City and Sea Isle City. - A regional shuttle service is proposed for study that will support summer visitors and have other year round applications.
<p>Coastal Resource Conservation:</p> <ul style="list-style-type: none"> - Conserve water resources in the coastal areas, particularly barrier islands dependent on ground water, reducing water demand and withdrawal to prevent saltwater intrusion that could degrade or destroy ground water resources. - Protect vital ecological areas and coastal high hazard areas to prevent significant adverse long-term impacts to the natural and scenic functions of these sensitive areas. - Restrict or limit development and redevelopment adjacent to these sensitive areas to water-dependent and compatible uses. 	<ul style="list-style-type: none"> - Through the planned Environmental Review regulations, the Township will enable greater control over development affecting more sensitive wetlands, C-1 waters, natural heritage priority sites, cultural resources etc.
<p>Recreation:</p> <ul style="list-style-type: none"> - Promote local and regional recreational opportunities, encourage tourism, and create meaningful public access along the oceanfront, bay front and rivers of all barrier island communities. 	<ul style="list-style-type: none"> - Public access is available to the oceanfront and bay front areas.
<p>Redevelopment:</p> <ul style="list-style-type: none"> - Support redevelopment activity compatible with existing barrier island community character. - Use redevelopment opportunities to maintain, expand and link parks and open space and to increase public access. 	<ul style="list-style-type: none"> - No redevelopment activities are planned within Strathmere. Private construction activity including renovation and expansion of residential properties occurs. Limited vacant developable land remains in Strathmere with significant environmental constraints in this area.

PA 5B ENVIRONMENTALLY SENSITIVE/BARRIER ISLAND PLANNING AREA	
Planning Area/Policy	Upper Township Compliance
<p>Historic Preservation:</p> <ul style="list-style-type: none"> - Coordinate the identification of historic sites, archaeological sites, landscapes and scenic features unique to the coast for inclusion in the state and national registers of historic places and in county and municipal master plans. 	<ul style="list-style-type: none"> - The Township Historic Plan Element of the Master Plan has identified many historic properties. The PIA recommends implementation of stronger design standards to better protect these resources.
<p>Public Facilities and Services:</p> <ul style="list-style-type: none"> - Ensure adequate public facilities and services to coastal barrier communities to accommodate season demands. - Barrier island communities are encouraged to participate in interlocal public service delivery. Coordinate growth management programs and policies with response planning and mitigation for natural disasters, including major storm events that can result in loss of fire, extensive flooding, shorefront erosion and infrastructure replacement decisions. 	<ul style="list-style-type: none"> - The Township has been looking into expanding public sanitary sewers in Strathmere. Public water has already been extended to Strathmere to address health issues due to small lots and failing septic systems. - There is a volunteer fire companies located in Strathmere. - Dredging is needed along sections of the waterfront. A regional approach is proposed to share the costs of equipment and to locate appropriate storage pile locations.
<p>Intergovernmental Coordination:</p> <ul style="list-style-type: none"> - Municipalities sharing the same island are encouraged to establish multi-jurisdictional policy and planning entities to guide and coordinate the efforts of state, county and municipal governments and to develop and implement master and functional plans. 	<ul style="list-style-type: none"> - Strathmere shares access with Ocean City and Sea Isle City. There are mutual aid agreements in place. At this time, each municipality undertakes its own planning efforts; the MLUL requires that master plans consider consistency of planning and zoning of surrounding municipalities, which has been done for Upper Township. - Through this PIA, a number of regional efforts have been identified that will affect the mainland municipalities. This includes transportation items such as a Route 9 Access Management Plan, campground shuttle services, and expanded excursion rail service.

APPENDIX A EXISTING CONDITIONS INVENTORY

UPPER TOWNSHIP EXISTING CONDITIONS INVENTORY

Prepared as part of the

*ROUTE 9 CORRIDOR
SMART GROWTH STUDY FOR
DENNIS, MIDDLE & UPPER TOWNSHIPS
CAPE MAY COUNTY, NEW JERSEY*

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1.0 INTRODUCTION

Plan Endorsement is the process established by the New Jersey Office of Smart Growth (NJOSG) to review municipal and regional plans for consistency with the New Jersey State Development and Redevelopment Plan. This process provides for development of a Planning and Implementation Agenda to incorporate planning activities and improvements with State Agencies and to provide priority permitting and funding for these activities.

The NJOSG has funded this study as part of an intermunicipal planning effort for Dennis, Middle and Upper Townships in Cape May County, to provide assistance in the Plan Endorsement Process. Both Middle and Upper Townships had previously been involved in but had not completed the Centers Designation process with NJOSG. Dennis Township had begun to explore the process. This study follows the adopted NJOPG 2004 Plan Endorsement Guidelines for initial endorsement.

An important part of this study is the reassessment and refined of the development centers in each Township. These centers, which are now regulated through the Coastal Zone Management rules, will be terminated as CAFRA Centers in 2005. Through this Plan Endorsement process through the NJOSG, centers may be established and designated through the State Plan. The centers concept is also strongly forwarded in the State Plan to develop livable, walkable communities of place and to act as a fulcrum for development allowing for preservation and protection of the surrounding environs. For these three Cape May mainline communities, environmental protection and regulatory controls are paramount. NJDEP in coastal areas (CAFRA) regulates development in all three municipalities and both Dennis and Upper Townships are within the Pinelands Management Area. This is of critical importance to these three municipalities since only in CAFRA Centers can more intensive development be concentrated. The Dennis, Middle and Upper Townships are linked through the transportation network with the focus of development along the Route 9 corridor, which parallels the Garden State Parkway. Each municipality has a number of Centers or areas for existing and future development with a majority of these Centers focused on the Route 9 corridor. (Map 1.0A provides the regional context of the Dennis Middle and Upper Townships study area (DMUSA).

This report provides the initial inventory of multiple factors influencing development in the municipality including: population and employment, housing, environmental, infrastructure, and transportation conditions. Planning policies are also reviewed with a focus on smart growth principles. Separate reports have been prepared for each municipality in the DMUSA; however, the regional context information is provided where appropriate in each subsection of this report to include a broader context for evaluation of conditions. This Existing Conditions Inventory is crafted to meet the NJOSG Plan Endorsement Guidelines in terms of information requirements as well.

This Existing Conditions Inventory has been updated to respond to comments from the NJOSG in their April 26, 2006 letter which addresses consistency of the Upper Township Plan Endorsement Petition of September 2005.

1.1 PLAN ENDORSEMENT DOCUMENTS

In order to initiate the plan endorsement process, the Office of Smart Growth must review the Township's planning documents for consistency with the goals, policies and strategies of the State Plan, with the State Plan Policy Map and with applicable State statutes and regulations. Table 1.1 identifies the applicable documents and the status of each.

This list of documents has been updated to reflect that the Township has prepared a 2006 Master Plan Reexamination Report and Land Use Plan Amendment, 2006 Housing Element and Fair Share Plan, Natural Resources Inventory, Stormwater Management Plan. These documents are expected to be adopted by the Planning Board in November 2006.

Table 1.1A

<u>Upper Township Plan Endorsement Documents</u>		
	Document	Date of Document
1	Master Plan	7/21/1994
2	2006 Master Plan Land Use Plan Amendment	November 2006
3	Master Plan Reexamination Report	November 2006
4	Board of Education Five Year Facilities Plan	5/21/2001
5	Adopted Capital Improvement Program	
6	County Comprehensive Farmland Plan or Municipal Farmland Preservation Plan	4/24/1990 No Municipal Farm Preservation Plan
7	Existing Land Use Map	November 2006 Land Use Plan
8	Current Zoning Map	1/12/2004
9	Community Facilities Map - Statement of facility capacity where applicable	See 1994 Master Plan
10	Existing and Proposed Affordable Housing Sites	November 2006 Housing Element and Land Use Plan
11	Township Land Development Ordinance	6/25/2002

1.2 POPULATION HOUSING AND EMPLOYMENT

1.2.1 Population

The population of Cape May County has significantly increased in the past fifty years and has consistently grown at a rate higher than that of the State. During period between 1970 and 1980, the Country experienced its largest growth

increment of over 38 percent or 22,712 new residents. The County's total population has more than doubled since 1950 (Table 1.2A) and has only begun to level in the recent years off in terms of percent change. During the period between the years of 1990 through 2000, the County grew at a 7.6 percent increase, compared to an increase of 8.9 percent statewide (Table 1.2B). This represented the first time in forty years that County population had growth below the state average. Growth in the county is still projected, but forecasts indicate this will occur at a slower rate (Table 1.2C).

The population of Upper Township has increased by 13.4 percent or 1,434 new residents from 1990 to 2000. The Township ranked third in rate of growth within the County behind Dennis and Wildwood during the same period. In 2000, Upper had a total population of 12,115 residents. The Township was only behind Middle and Lower in terms of actual population growth. The South Jersey Transportation Planning Organization has projected Upper Township's population will increase to approximately 14,835 through the year 2025. This increase will account for an additional 2,720 residents or a 22.5 percent increase. The buildout analysis associated with the development of the centers will refine these numbers.

The Township is projecting a majority of the growth will take place within the five designated centers, with Seaville Village and the Marmora/ Beesley Point/Palermo Town Center accounting for most of the growth¹. This anticipated growth is due in part by the accessibility to major roads and services as well as physical conditions suitable for septic systems. Strathmere Village, the municipality's barrier island community, is the most densely populated section of the Township. Although the Village only has approximately 175 permanent residents¹, the population swells to over 4,000 in the summer months. The Village has a high density of single-family dwellings typically on 4,000 s.f. (40'x100') lots. Although public water is provided, Strathmere relies on on-site septic systems for discharge of wastewater. By the year 2020, Strathmere's permanent population is projected to rise to approximately 275 people, while the summer population is expected to be over 6,750 people². This increase is consistent with the recent building trend experienced throughout the County's barrier island communities.

Table 1.2A: Permanent Population Trends 1950-2000

	1950	1960	1970	1980	1990	2000
New Jersey	4,835,329	6,067,412	7,168,164	7,364,823	7,730,188	8,414,350
Cape May County	37,131	48,555	59,554	82,266	95,089	102,326
Dennis Township	1,981	2,327	2,635	3,989	5,574	6,492
Middle Township	4,599	6,718	8,725	11,373	14,771	16,405
Upper Township	1,922	2,539	3,413	6,713	10,681	12,115

SOURCE: Cape May County Data Book, January 2003

Table 1.2B: Permanent Population Changes 1950-2000

	1950-1960		1960-1970		1970-1980		1980-1990		1990-2000	
	Number	%	Number	%	Number	%	Number	%	Number	%
New Jersey	1,232,083	25.5%	1,100,752	18.1%	196,659	2.7%	365,365	5.0%	684,162	8.9%
Cape May County	11,424	30.8%	10,999	22.7%	22,712	38.1%	12,823	15.6%	7,237	7.6%
Dennis Township	346	17.5%	308	13.2%	1,354	51.4%	1,585	39.7%	918	16.5%
Middle Township	2,119	46.1%	2,007	29.9%	2,648	30.3%	3,398	29.9%	1,634	11.1%
Upper Township	617	32.1%	874	34.4%	3,300	96.7%	3,968	59.1%	1,434	13.4%

¹ 2000 US Census

² Center Designation Petition for Upper Township – January 1999

SOURCE: Cape May County Data Book, January 2003

Table 1.2C: Permanent Population Projections 2000-2025

	2000	2010	2020	2025	Change 2000-2025	% Change 2000-2025
New Jersey*	8,414,350	9,062,800	9,780,900	9,780,900	1,366,550	16.2%
Cape May County**	102,326	110,699	119,019	123,066	20,740	20.3%
Dennis Township**	6,492	7,121	7,751	8,058	1,566	24.1%
Middle Township**	16,405	18,142	20,281	21,322	4,917	30.0%
Upper Township**	12,115	13,222	14,307	14,835	2,720	22.5%

* SOURCE: County Population and Labor Force Projections for New Jersey: 2000 to 2020 –
Division of Market and Demographic Research - NJ Dept of Labor

** SOURCE: South Jersey Transportation Planning Organization's 12/16/03 Cape May County Forecast

The New Jersey Department of Labor has indicated the largest expansion of population growth in the State took place in that Atlantic Coast Counties (Atlantic, Cape May, Monmouth and Ocean) during the period from 1990 to 2000. Continued growth is expected and should account for 24 percent of the State's population growth for the years 2000 to 2010. According to the 2000 Census, approximately one out of five residents (20.2%) of Cape May County was age 65 or older. The County will continue to be a popular retirement destination and the senior citizen population should continue to account for more than twenty percent of the population through the year 2020³.

Senior citizens make up 13.8 percent of Upper Township's population, which is considerably lower than the County's average of 20.2 percent (Table 1.2C). The Township's senior's population increase by 226 people between 1990 and 2000, which represents an increased of 2 percent of the total population.

Table 1.2D: Senior Population (age 65+) 1990-2000

	Number of Persons 1990	% of Population 1990	Number of Persons 2000	% of Population 2000
New Jersey	1,032,025	13.4%	1,113,136	13.2%
Cape May County	19,131	20.1%	20,681	20.2%
Dennis Township	712	12.8%	798	12.3%
Middle Township	2,707	18.3%	2,925	17.8%
Upper Township	1,246	11.7%	1,472	13.8%

SOURCE: 1990 and 2000 US Census

³ Source: County Population and Labor Force Projections for New Jersey: 2000 to 2020 – Division of
Market and Demographic Research

The total countywide population increases over six times during the months of May through September. Much of this growth is concentrated within the barrier island resort communities. The County anticipates a 15.7 percent increase in the summer population by the year 2025. This increase will result in an additional 96,440 summer residents (Table 1.2E). This indicates that Cape May County and its surrounding communities will continue to be an important part of the New Jersey tourist industry for the years to come.

Upper Township's population increases over three times the permanent population (approximately 26,000 total residents) during the summer months. The County has projected an increase of 6,061 summer residents by the year 2025. Many of the summer residents are attracted to the many campgrounds located along the Route 9 corridor, but a majority of the summer growth is attributed to the barrier island Village of Strathmere. The population of Strathmere increases to over 4,000 residents during the summer tourist season, not including the 300-400 day visitors⁴.

Table 1.2E: Summer Population Projections 2001-2025

	2001	2010	2020	2025	Change 2000-2025	% Change 2000-2025
Cape May County	614,261	654,837	693,367	710,701	96,440	15.7%
Dennis Township	32,408	34,549	36,582	37,496	5,088	15.7%
Middle Township	58,410	62,268	65,932	67,581	9,171	15.7%
Upper Township	38,607	41,157	43,579	44,668	6,061	15.7%

SOURCE: Cape May County Data Book, January 2003

1.2.2 Housing

In recent years Cape May County has experienced a significant level of new residential construction, most of which is built as vacation or rental homes. This is further apparent, since the rate of residential construction has exceeded the population growth in the last four decades⁵. The 2000 Census indicated that 47 percent of new construction within the County was built as seasonal rental or vacation home. Between 1990-2000, Upper, Middle and Lower Townships accounted for more than 72 percent of the population growth, but only 35 percent of the County's total increase in housing units⁶. This indicates that a large portion of the County's development has targeted the coastal communities. This is not a surprising trend, since the tourist industry is the cornerstone of the County's economy. The increased demand of summer rental properties within the barrier islands has caused these communities to be almost completely developed. This development pressure has forced many older homes to be demolished and replaced by new construction. The future growth of the permanent population within the County will more than likely be concentrated within the undeveloped upland areas of the mainland.

Upper Township's housing stock consists predominantly of single-family homes. The residential development pattern of the Township varies in density and lot size, from the high-density development of Strathmere to the larger lot and rural developments on the mainland.

