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MERRICK WILSON and PRESIDENTIAL HILL, LLC,	: SUPERIOR COURT OF NEW JERSEY : MERCER COUNTY : LAW DIVISION
Plaintiffs,	:
THE MAYOR AND TOWNSHIP COMMITTEE OF THE TOWNSHIP OF HOPEWELL, And HOPEWELL TOWNSHIP,	: Docket No. MER-L-3597-01 : Civil Action
Defendants.	:

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ANNA GREENWOOD, MARIAN GREENWOOD, JUDY GREENWOOD ULAN, BARBARA GREENWOOD BERG & LINDA GREENWOOD, as Tenants in Common, et als.	: SUPERIOR COURT OF NEW JERSEY : MERCER COUNTY : LAW DIVISION
Plaintiffs,	: Docket No. MER-L-3594-01 : Civil Action
THE MAYOR AND TOWNSHIP COMMITTEE OF THE TOWNSHIP OF HOPEWELL, and THE TOWNSHIP OF HOPEWELL, a municipal Corporation of the State of New Jersey, located in Mercer County, New Jersey,	: JUDGMENT
Defendants.	:

The above matters having come on for trial on May 17, 18, 22, 23, 25, 30 and 31 and June 1, 6, 8 and 12, 2006 in the presence of Casale, Popp and Panzer (Charles J. Casale, Jr., Esq., appearing), attorneys for plaintiffs, and Parker McCay (Howard D. Cohen, Esq., appearing), attorneys for defendants, Mayor and Township Committee of the Township of Hopewell and the Township of Hopewell; and the Court having heard the testimony and considered the documentary evidence; and the Court having rendered an Opinion dated September 21, 2006 containing the Court's Findings of Fact and Conclusions of Law, which Opinion is attached hereto and incorporated herein by reference; and for good cause shown;

IT IS on this 3rd day of October 2006,

ORDERED AND ADJUDGED that the Complaints of plaintiffs, as amended, with respect to those claims remaining for trial be and the same are hereby dismissed with prejudice and judgment is entered in favor of the Township of Hopewell.

Linda R. Feinberg

LINDA R. FEINBERG, A.J.S.C.

OFFICE
KER, McCAY &
CUOLO, P.A.

NOT FOR PUBLICATION WITHOUT THE APPROVAL OF THE COMMITTEE ON OPINIONS

MERRICK WILSON and PRESIDENTIAL HILL, LLC, Plaintiffs, v. THE MAYOR AND TOWNSHIP COMMITTEE OF THE TOWNSHIP OF HOPEWELL, and HOPEWELL TOWNSHIP, Defendants.	SUPERIOR COURT OF NEW JERSEY LAW DIVISION-MERCER COUNTY DOCKET No.:MER-L-3597-01 CIVIL ACTION OPINION
ANNA GREENWOOD, MARIAN GREENWOOD, JUDY GREENWOOD ULAN, BARBARA GREENWOOD BERG & LINDA GREENWOOD, as Tenants in Common, et als. Plaintiffs, v. THE MAYOR AND TOWNSHIP COMMITTEE OF THE TOWNSHIP OF HOPEWELL and THE TOWNSHIP OF HOPEWELL, a municipal Corporation of the State of New Jersey, located in Mercer County, New Jersey, Defendants.	SUPERIOR COURT OF NEW JERSEY LAW DIVISION-MERCER COUNRY Docket No.:MER-L-3594-01 CIVIL ACTION OPINION

Decided: September 21, 2006

Charles J. Casale, Jr., for the plaintiffs (Casale, Popp & Panzer, attorneys; Mr. Casale, on the brief).

Howard D. Cohen, for the defendants (Parker McCay, attorneys; Mr. Cohen, on the brief).

FEINBERG, A.J.S.C.

FEINBERG, A.J.S.C.

I.

BACKGROUND

The Township of Hopewell is located in the northwestern portion of Mercer County, bordering on East and West Amwell Townships in Hunterdon County. The boundary that Hopewell shares with these municipalities is located in the Sourland Mountains, as is a portion of the boundary the Township shares with Montgomery County in Somerset County. Along the southeastern and southern boundaries, the Township borders Princeton, Lawrence and Ewing Townships in Mercer County. Its western border is the Delaware River. Interstate 95, New Jersey Route 29 and New Jersey Route 31, are highways that traverse certain portions of the Township. The Township comprises 58 square miles, or approximately 37,349 acres.

Plaintiffs challenge the validity of Ordinance 02-1268 ("Ordinance"), adopted by the Township Committee of Hopewell Township), on December 19, 2002. The Ordinance regulates, among other things, the use of land in the Valley Resource Conservation District ("VRC") and Mountain Resource Conservation District ("MRC"). In the VRC District, the minimum lot area for conventional subdivisions is six acres. The VRC District also permits lot-averaging and cluster or open lands design

subdivision development options with a minimum lot area of 80,000 square feet. Section 17-160(I)(2)(3) &(4). The MRC District provides for a minimum lot area of 14 acres for conventional subdivisions and 80,000 square feet for lot-averaging, cluster or open lands design. Ibid. All of the plaintiffs own land in either the MRC or VRC Districts.

The purpose of the MRC and VRC Districts is to implement the goals and objectives set forth in the 2002 Master Plan.

> Purpose. The purpose of these Districts is to implement the goals, objectives and principles of the 2002 Master Plan relative to protecting environmentally sensitive areas, recognizing development capacity limitations established by natural resource capabilities, maintaining the rural character and providing for sustainable development. These Districts have been designed to comprehensively address the interrelated goals of protecting groundwater quantity and quality, maintaining surface water resources, conserving the scenic rural character, addressing limiting soil condition and promoting continued agricultural use opportunities, while also providing a range of development opportunities that offer alternatives for the land owner."
>
> [Ordinance 02-1268, Section 17-160(A).]

The principal permitted uses in the VRC and MRC Districts include the following:

> Single family dwellings and conversions.
>
> Community residences for the developmentally disabled, community shelters for victims of domestic violence, community residences for

> the terminally ill and community residences for persons with head injuries.
>
> Cemetery; golf courses with accessory club house; eating facilities; tennis courts; swimming pools and similar and usual accessory structures; public library; public parks and playgrounds; municipal buildings, including school bus shelters; fire house.
>
> Farm and agricultural uses, including, as accessory uses, horse riding lessons and a farm stand offering facilities for seasonal sale of products or produce, in accordance with the Township's Right to Farm Ordinance.
>
> Model homes, as a sales office, within a residential development during the period necessary for the sale of new homes within that development.
>
> [Section 17-160.]

The Ordinance permits open lands subdivisions on tracts of 18 acres or more in the VRC District and 40 acres or more in the MRC District. The Ordinance states:

> [T]his option is intended to promote the retention of large contiguous wooded tracts and large farm tracts, and to promote the aggregations of smaller wooded and farm parcels. It is also intended to encourage and promote flexibility, economy and environmental soundness and subdivision layout and design. At least 60% of the tract, if located in the VRC District, and 75% of the tract, if located in the MRC District, is to be designated as open lands and, as a condition of approval of the development, is to be deed restricted for agricultural or conservation use. Lots qualifying as open lands are permitted a primary residence and other accessory buildings and uses. The open lands

subdivision option is subject to standards set forth in the Ordinance."

[Section 17-160(I)(2)& D-3].

Cluster subdivisions on tracts of 18 acres or more in the VRC District and 40 acres or more in the MRC District are permitted, with the minimum open space to be 60% of the total tract in the VRC District and 75% of the total tract in the MRC District. Specific standards applicable cluster subdivisions are set forth in Section 17-160(I)(3). Furthermore, lot-averaging subdivisions are permitted on tracts of 18 acres or less in the VRC District and 40 acres or less in the MRC District in accordance with standards specified in the Ordinance. Section 17-160(I)(4).

In the case of open lands, cluster and lot averaging subdivisions, the Ordinance provides that development plans for such subdivisions shall not result in a greater dwelling unit yield than if the property in question were developed as a conventional subdivision. Section 17-160(I)(2)(3) and (4). The Ordinance also provides for non-contiguous cluster developments in the VRC and MRC Districts; standards for the municipal designation of villages in the VRC District; development standards for villages in the VRC District; and grandfathering of non-conforming properties in the VRC and MRC Districts. Section 17-160(J)(K)(L) and (M).

The Merrick Wilson plaintiffs were ultimately merged in and made a part of the Greenwood matter. While the Greenwood action initially included claims by approximately fifty plaintiffs, a significant number ultimately withdrew or alternatively voluntarily dismissed their claims against the Township before the trial date. Trial of these consolidated actions took place on May 17, 18, 22, 23, 25, 30 and 31, 2006 and June 1, 6, 8 and 12, 2006. The properties are identified by block, lot and acreage on the Plaintiff Identification Chart as Properties A, B, C, E, F, G, L, O, P, Q, R, V and W respectively. The applicable plaintiff by name of owner, block, lot and acreage appears opposite the letter reference identifying that plaintiff's property.

At the request of the Township and without objection by the counsel for the plaintiffs, the court and counsel for the parties physically toured the VRC and MRC Districts in the Township on March 9, 2006 pursuant to Lazovitz v. Board of Adjustment, 213 N.J. Super 376 (App. Div. 1986). By the time the matter proceeded to trial, the claims remaining for trial in the Greenwood Third Amendment to Complaint included the following:[1]

---

[1] The Merrick Wilson plaintiffs (Docket No. MER-L-3597-01) were ultimately merged in and made a part of the Greenwood plaintiffs' Third Amendment to Complaint (Docket No. MER-L-3594-01)

Amended Second Count, alleging Ordinance 02-1268 had an improper purpose;

Amended Third Count, alleging Ordinance 02-1268 was inconsistent with the Master Plan;

Amended Fourth Count, alleging Ordinance 02-1268 was based upon an invalid Resolution of Reasons;

Amended Fifth Count, challenging Ordinance 02-1268 as arbitrary as applied;

Amended Eighth Count, alleging Ordinance 02-1268 effected an improper and regulatory taking;

Amended Ninth Count, alleging Ordinance 02-1268 violated the Federal Fair Housing Act and New Jersey Law Against Discrimination;

Amended Tenth Count, alleging Ordinance 02-1268 violated the Township's affordable housing obligations;

Amended Eleventh Count, alleging Ordinance 02-1268 was facially arbitrary and capricious.

Prior to trial, the parties entered into several stipulations. The stipulations, set forth below, were marked into evidence and are as follows:

(a) The zoning ordinances adopted in 2000 and 2001 applicable to plaintiffs' properties were superseded by Ordinance 02-1268.

(b) On May 23, 2002 the Hopewell Township Planning Board adopted the 2002 Master Plan memorialized in a Resolution dated June 13, 2002 (D-5).

(c) On September 30, 2002 the Hopewell Township Planning Board adopted the 2002 Reexamination Report memorialized in a Resolution dated October 22, 2002 (D-6).

(d) The 2002 Master Plan was the subject of public hearings on February 28, 2002, March 14, 2002, April 11, 2002 and April 30, 2002.

(e) Ordinance 02-1268 (D-3) was introduced on November 21, 2002 and public hearings on the Ordinance were held on December 9, 10, 17 and 19, 2002.

(f) Ordinance 02-1268, among its other provisions, established the Valley Resource Conservation District (VRC) and the Mountain Resource Conservation District (MRC).