⁴ Center Designation Petition for Upper Township – January 1999

⁵ *Township of Middle Master Plan*, August 12, 2003

⁶ New Jersey Department of Labor – Atlantic Region – Regional Labor Market Review - December 2002

There have been 454 building permits issued for single-family dwellings between 1990 and 1999. The fact that there were no building permits issued for multi-family residential dwellings further reinforces the single-family residential character of the municipality. This is in contrast to the County, which has built single-family dwellings at a slower rate (see Table 1.2F). Like other mainland municipalities in Cape May County, Upper Township's development has been influenced by the lack of necessary infrastructure and regulation constraints. Building opportunities similar to the barrier island communities and other areas where public sewer and water are available, do not exist in the Township. This is part due to the existing environmental constraints as well as strict regulation by various State Agencies under CAFRA and the Pinelands Management Plan. However, the planned Marmora and Seaville Town Centers and the 2006 Housing Element and Fair Share Plan provide alternative housing options which will provide for both affordable housing and alternative housing options with mixed use development planned within the Centers.

Table 1.2 G presents housing projections based upon the SJTPO population estimates. About 998 additional housing units are forecast for the 25 year period between 2000 and 2025. This estimate is considered low based upon the research in the 2006 Upper Township Housing Element and Fair Share Plan. About 1,307 housing units are forecast for the 10 year period between 2004 and 2025. Annualizing this growth rate, about 3,268 housing units are forecast for the twenty-five year period between 2000 and 2025. This reflects both historic growth trends and planned development housing projects.

Table 1.2F: Residential Building Permits Authorized 1990-1999

	Total Build. Permits	Single-Family Units	% Single	Multi-Family Units	% Multi
New Jersey	239,061	199,207	83.3%	39,854	16.7%
Cape May County	7,152	4,505	63.0%	2,647	37.0%
Dennis Township	416	416	100.0%	0	0.0%
Middle Township	812	786	96.8%	26	3.2%
Upper Township	454	454	100.0%	0	0.0%

SOURCE: NJ Department of Labor and Work Force Development

Table 1.2G: Housing Projections 2000-2025

	Household Size*	2000*	2010**	2020**	2025**	% Change 2000-2025
New Jersey	2.68	3,139,683	3,381,642	3,649,590	3,649,590	16.2%
Cape May County	2.36	43,358	46,906	50,432	52,147	20.3%
Dennis Township	2.91	2,231	2,447	2,664	2,769	24.1%
Middle Township	2.58	6,359	7,032	7,861	8,264	30.0%
Upper Township	2.84	4,266	4,656	5,038	5,224	22.5%

* SOURCE: 2000 US Census

** SOURCE: Information calculated by dividing the projected population (Table 3) by the 2000 census household size.

1.2.3 Employment

Cape May County's economy is dependant on the seasonal tourist industry, most of which is concentrated along its coastline. The County's main source of employment is the service industry, which includes tourism. The County's employment market increases by about 20,000 jobs between the months of January and July as a result of the seasonal employment⁷. Employment within the government and retail trades account for the County's next largest job sector. The health service and retail industries have produced the County's most new jobs from 1995 to 2000 and should continue remain vibrant with the projected influx of new residents⁸.

The County's employment opportunities are projected to increase by 23.4 percent by the year 2025 or by an additional 9,363 new jobs. This rate of growth is slightly greater than the population projections of the region during the same time period. It is expected that 50 percent of the new jobs in the service sector would be within the health care field by the year 2025. These new jobs would be directly related to the anticipated growth of the senior population and the in-migration of retirees to the Atlantic Coast Counties.

The Upper Township labor market is similar to the County in the type of occupations and employment opportunities available. The service and tourism industries have historically provided the most jobs within the municipality. Upper Township still relies on these industries along with the retail trade for approximately 55% of the private sector jobs (Table 1.2H)⁹.

Table 1.2H: Employment by Industry (Private Sector)

	Dennis Township	Middle Township	Upper Township
Ag. For. Fish. Min. Unc.	96	209	104
Construction	307	299	308
Manufacturing		290	44
Tran. Comm. Utilities	79	390	371
Wholesale Trade	22	197	162
Retail Trade	240	2,287	873
Finance, Insurance & Real Estate		223	144
Services	538	3,233	508
Total	1,282	7,128	2,514

SOURCE: New Jersey Employment and Wages: 1999 Annual Private Sector Report - Municipalities by Industry

Table 1.2I indicates the projected employment growth within the County. Upper Township is projected to increase by 46.2 percent or 1,219 jobs between the years 2000-2025. This projection is a significantly higher rate of growth than both the County and State growth rates.

⁷ Source: SJTPO Regional Transportation Plan 2000

⁸ Source: New Jersey Department of Labor – Atlantic Region – Regional Labor Market Review
December 2002

⁹ Source: New Jersey Employment and Wages: 1999 Annual Private Sector Report Municipalities
By Industry

Please note that the 2006 Housing Element and Fair Share Plan projects about 614 additional jobs for the 10 years between 2004 and 2014. By annualizing this growth rate, this would result in approximately 1,534 additional jobs for the twenty-five year period between 2000 and 2025. This is 26 percent higher than the SJTPO projections. It is considered a reasonable forecast especially given the planned Town Centers in Marmora and Seaville which will permit higher density development.

Table 1.2.I: Employment Projections 2000-2025

	2000	2010	2020	2025	Change 2000-2025	% Change 2000-2025
New Jersey*	3,996,650	4,449,550	4,651,690	4,858,043	861,393	21.6%
Cape May County**	40,012	43,757	47,502	49,375	9,363	23.4%
Dennis Township**	1,168	1,368	1,568	1,668	500	42.8%
Middle Township**	8,766	9,536	10,423	10,667	1,901	21.7%
Upper Township**	2,636	3,124	3,612	3,855	1,219	46.2%

* SOURCE: Preliminary N.J. State Development and Redevelopment Plan - (pg. 38) 04/27/04

** SOURCE: South Jersey Transportation Planning Organization 12/16/03 Cape May County Forecast

1.3 NATURAL RESOURCES INVENTORY

1.3.1 Natural Resource Inventory

The NJOSG Plan Endorsement Guidelines under Section 2.2.A require submittal of Natural Resources Inventory information. The Township of Upper has prepared a Natural Resources Inventory dated October 2006 which has been reviewed and deemed satisfactory by NJDEP representative. The NRI has been submitted to NJOSG digitally under a separate cover.

1.4 MUNICIPAL ENVIRONMENTAL JUSTICE INVENTORY

The term ‘Environmental Justice’ as identified 2004 Preliminary State Plan, refers to the adoption of planning principles that ensure fair treatment and meaningful involvement of the public in land use decision making. Identifying brownfield sites under Initial Plan Endorsement is a first step of a strategy to identify these sites during the planning process to avoid, preserve or mitigate ‘disproportionate adverse expose to environmental health risks for communities of color and low income communities.’¹⁰

In accordance with the NJOSG Plan Endorsement Guidelines, an inventory of brownfield sites is required as part of initial Plan Endorsement. This brownfield sites inventory is included within the NRI. This is a planning tool that can be used to identify potential areas for brownfield remediation and land reclamation. It can also be used to assess potential redevelopment areas that the Township may wish to consider in their planning efforts. Grant funding is available through NJOSG to assist in these efforts.

¹⁰ 2004 Preliminary New Jersey State Development and Redevelopment Plan, page 24.

1.5 HOUSING

1.5.1 Diversity of Housing Opportunities

Upper Township is predominantly single-family, with only fifty building permits issued for multi-family developments between the years 1971 and 1990 and zero (0) multi-family permits issued from 1990 to 2000. The 2006 Future Land Use Plan proposes greater diversity in housing with affordable senior apartments, group homes for physically and mentally challenged adults, and family affordable housing. The Township also has approved age restricted housing development with attached housing units.

1.5.2 Commitment to Plan for Appropriate Housing

Upper Township currently has an affordable housing obligation of 341 low and moderate income units with zero (0) rehabilitation obligation under the Prior Rounds (1987-1999). The Township has prepared and expects to adopt a Housing Element and Fair Share Plan which addresses their Prior Rounds affordable housing obligation and the Third Round growth share obligation. The Township expects to file its HEFSP and to petition COAH for substantive certification.

1.5.3 Zoning in Support of a Coordinated Planning Effort

The 2006 Upper Township Master Plan Reexamination Report and Land Use Plan Amendment together with the HEFSP underwent a process which reflected the Township's planning goals to direct growth to the four proposed Township centers and to protect its Environs. Land use patterns are based upon environmental constraints, which are also overlain by regulatory controls including Pinelands and CAFRA regulations. This supports planning that is coordinated with the carrying capacity of the land and acknowledging of the lack of infrastructure to accommodate more intensive development except within the planned sewer service areas (for community package treatment plants) within the Town Centers. Zoning amendments will be prepared and adopted to implement the Future Land Use Plan recommendations.

1.6 TRANSPORTATION

1.6.1 Dennis, Middle, Upper Study Area (DMUSA)

The County of Cape May has experienced a considerable influx of growth over the past fifty years, due in part to its popularity as a tourist destination. The tourist season is most prominent during the months of May through September, when the County population increases over six times. Most of this growth takes place within the barrier island resort communities. Directly related to the population growth is the amount of cars and trucks on the County's roadways. The effect on local traffic conditions during the summer months is evident in each municipality, when resorts bound traffic descends on Friday afternoons and exits en mass on Sunday evenings. The County transportation system faces many challenges due heavy congestion and limited road capacity. The limited public transportation and pedestrian and bicycle routes further advances the congestion problems.

The County has three major roadways, running north and south providing access from Central and Northern New Jersey. The Garden State Parkway is a toll road with limited access points throughout the County. The Parkway carries the lion's share of the incoming and outgoing traffic in the region. The Parkway's Cape May Toll Plaza has an average daily traffic (ADT) of over 29,000 a day, which increases to over 47,000 during the summer months. The

Toll Plaza has a total yearly traffic count of over 10 million trips per year¹¹. New Jersey Route 9 through Cape May is classified as Urban Minor Arterial Road by the NJDOT, and provides access to a more localized regional traffic base. The third major traffic corridor is Route 47, which accommodates north/south travel through Dennis and Middle Townships.

There are a number of local, county and other state highways, which traverses Cape May County. Many of these roads provide a link between the barrier islands to the east and Route 55 to the west. Route 55 serves as a north-south connector through Gloucester and Cumberland Counties. The network of state roads, which link, to the Route 55 corridor includes Rt. 47, Rt. 347, Rt. 49 and Rt. 50. Many of these highways are two lane roadways, which become extremely congested during the summer months. The Route 55/47 Corridor draws traffic from the Atlantic, Cumberland and Salem Counties as well as the Philadelphia metropolitan area. In addition to the importance as a connection to the recreational areas of the County, the Route 55/47 Corridor also serves as an important emergency evacuation route.

Cape May along with Atlantic, Cumberland and Salem counties fall under the jurisdiction of the South Jersey Transportation Planning Organization (SJTPO). The SJTPO is the designated Metropolitan Planning Organization responsible for making regional transportation planning decisions. The SJTPO is required to prepare a Regional Transportation Plan (RTP) that serves as the long-range guide for the transportation decision making of the region. The RTP has addressed a number of issues directly relating to the DMUSA and has developed both short and long range plans of action to provide necessary improvements.

The SJTPO has conducted a number of transportation studies specifically dealing with the major travel movements in the DSMUA Region, most notably the *1998 Route 55/47 Corridor Transportation Study*. This study indicated that the Route 55/47 Corridor experienced significant seasonal traffic variation due to the influx of recreational travel. A 70 percent increase of daily traffic was identified during the summer tourist months compared to the off-season periods. The previous traffic estimates have predicted limited spot congestion within the Corridor on an average day, but severe congestion during summer weekend periods. This study defined the problems concerning roadway congestion, traffic safety and local access, as well as the impacts on the local quality of life¹².

The study identified the following problem areas:

- **Rts. 49/50 Corridor from Rt. 55 to GSP/US 9**
 - *Queuing on Rt. 55 at Rt. 49.*
 - *Congestion on Rt. 50 through Tuckahoe, and at times at the Rt. 49 signals.*
 - *No flow problems through to US 9.*

- **US 9/GSP Corridor from Rt. 50 to Cape May**
 - *GSP congestion at Cape May toll plaza, Sea Isle Blvd. exit ramps, and Stone Harbor Blvd. Intersection (CR. 550).*
 - *Severe Rt. 9 congestion at Sea Isle Blvd. and at Stone Harbor Blvd./GSP.*

- **Rts. 47/347 Corridor from Rt. 55 to Rio Grande**
 - *No flow problems at south end of Rt. 55.*
 - *Spotty congestion at Rts. 47/347 split (SB).*
 - *Severe congestion at Rts. 47/347 convergence (SB) – Queue 3-4 miles long.*

¹¹ Cape May County Transportation Plan 2000

¹² Shore Connection Committee Report – Route 55/47 Corridor Transportation Study, Nov. 1998

- *Congestion at Tyler Road intersection.*

The peak movement of travel back from the shore occurs on a Sunday from afternoon to early evening. The predominant directions of travel in this period are northbound (NB) and westbound (WB). Sunday existing conditions and problem locations grouped by travel corridors follow.

- **Rts. 49/50 Corridor from GSP/US 9 to Rt. 55**
 - *Continuous, steady flow through corridor.*
 - *Heavy traffic on Rt. 50 through Tuckahoe.*
- **US 9/GSP Corridor from Cape May to Rt. 50**
 - *Continuous, steady flow through corridor.*
 - *Heavy traffic on US 9 in several areas.*
 - *Congestion at Sea Isle Blvd and US 9.*
- **Rts. 47/347 Corridor from Rio Grande to Rt. 55**
 - *Continuous, steady flow through corridor.*
 - *Heavy traffic on Rt. 47 at CR. 585 and Rt. 83.*
 - *Heavy traffic between Rt. 83 and Tyler Road.*
 - *Congestion at Rts. 47/347 convergence (NB).*
 - *Congestion on Rt. 47 through Port Elizabeth central business district*

The 1998 *Route 55/47 Corridor Transportation Study* recommended that the new four-lane highway from the existing terminus in Port Elizabeth to the Garden State Parkway in Dennis Township, as part of the Tier 2 or long term plan. The study notes that new roadway would alleviate daily congestion and delays on Route 47 and 49 as well as provide significant relief during the summer months. The expansion would address the growing population and divert traffic away from the already taxed two lane roads within Cape May County. This plan could be activated only following additional studies or implementation of Tier 1 (Near Term Plans). The Tier 1 plans included a number of interchange, capacity, intersection and alignment improvements to the problematic areas identified above.

The completion of the Route 55 link to the Garden State Parkway would have a significant impact on Dennis Township. The 1994 *Township of Dennis Master Plan* indicated that this extension would be inconsistent with its goals and objectives and should be discouraged and actively opposed. In 2002, the Dennis Township Committee reaffirmed their position by adopting a resolution opposing the Route 55 extension, unless it could be done in an environmentally safer manner

In 2004, the SJTPO 2025 Regional Transportation Plan concluded that improving the Route 55/47 Corridor, in a manner that is respectful of the communities through which it passes is a critical need¹³. It was determined that the benefits of the improvements to the corridor would far outweigh the cost and impacts of such a project. Completion of Route 55 would address the long-term needs of the region by improving the ability to move people and goods to and from the shore communities, while alleviating congestion and providing a better and safer evacuation route.

The SJTPO is currently conducting a study on the US 9/Garden State Parkway Corridor. The study has targeted an area located in the northern most part of Cape May County and southern Atlantic County. The purpose of the study is to address the problems at locations of heavy congestion during the summer and weekday peak periods. The areas of concern are as follows¹⁴:

¹³ SJTPO 2025 Regional Transportation Plan – Executive Summary June 2004

¹⁴ *U.S. 9/Garden State Parkway Corridor Study – Draft Final Report – SJTPO – April 2004*

- *10.2-mile section of Route 9 from Route 50 (Upper Twp.) to Route 52 (Somers Point City, Atlantic County).*
- *Garden State Parkway from interchange 20 (Upper Twp.) to Interchange 30 (Somers Point City, Atlantic County).*
- *A 2-mile stretch of Roosevelt Boulevard (Upper Twp.) from Route 9 to Bay Avenue (Ocean City).*
- *A 2.7-mile portion of Bay Avenue in Ocean City between 34th Street and 9th street.*

The draft study concluded with a number of long and short-term solutions to relieve the congestion problems. Some of the recommendations that affect the transportation network of Cape May County are:

- **Route 9 from Route 50 to Tuckahoe Road:**
 - *Improve bicycle safety by providing bicycle compatible inlets.*
 - *Pedestrian crosswalks.*
 - *Improve sight distances.*
 - *Construct a center turn lane from Church Road (CR 602) to Tuckahoe Road (CR 631).*
 - *Installation of curbs and sidewalks for better pedestrian access.*
- **Tuckahoe Road**
 - *Pedestrian crosswalks.*
 - *Improvement to the road geometry and sight distances.*
 - *Construction of north and south bound turn lanes.*
- **Route 9 from Tuckahoe Road to Roosevelt Boulevard**
 - *A center turning lane should be constructed.*
 - *Improve downtown Marmora to include landscaping, street furniture and other site amenities that would create a sense of place*
 - *Drainage improvements to reduce flooding.*
- **Roosevelt Boulevard**
 - *Re-stripe the portion east of Route 9 to extend left turn lanes and to provide for two eastbound travel lanes.*
 - *Capacity Improvements to the Roosevelt Blvd./Rt.. 9 intersection could be improved with a high-speed northbound right turn ramp.*
 - *Curbs and sidewalks should be constructed to improve pedestrian access.*
- **Tuckahoe Road Extension (Rt. 9 intersection between Hollyberry Ave. & Redwish Ln.)**
 - *Improve pedestrian safety by providing crosswalks at the northbound, southbound and eastbound approaches.*
 - *Provide advanced directional signals.*
- **Route 9 from Roosevelt Boulevard to Beesley's Point Bridge**
 - *Improve pavement*
 - *Rehabilitation of the Beesley's Point Bridge and the U.S. 9 Over Drag Channel Bridge.*
- **Improvements to the Garden State Parkway Interchange 25**

- *On ramp acceleration lanes should be lengthened.*
- *Pavement Improvements.*
- *Signage improvements.*
- **Improvements to the Garden State Parkway Interchange 20**
 - *On ramp acceleration lanes should be lengthened.*
 - *Reconfigure interchange to include connections from the southbound GSP to Route 50 and Route 9 and from Route 50 and Route 9 northbound.*

The *Cape May County 2000 Transportation Plan*¹⁵ has indicated a number of recommendations related to general and specific areas of transportation within the County. The following are selected recommendations affecting the DMUSA Region:

- *Greater emphasis should be placed on transportation projects and programs in the area.*
- *Improved and expanded transit services should be provided.*
- *Explore the possibility of providing the approximately 16,000 campsites with transit service to the beaches and recreational facilities of the barrier island.*
- *Encourage mass transit, car pools and vanpools and alternative means of transportation. Develop strategies to reduce the amount of single occupancy vehicles.*
- *Encourage the funding and completion of the Route 55 highway expansion.*
- *Encourage the wise distribution of commercial and residential development at suitable access points to major arterial.*
- *Pursue plans for grade-separated interchanges at the three intersections on the Garden State Parkway in Middle Township. These intersections require traffic signals and cause significant delays and congestion.*

Although NJ Transit provides bus routes within Cape May County, service in the DMUSA only provides a few daily trips with no service at night or weekends. Most of the service is geared toward the Atlantic City commuter bus route from Cape May to Atlantic City. This route provides service to Rio Grande via Rt. 47, Cape May Court House and Burdette Tomlin Hospital via Rt. 9, as well as the Crest Haven County Complex from the Parkway. In addition to providing local bus service, NJ Transit operates an interstate route from Philadelphia to Cape May with local stops in Goshen, Tuckahoe, Cape May Court House and Rio Grande.

The County offers Fare-Free Transportation, which provides free bus transportation to senior citizens, persons with disabilities, veterans and persons of low income. The service operates a modified fixed-route service, which provides residents access to local shopping areas two times per week. Appointments are not necessary and service is provided at any corner along the route. Door-to-door service is also provided to all areas of Cape May and requires a reservation.

¹⁵ Cape May County – Department of Planning – *Transportation Master Plan 2000*

The Cape May Seashore Line operates a seasonal excursion line through a lease agreement with NJ Transit. Currently the line focuses on the recreational tourist market and provides service from County 4-H Fairgrounds to Cape May City. NJ Transit has developed a plan that depicts the transit possibilities for the future. The plan shows the current rail lines, projects committed for construction and candidate projects, which are potential projects with some degree of planning. The rail link from Hammonton to Cape May Courthouse has been identified as candidate project. This project needs additional work and identified funds in order to advance to a committed project¹⁶.

The majority of the bicycle facilities in the DMUSA are non-designated facilities consisting of paved shoulders and shared roadways. Middle Township has a bicycle connection that links the Park and Zoo to the Middle Township Recreation Complex. The County and Middle Township have proposed a 1.4 mile shared use path, which would connect the existing bikeway system to the center of Cape May Courthouse. The Belleplain State Forest located in the northwest are of the county has 31 miles of roadways accessible to bicyclists. Most of the County's designated bike routes are located in the southern portion of the County and the barrier island communities. Some of the other facilities include Seashore Road bike lane connecting West Cape May and the Cape May Canal and a number of other bicycle accessible paths in Ocean City, Wildwood Crest and North Wildwood.

In recent years the County has emphasized the importance of bicycles as an alternative means of transportation. The County is actively pursued efforts to improve bicycle travel by promoting the development of facilities designed specifically for bicycles. In their efforts to improve the intermodal transportation system, the County has secured funding to construct the 0.85-mile Cold Spring Bikeway connecting the existing Seashore Road bike lanes with Historic Cold Spring Village. A second phase of the project will extend the path north an additional 1.27 miles into Lower Township. A project sponsored by the Division of Parks and Forestry will provide a fourteen-mile long bike path from Belleplain through Woodbine and Dennis to Middle Township. The path will be utilized for bicycles and hikers and will connect with the existing bikeway in Woodbine.

The Department of Transportation plans to designate a bicycle accessible route the entire length of the State from Cape May Point to High Point. The route will use a combination of existing State highways, County and local roads. The route has not been finalized and is likely to include County Roads 557, 657 and 626 along with Highway 9 and 47¹⁷.

1.6.2 Upper Township

Upper Township like many of the municipalities in Cape May experience increase roadway congestion and seasonal variations in the local traffic flows. The Township of Upper has four major roadways, which fall under the jurisdiction of the New Jersey Department of Transportation: Routes 49, 50, 9 and the Garden State Parkway. Route 49 and 50 provide east west access to the barrier island communities from the metropolitan Philadelphia area and New Jersey's southwestern counties. Both the Parkway and Route 9 provide highway connections to Cape May from northern New Jersey. The Township has a number of roads that are under the authority of Cape May County. These roads are classified as follows:

- Primary – connecting large population centers in and out of the County servicing high traffic counts, includes Routes 623 and 631. These roads have an ultimate right-of-way (R.O.W.) of 86 feet.
- Secondary – act as minor links between County population centers and have smaller counts, includes Routes 557, 605, 610, 617, 619, and 628. These roads have an ultimate R.O.W. of 66 feet.

¹⁶ *SJTPO Regional Transportation Plan* – Chapter Four – June 2004

¹⁷ *Cape May County Bicycle Study*, Cape May County Planning Department, June 2002

- Local – provide access to private residential property; include Routes 548, 602, 616, 637, 662, 632, 659, and 669. These roads have an ultimate R.O.W. of 50 feet.

The 1994 Township of Upper Master Plan indicated that the road and pedestrian network, which had worked efficiently in the past, would no longer be able to support the traffic related to the increase of suburban development. The problems associated with the lack of efficiency and roadway congestion are attributed to the increase in both the permanent and summer populations.

The NJDOT has recently made improvements to the intersection of Route 9 and Route 50. These improvements included the installation of traffic lights and the reconfiguration of approach lanes. The NJDOT has also improved the intersections of Route 50 and Route 610 and County Road 662 at the Garden State Parkway Interchange¹⁸. These improvements should improve the traffic safety of Upper, although additional solutions for reducing summertime congestions still need to be explored. The long and short-term recommendations of the SJTPO's study on the US 9/Garden State Parkway Corridor (discussed in section 1.6.1) outline a number of possible solutions that would further enhance traffic safety and improve the Township circulation system.

Upper Township is further hindered by the limited public transportation system. Bus service is currently provided by New Jersey Transit, which operates the Route 552 between Cape May and Atlantic City along the Garden State Parkway. This service is oriented toward the casino crowds and passengers making travel connections in Atlantic City. Service is provided from the Garden State Parkways Park and Ride facility in Seaville. NJ Transit also provides intrastate service between Philadelphia and Cape May via Route 315, with two stops daily at Rt. 50 and Reading Avenue in Tuckahoe.

The Township has an active rail line, which provides freight and coal to the existing B.L. England Power Plant. The Cape May Seashore Lines Railroad currently provides regularly scheduled excursion service between the 4-H Fairgrounds Rail Station located in Middle Township and Cape May City. Plans are underway for the extension of service between the 4-H Fairgrounds (present northernmost station) and Tuckahoe (Upper Township), and then north for the interchange of passengers with NJ Transit on their Atlantic City Rail Line. The Township has recently renovated the historic Tuckahoe train station, which included improvements to the building facades and parking areas. The NJDOT is planning improvements to Route 50 which is currently in the preliminary design stage. The Township should coordinate with NJDOT and plan local sidewalk improvements to provide a link to Route 50.

Upper lacks pedestrian walkways and accessibility that would encourage residents to walk to retail and service destinations. This should be required for all commercial development with linkages to residential neighborhoods. It is especially important in the planned Centers to reduce vehicle trips. Design standards should be amended to require sidewalks for commercial development. Cape May County has proposed a 1.6-mile path in the Palermo section of the Township from Route 9 east along the inactive NJ Transit rail right-of-way to Crook Horn Creek. The path will accommodate both pedestrians and bicycles and will provide scenic overlooks to the wetlands and the barrier islands¹⁹.

1.6.3 Key Transportation Issues

Tourism is the engine, which drives the Cape May County economy, and improvements to the transportation system will help support projected growth. Limited public transit systems have added to the traffic congestion within the

¹⁸ *The Township of Upper Master Plan Reexamination and Master Plan Amendment*, adopted July 19, 2001

¹⁹ *Cape May County Bicycle Study*, Cape may County Planning Department, June 2002

County and Upper Township. The forecasted expansion of the population, housing, employment and tourism will further diminish the already congested road network, unless some of the recommended of both the SJTPO and the County Transportation Master Plan can be accomplished. The following summarizes key regional and local transportation issues.

REGIONAL

- Address near term transportation improvements as recommended in the 2025 Regional Transportation Plan and County Transportation Plan.
- Evaluate Route 55 extension.
- Provide improved transit services.
- Develop seasonal shuttle services for the campgrounds in coordination with the County and NJ Transit.
- Expand passenger rail service.

LOCAL

- Improve pedestrian facilities.
- Improve bicycle facilities.
- Explore shuttle services to serve summer visitors and campgrounds.
- Support further improvements for Tuckahoe rail station.
- Improve Garden State Parkway Exit 20 as a full Interchange.

1.7 INFRASTRUCTURE

1.7.1 Water Supply

The potable water supply for Cape May County and the Dennis, Middle, Upper Study Area (DMUSA) is derived from ground water through fresh water aquifers. The County does not have a system of reservoirs and relies on two major aquifer systems for its water supply: the shallow aquifer system and the deep aquifer system. The shallow system consists of the Holly Beach Water Bearing Zone, the Estuarine Sand aquifer and the Cohansey Sand aquifer. The deep aquifer system consists of the Rio Grande Water Bearing Zone and the Atlantic City 800-Foot Sand aquifer.

The County's public water supply has been declining in recent years, due in part to the increased pumping of groundwater associated with the population growth and the reduction of aquifer recharge by the discharge of stormwater drainage systems. This has resulted in the lowering of the groundwater table and saltwater contamination of groundwater wells. Wells in Wildwood, Cape May City and areas of Lower Township have been forced to close as a result. In the DMUSA, wells in the Beesley Point and the Marmora section of Upper Township have been closed due to chemical contamination. The depletion of the current water supply and the ability of the existing aquifer systems to meet future needs has become a countywide concern.

The concerns of how the County's current and future water supply needs will be accomplished, as well as how to protect the aquifer system while avoiding adverse ecological impacts, has prompted the Gibson Bill. Enacted by the New Jersey State Senate and General Assembly on July 20, 2001, the Bill funds an assessment of water resources in Cape May County including the County's pinelands area. Specifically, Section Three of the Bill directs the NJDEP

in cooperation with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service and the U.S. Geological Survey to prepare reports and analysis addressing a number of issues including:

- A report on sustainable water supply alternatives necessary to meet the current and future water supply needs of the county while avoiding adverse ecological impact.
- A county-wide water hydrological assessment and survey
- A county-wide water supply alternative water supply design.
- A county-wide water supply cost effectiveness study.
- Identification of water conservation and reuse methods.
- Analysis of potential future water supply demands based on future development.

The New Jersey Department of Environmental Protection and the U.S. Geological Survey have prepared a draft Project Work Plan describing the objectives and approaches of the study to determine the extent of the sustainable water supply and the capability of meeting the current and future needs of Cape May County. The Project Work Plan indicates that future water supplies would be pumped to places of need from a line of wells located along the middle of the County north of Lower Township with aquifer storage and recovery systems used to supplement high demand during the summer months. The County should consider wastewater reuse and continue its current conservation practices. It was further recommended that desalinization and piping water into the County from outside sources should be a last resort.²⁰

The proposed study will be a four-phase process completed over a two-year period. The study will address the following issues:

Phase 1: Develop the detailed plans for the project and to organize the multi-agency team that will undertake the activities of the project.

Phase 2: Develop the necessary information and tools that will provide a predictive understanding of hydrologic, ecologic, and regulatory issues that pertain to planning a sustainable water supply for Cape May.

Phase 3: Integrate the water demand projections, the information about hydrologic limitations, the ecological sensitivities, and regulatory policy considerations to define possible well locations and pumping rates for water supply production that will meet future needs while minimizing hydrological problems and minimizing impacts to the ecosystem.

Phase 4: Determine and rank the engineering feasibility and cost effectiveness of the leading Phase 3 scenarios.

Phase 2 of the proposed study will include analysis to determine the future water demand utilizing population projections, zoning, build-out analysis, development plans and wastewater plans. This analysis will focus on the projections and build-out scenarios for the years 2025 and 2055. This phase is particularly important to the Initial Plan Endorsement Report, since it may have an affect on the character, development options and public facilities of each of the municipalities in the DMUSA.