(g) Creation of the Valley Resource Conservation District and Mountain Resource Conservation District were among the specific recommendations in the 2002 Master Plan.

(h) The VRC and MRC Districts are in the Rural, Rural Environmentally Sensitive and Environmentally Sensitive Planning Areas under the State Plan (D-9), PA4, PA4B and PA5 (D-9).

(i) The 2002 Master Plan was preceded by an evaluation of groundwater resources in the Township in a report dated March 2, 2001 prepared by Matthew J. Mulhall, P.G. (D-115). The Mulhall report was the subject of 3 peer reviews: Hoffman and Boyle report dated November 13, 2001 (D-141); Guswa report dated December 4, 2001 (D-142) and Milly report dated September 21, 2001 (D-143).

(j) All of the plaintiffs' properties were farmland assessed or eligible for farmland assessment for tax years 1997 through 2005, except as to Merrick Wilson, Block 75, Lot 1.02, whose property was farmland assessed

> for 1997 through 2003, but denied in 2004 through 2006 owing to his failure to make certain required submissions to continue the property's qualification for farmland assessment. This is discussed in the context of Mr. Wilson's testimony below. The farmland assessment documentation comprises D-20, 21, 22, 23, 24, 26, 125, 126, 127, 128, 129, 130, 131 and 132.
>
> (k) The Township is the recipient of Substantive Certifications from the Council on Affordable Housing (COAH) for its First and Second Round affordable housing obligations. Plaintiffs further stipulated the Township is not in violation of its Mount Laurel affordable housing requirements. The Substantive Certification documentation comprises D8, 10 and 11.
>
> [Stipulations.]

The documentary evidence offered during the proceedings is extensive. Counsel for the Township produced five, five-inch notebooks of documentary evidence; to wit, reports, diagrams, charts and tables. The Township also produced fifty-four white boards, measuring approximately forty-two inches by thirty inches, of maps, charts, photographs and tables. Plaintiffs produced fifteen exhibits. Furthermore, several of the witnesses offered testimony related to highly technical and complex scientific and environmental issues.

Plaintiffs offered the testimony of Dennis W. Hudacsko, a professional planner, Thomas Niederer, a property owner, and Merrick Wilson, a property owner. The township produced Michael

P. Bolan, a professional planner, Michael F. Sullivan, a professional planner, James Coe, a professional engineer and wastewater management planning consultant and Matthew J. Mulhall, a professional geologist and hydrogeologist.

At the close of plaintiffs' case, the Township moved for dismissal pursuant to R. 4:37-2(b). For the reasons set forth on the record, the court dismissed the amended second, third, fourth, fifth, eighth, ninth and tenth counts. The first, sixth and seventh counts were dismissed earlier with prejudice pursuant to the Stipulation of the parties. The only count remaining is the amended eleventh count of the third amended complaint facially challenging the Ordinance. The court entered an appropriate Order on May 30, 2006. For convenience, the witnesses are listed and their testimony reviewed, in chronological sequence, in the next section of this opinion.

II.

WITNESSESS

A. DENNIS HUDACSKO

Plaintiffs' first witness, Dennis Hudacsko ("Hudacsko"), is a professional planner and prepared, what is referred to as "An In General Planning Report." Written before the litigation commenced, the report does not include an as-applied analysis or an evaluation of property values. Furthermore, despite the submission of numerous expert reports prepared by township

professional and experts in anticipation of trial, the report was never updated.

Hudacsko strongly criticized the density recommendations, lot sizes and the hydrogeologic report prepared by Matthew J. Mulhall ("Mulhall"). Mulhall's report, to be reviewed later in this opinion, was part of the Township's master planning process. The Mulhall report, incorporated by reference into the 2002 Master Plan, recommended, among other things, establishment of the VRC and MRC Districts. Hudacsko is not a hydrogeologist and performed no independent hydrogeologic studies. He testified, however, that his opinions regarding recharge areas and hydrogeologic considerations fell within the scope of his analysis as a professional planner.

Challenging the lot sizes in the VRC and MRC Districts, Hudacsko cited several errors: (1) the hydrogeologic recharge calculations were premised upon a household size of 4.2 persons, rather than a household size assumption of 3.1 persons; (2) the Township did not utilize a carrying capacity analysis in fashioning the zoning for the VRC and MRC Districts; (3) the Ordinance and the underlying 2002 Master Plan are inconsistent with the State Plan; (4) if the Township's orientation was to foster farmland preservation, the Township should have done a specific assessment for water use; (5) there is no substantial relationship between Ordinance 02-1268 and what he characterized

as the water problem; and (6) there was no objective relationship between lot size and scenic value, which was among the objectives sought to be accomplished in the adoption of Ordinance 02-1268.

The "In General" report does not include: (1) photographs of the VRC and MRC Districts; (2) maps; (3) an analysis of Land Use by Property Class or Land Use/Land Cover in the Township; (3) mapping under the State Plan; (4) mapping of the VRC and MRC Districts or an analysis with respect to farmland assessment, wetlands, surface water quality, depth to seasonal high water table, depth to bedrock, agricultural soils, critical habitat, steep slopes and bedrock geology; (5) the hydrogeologic character of the bedrock beneath the Township or the hydrogeologic zones in the Township; (6) an analysis of the stream flow in the Stony Brook; (7) a hydrogeological empirical analysis of the Township; (8) a land use analysis in the VRC and MRC Districts; (9) the number of acres in each of those districts or the percentage of acreage devoted to farm use; (10) the percentage of agricultural fields, forests, wetlands and water in the VRC and MRC Districts; (11) an analysis of average lot sizes in the VRC and MRC Districts; and (12) the mapping or analysis of slopes, surface water quality, forest and grassland habitat, farmland soils, open space and preserved farmland in the VRC and MRC Districts.

The report acknowledges: (1) the absence of any public water and public sewer in the VRC and MRC Districts; (2) pursuant to established wastewater management planning principles, sewer and water infrastructure follow zoning and planning under the controlling Master Plan and Ordinance, pursuant to N.J.A.C. 7:15-5.18; (3) sewer and public water represent growth-inducing infrastructure; (4) the State Plan for the Rural, Rural Environmentally Sensitive and Environmentally Sensitive Planning Areas (PA4, 4B and 5), is to discourage growth-inducing infrastructure, except in Centers; (5) the State Plan intent for PA4, 4B and 5 is maintenance of the Environs as large contiguous areas of farmland and other environmentally sensitive lands; and (6) permitted uses in the VRC and MRC Districts are, in fact, greater than the permitted uses under the prior zoning.

B. THOMAS NIEDERER

Thomas Niederer, owns over two hundred acres of property impacted by the Ordinance and attended several of the public meetings preceding adoption of the Ordinance. A real estate broker, he did not produce any appraisals with respect to the value of his property, or the properties of any of the plaintiffs. According to Niederer, his family is presently negotiating with the Township to sell the development rights to their properties. To date, a Letter of Intent has been signed

and proposed agreements relating to that sale have been sent to his attorney by counsel for the Township. If these agreements are consummated, the issue of developing his property would be rendered moot.

Serving as spokesperson for the other plaintiffs in the Greenwood litigation, he characterized these lands as: (1) mostly farmland and farmland assessed; (2) engaged in agricultural activity; (3) containing steep slopes; (4) forested areas with wildlife; (5) having soils of statewide significance; and (6) agriculturally and environmentally sensitive. Unfamiliar with the geology, depth to seasonal high water table, depth to bedrock, depth to seasonal high water table or agricultural soils on many of the properties, he generally admitted the agricultural and environmentally sensitive character of all of the properties in the Greenwood litigation.

C. MERRICK WILSON

Merrick Wilson is the owner of three parcels in the VRC District. Block 75, Lot 1.02 has historically been used for growing crops and is leased to a tenant who currently uses the property as a horse farm. While Wilson submitted a plan for development in the late 1990's, he never made efforts to address the deficiencies in the development application or to secure an updated Letter of Interpretation ("LOI") from NJDEP. A LOI, related to the property expired in August 1998.

The record establishes the inability to pursue development of the property relates solely to the failure of Wilson to address the deficiencies in the development application. These deficiencies included, but are not limited to, failure to: (1) obtain an updated LOI; (2) make provision for recreational acreage; (3) obtain authorization for public water and sewer, even though his application was proposing utilization of cluster provisions under the former R-200 Zone, which required public water and sewer; (4) revise his plans to conform with the R-200 Zone regulations governing cluster design, even though the Township Engineer and Application Review Committee directed him to do so; (5) obtain required soil tests; (6) propose lot sizes in conformance with the Township's R-200 Ordinance; (7) submit updated well test and well-yield data; and (8) submit a required key map, signed and sealed boundary and topographic map showing all easements, profiles for drainage outside of the roadways and proposed light fixture locations.

Regarding a six-acre lot, Block 72, Lot 1.12, Wilson acknowledge the lot conforms to the minimum six-acre lot size for the VRC District where it is situated. Furthermore, a previous application to subdivide the lot into two lots had been denied by the Planning Board. The record reflects the Board denied relief on the grounds the applicant failed to submit sufficient proofs to warrant variance relief. Wilson admitted

notwithstanding the denial of the application for a minor subdivision, he was not precluded from obtaining an economic benefit associated with construction on the lot, as approved for a single-family unit. On cross-examination, he testified to owning four other lots in the same subdivision that are only two acres in size. Interestingly, he has been unable to sell those lots.

Wilson did not submit any appraisals with respect to the value of any of the properties. As to a 56 acre parcel in Block 65, Lot 1.02, he represented being unaware that, under the Ordinance, the parcel is eligible for clustering provided the criteria for clustering are satisfied. Finally, nothing in the testimony of Wilson is probative with respect to challenging the validity of the Ordinance.

Each of the plaintiffs' lay witnesses testified that the Township held several public hearings regarding the adoption of the 2002 Master Plan and the proposed Ordinance and afforded members of the public the opportunity to address any concerns.

D. MICHAEL P. BOLAN

Michael P. Bolan, an expert in planning, has served as the Township's consultant since 1999. As an overview, Bolan testified: (1) the Township is 58 square miles and comprises approximately 37,349 acres; (2) Land Use by Property Tax Class Map establishes 50% of the Township is classified as farmland,

20% as residential, 17% as public or quasi-public, with the remaining land being industrial, commercial or vacant; (3) Land Use by Land Cover Map establishes 31% of the Township as agriculture, 39% as forest, 19% as urban, 2% as water, 9% as wetlands, and 1% as barren land; (4) collectively, 11,519 acres represent agriculture and 14,441 acres represent forest, which together comprise over 69% of the total land in the Township and represent the predominant land use and land cover; (5) the forested areas in the Township are located mostly in the higher elevations in the north and northwestern portions of the Township known as the Sourland, Pennington and Baldpate Mountains; (6) these highly elevated forested areas of the Township correlate substantially to the boundaries of the MRC Zoning District; and (7) the agricultural component of the Township is located mostly in the valleys and lower elevations and correlates to the boundaries of the VRC Zoning District.

Bolan explained that the growth in the Township during the 1990's played an important role in the underlying development of the 2002 Master Plan and Ordinance. These same observations are set forth in the 2002 Reexamination Report. The concerns about uncontrolled sprawl were among the underlying planning considerations associated with controlling development in the Township's environmentally sensitive and agricultural areas

leading to the recommendation in the 2002 Master Plan for establishment of the MRC and VRC Districts.