²⁰ Executive Summary of the Project Work Plan – Development of a Plan for Sustainable Future Water Supply for Cape May County, New Jersey prepared by the N.J.D.E.P. and the U.S. Geological Survey – August 2003

Water conservation practices, groundwater recharge using treated effluent or other aquifer recharge alternatives would allow the County to continue to pump potable water from the Cohansey aquifer without increasing the threat of saltwater intrusion. Some of the aquifer recharge alternatives recommended in the *Feasibility Study for Reuse of Wastewater Effluent* prepared for Cape May County Municipal Utility Authority are as follows:

- Direct recharge through injection wells.
- Indirect recharge through infiltration/percolation ponds.
- Indirect recharge through land application (spray irrigation systems).
- Indirect recharge by discharge to a receiving surface water feeding groundwater, including streams and wetlands.

Countywide groundwater recharge efforts would be a major undertaking, but could provide significant benefits. Such efforts would include implementation of a plan that would satisfy the NJDEP's regulatory requirements for wastewater reuse including water quality issues and location of applications. Additional wastewater treatment as well as upgrading all or portions of the existing treatment plants would also need to be addressed²¹.

The Cape May County Planning Board has recognized the urgency of the water supply problem and has encouraged municipalities to adjust zoning and control growth to protect the water supply systems. It is the County's policy to limit growth so development does not exceed the ability to provide an adequate water supply. The County has further committed to protecting the water sources through its involvement with the Open Space and Farmland Preservation Program, support of the New Jersey Statewide Water Supply Plan and implementation of the Watershed Management Planning Program as funded by the NJDEP²².

The County has implemented a pilot Well Head Protection Program to identify domestic well cluster areas within the County. The purpose of the program is to minimize the risk of pollution of domestic wells and ground water resource preservation. Seventy-two clusters were identified in the mainland communities including Lower Township and the DMUSA. Well Head Protection Areas has been delineated and management programs have been developed²³.

Septic systems, above and underground storage tanks, and cemeteries were found to be some of the sources of pollution in the areas surrounding the well clusters. The County Health Department has provided public education packets to homeowners explaining the County's hydrology and groundwater systems as well as proper care of septic systems and under ground storage tanks. The County has also collected hundreds of water samples from the seventy-two clusters and continues to monitor contamination levels. There has been contamination of the wells in areas of Cape May Court House, Beesley's Point, Marmora, and Tuckahoe. These areas have received public water or treatment systems to address the problems.

1.7.2 Upper Township Water Facilities

The Township of Upper lies above the Cohansey aquifer and most of the Township's potable water is derived from on-site private wells. New Jersey American Water provides public water to parts of Marmora, Beesley's Point, Seaville and Strathmere.²⁴ Water mains have been installed in the Marmora and Beesley Point section of the Township. This area includes Route 631 from Stagecoach Road to Route 9, north to Roosevelt Boulevard from Old

²¹ Feasibility Study for Reuse of Wastewater Effluent – Malcolm Pirnie – July 2000

²² Cape May County Comprehensive Master Plan prepared by the Cape May County Planning Department–July 2002.

²³ Cape May County Water Quality Management Plan / Waste Water Management Plan (208 Plan) – Sept. 28, 2001

²⁴ NJDEP, Public Water Supply Surplus/Deficit, updated 9/6/06.

Tuckahoe Road east to 34th Street. Water service has also been provided to the entire portion of Beesley's Point north of Roosevelt Boulevard to Cedar Hollow Court. Water service has recently been extended through Palermo to Seaville serving Osprey Point (a 149 unit age-restricted development). The waterline then runs down Stagecoach Road south to Evergreen Drive, then east to Route 9 and continues east for approximately 1,000 feet. New Jersey American Water Company services the Township's barrier island community of Strathmere through an extension of the Ocean City system²⁵.

An analysis was performed to determine the available water supply allocation capacity to serve the projected growth in the Marmora Palermo Beesley's Point Town Center and Seaville Town Center. This is based upon the Buildout Analysis performed on the 2006 Master Plan Land Use Plan which identified future land use. As shown on Table 1.7A, there is currently a projected monthly surplus of 87.521 MGM; the projected water usage in the two Town Center is estimated at full buildout at 47.75 MGM.

Table 1.7A

Water Supply Analysis

New Jersey American Water - Ocean City (Upper)

Available Water Supply Limits

	Allocation	Contract	Total
Monthly Limit	294.500 MGM	N/A MGM	294.500 MGM
Yearly Limit	1474.000 MGY	N/A	1474.000 MGY
Surplus			

Water Demand

	Current Peak	Date	Committed Peak
Daily Demand	6,677 MGD	Jul-02	0.000 MGD
Monthly Demand	206.979 MGD	Jul-02	0.000 MGM
Yearly Demand	1096.299 MGY	2004	0.000 MGY

Surplus

Monthly Demand	87.521 MGM
Yearly Demand	377.701 MGY

Source: NJDEP, Division of Water Supply, Public Water System Deficit/Surplus, last updated 09/06/06

Public Water Supply Needs
Projected for Town Centers

	<i>X 2000 census average household size</i>	<i>population @buildout</i>	<i>X gallons use /day</i>	<i>gallons/ day</i>	<i>X peaking factor 1.5</i>	<i>peak gallons use</i>	<i>X month days</i>	<i>projected MGM used</i>	<i>MGM</i>	
Marmora Palermo Beesley's Point Town Center -Seaville Town Center Residential Units (@Full Buildout)	1,594	2.84	4,527	100	452,696	1.5	679,044	31	21,050,364	21.050
Marmora Palermo Beesley's Point Town Center -Seaville Town Center Non-Residential Development (@Full Buildout)	4,587,147			0.125	573,393	1.5	860,090	31	26,662,792	26.700
TOTAL									47,713,156	47.750

²⁵ Township of Upper Master Plan Reexamination and Master Plan Amendment – July 19, 2001

1.7.3 Sewer

Sewer service in the Cape May County is divided into five service area regions with publicly owned wastewater treatment plants (Table 1.7B). The regions are identified as the Ocean City – Upper Township Region, Dennis Township – Woodbine Region, Seven Mile – Middle Township Region, Wildwood – Lower Township Region and the Cape May Region. The County's Water Quality Management Plan is prepared and directed by the Cape May County Board of Health²⁶.

Table 1.7B: Cape May County Sewer Service Regions

- 1. Ocean City - Upper Township Region**
 - Ocean City Regional Wastewater Treatment Plant -
 - Cape May County Municipal Utilities Authority (CMCMUA)
 - Upper Township
 - Ocean City
- 2. Dennis Township Woodbine Region**
 - No Regional Wastewater Treatment Plant
 - Dennis Township
 - The Borough of Woodbine
- 3. Seven Mile - Middle Township Region**
 - Seven Mile/Middle Regional Wastewater Treatment Plant (CMCMUA)
 - Middle Township
 - Sea Isle City
 - Avalon Borough
 - Stone Harbor Borough
- 4. Wildwood - Lower Township Region**
 - Wildwood/Lower Regional Wastewater Treatment Plant (CMCMUA)
 - Lower Township M.U.A. Sewage Treatment Plant
 - North Wildwood City
 - Wets Wildwood Borough
 - Wildwood City
 - Wildwood Crest Borough
 - Portions of Middle Township (south)
 - Lower Township
- 5. Cape May Region**
 - Cape May Regional Wastewater Treatment Plant (CMCMUA)
 - Portions of Lower Township (south)
 - The City of Cape May
 - West Cape May Borough
 - Cape May Point Borough

SOURCE: Cape May County Water Quality Management Plan / Waste Water Management Plan

²⁶ Cape May County Quality Management Plan / Waste Water Management Plan (208 Plan) – Sept. 28, 2001

The Dennis, Middle, Upper Study Area (DMUSA) along with Lower Township are communities in Cape May County with the largest areas of undeveloped and environmentally constrained lands. These municipalities rely on on-site ground water discharge for most of the wastewater disposal. Table 1.7C indicates the proposed expansion of the Regional Sewage Treatment Plant capacity.

Table 1.7C: Cape May Regional Sewage Treatment Plant Capacities

1	Ocean City - Regional Sewage Treatment Plant	MGD (Million Gallons per
	Design Capacity =	8.240 Day)
	Permitted Flow =	8.240 MGD
	Current Flow =	5.399 MGD
	Planning Flow =	8.240 MGD
2	Seven Mile - Middle Township Regional Sewage Treatment Plant	
	Design Capacity =	9.240 MGD
	Permitted Flow =	7.670 MGD
	Current Flow =	5.814 MGD
	Planning Flow =	8.387 MGD
3	Wildwood - Lower Township Regional Sewage Treatment Plant	
	Design Capacity =	17.590 MGD
	Permitted Flow =	14.180 MGD
	Current Flow =	9.221 MGD
	Planning Flow =	14.180 MGD
4	Lower Township M.U.A. Sewage Treatment Plant	
	Design Capacity =	4.000 MGD
	Permitted Flow =	4.000 MGD
	Current Flow =	2.500 MGD
	Planning Flow =	4.000 MGD
5	Cape May Regional Sewage Treatment Plant	
	Design Capacity =	3.200 MGD
	Permitted Flow =	3.000 MGD
	Current Flow =	1.943 MGD
	Planning Flow =	3.372 MGD

SOURCE: Cape May County Water Quality Management Plan / Waste Water Management Plan

The Cape May County adopted Septic Management Plan (SMP) establishes guidelines for development which utilizes septic systems. The SMP's goal is to establish a minimum lot size to reduce the risk of well contamination when septic systems are placed on lots. The SMP is administered by the County Health Department, who reviews development applications for consistency to the SMP as follows:

- New subdivisions may not create lots less than 35,000 square feet.

- Proposed developments on existing lots generating 500 gallons per day of wastewater are grandfathered.
- Proposed developments, excluding single-family residences, generating more than 500 and less than 2,000 gallons per day of wastewater must comply with the 35,000 square foot minimum lot size.

1.7.4 Upper Township Sewer Facilities

Upper Township is located in the Ocean City – Upper Township Regional Sewerage Authority Service Region (Figure 1.7A). The municipality has no public sanitary sewer system and relies on a combination of on-site package treatment systems and individual septic systems for its wastewater disposal. The Township is consistent with the County's Septic Management Plan by maintaining a minimum lot size of 35,000 square feet for the mainland portion of the Township. However, undersized lots are permitted in Strathmere section of the Township²⁷. Strathmere is serviced by individual subsurface disposal systems and was shown as a sewer area with a projected build-out of 0.360 million gallons per day (MGD) on the County's 208 plan.

The Cape May County Municipal Utilities Authority (CMCMUA) has adopted a Capacity Assurance Plan (CAP) to insure that wastewater flows for each of the participating communities does not exceed their flow allocation. The flow allocation for each community is based on design flows from a build-out analysis in the 201 Plan. The purpose of the analysis was to ensure that the wastewater from each community could be properly treated by the CMCMUA. The 1996 CAP Community Flow Status identifies flow allocation projections for the year 2020.

The following figures represent the maximum daily average flows that can be transmitted from Strathmere, the numbers represent the not-to-exceed flows enforced by the CMCMUA²⁸.

	<u>1995 Allocation</u>	<u>2020 Allocation</u>
Strathmere	0.240 MGD	0.360 MGD

This projection is based upon actual flows from dwellings in existing sewer areas, new dwellings permissible under current zoning in existing sewer areas and additional flow contributions from future sewer service areas. In order to expand the County's treatment plants beyond the permitted flow, the CMCMUA will need to apply to the NJDEP for an amendment to the Water Quality Management Plan and provide justification for the proposed flows.

The 1993 Township of Upper Master Plan had indicated that the Township was considering sewer service to Strathmere for health and safety reasons. Public sewers would connect into the Sea Isle City system through Whale Beach and then processed by the Seven Mile Middle Township Wastewater Treatment Plant. The NJDEP had reviewed this proposal and indicated that the sewer extension through Whale Beach was in direct conflict with the Rules on Coastal Zone Management. The plan was opposed by many in the community, fearing that providing sewers to Strathmere would increase development and encourage the same high density growth experienced by the other barrier island communities of Cape May County. The County has explored alternatives to the extension including servicing the area from the north via the Ocean City Regional Wastewater Treatment Plant, and incorporation of various on-site alternatives for failing septic systems such as individual or community holding tanks, composting toilets or recycling systems²⁹.

²⁷ Township of Upper Master Plan Reexamination and Master Plan Amendment – July 19, 2001.

²⁸ Cape May County Quality Management Plan / Waste Water Management Plan (208 Plan), Sept 28, 2001

²⁹ Cape May County Quality Management Plan / Waste Water Management Plan (208 Plan), Sept 28, 2001

At this time, the 2006 Master Plan Reexamination Report and Land Use Plan Amendment does not recommend extending public sewer to Strathmere. Public water has been extended to Strathmere to address contaminated wells and related health issues.

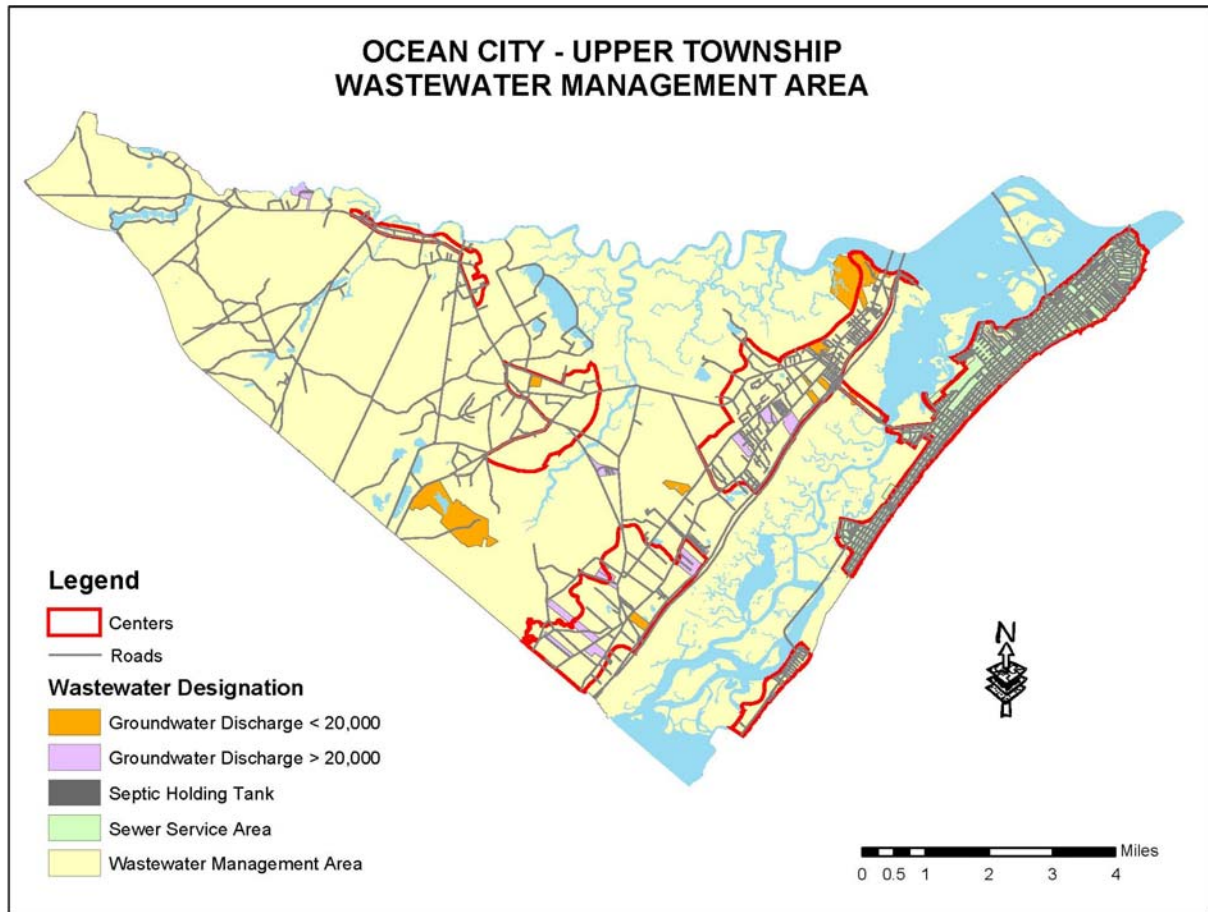
Recent changes to the County's Water Quality Management Plan indicate the following facilities in Upper Township:

- Areas of Upper Township which are zoned Commercial District (CD) have been identified as being designated for wastewater facilities with planning flows less than 20,000 GPD which discharge to groundwater.
- The B.L. England Generating Plant has been designated under the categories of "Surface Water Discharge Area" for its industrial discharge into the Tuckahoe River and for its "Wastewater Facilities with Planning Flows less than 20,000 GPD which Discharges to Ground Water" for its underground sewerage discharge.
- Osprey Village has been approved for the construction of 149 unit age-restricted planned community with onsite package treatment. The total discharge is 25,330 GPD.

It should be noted that upland portions of Roosevelt Boulevard were originally included in the proposed sewer service area, but were not adopted as part of the County's Water Quality Management Plan. Existing ground water disposal facilities and the Bridge Commission Property, as well as future development were proposed to discharge to Ocean City Regional Treatment Plant. Based on the Superior Court of New Jersey Consent Order dated November 30, 2000 (Docket No. CPM-L-226-00), these existing properties should be included in the Cape May Water Quality Management Plan/Waste Water Management Plan.

As part of the 2006 Master Plan Land Use Plan Amendment, sections of Marmora Palermo Beesley's Point Town Center and the Seaville Town Center are recommended to be included in a sewer service area. This area is centered in the Town Center cores but extends beyond to include areas of public and quasi-public facilities, small lot residential neighborhoods, campgrounds and mobile home parks that would be prime candidates for sewer. The Township does not plan to provide public sewer, but supports the use of community package treatment plants. The Township plans to prepare and submit an Amendment to the Cape May County Wastewater Management Plan.

Figure 1.7A Ocean City – Upper Township Wastewater Management Area



1.8 LAND USE INVENTORY

1.8.1 Current and Future Conditions

The Existing Land Use Inventory and related maps and tables are included in the Upper Township NRI.

1.9 CENTERS

1.9.1 State Development Plan Centers

The State Development and Redevelopment Plan established planning areas throughout the State that share common development and environmental characteristics. These Planning Areas serve as the framework for application of the Policies of the State Plan. Each Planning Area has Policy Objectives that guide growth. These Objectives are intended to guide local and regional planning to establish a system of Centers to encourage livable

neighborhoods with a variety of housing types, price ranges and multi-modal forms of transportation, while preserved green space. The five Planning Areas are as follows³⁰:

- **Metropolitan Planning Area: PA1**
Provide for much of the state's future redevelopment; revitalize cities and towns; promote growth in compact forms; stabilize older suburbs; redesign areas of sprawl; and protect the character of existing stable communities.
- **Suburban Planning Area: PA2**
Provide for much of the state's future development; promote growth in Centers and other compact forms; protect the character of existing stable communities; protect natural resources; redesign areas of sprawl; reverse the current trend toward further sprawl; and revitalize cities and towns.
- **Fringe Planning Area: PA3**
Accommodate growth in Centers; protect the Environs primarily as open lands; revitalize cities and towns; protect the character of existing stable communities; protect natural resources; provide a buffer between more developed Metropolitan and Suburban Planning Areas and less developed Rural and Environmentally Sensitive Planning Areas; and confine programmed sewers and public water services to Centers.
- **Rural Planning Area: PA4 and Rural/Environmentally Sensitive Planning Area: PA4B**
Maintain the Environs as large contiguous areas of farmland and other lands; revitalize cities and towns; accommodate growth in Centers; promote a viable agricultural industry; protect the character of existing stable communities; and confine programmed sewers and public water services to Centers.
- **Environmentally Sensitive Planning Area: PA5 and Environmentally Sensitive/Barrier Islands Planning Area: PA5B**
Protect environmental resources through the protection of large contiguous areas of land; accommodate growth in Centers; protect the character of existing stable communities; confine programmed sewers and public water services to Centers; and revitalize cities and towns.

Like most of Cape May County, a large portion of Upper Township is designated as PA5 due to the large amounts of coastal wetlands and other environmentally constrained lands. The bulk of the Township development, which runs along the Route 9 Corridor, is designated as PA2. The western portion of the municipality has large isolated areas designated PA4. These areas are surrounded by environmentally sensitive lands and linked together by major roads such as Route 557, 631 and 49. Map 1.9A indicates the location of both the Office of Smart Growth Identified Centers as well as the CAFRA Coastal Centers.

The State Plan guides development and economic expansion in each of the planning areas, but encourages such "Smart Growth" in compact forms of development that consume less land, deplete fewer natural resources and are more efficient in the delivery of public services. These areas are known as Centers and are categorized as Regional Centers, Towns, Villages and Hamlets. The Office of Smart Growth classifies each of these centers as Designated, Proposed or Identified. Designated Centers are formally adopted and are officially recognized by the N.J.O.S.G.

In 1999, the Township of Upper had submitted a petition in an attempt to qualify certain areas within the Township as Designated Centers. The goal was to formally adopt boundaries in suitable areas where future development and redevelopment activities could take place. These boundaries would represent the areas most compatible for growth,

³⁰ NJDEP website 2004 <http://www.state.nj.us/dca/osg/plan/stateplan>

with minimal environmental constraints, existing public services. These areas were not officially designated by the Office of Smart Growth and have been classified as Identified Centers. These areas include Marmora/Beesley Point/Palermo, Petersburg, Seaville, Strathmere and Tuckahoe. These Identified Centers represent the existing areas of the Township with the largest concentration of population and development³¹.

The 2006 Upper Township Master Plan Land Use Plan Amendment and Plan Endorsement Petition provides detailed information on the four proposed Township Centers which has been subject to extensive review by the State Agencies.

1.9.2 CAFRA Centers

Approximately two thirds of Upper Township is located within the Coastal Area Facilities Act (CAFRA) Zone, where the New Jersey Department of Environmental Protection (NJDEP) regulates development. The CAFRA Zone is divided into different centers and planning areas. CAFRA administers restrictions on the intensity of development in each of the various Planning Areas. Consistent with the State Plan, CAFRA regulations encourage growth within centers and minimize development potential outside these centers by requiring more stringent regulations. It should be noted that the CAFRA Center designations would be eliminated by February 2005 and incorporated into the Office of Smart Growth centers via the plan endorsement process. CAFRA restrictions for impervious cover and tree preservation are indicated in Table 1.9A.

The Township's four expired CAFRA centers areas are identified as follows³²:

- Marmora/Beesley Point/Palermo – Coastal Town
- Petersburg – Coastal Village
- Seaville – Coastal Hamlet
- Tuckahoe – Coastal Hamlet

The Township's Plan Endorsement Petition provides for four Centers. Marmora Palermo Beesley's Point Town Center and Petersburg Village Center are within the same CAFRA category. The Seaville Town Center and the Tuckahoe Village Center are proposed at a higher level of CAFRA development reflect both existing conditions and future plans for these centers. It is also in accordance with NJOSG Centers Guidelines.

³¹ *Centers Designation Petition for Upper Township*, January 1999

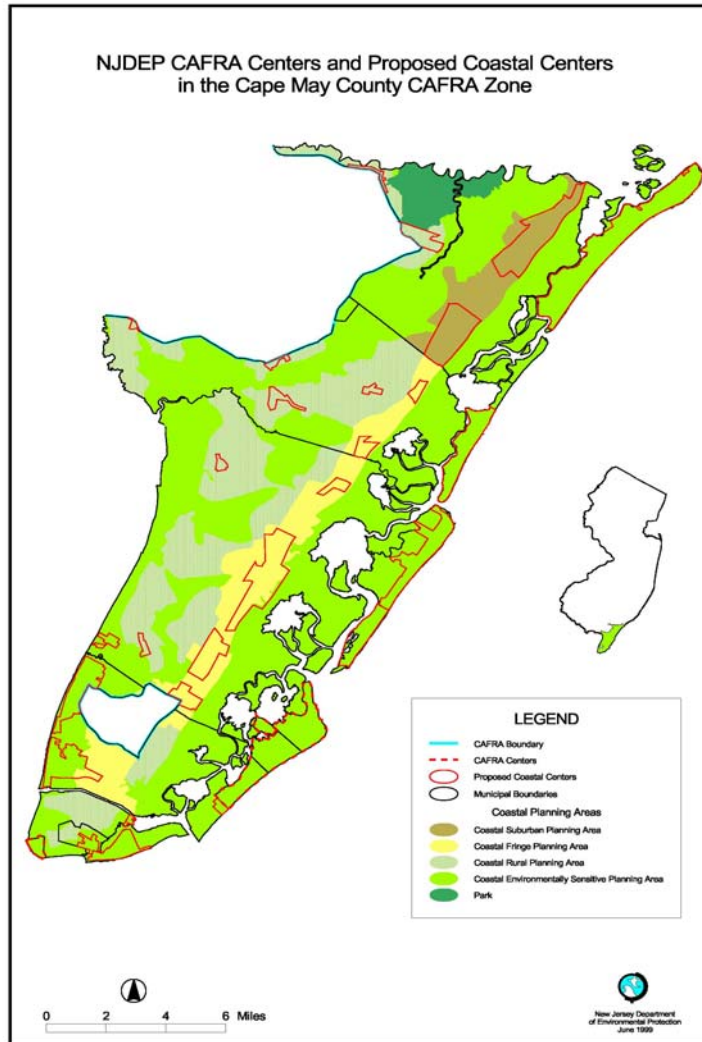
³² Coastal Zone Management rules NJAC 7:7E, February 2, 2004

Table 1.9A: CAFRA Land Use Regulation

Site Location	Impervious Coverage Percentage	Tree preservation for forested portion of site	Tree preservation and/or planting for unforested portion of site
CAFRA Urban Center	90%	10%	0%
CAFRA Regional Center	80%	10%	0%
Coastal Regional Center	80%	10%	0%
CAFRA Core	80%	10%	0%
CAFRA Node	80%	10%	0%
CAFRA Town	70%	25%	5%
Coastal Town	70%	25%	5%
Military Installation	70%	10%	0%
CAFRA Village	60%	30%	5%
Coastal Village	60%	30%	5%
CAFRA Hamlet	50%	40%	5%
Coastal Hamlet	50%	40%	5%
Coastal Metropolitan Planning Area	80%	10%	0%
Coastal Suburban Planning Area within sewer service area	30%	35%	5%
Coastal Suburban Planning Area outside sewer service area	5%	70%	5%
Coastal Fringe Planning Area	5%	70%	5%
Coastal Rural Planning Area	3%	70%	5%
Coastal Environmentally Sensitive Planning Area	3%	70%	5%

Source: Coastal Zone Management rules NJAC 7:7E, February 2, 2004

Map 1.9B NJDEP CAFRA Centers and Proposed Coastal Centers



Source: New Jersey Department of Environmental Protection web site (<http://www.state.nj.us/dep>)

Marmora/Beesley Point/Palermo and Seaville are located within the Coastal Suburban Planning Area, which are generally located adjacent to the Coastal Metropolitan Planning Area, but can be distinguished by a lack of high-density development. The existing inventory of undeveloped and underdeveloped land should be enough to accommodate much of the future growth and development. Mixed-use centers should be encouraged and development intensities should be highest in the centers. Development in areas not in centers and not in or adjacent

to sewer service areas should not be encouraged. The policy objectives of the Coastal Suburban Planning Area are as follows³³:

- 1) Encourage mixed-use development and redevelopment in compact centers.
- 2) Guide economic opportunities and employment in centers.
- 3) Encourage links from coastal suburban areas to employment centers with public transit.
- 4) Ensure adequate wastewater treatment capacity and minimize off-site storm water runoff by encouraging the use of best management practices, which protect the character of the natural drainage systems.

Tuckahoe and Petersburg are located within the Coastal Rural Planning Area, which usually contain prime agriculture lands and large tracts of forested areas. It is usually served by rural road network and on-site well water and wastewater systems. The policy objectives of the Coastal Rural Planning Area are as follows³⁴:

- 1) Protect and enhance rural character and agricultural viability of the Coastal rural planning area by guiding growth to centers. Maintain low-density development, encourage creative land use techniques to minimize the impact of new development, ensure development that does not exceed the carrying capacity of the natural and built systems of the community.
- 2) Encourage transportation network to accommodate agricultural and access to markets.
- 3) Encourage rural economic activities in centers that support rural and agricultural communities, provide a rural economy which accommodates the economic activities outside the centers and enhances the rural environment and has a minimal impact on agricultural resources and has a minimal need for infrastructure improvements.
- 4) Protect large areas of farmland and open space to preserve environmentally features and minimize conflict between development and agricultural practices.

1.9.3 Pinelands Management Area

The western portion of the Township outside the CAFRA Zone is part of the Pinelands Management Area. This area represents a partnership between the State and Federal government to preserve, protect and enhance the natural and cultural resources of Pinelands. The Pinelands Comprehensive Management Plan protects the region in a manner that maintains its unique ecology while permitting compatible development. The communities within the Pinelands are designated as either Pinelands Villages or Towns and allow traditional development under certain rules. The Pinelands Protection Act established a requirement that county and municipal master plans and land use ordinances be brought into conformance with the Pinelands Comprehensive Management Plan. While some of the Plan's provisions are mandatory, such as the density limitations and the requirement that growth areas accept development credits, many other aspects are intended to give municipalities resource management goals to work toward as they revise their land use regulations. The specific means chosen to meet those goals are open to negotiation between the Pinelands Commission and the local government.

The villages of Tuckahoe and Petersburg are split between the Pinelands Management Area and the CAFRA Zone. The purpose of this Smart Growth Study is to assess the boundaries of the Township's centers as part of the Plan

³³ Ibid.

³⁴ Ibid.

Endorsement process. There will be no proposed changes to the boundaries of Pineland centers although changes to the CAFRA centers will be incorporated into the NJOSG centers as part of this study.

1.10 PLANNING POLICIES PROMOTING SMART GROWTH

1.10.1 Land Development Regulations

The Township will be amending its zoning ordinance to implement the 2006 Master Plan Land Use Plan Amendment. Zoning amendments will address a multitude of recommendations of the Land Use Plan. The Town Center zones will allow for mixed use. Design standards to implement a new development paradigm within the Town Centers will be prepared to address bulk, area, coverage, setbacks and also important design standards for building facades, streetscape improvements, signage, landscaping, lighting and parking and other design features.

Design tools such as Conservation Residential Cluster and Density Transfers are recommended to further protect the Environs outside of the Centers. The Township through its Land Use Plan encourages density transfer through bonus mechanisms to be transferred into the Centers. Transfer of Development Rights ("TDR") is a possible future planning effort recommended for the Township to further support Environs protection.