According to Bolan, the availability of sewer played a role in the land use decisions by the Township. The Township does not have its own sewerage treatment facilities. It is undisputed the VRC and MRC Districts are not now and never were in a sewer service or public water area. Instead, wastewater treatment is handled by individual septic systems and drinking water is obtained through underground wells.

Relying on the 1978, 1985 and 1992 Master Plans, Bolan testified these plans consistently identify the presence of environmentally critical areas in a significant portion of the Township, as well as existing patterns of both agricultural and low-density development, in all but a few areas. Furthermore, the goals and objectives of the Master Plans consistently address: (1) protection of environmentally critical areas; (2) providing a range of housing types; (3) guiding more intense development to sewer service areas; (4) gearing population density to limits of water resources; (5) encouraging agriculture where appropriate and providing public facilities; and (6) coordinating open space proposals with population growth and natural resources.

The 1992 Master Plan reflects a concern to preserve farmland, agriculture and the rural character throughout the valley and

mountain areas. The plan recognized: (1) the presence of open fields; (2) wooded areas; (3) undeveloped mountain slopes; (4) farmland; 5) narrow two lane rural roads; (6) the absence of public facilities; and (7) low density of housing and population in the valley and mountain areas. The 1998 Reexamination Report recommended reduction of densities in the valley and mountain areas of the Township to reflect the rural, very low density character, steeper slopes, narrow roads and absence of public water and sewer, and to provide more flexible design alternatives for on-site development. Additionally, the 1998 Reexamination Report recommended a new Master Plan.

According to Bolan, beginning in 1999, the Township undertook a three-year master planning process that included approximately 40 public meetings of the Board. These meetings resulted in preparation of the 2002 Master Plan that included a new and refined Statement of Goals and Objectives, Land Use Element and Conservation Plan Element. Consistent with that effort, from January 25, 1999 to spring 2002, the Board held numerous meetings and secured reports from independent consultants on groundwater resources, rural conservation strategies and development scenarios. Additionally, the Board spent some 4 to 5 months developing objectives for the 2002 Master Plan.

As part of the process, the Board also requested information regarding carrying capacity and nitrate dilution. Significantly,

Bolan explained due to the absence of sewer capacity, the nitrate dilution model and carrying capacity analysis of natural resources were important considerations by the Board. Accordingly, in assessing the appropriate intensity of development to be included as recommendations in the new Master Plan, the Board expressed a strong interest to maintain lower densities in areas that did not have sewer capacity in order to insure an adequate supply of safe drinking water.

Bolan testified that, in preparing the Master Plan, the Board considered the State Plan. Particular emphasis was placed on the Rural, Rural Environmentally Sensitive and Environmentally Sensitive Planning Areas (PA4, 4B and 5), which encompass the VRC and MRC Districts. Also, the Board considered alternate development scenarios based upon reports and information conveyed by independent consultants and farmland preservation issues and strategies.

A hydrogeologic study, entitled "Evaluation of Groundwater Resources of Hopewell Township" authored by Matthew Mulhall, P.G., of M2 Associates is an empirical analysis of the Township. The report addresses the Township's geology, hydrogeologic zones, aquifer recharge, water supply and dilution of septic system contaminants. It also contains recommendations on reduction of densities in the valley and mountain areas based upon the Township's hydrogeologic characteristics. The

conclusions and recommendations are referenced in the 2002 Master Plan. The recommendations include the sustainable safe yield of water recharge areas for the dilution of wastewater and acreage needed for dependable yield of water in the Township's aquifers.

Due to the absence of sewer capacity and public water in the VRC and MRC Districts, the Township is dependent on its own groundwater resources. Also, Pennington and Hopewell Boroughs are dependent on the same groundwater resources. For this reason, water resource management was a primary concern of the Board in its master planning process. The process also included consideration of other planning issues including surface water quality, wetlands, soils, steep slopes and protection of agricultural and environmentally sensitive lands.

The 2002 Master Plan, among its 70 listed objectives, includes: (1) maintaining the rural character of the Township; (2) protecting sensitive environmental resources from destruction; (3) lowering densities in areas that rely on groundwater supplies and on-site sewage disposal to conserve available water resources and the ability of the soil and water to sustain onsite disposal; and (4) protecting biological diversity and maintenance of large contiguous tracts to preserve agriculture and environmentally sensitive lands. Based upon these goals and objectives, coupled with the data and studies

compiled regarding the character and hydrogeology of the Township, the Board commenced crafting the Land Use Plan and Conservation Plan Elements of the 2002 Master Plan.

The VRC and MRC Districts are described, at length, in the 2002 Master Plan. Both are characterized as lacking public water, public sewer, distinctly rural character, scenic vistas, wooded hillsides, agricultural fields, agricultural use, rural roadways and historic settlements. As a result, the Land Use Plan in the 2002 Master Plan made specific recommendations for all zoning districts in the Township and was not confined to just the MRC and VRC Districts. With respect to the MRC and VRC Districts, the 2002 Master Plan recommends different development options. These include conventional, clustering, lot-averaging and open lands subdivisions. It also discusses Villages and Centers and recommended criteria to establish a village within the VRC District.

The Land Use Plan element also contains recommendations for lot sizes; to wit, 6 acres in the VRC District and 13-14 acres in the MRC District. The lot sizes are based upon a variety of agricultural and environmental concerns and recommendations; including aquifer recharge areas discussed in the groundwater resources report prepared by the consultant. Bolan explained the methodology to calculate the densities in the VRC and MRC Districts by relying on the aquifer recharge numbers in the

Mulhall report (5.1 acres in the VRC District and 13.1 acres in the MRC District) and increasing the numbers to offset impervious surface coverage and other constraints.

Bolan reviewed the development options set forth in the Ordinance. The open lands zoning technique provides for the retention of 60% (VRC District) and 75% (MRC District) of the parcel for continuing agricultural or resource conservation use and limits the extent of residential development opportunities within that district to 25 to 40%, depending on the district. Open lands subdivisions are permitted on tracts of 18 acres or more in the VRC and 40 acres or more in the MRC District. This subdivision option permits an appropriate scale of development while also promoting the Township's objectives of retaining prime agricultural lands and protecting sensitive environmental features within the VRC and MRC Districts.

Similarly, provisions for clustering and lot-averaging available in the VRC and MRC Districts provide additional flexibility for landowners in meeting the zoning objectives for preservation of critical environmental resources. Cluster zoning permits a reduction in the minimum lot size in return for permanent commitments of open space areas, with the open space dedicated to either a public body or homeowners association. The clustering technique is intended to provide useful tracts of open space as a by-product of residential development. Lot size

averaging is a variation of the cluster design concept. Under this technique, the taxable status of all resulting lots is retained and any questions about the long term maintenance of dedicated open space and any related municipal responsibilities are eliminated, since all properties remain within private ownership.

Pursuant to the Township's Health Department regulations, lot sizes cannot be smaller than 1.84 acres. This minimum lot size, which roughly corresponds to 80,000 square feet as the permitted lot size under Ordinance 02-1268 applicable to the open lands, cluster and lot averaging subdivision options is based upon considerations associated with soil quality, depth to bedrock, slopes and seasonal high water characteristics of the Township and their relationship to septic suitability. To fully promote the objectives of the 2002 Master Plan, lot size averaging was limited to lots of 18 acres or smaller in the VRC and lots of 40 acres or smaller in the MRC Districts.

Bolan testified the MRC and VRC Districts are consistent with the State Plan's intent for its Rural, Rural Environmentally Sensitive and Environmentally Sensitive Planning Areas, PA4, 4B and 5. Furthermore, Bolan spent a considerable amount of time to explain the concepts of Environs and Centers discussed and defined in the State Plan. Marshalls Corner, located in the VRC District, is an identified Center in the

State Plan. The Township adopted Ordinance 05-1361 and Ordinance 04-1325 designating Marshalls Corner as a Village, now renamed Hamlet. These ordinances provide for higher density housing and community wastewater treatment systems to service wastewater. Although the State Plan includes Titusville and I-95 as Centers, neither is in the VRC or MRC Districts.

The 2002 Reexamination Report made specific density recommendations for lot sizes in the MRC and VRC Districts for conventional, open lands, lot averaging and cluster subdivisions. The 2002 Master Plan also included specific recommendations for non-contiguous development opportunities and the transfer of development rights to areas of concentrated development.

To further illustrate the characteristics of the VRC and MRC Districts, the Township presented a Photographic Tour and Key Map and photographs corresponding to locations shown on the key map. Bolan represented the photographs demonstrate the rural character of the VRC and MRC Districts and the predominance of open fields, farms, ponds, streams, wetlands, rural roads and scenic vistas. This photographic tour largely replicates the tour taken by the Court and counsel on March 9, 2006.

A few subdivisions located in the VRC and MRC Districts; to wit, Hunters Ridge Drive, Harbourton Ridge, Long Way and

Rosedale Way, were visited by the Court and counsel on the March 9, 2006. Bolan explained these subdivisions were built in the 1980's and are grandfathered under Ordinance 02-1268. Collectively, these subdivisions comprise less than 1% of the total land area in the VRC and MRC Districts.

The Ordinance, specifically Section 17-160 governing the VRC and MRC Districts, outlined in the Master Plan, is designed to protect environmentally sensitive areas, recognize development capacity, limitations established by natural resource capabilities, maintain the rural character and provide sustainable development. Bolan explained the concept of recharge areas and nitrate dilution. Utilizing the recharge area calculations done by Mulhall in the groundwater evaluation report, Bolan reviewed the maximum lot coverage the ordinance permitted (VRC-10% and MRC-6%) and added those, in relation to each district, to account for water that was not capable of being recharged through impervious surfaces. This resulted in a calculation of 5.61 acres for the VRC District (rounded to 6 acres because of farmland assessment considerations) and 13.6 acres in the MRC District (rounded to 14 acres).

The Ordinance provides for non-contiguous cluster development in Section 17-160(J). Non-contiguous cluster development permits a land owner to transfer development potential from its property in the VRC and MRC Districts to an

area designated as a Village or Hamlet. There is a double density bonus for utilizing this option (VRC-3 acres per unit and MRC-7 acres per unit). This option contemplates a private market exchange between a landowner in a hamlet and a landowner in the MRC or VRC District. Section 17-160(K) contains criteria governing designation of a hamlet or village in the VRC District.

According to Bolan, these criteria include, among other things, a lot's location to other residential developments, wastewater disposal capacity, mix of woodland and open fields and location over the Passaic/Stockton formation. Because of water resource concerns, based upon the groundwater evaluation report, villages now renamed hamlets under Ordinance 04-1325 are only permitted in the VRC District. Development, however, can be transferred from the MRC to a hamlet in the VRC.

Ordinance 02-1268 contains a grandfather provision protecting non-conforming properties in the MRC and VRC Districts in Section 17-160(M). Furthermore, Ordinance 02-1268 and the underlying 2002 Master Plan, include 6 other residential districts and 12 non-residential zoning districts in the Township, in addition to the MRC and VRC Districts, consistent with recommendations in the Master Plan. The residential districts permitted, in addition to the VRC and MRC Districts, include the R150, R100, R75, R50, R5 and R6

Districts described in Section 17-159. The non-residential districts are described in Sections 17-161 through 17-170. The zoning districts provided under Ordinance 02-1268 are shown on the Zoning Map.