111606 Existing Conditions Inventory

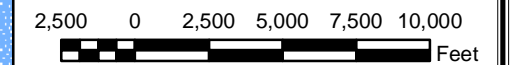
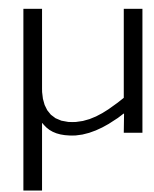
APPENDIX B MAPS

**PROPOSED 2006
PRELIMINARY
STATE DEVELOPMENT
AND
REDEVELOPMENT PLAN
- POLICY MAP -**

TOWNSHIP OF UPPER

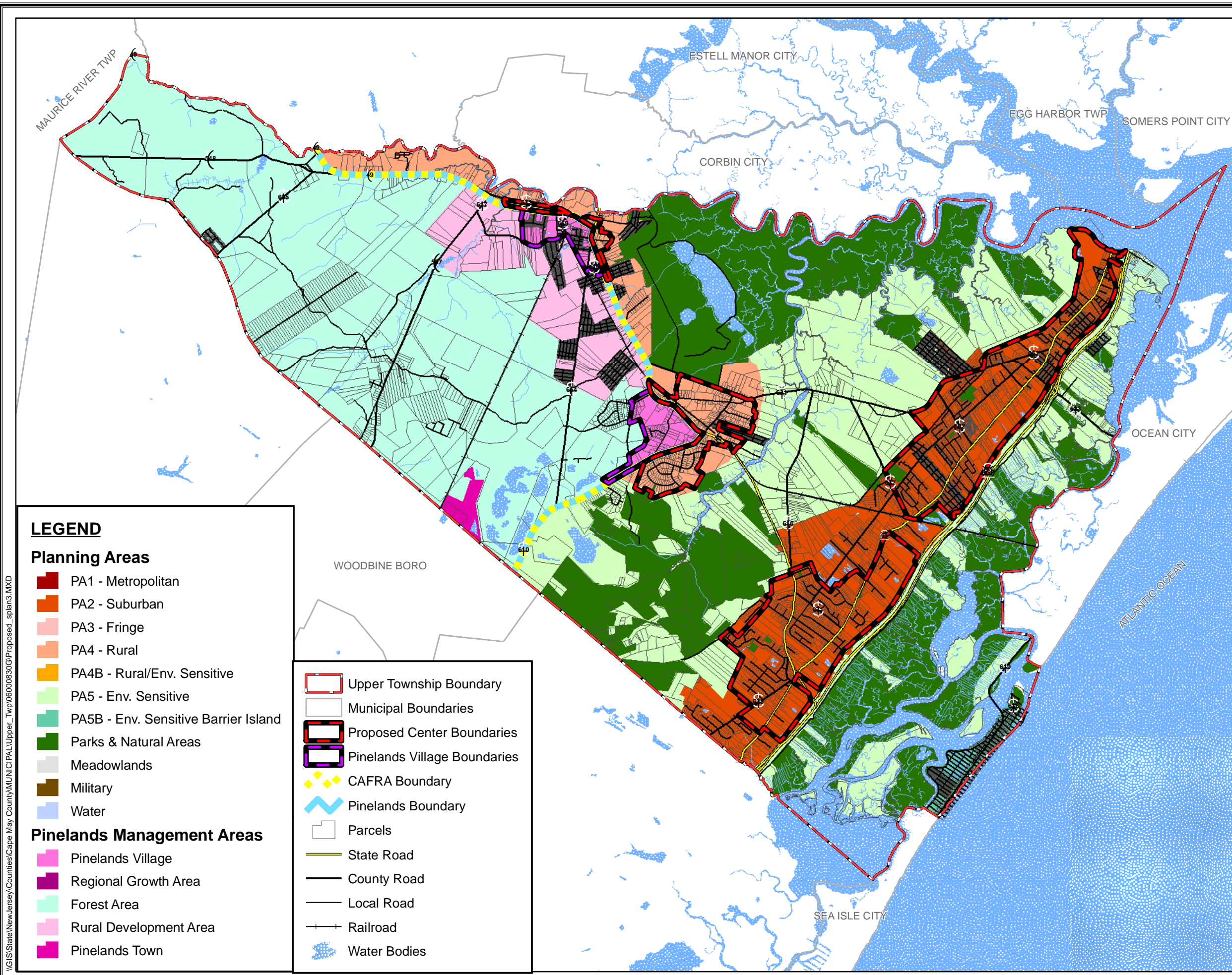
CAPE MAY COUNTY, NEW JERSEY

NOVEMBER 2006



1 inch equals 6,500 feet

DIGITAL SPATIAL DATA SOURCES:
 - CAPE MAY COUNTY GEOGRAPHIC INFORMATION SYSTEM
 - NEW JERSEY DEPARTMENT OF COMMUNITY AFFAIRS, OFFICE OF SMART GROWTH
 - NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BUREAU OF GEOGRAPHIC INFORMATION
 - UNITED STATES DEPARTMENT OF AGRICULTURE, NATURAL RESOURCES CONSERVATION SERVICES
 - NEW JERSEY OFFICE OF INFORMATION TECHNOLOGY, OFFICE OF GIS



LEGEND

Planning Areas

- PA1 - Metropolitan
- PA2 - Suburban
- PA3 - Fringe
- PA4 - Rural
- PA4B - Rural/Env. Sensitive
- PA5 - Env. Sensitive
- PA5B - Env. Sensitive Barrier Island
- Parks & Natural Areas
- Meadowlands
- Military
- Water

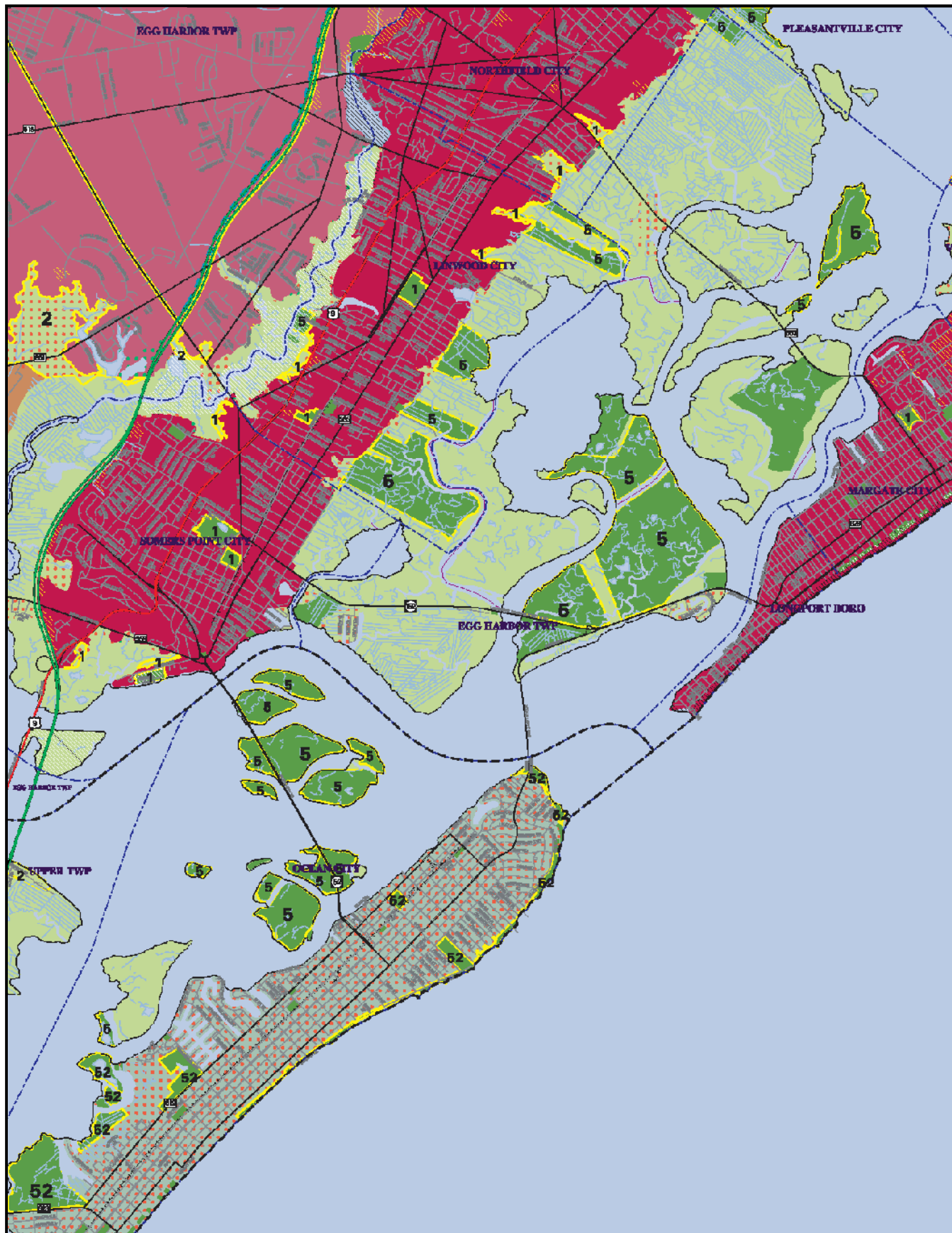
Pinelands Management Areas

- Pinelands Village
- Regional Growth Area
- Forest Area
- Rural Development Area
- Pinelands Town

- Upper Township Boundary
- Municipal Boundaries
- Proposed Center Boundaries
- Pinelands Village Boundaries
- CAFRA Boundary
- Pinelands Boundary
- Parcels
- State Road
- County Road
- Local Road
- Railroad
- Water Bodies




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UPPER TOWNSHIP PROPOSED REVISIONS TO 2004 PRELIMINARY STATE DEVELOPMENT & REDEVELOPMENT PLAN POLICY MAP



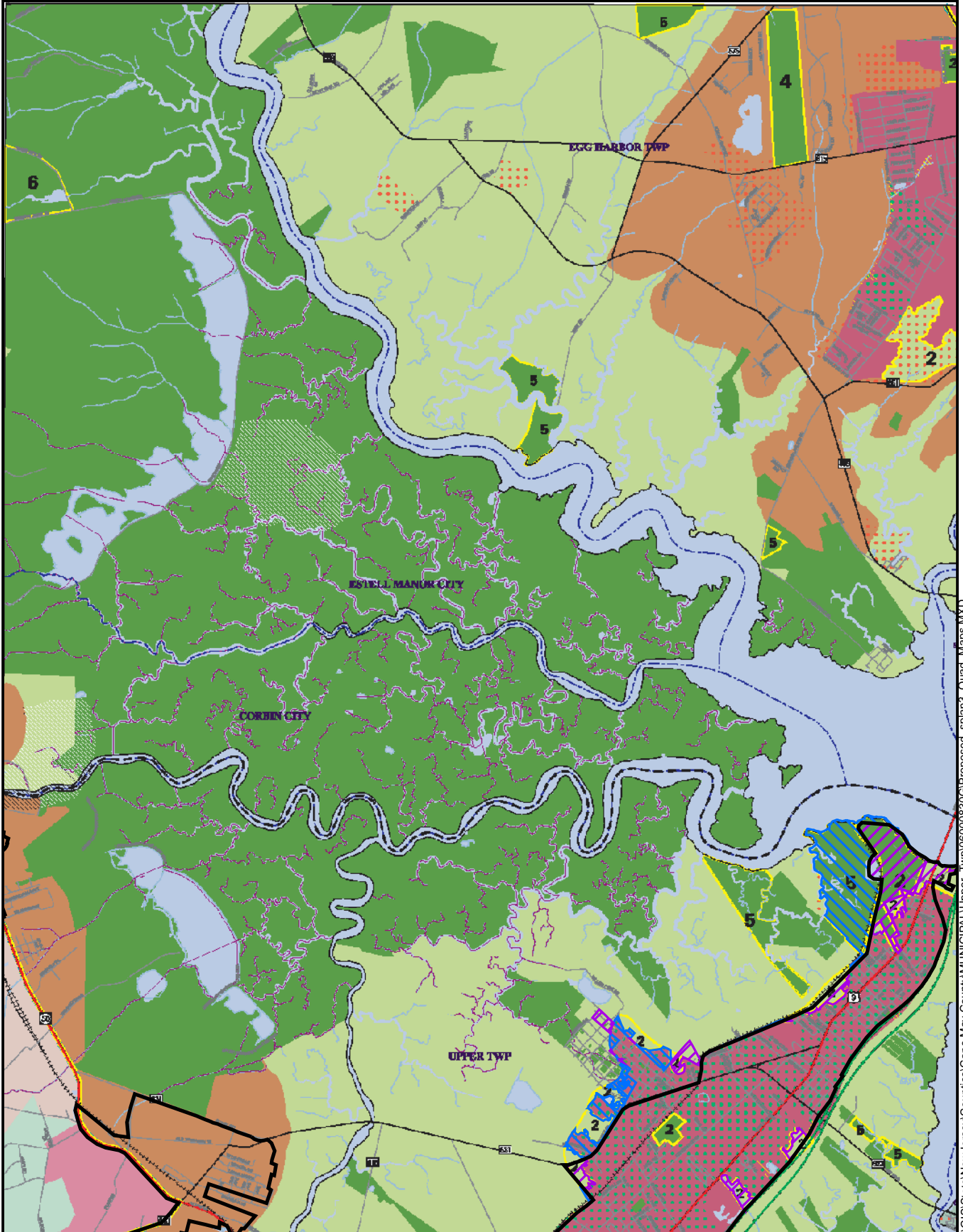
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NOVEMBER 2006
QUAD 167

Proposed Center Boudaries	Retain as PA2	Retain as PA5
		






**UPPER TOWNSHIP PROPOSED REVISIONS
TO
2004 PRELIMINARY STATE DEVELOPMENT & REDEVELOPMENT PLAN POLICY MAP**



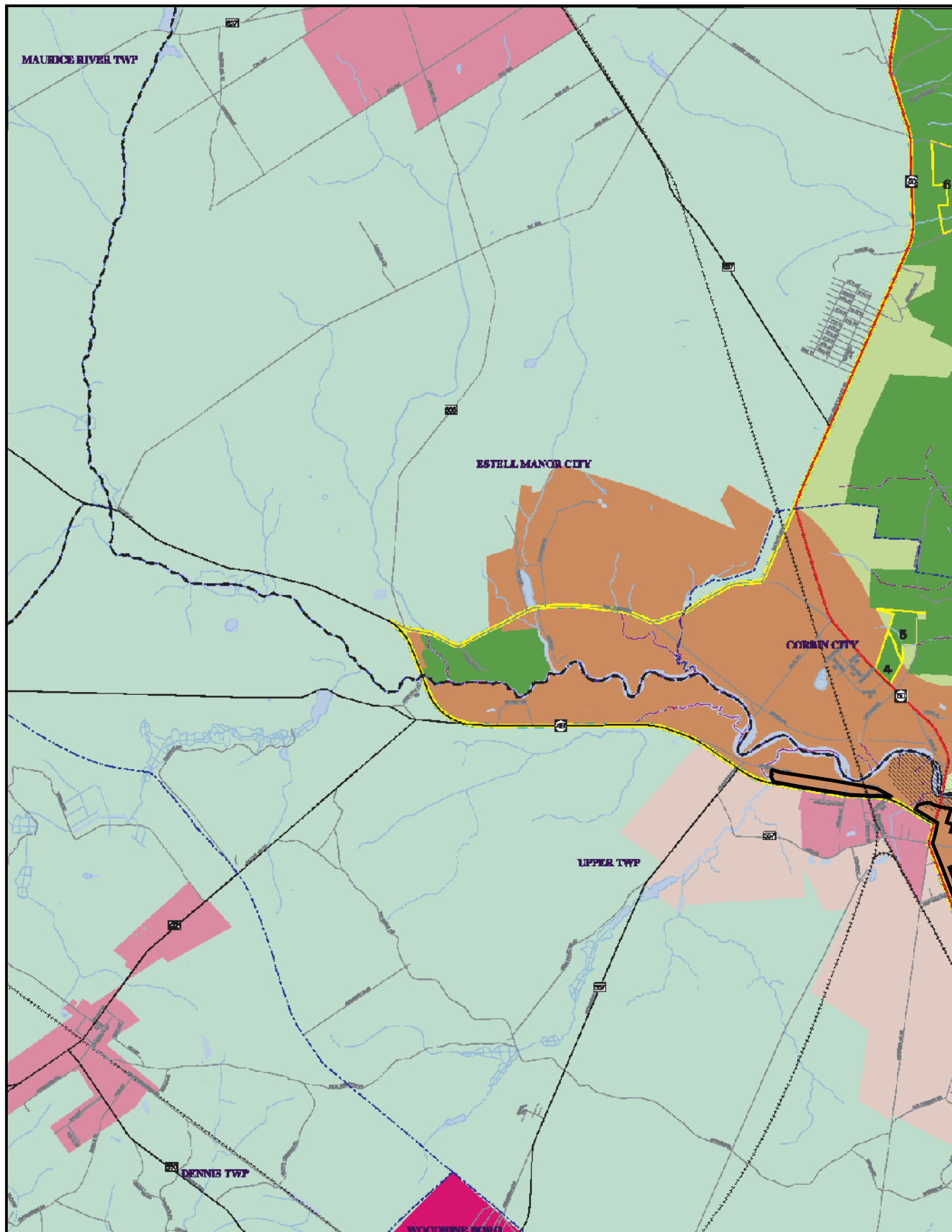
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NOVEMBER 2006
QUAD 166

Proposed Center Boudaries	Retain as PA2	Retain as PA5
		



UPPER TOWNSHIP PROPOSED REVISIONS TO 2004 PRELIMINARY STATE DEVELOPMENT & REDEVELOPMENT PLAN POLICY MAP



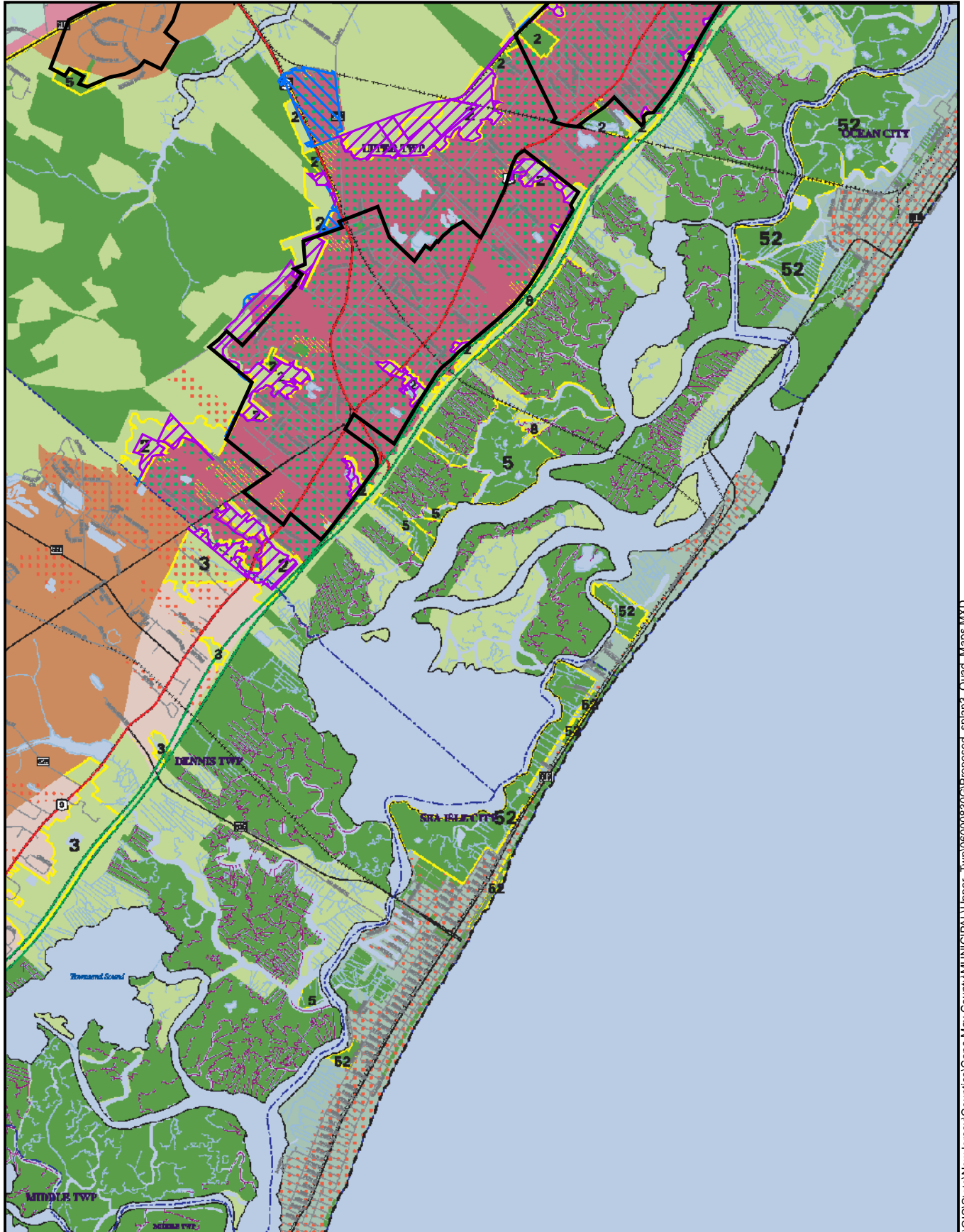
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NOVEMBER 2006
QUAD 165

Proposed Center Boudaries Retain as PA2 Retain as PA5






UPPER TOWNSHIP PROPOSED REVISIONS TO 2004 PRELIMINARY STATE DEVELOPMENT & REDEVELOPMENT PLAN POLICY MAP











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NOVEMBER 2006
QUAD 173

Proposed Center Boudaries	Retain as PA2	Retain as PA5
		



LEGEND

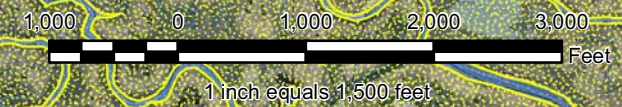
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-  Parcels
-  Water Bodies
-  Total Environmental Constraints (Wetlands & 300' C-1 Waters Buffer)
-  Proposed Township Center Boundaries
-  Expired NJDEP Coastal Center
-  Proposed Sewer Service Areas
-  Existing Water System



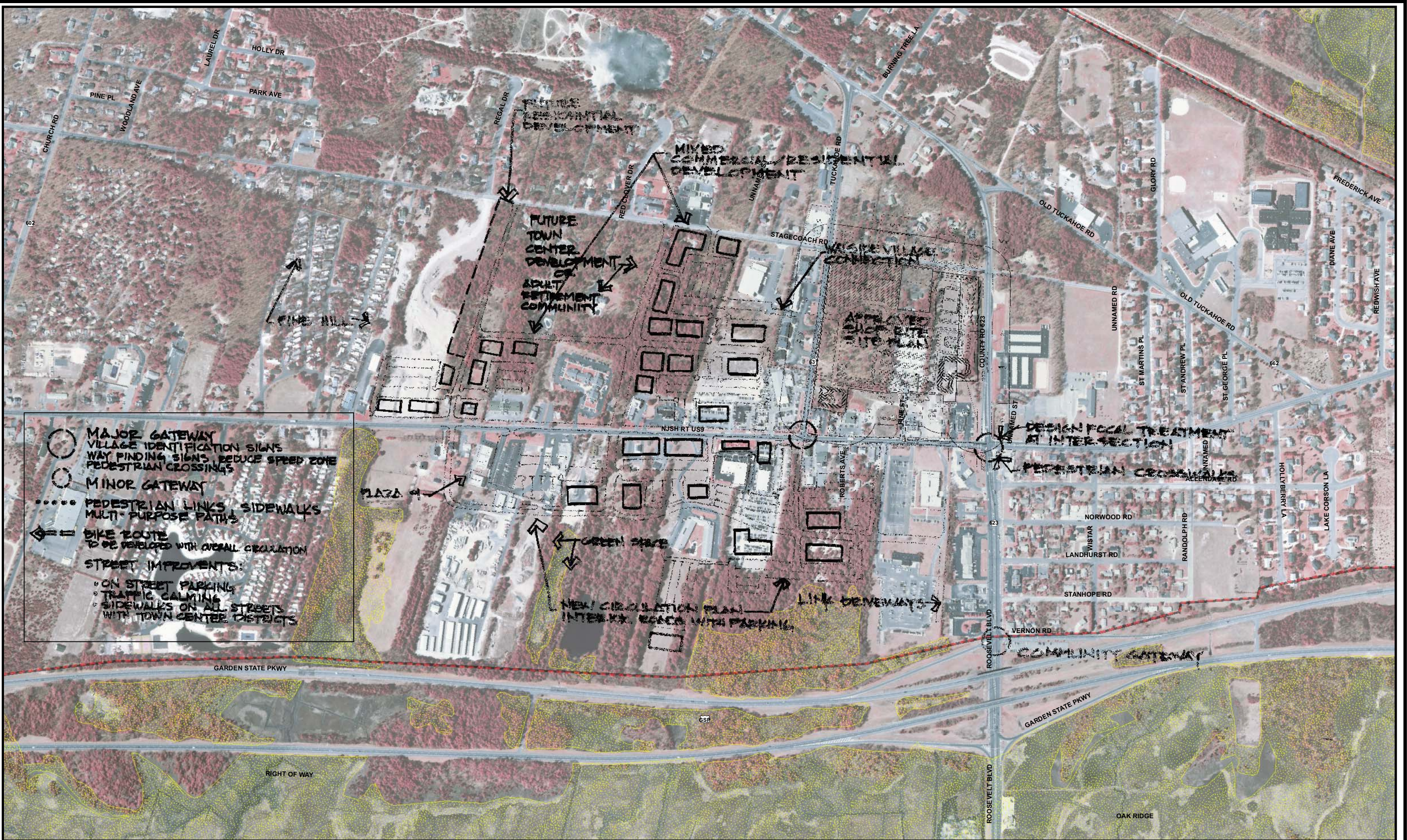
**Marmora-Palermo-Beesley's
Point Town Center**
TOWNSHIP OF UPPER
CAPE MAY COUNTY, NEW JERSEY
OCTOBER 2006



DIGITAL SPATIAL DATA SOURCES:
- CAPE MAY COUNTY GEOGRAPHIC INFORMATION SYSTEM
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- NEW JERSEY DEPARTMENT OF ENVIRONMENTAL
PROTECTION, BUREAU OF GEOGRAPHIC INFORMATION
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OFFICE OF GIS



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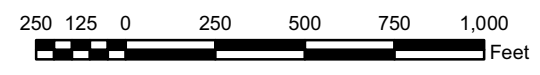
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VILLAGE IDENTIFICATION SIGNS
WAY FINDING SIGNS REDUCE SPEED ZONE
PEDESTRIAN CROSSINGS
- MINOR GATEWAY
- PEDESTRIAN LINKS SIDEWALKS
MULTI-PURPOSE PATHS
- ⇐ BIKE ROUTE
TO BE DEVELOPED WITH OVERALL CIRCULATION
- STREET IMPROVEMENTS:
 - ON STREET PARKING
 - TRAFFIC CALMING
 - SIDEWALKS ON ALL STREETS
WITH TOWN CENTER DISTRICTS



NOTE: THESE AERIAL PHOTOS ARE FROM NJDEP AND ARE DATED 2002.









Marmora Town Center
TOWNSHIP OF UPPER
CAPE MAY COUNTY NEW JERSEY



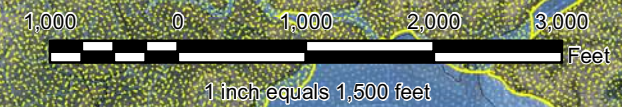
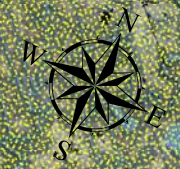
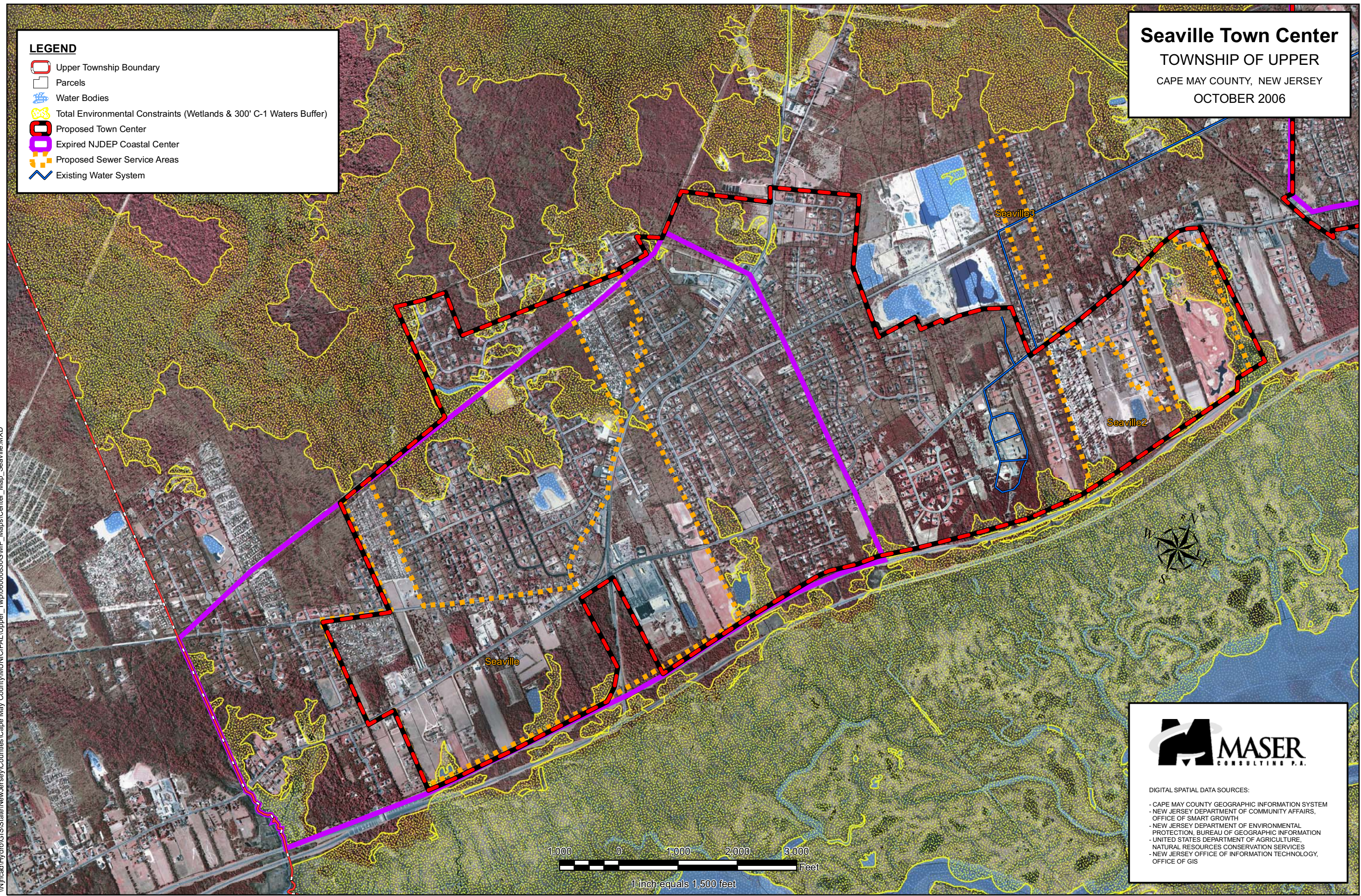
- Legend**
- Environmental Constraints
 - Proposed Center Boundary