Recognizing the Master planning process under N.J.S.A. 40:55D-89, as an on-going process predicated on a multi-year work program, Bolan noted the work program includes a series of optional master plan elements. With respect to those optional plan elements, identified in the 2002 Master Plan, several have been completed. These include the Circulation Plan Element, Open Space and Recreation Plan, Farmland Preservation Plan, Community Facilities Plan Element, now in process, Utility Services Element, awaiting NJDEP approval of a Wastewater Management Plan Amendment, revised Housing Plan Element for the Third Round and Historic Preservation Element.

As to the Land Use and Conservation Plan Elements referenced in the 2002 Master Plan recommendations, the following has been completed:

> The Zoning Map was amended to comply with the recommended classification and boundary changes to the zoning districts through the adoption of Ordinance 02-1268 (D-3) and adoption of the Zoning Map (D-4 and D-118F);
>
> The development regulations were amended to incorporate the bulk standard recommendations in the Master Plan for the VRC and MRC Districts (D-3);

> The Township developed regulations incorporating new development standards for the VRC and MRC Districts for open lands, clustering and lot averaging in those districts in accordance with recommendations in the 2002 Master Plan;
>
> Development regulations incorporating development standards and delineation criteria for the village development option including mechanisms to transfer development potential from contiguous and non-contiguous parcels as per recommendations of the 2002 Master Plan were incorporated in Ordinance 02-1268;
>
> Non-residential development regulations were incorporated in Ordinance 02-1268 consistent with the recommendations in the 2002 Reexamination Report and 2002 Master Plan.

Bolan testified the Ordinance is substantially consistent with the 2002 Master Plan and 2002 Reexamination Report. Furthermore, the Zoning Map and a chart listing Residential Zoning Districts by Area, a chart listing Residential Zones and Permitted Densities, and Table 11 in his report listing Nonresidential Zoning Districts by Area, demonstrate the Township offers a wide range of development opportunities.

As to the State Plan, Bolan determined the VRC and MRC Districts coincide with State Planning Areas 4, 4B and 5 and further advance the policies, goals and objectives of the State Plan. Bolan explained that Environs are areas located outside Centers where growth is discouraged. He characterized the VRC

and MRC Districts as comprising the Environs of PA4, 4B and 5.[2] The intent for Planning Areas 4, 4B and 5 is to maintain the Environs as large contiguous areas of farmland. This is consistent with promoting agriculture, protecting rural character, and limiting sewer and public water to Centers.

In addition to consistency with the Master Plan and other State plans, the VRC and MRC Districts are contained in the Mercer County Agriculture Development Area, established by the Mercer County Agriculture Development Board pursuant to the Agriculture Development and Retention Act, N.J.S.A. 4:1C-11. Agricultural Development Areas are areas prioritized for agricultural activity and for farmland preservation funding. Furthermore, the 2002 Master Plan is consistent with Mercer County's Growth Management Plan and the Master Plans of surrounding municipalities.

Consistent with the Municipal Land Use Law ("MLUL"), Bolan concluded the VRC and MRC Districts advance nine purposes. N.J.S.A. 40:55D-2(a)(b)(c)(d)(e)(g)(h)(i)& (j). This includes protection of environmental resources, protection of groundwater quantity and quality and surface water resources; establishment of appropriate population densities in concentrations contributing to the well-being of persons and

[2] While the Township has made provision for a Center in Marshalls Corner in the VRC, the State Plan does not mandate Centers.

preservation of the environment; conservation of valuable natural resources; prevention of urban sprawl and degradation of the environment through improper use of land; conservation of scenic rural character and the promotion of a desirable visual environment through creative development techniques; such as open lands, clustering and lot size averaging options available in the VRC and MRC Districts. The VRC and MRC Districts also encourage continued agricultural use and opportunities that, together with the preservation of natural and scenic resources, advance retention of open space.

Bolan testified the VRC and MRC Districts are also consistent with the State and County planning goals and objectives (where the VRC and MRC Districts are in the Limited Growth/Agricultural Area) under the County Growth Management Plan and are within the Rural, Rural Environmentally Sensitive and Environmentally Sensitive Planning Areas, PA4, 4B and 5 under the State Plan. As a result the Ordinance advances purpose (d) under the MLUL by taking steps to insure the development of individual municipalities do not conflict with the development and general welfare of the County and State.

Lastly, Bolan testified the VRC and MRC Districts preserve natural and scenic resources, open space and farmland and are beneficial to the public health, safety and general welfare. Accordingly, the Ordinance advances purpose (a) under the MLUL.

Furthermore, the characteristics of plaintiffs' properties, as shown, described and mapped, demonstrate these are well-suited to inclusion in the VRC and MRC Districts.

Bolan rejected the opinion of Dennis Hudascko that the reduction in density in the VRC and MRC Districts is not the least onerous means of achieving their public purposes. Importantly, Bolan noted the rezoning was not the only technique recommended by the Master Plan and adopted by the Township. He explained, at length, the different development options. Open lands zoning is patterned after the objectives of the State Plan and provides for the retention of the substantial majority of a parcel for continuing agricultural or resource conservation use, limiting the residential development to no more than 20-40% of the tract, depending on the district. In this way, the "sprawl factor", while not entirely eliminated, is dramatically reduced, enabling permanent preservation and conservation of major portions of the natural and agricultural landscape.

The open lands zoning permits property owners in the VRC District a density of approximately 1 unit per 6 acres, provided that a substantial remainder (60-75% of the parcel) is permanently deed restricted against future residential use and remains available for agricultural or other resource conservation uses. Minimum lot sizes were established to assure an adequate site for a home, septic system and accessory uses,

but small enough so that the open space ratios can be provided. The Township's objective for open lands is that these natural systems are agricultural management units, are retained in sufficient area and with all vital components to support continued healthy functioning. Two other development options, clustering and lot averaging, are also available in the VRC and MRC Districts at the same densities as with the open land zoning option and thus are designed to further advance the Township's objectives to protect and preserve critical resources.

Bolan testified the Township has an active open space and farmland acquisition program and, in cooperation with County and local non-profits, in the purchase of agricultural easements. The 2004 Open Space and Recreation Plan documents 5,845 acres of State, County and Township open space have been maintained. Another 1,443 acres are under the jurisdiction of semi-public groups such as the Stony Brook Millstone Watershed Association, Delaware and Raritan Greenway and Friends of Hopewell Valley. Conservation easements are also important tools in the preservation of significant agricultural and open space areas. The Township has over 3,000 acres of conservation easements and over 1,200 acres of preserved farmland.

Bolan also rejected Mr. Hudacsko's assertion that the reduction in density is based upon abandonment of existing, planned or potential infrastructure and substitutes a

computation of groundwater capabilities for development carrying capacity. Bolan testified the VRC and MRC Districts have never been in a sewer service area or program for public water supply. Therefore, the opinion concerning abandonment of prior policy relying on public water/sewer is without factual foundation since no prior policy ever existed.

E. MICHAEL F. SULLIVAN

Michael F. Sullivan, a professional planning expert, was retained by the Township to conduct an independent planning evaluation of the VRC and MRC Districts. The analysis included the character of the land in the VRC and MRC Districts; the physical conditions, natural resources, lot size and land uses within those districts. The MRC District is the hilliest part of the Township and contains very narrow windy rural roads. The more steeply sloped areas are forest and wooded with occasional openings of farm fields. There are scattered and sporadic sections of single and two lot developments that exist within that district.

The VRC District contains the same characteristics of the MRC District, except it is less steeply sloped. Sullivan described the roads as narrow agricultural roads, except for Route 31. The predominant land cover consists of agricultural fields. Sullivan described the VRC and MRC Districts as rural and agricultural. The predominant land use in the VRC District

is agriculture, representing over 52% of the land. The MRC District is also comprised predominantly of agricultural lands, with over 53% of land falling in that category. The most prevalent land use in the VRC and MRC Districts is agriculture with residential uses covering less than 20% of those districts.

Sullivan reviewed the Land Use by Property Class. As to the VRC District, vacant lands occupy 618 acres or 3.8%; residential occupies 3,068 acres or 18.6%; farm use occupies 8,422 acres or 51.2%; commercial occupies 291 acres or 1.8%; industrial occupies 98 acres or 0.6%; railroad occupies 91 acres or 0.6%; public occupies 3,698 acres or 22.5% and quasi-public occupies 168 acres or 1.0%. The total acreage in the VRC District is 16,454 acres.

Referring to Land Use by Property Class in terms of acreage and percentages in the MRC District, Sullivan represented vacant land occupies 483 acres or 3.8%; residential occupies 2,182 acres or 17.1%; farm use occupies 6,862 acres or 53.7%; commercial occupies 75 acres or 0.6%; industrial occupies 26 acres or 0.2%; railroad occupies no acres or percentage; public occupies 3,137 acres or 24.5% and quasi-public occupies 20 acres or 0.2%. The total acreage in the MRC District is 12,785 acres. He also analyzed Land Use by Property Class in terms of acreage and percentage in the other zones of the Township.

Vacant occupies 1,102 acres or 15.8%; residential occupies 2,783 acres or 40%; farm use occupies 569 acres or 8.2%; commercial occupies 520 acres or 7.5%; industrial occupies 1,390 acres or 20%; railroad occupies 19 acres or 0.3%; public occupies 214 acres or 3.1% and quasi-public occupies 360 acres or 5.3%. The other zones comprise 6,964 acres.

Sullivan testified agricultural lands, crop lands or pasture lands are fairly prevalent throughout the Township. The MRC District has large contiguous areas of forest and the VRC District contains scattered areas of contiguous forest and a patchwork of forest cover in-between agricultural fields, which predominate in that district. He concluded 84.3% of the VRC District and 89.2% of the MRC District is comprised of lands that are classified as agricultural fields, forest, wetlands and water. In contrast, these same features make up only 54% of the other collective zoning districts in the Township.

Sullivan also mapped and analyzed lot sizes in the VRC and MRC Districts and determined the average lot size is 12 acres in the MRC District and 10 acres in the VRC District. The majority of lots within each of those districts exceed the minimum lot size requirements established by Ordinance 02-1268. In the VRC District over 81% of the lots are larger than 6 acres (qualifying them for lot averaging) and 71% are larger than 18 acres (qualifying them for clustering and open lands

development). In the MRC District, over 73% of the lots are larger than 14 acres (qualifying them for lot averaging) and 50% are larger than 40 acres (qualifying them for clustering and open lands development).

Sullivan testified the slopes and topography in the VRC and MRC Districts, demonstrate the MRC District encompasses the largest amounts of steep slopes and there is a rational relationship between the presence of steep slopes and the boundaries of the MRC District. These steep slopes have high levels of erosion and present more difficulty in establishing vegetation. He also noted, from a planning standpoint, it is costly and difficult to extend infrastructure to these areas.