Seaville Town Center
 TOWNSHIP OF UPPER
 CAPE MAY COUNTY, NEW JERSEY
 OCTOBER 2006

LEGEND

-  Upper Township Boundary
-  Parcels
-  Water Bodies
-  Total Environmental Constraints (Wetlands & 300' C-1 Waters Buffer)
-  Proposed Town Center
-  Expired NJDEP Coastal Center
-  Proposed Sewer Service Areas
-  Existing Water System

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- NEW JERSEY OFFICE OF INFORMATION TECHNOLOGY, OFFICE OF GIS

MAJOR GATEWAY
 VILLAGE IDENTIFICATION SIGNS
 WAY FINDING SIGNS, REDUCE SPEED ZONE
 PEDESTRIAN CROSSINGS

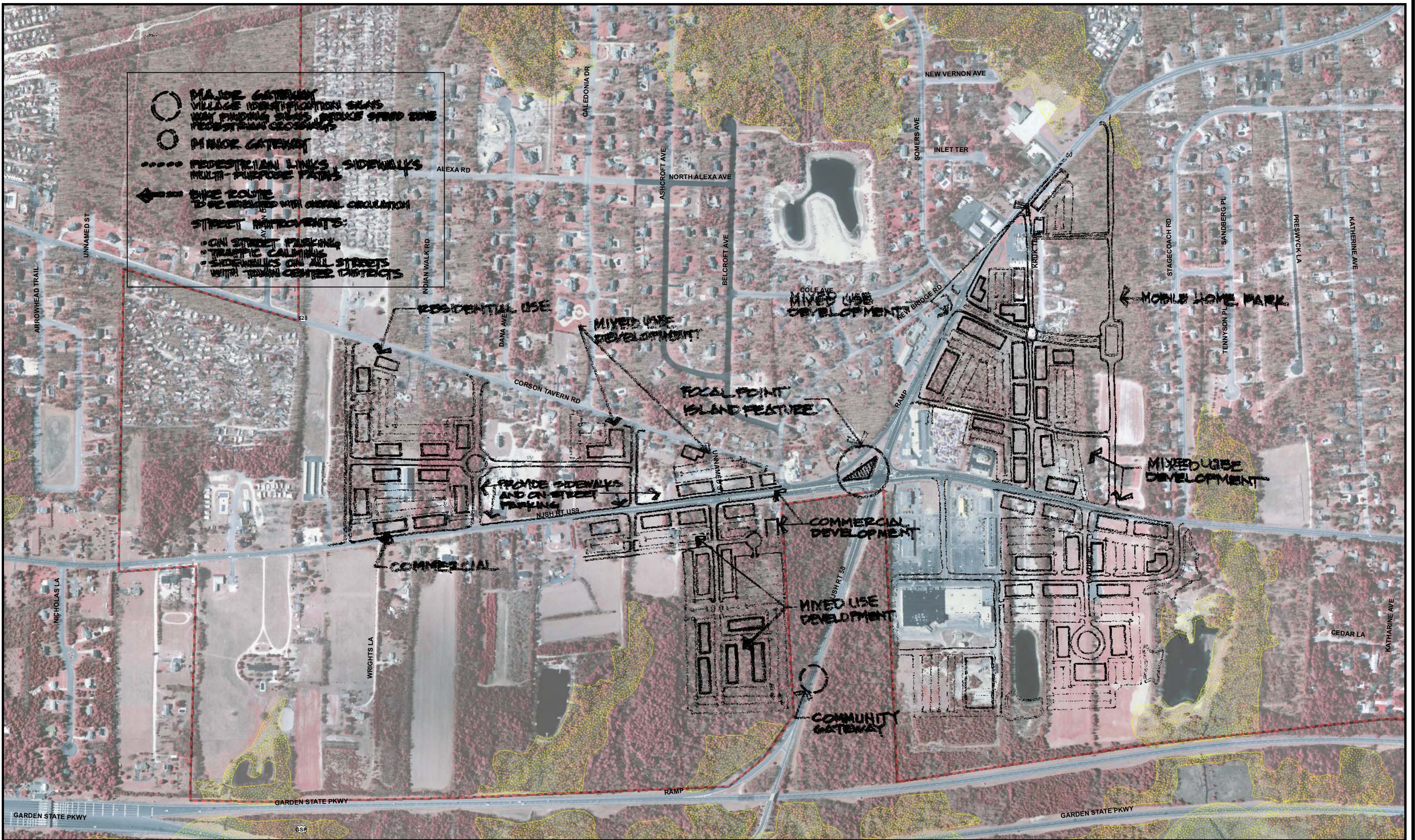
MINOR GATEWAY

PEDESTRIAN LINKS, SIDEWALKS
 MULTI-PURPOSE PATHS

BIKE ROUTE
 TO BE DEVELOPED WITH GENERAL CIRCULATION

STREET IMPROVEMENTS:

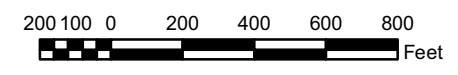
- ON STREET PARKING
- TRAFFIC CALMING
- SIDEWALKS ON ALL STREETS WITH TOWN CENTER DISTRICTS



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Seville Town Center
 TOWNSHIP OF UPPER
 CAPE MAY COUNTY NEW JERSEY









Legend

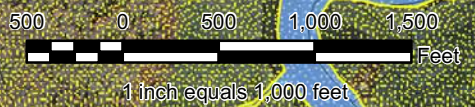
- Proposed Center Boundary
- Environmental Constraints

Petersburg Village Center
 TOWNSHIP OF UPPER
 CAPE MAY COUNTY, NEW JERSEY
 OCTOBER 2006

LEGEND

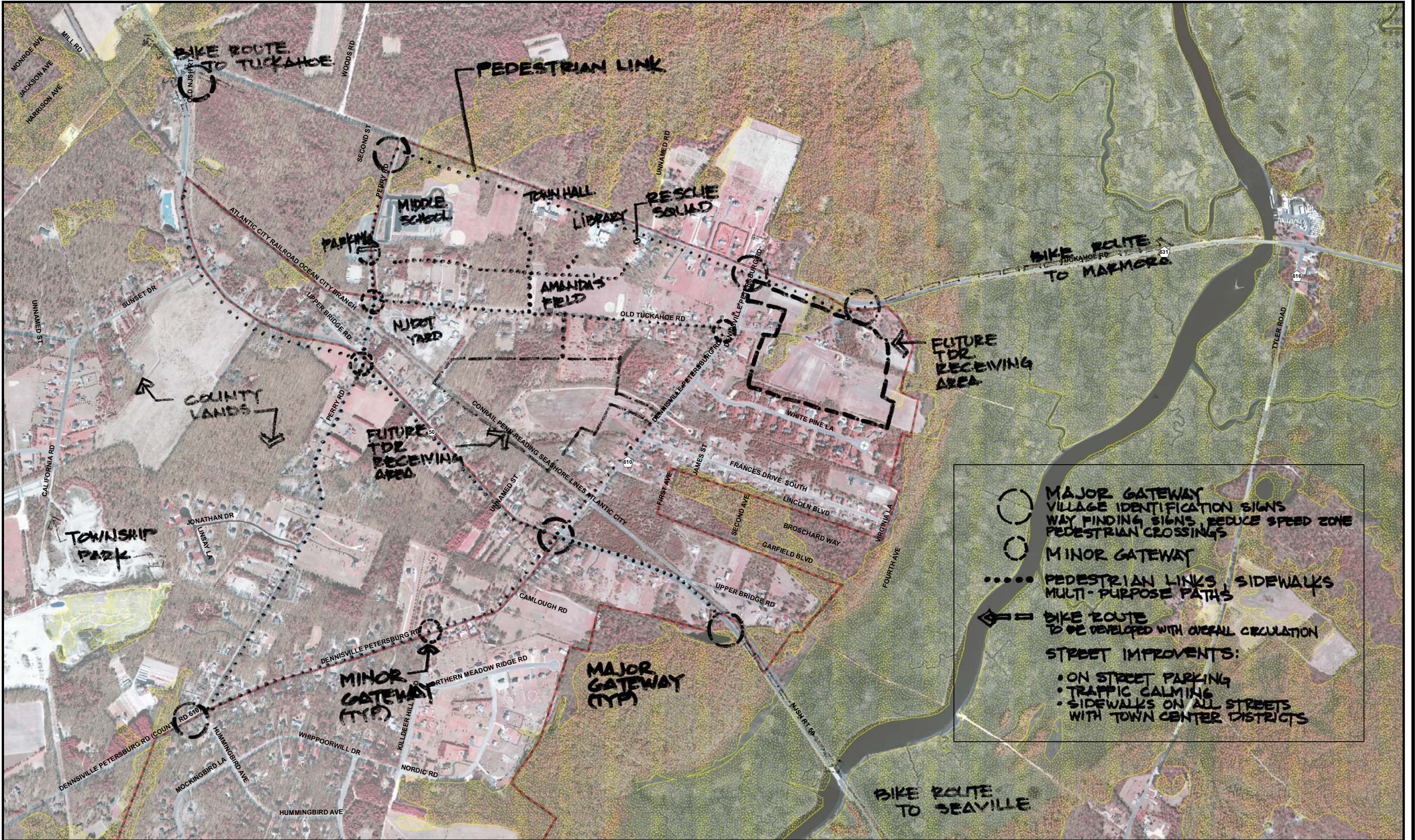
-  Upper Township Boundary
-  Parcels
-  Water Bodies
-  Total Environmental Constraints (Wetlands & 300' C-1 Waters Buffer)
-  Expired NJDEP Coastal Center
-  Proposed Township Center Boundaries
-  Pinelands Village

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MAJOR GATEWAY
 VILLAGE IDENTIFICATION SIGNS
 WAY FINDING SIGNS, REDUCE SPEED ZONE
 PEDESTRIAN CROSSINGS

MINOR GATEWAY

PEDESTRIAN LINKS, SIDEWALKS
 MULTI-PURPOSE PATHS

BIKE ROUTE
 TO BE DEVELOPED WITH OVERALL CIRCULATION

STREET IMPROVEMENTS:

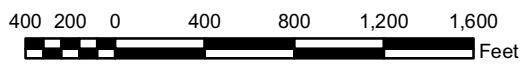
- ON STREET PARKING
- TRAFFIC CALMING
- SIDEWALKS ON ALL STREETS WITH TOWN CENTER DISTRICTS



NOTE: THESE AERIAL PHOTOS ARE FROM NJDEP AND ARE DATED 2002.



Petersburg Village Center
 TOWNSHIP OF UPPER
 CAPE MAY COUNTY NEW JERSEY



Legend

- Proposed Center Boundary
- Environmental Constraints

Tuckahoe Village Center
 TOWNSHIP OF UPPER
 CAPE MAY COUNTY, NEW JERSEY
 OCTOBER 2006



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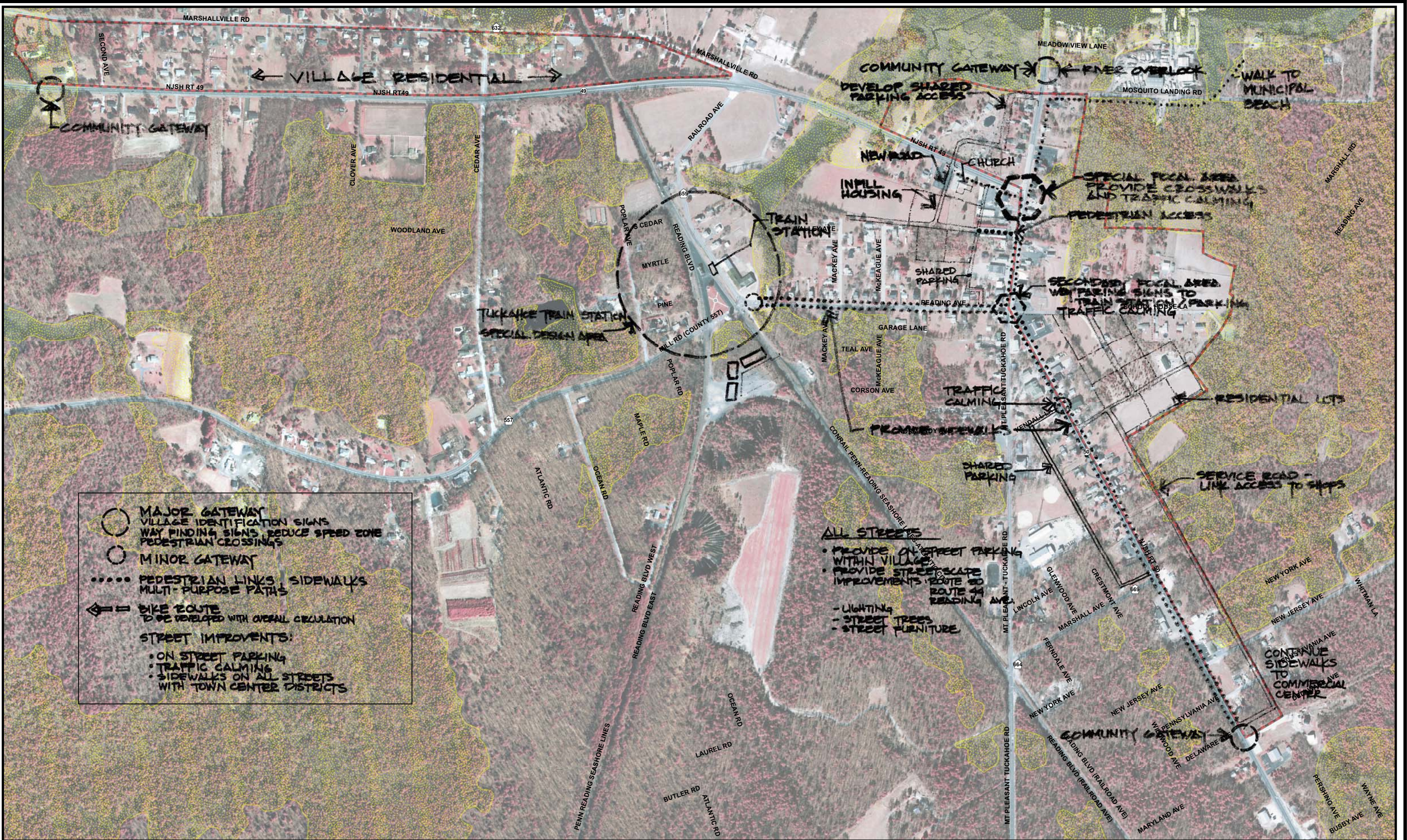
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- Upper Township Boundary
- Parcels
- Water Bodies
- Total Environmental Constraints (Wetlands & 300' C-1 Waters Buffer)
- Expired NJDEP Coastal Center
- Proposed Town Center
- Pinelands Village



DIGITAL SPATIAL DATA SOURCES:

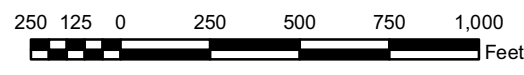
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- MAJOR GATEWAY
VILLAGE IDENTIFICATION SIGNS
WAY FINDING SIGNS REDUCE SPEED ZONE
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- STREET IMPROVEMENTS:
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 - TRAFFIC CALMING
 - SIDEWALKS ON ALL STREETS
WITH TOWN CENTER DISTRICTS

- ALL STREETS**
- PROVIDE ON-STREET PARKING WITHIN VILLAGE
 - PROVIDE STREETSCAPE IMPROVEMENTS: ROUTE 44 READING AVE
 - LIGHTING
 - STREET TREES
 - STREET FURNITURE

Tuckahoe Village Center
TOWNSHIP OF UPPER
CAPE MAY COUNTY NEW JERSEY



- Legend**
- ▭ Proposed Center Boundary
 - ▨ Environmental Constraints



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