Sullivan also analyzed and mapped surface water quality features in the VRC and MRC Districts. He noted: (1) the Township has two C-1 stream sub-watersheds located predominately within the VRC and MRC Districts; (2) the trout maintenance watersheds within the Township are located primarily in the VRC and MRC Districts; (3) the C-1 streams run throughout the VRC District and that trout maintenance streams flow through the MRC District; (4) unclassified streams that run through the VRC and MRC Districts and in other districts of the Township; (5) the streams in the Township are classified as headwaters, meaning that they are the beginning points of stream flow; (6) the Township was very specific in its policies

regarding preservation of water quality in its master planning documents; (7) headwaters are particularly sensitive to any type of contamination because they are at the beginning of streams and have less water quantity to dilute contaminants; (8) the VRC District encompasses 72% of the Township's C-1 watershed and 19.5% of the trout maintenance watershed areas; and (9) the MRC District contains 65% of the Township's total trout maintenance watershed area.

Sullivan also examined and mapped high priority forest and grassland habitat and high priority wetland habitat. He noted: (1) that 10,700 acres of high priority grassland are located in the VRC and MRC Districts, representing 90% of such grassland habitat in the Township; (2) 93% of the Township's high priority forest habitat was located in the VRC and MRC Districts; and (3) there are 1,297 acres of high priority wetland habitat within the VRC and MRC Districts.

Sullivan also analyzed and mapped farmland soils in the VRC and MRC Districts and explained terms "prime farmland soils" and "farmland soils of statewide importance" as defined by the United States Department of Agriculture. He found prime farmland soils and soils of statewide importance comprise over 87% of the VRC District and 60% of the MRC District. Both of these districts contain an abundance of agricultural soils supporting the policies underlying the establishment of these

districts contained in the 2002 Master Plan and implemented in Ordinance 02-1268.

Sullivan concluded the VRC and MRC Districts exhibit: (1) a predominantly agricultural land use, undeveloped land cover and agricultural land cover; (2) are predominated with important surface water resources and agricultural soils; (3) contain most of the undeveloped or agricultural land in the Township; and (4) encompass the natural resources and environmental features that the Township's policies underlying establishment of the VRC and MRC Districts are designed to protect and conserve.

Sullivan testified the Ordinance advances numerous purposes of the MLUL, more specifically, N.J.S.A. 40:55D-2, including purposes (a) (b) (c) (d) (e) and (j). The 2002 Master Plan addresses protection of environmental resources and, in particular, protection of groundwater quantity and quality, and surface water resources, is a primary goal of the VRC and MRC Districts. As such, the zoning in those districts directly serves to advance N.J.S.A. 40:55D-(e), which promotes the establishment of appropriate population densities that contribute to the preservation of the environment. These districts also advance N.J.S.A. 40:55D-2(j), which promotes the conservation of open space and prevention of urban sprawl and degradation of the environment.

Sullivan further testified another goal for the VRC and MRC Districts in the 2002 Master Plan is conservation of scenic rural character to promote a desirable visual environment through creative development techniques. Such techniques include open lands, clustering and lot averaging development options recommended in the 2002 Master Plan and implemented in Ordinance 02-1268. Additionally, the VRC and MRC Districts promote continued agricultural use and opportunities that, together with preservation of natural and scenic resources, result in retention of open space. This is consistent with the MLUL, by providing for open space, and sufficient space and appropriate locations for agricultural, residential and recreational uses and open space according to their respective environmental requirements. N.J.S.A. 40:55D-2(c)(g).

Lastly, the goals and objectives of the 2002 Master Plan and 2002 Reexamination Report are met. The MLUL seeks to encourage municipal action in a manner that will promote the public health, safety, morals and general welfare. According to Sullivan, the VRC and MRC Districts represent an appropriate response to the underlying physical characteristics documented within their boundaries.

Sullivan concluded the VRC and MRC Districts directly help to implement policy objectives outlined in the 2002 Master Plan Statement of Goals and Objectives. That Statement includes the

general categories of Land Use and Management, Community Design, Natural Resources, Agriculture and Historic and Cultural Resources, among others. As to the off-tract cluster option permitted, this option permits a transfer of development potential from undeveloped lands in the VRC and MRC Districts to a municipally designated Village located within the VRC District.

To encourage the transfer of development, the Ordinance allocates development potential at a higher density than is permitted for conventional residential development within each district with one dwelling unit per three acres allocated for land within the VRC District and one dwelling per seven acres allocated for land within the MRC District. The non-contiguous cluster development option permitted under the Ordinance is contained at Section 17-160(J). Standards governing municipal designation of Villages in the VRC District are set forth in Section 17-160(K).

Sullivan testified the non-contiguous cluster development option is a very innovative development technique, endorsed by the State Plan. It permits land preservation to occur while shifting what otherwise would be developed into areas where high density is incurred. He testified this option advances the goals, policies and objectives of the 2002 Master Plan because it fosters preservation of farmland, woodlands, steep

slopes and stream corridors while permitting development in areas better suited to handle such development.

Sullivan also noted the non-contiguous cluster development option is consistent with recommendations in the 2002 Master Plan Reexamination Report and County Plans. The VRC and MRC Districts fall within the area that the Mercer County Growth Management Plan identifies as a "Limited Growth Area." Both the VRC and MRC Districts do not envision large scale growth or the introduction of infrastructure. This is consistent with the intent of the "Limited Growth Area" under the County Plan. He concluded the VRC and MRC Districts are consistent with the Mercer County Growth Management Plan and the County's 1992 Open Space and Recreation Plan.

As to consistency with the State Plan, Sullivan represented the goals and objectives of the VRC and MRC Districts are substantially consistent with Statewide Policies and the Planning Area policies of PA4, 4B and 5 under the State Plan and the State Plan Policy Map. The VRC and MRC Districts fall within Planning Areas 4, 4B and 5. The State Plan's intent and policy for these planning areas is to protect natural resources and rural character. The majority of the VRC District (9,924 acres or 58.8%) is located in PA4, evidencing the rural and agricultural nature of this zone. The majority of the MRC District (9,532 acres or 73.2%) is located within the

Environmentally Sensitive Planning Area (PA5) and the Rural/Environmentally Sensitive Planning Area (PA4B), which highlights the statewide recognition of the high concentration of environmentally sensitive features in this zone.

Sullivan emphasized that the introduction of infrastructure into these planning areas is limited to Centers and that the State Plan's intent for the Environs (those areas located outside Centers), is that they remain undisturbed. He noted Marshalls Corner is a Center and permits infrastructure and development and that the remaining areas in the VRC and MRC Districts are within the Environs as defined by the State Plan where the introduction of sewers, public water and infrastructure is highly discouraged.

Sullivan also studied a number of regional plans. These include the Raritan Basin Watershed Plan, the Central Delaware Watershed Plan, the Mercer County Green Links Plan and the Sourland Mountains Comprehensive Management Plan. He concluded the 2002 Master Plan and Ordinance 02-1268 are substantially consistent with these regional plans, thereby advancing N.J.S.A. 40:55D-2(d), which looks to maintaining consistency with County Plans.

He rejected Hudacsko's opinion that the public purposes of the VRC and MRC Districts are neither clear nor compelling. To the contrary, he stated the Township has identified a series of

very clear and compelling policy objectives including preservation of natural resources, agriculture, wildlife habitat, groundwater supply and surface water quality. He also disagreed with the notion the VRC and MRC Districts are not rationally related to their purposes, the zoning is ineffectual and the Township failed to consider less onerous means of achieving the stated purposes of those districts.

Sullivan disagreed with Hudacsko's assertion the density reductions applicable to the VRC and MRC Districts exceed the statutory authority of the MLUL. Rather, the MLUL does not set a limit on lot sizes a municipality may permit. Sullivan concluded the Ordinance is reasonable, given the character of the VRC and MRC Districts and the important of encouraging the most appropriate use of land, consistent with N.J.S.A. 40:55-62. He testified the maps and evidence amply demonstrated the physical characteristics of each district and how those physical attributes relate substantially to the policy objectives underlying the establishment of those zones.

F. JAMES G. COE

James G. Coe, a professional engineer with expertise in wastewater management planning, prepared reports dated September 2004 and October 12, 2005. Both reports addressed the Township's Wastewater Management Plan. Within that plan, all properties owned by the plaintiffs are designated for

wastewater disposal to be provided by individual subsurface sewerage disposal systems (septic systems), with a design capacity of less than 2,000 gallons per day.

Preceding adoption of the Ordinance, this designation has been in effect under the governing Wastewater Management Plan since 1989. Furthermore, none of these properties or the lands encompassing the VRC and MRC Districts has ever been in a sewer service area. Coe concluded the Wastewater Management Plan provides an appropriate means of wastewater disposal for the plaintiffs' properties based upon the underlying zoning implemented in the Ordinance and the 2002 Master Plan.

Applying the general principles of wastewater management planning, set forth in N.J.A.C. 7:15-5.18, Coe testified a Wastewater Management Plan should support the underlying planning and zoning as implemented in the zoning ordinance and governing master plan. Given the densities provided in the VRC and MRC Districts, Coe concluded septic systems are the appropriate wastewater management planning methodology. Importantly, the Wastewater Management Plan protocol established in N.J.A.C. 7:15-5.18, does not support extending the sewer service area to an area the local zoning and Master Plan do not support. Clearly, NJDEP would not approve that Plan or Plan Amendment.

Furthermore, the State Plan with respect to the Rural Planning Area (PA4), Rural Environmentally Sensitive Planning Area (PA4B) and the Environmentally Sensitive Planning Area (PA5) discourages the extension of growth inducing infrastructure, including sewers, into the Environs of those planning areas. Focusing specifically upon the VRC and MRC Districts and the plaintiffs' properties, in particular, Coe stated all of the properties are located in the Environs of PA4, 4B, 5 and are not appropriate locations for the extension of sewer service. Instead, those zoning districts are appropriate for on-site wastewater disposal through individual septic systems.

Coe explained a community wastewater system as a small wastewater treatment plant designed to serve a group of homes or a commercial facility. The wastewater is treated and then may be discharged to groundwater or surface water. To obtain approval, construct and operate such a system, there are specific permitting requirements that must be satisfied. This includes obtaining, among other things, an amendment to the Wastewater Management Plan and securing a New Jersey Pollution Discharge Elimination System Permit (NJPDES) and Treatment Works Approval since these community wastewater treatment systems have a design capacity in excess of 2,000 gallons per day. These permits are issued through NJDEP.

Coe noted the approval process of a privately owned community wastewater treatment system requires application for franchises and approvals from the New Jersey Board of Public Utilities. Because of the underlying zoning and master plan governing the VRC and MRC Districts, community wastewater treatment systems are only appropriate to those locations within a district comprising a Center.

The Ordinance makes provision for a hamlet or village in the VRC District, subject to the satisfaction of certain standards and criteria. The Ordinance authorizes a community wastewater treatment system for such a Center. Coe noted Marshalls Corner has been identified as a Village and is authorized by Ordinance 05-1361 to serve as a Center, with provisions for community wastewater treatment. Other than Marshalls Corner, the appropriate treatment of wastewater in the balance of the VRC District and the entirety of the MRC District is through individual septic systems.

Coe represented the treatment of on-site sewage disposal through septic systems has been an integral part of the Township Wastewater Management Plan since 1989. Importantly, there are no provisions or recommendations in that Plan for future sanitary sewers in the lands comprising the VRC and MRC Districts. Because of the above described wastewater management planning policies and principles and the provisions of N.J.A.C.

7:15-5.18, Coe opined NJDEP would not approve any Wastewater Management Plan amendments designed to extend sewer infrastructure into the VRC and MRC Districts, except as to a Center (i.e., Marshalls Corner).

Importantly, Coe represented the VRC and MRC Districts are not now and never have been in a sewer service area. The Township is not a member of the Stony Brook Regional Sewerage Authority, which serves Pennington and Hopewell Boroughs. Furthermore, there are only two older subdivisions in the VRC District served by sewer, Hopewell Hunt and Princeton Farms, both previously on septic systems. Both failed leading to the sewering of the subdivisions.

Coe concluded the Township acted appropriately in maintaining a Wastewater Management Plan that designates the plaintiffs' properties as areas to be served by individual septic systems with capacities of less than 2,000 gallons per day. That designation is consistent with N.J.A.C. 7:15-5.18 that regulates the preparation of wastewater management plans. He also concluded the service of the plaintiffs' properties by individual septic systems is consistent with the intent of the State Plan for PA4, 4B and 5.

G. MATTHEW J. MULHALL

The Township's last witness, Matthew J. Mulhall, is a geologist who specializes in hydrogeology. His report, entitled

"Evaluation of Groundwater Resources of Hopewell Township, Mercer County, New Jersey," dated March 2, 2001, is incorporated by reference in the 2002 Master Plan. The report, consisting of forty-pages also includes tables, figures and maps. A second thirty-six page report, dated October 12, 2004, was prepared in response to issues raised by the plaintiffs during the discovery phase of the proceedings. Retained by the Board in May of 2000, all but 3,500 residents in the Township of Hopewell, as well as Hopewell Borough and Pennington Borough, rely upon the underlying aquifer system as their sole source of drinking water.

The March 2, 2001 report notes:

> The evaluation of the groundwater resources included a review of published maps and reports on the geology of Hopewell Township and neighboring municipalities in the County; an assessment of surface-water basins and potential groundwater recharge rates within these basins and a review of published reports and data regarding groundwater quality and aquifer yields. The date/information from this review was used to assess the recharge area requirements for supporting the drinking water needs for a single family residence and to dilute nitrate contaminants from a septic system discharge. In addition, the recharge area requirements were evaluated to minimize potential downstream impacts to the water resources and ecology of the Raritan and Delaware River Watersheds.
>
> [Report, page 2.]

Due to the highly technical nature of the testimony, the conclusions set forth in the March 2001 report, for convenience, are set forth herein:

> 1. Hopewell Township is located within RWRPA 10, the Raritan River Watershed, and RWRPA 9, which is the Trenton Delaware Tributaries Watershed. As a recharge and headwaters area for one of the most populous and fastest growing regions in the State, Hopewell Township is concerned with water resource availability and water quality for its citizens, ecosystems, and downstream consumers in RWRPAs 9 and 10.
>
> 2. The Township's groundwater resources are of value to the current and future residents of the Township as well as downstream consumers and ecological receptors. Hopewell Township wants to protect these critical resources for these residents, receptors and consumers.
>
> 3. Hopewell Township is located within the Piedmont Physiographic Province and is nearly equally divided between the Raritan River and the Delaware River Watersheds. Triassic-Jurassic sedimentary deposits of the Stockton, Lockatong, and Passaic Formation and igneous diabase intrusions underlie the Township. Groundwater is stored and transmitted in fractures and other openings in these rocks. Unfractured portions of the bedrock are considered impermeable and incapable of yielding sufficient water for supply. Well yields are dependent on the number and interconnection of fractures/openings in the bedrock.
>
> 4. Well yields, aquifer characteristics and geology indicate that two very different aquifer systems or hydrogeologic zones underlie the Township. The Lockatong/Diabase Zone has well yields, specific capacities, and transmissivities

that are significantly less than the Stockton/Passaic Zone.

5. Groundwater recharge to the Stockton/Passaic Zone during years of normal precipitation should be approximately 8.2 inches per year, which is approximately equivalent to 610 gpd/acre. Groundwater recharge to the Lockatong/Diabase Zone is approximately 3.15 inches per year, which is approximately equivalent to 235 gpd/acre. During a drought similar to the "Drought of Record" groundwater recharge rates should be approximately 410 gpd/acre and 160 gpd/acre for the Stockton/Passaic Zone and Lockatong/Diabase Zone, respectively.

6. To ensure adequate water is available for human consumption, ecological receptors, and downstream consumers, the dependable yield for the Stockton/Passaic Zone is approximately 82 gpd/acre and for the Lockatong/Diabase Zone is approximately 32 gpd/acre.

7. During a recurrence of the "Drought of Record" Hopewell Township will receive approximately 5,056.6 million gallons of recharge per year of which the dependable yield for the Township is approximately 84.3 million gallons per month. Current residential self-supply and existing NJDEP Water Allocation Permits/Agricultural Registrations could result in consumption of approximately 83.2 million gallons per month. Hopewell Township is nearing the dependable yield for the area encompassed within the Township perimeter and continued demands could adversely impact stream ecosystems, downstream consumers, or current residents of the Township and/or Boroughs.

8. Hopewell Township is located at or very near the headwaters for all surface-water streams flowing within its borders. As a result, the Township and the two enclosed Boroughs cannot rely on upstream sources or

conversation measures to ensure a long-term adequate water supply. If the Township and Boroughs are to be self sustained without adverse impacts to existing ecosystems during a recurrence of the "Drought of Record", it may be necessary to institute measures to limit additional water use and to increase conservation of groundwater within the Township perimeter. Since the Township and Boroughs are apparently nearing the long-term dependable yield limit adverse impacts to groundwater quality from accidental or purposeful discharges of contaminants can further reduce the margin of safety between current demand and long-term dependable yield.

9. Current demographics indicate that each existing dwelling unit consumes approximately 300 gallons per day. Given the dependable yields of the hydrogeologic zones, each of these existing dwelling units requires a recharge area of 3.7 acres for the Stockton/Passaic Zone and 9.4 acres for the Lockatong/Diabase Zone to ensure an adequate long-term safe yield.

10. Based on demographic studies presented to the Township Planning Board, dwelling units constructed in the future will have 4 to 5 bedrooms and will be occupied by approximately 4.2 persons. These dwelling units will have a resulting water demand of approximately 420 gallons per day and would require a recharge area in the Stockton/Passaic Zone of 5.1 acres. Within the Lockatong/Diabase Zone, this same dwelling unit would require a recharge area of 13.1 acres.

11. Nitrate is a highly soluble, stable, and mobile compound in groundwater and can migrate large distances resulting in an extensive plume of contamination. The background concentration of nitrates in groundwater within Hopewell Township is approximately 1 mg/l. Since nearly all

Hopewell Township residents rely on groundwater for drinking water and bedrock aquifers provide minimal if any, contaminant removal, the aquifers beneath the Township have similar needs for protection as those areas designated by the NJDEP as Class 1-A and 1-PL groundwater. Given Hopewell Township's experience with septic discharges resulting in coliform bacterial contamination of groundwater and the characteristics of the fractured bedrock aquifers, a discharge limit of 5.5 mg/l would provide little margin of safety. A limit of 2 mg/l would provide a more reasonable safety margin while still doubling background concentrations. This 2 mg/l discharge limit is identical to the discharge limit suggested by the NJDEP in the May 30, 2000 carrying capacity model.

12. The Trela-Douglas model was used to calculate recharge areas for diluting nitrates from septic system effluent in groundwater. Based on the results of this model, the recharge areas per dwelling unit were calculated. Based on current demographics, existing lots with 3 persons per dwelling unit will require recharge areas in the Stockton/Passaic Zone of approximately 3.7 acres and in the Lockatong/Diabase Zone of approximately 9.4 acres to adequately dilute nitrates. For a future residence with 4.2 persons per dwelling unit the recharge area necessary to adequately dilute nitrates in the Stockton/Passaic Zone is approximately 5.1 acres and in the Lockatong/Diabase Zone is approximately 13.2 acres. If the nitrate discharge rate was established at 2 mg/l instead of 5.5 mg/l, the recharge areas for existing and future residences for the Stockton/Passaic Zone would be 11.1 and 15.6 acres and for the Lockatong/Diabase Zone would be 28.5 and 39.9 acres.

13. The recharge areas should have flat to gentle slopes and be open to precipitation.

> The areas should not include impervious surfaces or buildings that can prevent precipitation from infiltrating into bedrock fractures. Portions of lots that include seeps, wetlands, streams, bedrock outcrops, impervious surfaces, buildings and/or steep slopes should be in addition to the recharge areas.
>
> 14. In areas of the Township with existing lot sizes smaller that the recharge areas, it may be necessary to preserve or protect upstream open areas within the same watershed to ensure sufficient water infiltrates the aquifer to support the existing demands. Even in areas where the existing lot sizes are equal to the recharge areas, it may be necessary to protect upstream open areas to balance portions of the lots covered with impervious materials.

Mulhall spent a significant amount of time, in court and in his report, to explain how the density of housing and application of surface/subsurface improvements can impact aquifers and result in reduced recharge, lower yields, increased interference and degradation of groundwater quality. In areas of the Township where aquifer yields and/or recharge are limited or strained, additional housing and/or improvements are likely to impact current users of groundwater.

As noted by Mulhall, the Township is reliant upon sole source aquifers for its drinking water supply, its groundwater resources are of critical value to current and future residents of the Township, as well as downstream consumers and ecological receptors. As a result, the Board, in its master planning

process leading to adoption of the 2002 Master Plan and establishment of the VRC and MRC Districts, expressed a desire to protect these critical resources for the Township's residents, receptors and consumers. The report evaluates the Township's groundwater resources and makes recommendations to guide the Planning Board in making appropriate and informed decisions regarding densities in the VRC and MRC Districts.

In the Passaic and Stockton Formations, Mulhall noted wells are usually drilled to deeper depths because of the potential to encounter additional water-bearing fractures and therefore to increase the yield. In the Lockatong Formation and diabase, since increased yields are unlikely, wells are usually drilled to greater depths in order to store water.

Mulhall testified the Stockton Formation, which is pinched out of the Hopewell Fault to the southwest near Harbourton, encompasses approximately 3.6 miles of the 60.3 square miles within the borders of the Township, including the Boroughs of Pennington and Hopewell. Well data published by NJGS in 1965 and USGS in 1995 indicates that the Stockton Formation has a median yield ranging from 12 to 15 gallons per minute (GPM). The data also reflects the Stockton Formation has a higher capacity to transmit water than the 3 other bedrock formations beneath the Township (Passaic, Lockatong and diabase.

He represented: (1) the Lockatong Formation is encountered in the northern and southern portions of the Township; (2) the northern band of the Lockatong Formation encompasses approximately 9.2 square miles and is located north of the Hopewell Fault; (3) the southern band encompasses approximately 2.9 square miles of the Township; and (4) the thin-bedded shales of this formation are the primary water-bearing layers and are often confined by thick-bedded siltstones.

Citing a study by Kasabach, a noted geologist, (1966), Mulhall testified Kasabach concluded the Lockatong Formation is one of the poorest yielding aquifer systems in nearby Hunterdon County. Referencing a study by Widmer, another highly regarded geologist, (1965), Widmer found that 33% of the wells completed in the Lockatong Formation in Mercer County had yields of less than 4 gpm (gallons per minute) and considered this yield inadequate. According to the data, Mulhall stated the Lockatong Formation typically yields between 5 and 7 gpm or less than half of the median yield for the Stockton Formation. The data also indicates the Lockatong Formation has a significantly lower capacity to transmit water than the Stockton Formation.

Mulhall testified the Passaic Formation is primarily encountered in the Township south of the Hopewell Fault and encompasses an area of 40 square miles of the 60.3 square mile area comprising the Township and Hopewell and Pennington

Boroughs. Published data shows the Passaic Formation has a median yield ranging from 10 to 15 gpm. The data also indicates the Passaic Formation has a slightly lower capacity to transmit water than the Stockton Formation but significantly greater transmissivity than the Lockatong Formation.

The diabase intrusions are highly resistant to erosion and, as a result, are found at the highest elevations in the Township. The diabase sills are encountered beneath Sourland, Belle, Baldpate and Pennington Mountains and along Crusher Road. These diabase intrusions encompass approximately 4.6 square miles of the Township. In addition to the diabase, the hornfels produced from the metamorphism of the Passaic Formation host rock are often found within 1,000 feet of the diabase sills.

Mulhall explained Kasabach (1966) found the diabase to be the poorest source of water in nearby Hunterdon County. Widmer (1965) indicated wells in the diabase of Mercer County have poor yields. Published data indicates the diabase and surrounding hornfels is a poor yielding aquifer with a median yield ranging from 5 to 6 gpm, which is less than half the median yield for the Stockton and Passaic Formations. The data also shows the diabase has a significantly lower capacity to transmit water than either of these formations.

The Stockton/Passaic Zone encompasses approximately 43.6 square miles or 72% of the Township. This zone includes the Stockton Formation and the Passaic Formation. Both have median yields ranging from 10 to 15 gpm. Furthermore, wells in these bedrock formations may intersect additional water-bearing fractures with depth and are not dependent on shallow, highly weathered zones to transmit and store groundwater.

The second zone, Lockatong/Diabase Zone, includes the poor fractures encountered within the Lockatong Formation and diabase intrusions. Since the hornfels surrounding the diabase intrusions are also poor aquifers, the rocks within 1,000 feet of the diabase intrusions are included in this second hydrogeologic zone. This zone encompasses approximately 16.7 square miles or 28% of the Township. Median yields in this zone are likely to range from 5 to 7 gpm and drilling to depths exceeding 125 feet below ground surface is unlikely to result in the intersection of additional water-bearing fractures.

Mulhall explained data from the USGS studies indicates the estimated transmissivity, which is a measure of the aquifer's ability to transmit water, of the Lockatong/Diabase Zone, is approximately one-fourth of the estimated transmissivity of the Stockton/Passaic Zone.

Based upon the recharge rate calculations, Mulhall concluded in the Passaic/Stockton Zone, the recharge rate was

610 gallons per day per acre and the recharge rate in the Lockatong/Diabase Zone was 235 gallons per day per acre. He then adjusted the recharge rate because State law requires planning for future conditions, including the Drought of Record. As a result, he reduced the recharge numbers to account for drought conditions.

The findings are summarized in the March 2001 report and establish after taking into account severe drought, the recharge rate of gallons per day per acre for the Stockton/Passaic Formation is 410 and for the Lockatong/Diabase Formation is 160. The conclusions with respect to the severe drought recharge rate are based upon data obtained from 1965 and then averaging the highest suggested amount of 82% with the lowest suggested amount of 50%, resulting in a 66% adjustment. Thereafter, he then reduced the recharge numbers and determined the recharge in the Stockton/Passaic Formation would be 410 gallons per day per acre (610 x .66) and the recharge rate in the Lockatong/Diabase Formation would be 160 gallons per day per acre (410 x .66).

The groundwater evaluation of the Township also took into account water supply considerations. He noted, based on the 2000 population of the Township relying on the water resources and the average daily demand indicated in N.J.A.C. 7:10, Township residents currently consume nearly 37,000,000 gallons

per month of water. Within the perimeter boundary of the Township, several municipal agencies and private corporations have NJDEP Water Allocation Permits to divert groundwater. These include Bristol-Meyers Squibb, Hopewell Borough Water Department, Hopewell Valley Golf Club, Hopewell Township, Lucent Technologies, Pennington Borough, Pennington School and Pennwell Holdings. Additionally, the organic farm at the Stony Brook-Millstone Watershed Association site has an agricultural registration for water use. A summary of estimated maximum monthly consumption of water derived from within the perimeter of the Township is shown in the report.

Based upon the 2000 census data and the permitted diversions within the Township borders (water allocation permits and agricultural registration for the organic farm), Mulhall concluded it is likely current total demands from the aquifer systems beneath the Township likely exceed 83,000,000 gallons per month.

The groundwater evaluation also covered the subject of dependable yield. He explained the Statewide Water Supply Plan, prepared by NJDEP defines the dependable yield as "the water yield maintainable by a groundwater system during projected future conditions, including both a repetition of the most severe drought of record and long-term withdrawal rates without creating undesirable effects." A similar definition is

included in N.J.A.C. 7:19-6 and the New Jersey Water Supply Management Act, N.J.S.A. 58:1A-3(h). The "Drought of Record" as currently defined occurred in the mid-1960's with 1962 through 1966 recording below normal precipitation equal to approximately 82% of normal precipitation. In 1965, the State received approximately 30 inches of precipitation; two-thirds of normal precipitation.

Mulhall rejected the notion, using local stream flow data, groundwater recharge during a prolonged drought ranges between 50 and 82% of normal-year recharge. He explained recharge rates based upon these percentages will most likely result in either overly conservative or non-existent margins of safety. Although groundwater and storage within an aquifer could be used to buffer a short-term drought, this limited resource could be quickly consumed resulting in adverse long-term impacts to the aquifer system in a prolonged drought. Therefore, Mulhall testified a reasonable margin of safety is necessary to insure adequate water supplies in a repeat of the "Drought of Record."

In 1965, the lowest precipitation in the last 100 years was recorded. During this year, precipitation was equal to approximately 66% of normal precipitation. As a result, in calculating a recharge rate for each of the two hydrogeologic zones, he assumed a drought groundwater recharge rate is equal

to 66% of a normal year recharge rate and opined it provided a reasonable margin of safety to insure adequate water availability during a prolonged drought.

To insure water is available, during all weather conditions for human consumption as well as ecosystems dependent on groundwater discharges without creating undesirable effects, Mulhall explained the NJDEP has established what is known as the "Planning Threshold". NJDEP has determined the Planning Threshold should equal 20% of aquifer recharge. The threshold proposes to limit human consumption of water within a watershed/basin to 20% of recharge and establishes the dependable yield at this level. He summarized the normal year recharge rates, severe drought recharge rates and dependable yields, as established with the Planning Threshold for the two hydrogeologic zones.

Based upon the areas of hydrogeologic zones and Hopewell Fault and the severe drought recharge rates, during a "Drought of Record," Mulhall concluded the Township will receive approximately 5,056.6 million gallons of recharge per year. Applying the Planning Threshold, the dependable yield for the Township is approximately 84.3 million gallons per month. As discussed above, current residential self-supply and existing NJDEP Water Allocation Permits/Agricultural Registrations could result in consumption of approximately 83.2 million gallons per

month. Mulhall concluded the Township is nearing the dependable yield for the area encompassed within the Township's perimeter. Accordingly, and continued demands could adversely impact stream ecosystems, downstream consumers, and current residents of the Township, as well as Pennington and Hopewell Boroughs.

The Township is located at or very near the headwaters for all surface-water streams flowing within its borders. As a result, the Township, Pennington and Hopewell Boroughs cannot rely on upstream sources or conservation measures to insure a long-term adequate water supply. Mulhall noted because the Township and two Boroughs are likely nearing the long-term dependable yield limit, adverse impacts to groundwater quality from accidental or purposeful discharges of contaminants can further reduce the margin of safety between current demand and long-term dependable yield.

Mulhall further testified current demographics indicate a density of 3 persons per dwelling unit for the Township. Based on demographic studies completed by applicants to the Board for subdivision plans, future residences served by on-site wells and septic systems within the Township will be primarily single family 4-5 bedroom homes and will have a density of 4.2 persons per dwelling unit.

Based upon the above data, Mulhall analyzed recharge areas for water supply in the two hydrogeologic zones. Current

demographics indicate that each existing dwelling unit consumes approximately 300 gallons per day. Given the dependable yields of the hydrogeologic zones, each of these existing dwelling units requires a recharge area of 3.7 acres for the Stockton/Passaic Zone and 9.4 acres for the Lockatong/Diabase Zone to insure an adequate long-term safe yield.

Based upon the dependable yields for the hydrogeologic zones, a 4.2 person dwelling unit using approximately 420 gallons of water per day would require a recharge area in the Stockton/Passaic Zone of 5.1 acres within the Lockatong/Diabase Zone, this same dwelling unit would require a recharge area of 13.1 acres. The March 2001 report and supporting documentation set forth, in greater detail, the calculation and rationale.

Mulhall also evaluated recharge areas for nitrate dilution. The March 2001 report noted the Soil Conservation Service established the following soils in the Township have severe limitations for the disposal of septic systems effluent: Chalfont, Penn, Reaville, Abbotstown, Doylestown, Bowmansville, Lawrenceville, Klinesville, Rowland, Lehigh, Mount Lucas and Watchung. These soils in conjunction with the areas underlain by very stony soils encompass approximately 62% of the Township. If soils with moderate restrictions are included, approximately 95% of the Township is underlain by soils with septic discharge limitations.

The Township septic systems are the predominant means used for disposal of wastewater. As a result, an estimated 80% of the water removed from the aquifer is returned. Mulhall explained the wastewater contains contaminants such as nitrates, bacteria and viruses that are highly mobile and are not readily removed. As a result, he concluded additional recharge is required to dilute these and other contaminants to a level that is deemed safe for consumption.

Nitrate is used as an indicator of anthropogenic impacts to groundwater from sewerage disposal. Elevated nitrates can have adverse health impacts but they are primarily used as an indicator of pathogenic bacterial contamination and/or contamination resulting from discharges of chemicals to septic systems. Mulhall testified nitrate is not typically found in groundwater because of natural conditions.

On January 7, 1993, NJDEP established groundwater classifications and quality criteria (N.J.A.C. 7:9-6). As part of the State's groundwater quality standards, NJDEP established an anti-degradation policy to protect groundwater in which the background concentration of a contaminant does not exceed the quality criteria. The policy limits the discharge of contaminants to groundwater to a percentage of the difference between the background concentration and the quality criteria. For Class II-A Water, the limit is the background concentration

plus 50% of the difference between the background concentration and the quality criteria. The nitrate as nitrogen criteria for Class II-A Water is 10 milligrams per liter (mg/l). This criterion is the same as the USEPA standard for nitrate as nitrogen in drinking water. Based on USGS studies of groundwater beneath portions of the Township, the background concentration of nitrates in groundwater beneath the Township is approximately 1 mg/l. Therefore, the anti-degradation limit for nitrate discharge is approximately 5.5 mg/l.

Mulhall used the Trela-Douglas Nitrate Dilution Model to evaluate existing recharge needs in the Township to insure adequate dilution of septic system contaminants for current and future demographic conditions. The Trela-Douglas Nitrate Dilution Model was developed in 1978 and has been widely accepted and used by NJDEP for more than 20 years. It is applied to evaluate potential nitrate discharges from septic systems to groundwater and to determine the recharge area necessary to dilute nitrate concentrations.

Referencing a chart, summarizing recharge areas for nitrate dilution, Mulhall explained for an existing three person dwelling unit in the Stockton/Passaic Zone, a recharge area of 3.7 acres is necessary to insure adequate dilution of septic system contaminants. Within the Lockatong/Diabase Zone, the recharge area needs to be 9.4 acres or more. For a future

residence with 4.2 persons per dwelling unit in the Stockton/Passaic Zone, the recharge area needed to insure adequate dilution is 5.1 acres. In the Lockatong/Diabase Zone, the recharge area necessary to insure adequate dilution is 13.2 acres.

Mulhall further noted if nitrate dilution was calculated on the basis of 2 mg/l, the recharge areas for the Stockton/Passaic and Lockatong/Diabase hydrogeologic zones would dramatically increase. This is also established in the report and testimony, in terms of both current and future demographics. For example, for an existing 3 person dwelling unit in the Stockton/Passaic Zone, a recharge area of 11.1 acres is necessary and in the Lockatong/Diabase Zone a recharge area of 28.5 acres would be required. In the case of future demographics based upon a residence with 4.2 persons per dwelling unit, the recharge area for the Stockton/Passaic Zone would be 15.6 acres and in the Lockatong/Diabase Zone, 39.9 acres.

Mulhall emphasized the recharge area calculations with respect to the Stockton/Passaic and Lockatong/Diabase hydrogeologic zones; 5.1 and 13.2 respectively, would require upward adjustment by the Township's planning consultant to take into account impervious surfaces and other constraints, such as steep slopes and wetlands. As noted above, Bolan made those

adjustments to arrive at the minimum lot sizes recommended for the VRC and MRC Districts contained in the 2002 Master Plan, 2002 Reexamination Report and implemented in the Ordinance.

A review of the Stockton/Passaic hydrogeologic zone locations shows they correspond to the VRC District and the Lockatong/Diabase hydrogeologic zone locations show they correspond to the boundaries of the MRC District.

Mulhall's groundwater evaluation report was the subject of 3 peer reviews. He testified, at length, on both direct and cross-examination regarding the findings in the peer reviews. Importantly, he testified none of the peer reviews affected any of his conclusions. The court has reviewed each of the peer reports and the response offered by Mulhall. The court finds nothing in the peer reports to undermine or challenged the findings by Mulhall.

III.

ANALYSIS

A. STANDARD OF REVIEW

The power of municipalities to adopt ordinances for the public health, safety and welfare of its inhabitants, is coterminous with the police power of the State Legislature. Quick Check Food Stores v. Springfield Tp. 83 N.J. 438, 447 (1980). Thus, municipalities may enact regulatory ordinances on any subject

matter of local concern that are reasonably related to a legitimate object of public health, safety or welfare. Id.

In evaluating whether a zoning ordinance is arbitrary, capricious, or unreasonable, a court's role is not to pass on the wisdom of the ordinance; that is exclusively a legislative function. Pheasant Bridge Corp. v. Tp. of Warren, supra, 169 N.J. 282 (citing Home Builders League of S. Jersey, Inc. v. Tp. of Berlin, 81 N.J. 127, 137 (1979)). Rather, a court engages in a review of the relationship between the means and ends of the ordinance. Pheasant Bridge, supra, 169 N.J. at 290 (citing Taxpayers Ass'n of Weymouth Tp. Inc. v. Weymouth Tp. 80 N.J. 6, 21 (1976)). In the context of a zoning challenge:

> The means selected must have real and substantial relation to the object sought to be attained, and the regulation or proscription must be reasonably calculated to meet the evil and not exceed the public need or substantially affect uses which do not partake of the offensive character of those which cause the problem sought to be ameliorated.
>
> [Pheasant Bridge, supra, 169 N.J. at 290 (quoting Kirsch Holding Co. v. Borough of Manasquan, 59 N.J. 241 (1971)).]

The fundamental question in all zoning cases "is whether the requirements of the ordinance are reasonable under the circumstances." Ibid.

Municipalities have broad power to enact and enforce ordinances to protect the public health, safety, and welfare. The legislation must bear a rational relationship to a constitutionally permissible objective. As noted by the Court in Quick Check:

> The burden of proof to establish that they are arbitrary and unreasonable rests on the party seeking to overturn them. Hutton Park Gardens v. West Orange Town Council, 68 N.J. 543 (1975). The presumption may be overcome only by a clear showing that the local ordinance is arbitrary and unreasonable. Hudson Circle Servicenter, Inc., 79 N.J. at 298-299 (citations omitted). The underlying policy and wisdom of ordinances are the responsibility of the governing body, Lehrhaupt v. Flynn, 140 N.J. Super, 266 (App. Div. 1976), aff'd o.b. 75 N.J. 459 (1978); Little Falls Tp. v. Husni, 139 N.J. Super. 74, 80 (App. Div. 1976), and if any state of facts may reasonably be conceived to justify the ordinance, it will not be set aside. Hutton Park Gardens, 68 N.J. at 564-565.
>
> [Quick Check, supra, 83 N.J. at 447.]

A zoning ordinance is insulated from attack by a presumption of validity, which may be overcome only by a showing that the ordinance is "clearly arbitrary, capricious or unreasonable, or plainly contrary to fundamental principles of zoning or the [zoning] statute." Bow & Arrow Manor v. Town of West Orange, 63 N.J. 335, 343 (1973). Accord, Zilinsky v. Zoning

Bd. of Adjustment of Verona, 105 N.J. 363, 368 (1987); Taxpayers Ass'n of Weymouth Tp. v. Weymouth Tp. 80 N.J. 6, 20 (1976). The party attacking the ordinance bears the burden of overcoming the presumption. Ward v. Montgomery Tp. 28 N.J. 529, 539 (1959); LaRue v. East Brunswick, 68 N.J. Super. 435, 454 (App. Div. 1961). A court should not countenance a challenge to the wisdom of an ordinance; if the ordinance is debatable, it should be upheld. Bow & Arrow Manor, 6 N.J. at 343. See also Zilinsky, 105 N.J. at 368-69 ("a mere difference of opinion as to how an ordinance will work will not lead to a conclusion of invalidity; 'no discernible reason' is the requisite standard.")

Municipalities possess broad police power to zone for the public good insofar as the Legislature delegates that authority. Riggs v. Tp. of Long Beach, 109 N.J. 601, 610 (1988). A strictly circumscribed judicial role in reviewing zoning regulations effectuates that broad power. Harvard Enterprises, Inc. v. Bd. of Adjustment, 56 N.J. 362, 368 (1970). See also Pascack Ass'n v. Mayor of Washington, 74 N.J. 470, 481 (1977) (referring to sound and long-established principles concerning judicial respect for local policy decisions in the zoning field); Bow & Arrow Manor, 63 N.J. at 343 (stating that the function of the court is not to rewrite or annul a particular zoning scheme duly adopted by a governing body merely because the court would have done it differently); Kozesnick v. Tp. of Montgomery, 24 N.J.

154, 167 (1957) (stating that the judiciary should not exercise zoning power indirectly by measuring the policy determination by a judge's private view).

The fundamental question in all zoning cases is whether the requirements of the ordinance are reasonable under the circumstances. Southern Burlington County NAACP v. Tp. of Mount Laurel (Mount Laurel II), 92 N.J. 158, 276-77 (1983); Vickers v. Tp. Comm. 37 N.J. 232, 245 (1962), cert. denied 371 U.S. 233, 83 S. Ct. 26, 9 L.E.D. 2d. 495 (1963).

These controlling principles have been most recently affirmed in Pheasant Bridge Corp. v. Tp. of Warren, 169 N.J. 282, 294 (2001), cert. denied 535 U.S. 1077 (2002). See also Manalapan Realty v. Tp. Comm. 140 N.J. 366, 380-386 (1995); New Jersey Farm Bureau, Inc., v. Tp. of East Amwell, 380 N.J. Super. 325, 330-331 (App. Div. 2005), certif. denied, 185 N.J. 596 (2005).

It is well settled that a valid zoning ordinance or amendment thereto must advance one of the fifteen general purposes of the MLUL specified in N.J.S.A. 40:55D-2. Riggs, 109 N.J. at 601. Additionally, the ordinance or amendment must be substantially consistent with the land use plan element of the master plan. Zilinsky, 105 N.J. at 367; N.J.S.A. 40:55D-62(a). The MLUL, N.J.S.A. 40:55D-5 defines a master plan as a "composite of one or more graphic proposals for the development

of the municipality as set forth in and adopted pursuant to [N.J.S.A. 40:55D-28]." A planning board is charged with the responsibility of preparing, adopting and amending a master plan "to guide the use of lands within the municipality in a manner which protects public health and safety and promotes the general welfare." N.J.S.A. 40:55D-28(a). The zoning amendments must be "substantially consistent with the land use plan element … or designed to effectuate such plan element…" N.J.S.A. 40:55D-26(a). A determination by the planning board with respect to consistency is entitled to deference and great weight. See Manalapan Realty, 140 N.J. at 383; In re Adoption of N.J.A.C. sec 7:26B, 128 N.J. 442, 449-50 (1990); Kramer v. Board of Adjustment, Sea Girt, 45 N.J. 268, 296-97 (1965); Waste Management v. State DEP, 278 N.J. Super. 56 (App. Div. 1994).

B. FINDINGS

First, the record is replete with testimony that the Township held extensive hearings prior to the adoption of the 2202 Master Plan and Ordinance 02-1268. These hearings afforded members of the public an opportunity to be heard.

As in any bench trial, the court is required to make specific findings of fact. Part of that decision-making process involves determining the reliability, credibility and veracity of witnesses. In the case at bar, the evidence at trial overwhelmingly supports the testimony of the Township's

witnesses. Individually and collectively, the testimony establishes that Ordinance 02-1268 supports the broad public purposes of the MLUL and is premised upon recommendations in the 2002 Master Plan and 2002 Reexamination Report. The 2002 Master Plan was the result of a three-year painstaking, thorough and thoughtful effort involving some 40 public meetings underlying its preparation and 4 public hearings preceding its adoption. Bolan noted the Township is compliant with its obligation to examine the Master Plan every 6 years as required under N.J.S.A. 40:55D-89. The 1992 Master Plan was the subject of a Reexamination Report in 1998, the 2002 Master Plan amendment of the Statement of Goals and Objectives, Land Use and Conservation Plan elements, and the 2002 Reexamination Report.

The purpose of the VRC and MRC Districts is to implement the goals, objectives and principles of the 2002 Master Plan. These goals are designed to protect environmentally sensitive areas, recognize development capacity limitations established by natural resource capabilities, maintain the rural character and provide for sustainable development. These Districts have been developed to comprehensively address the interrelated goals of protecting groundwater quantity and quality, maintaining surface water resources, conserving the scenic rural character, addressing limiting soil conditions and promoting continued agricultural use opportunities, while also providing a range of

compatible development opportunities. This was aptly demonstrated through the thorough and well-documented testimony and demonstrative evidence adduced by the Township through its planning experts.

While the court appreciates the personal interests of the two lay witnesses, the testimony provided no probative evidence to the contrary. In fact, both acknowledged the public hearings conducted regarding the Master Planning process or the adoption of the Ordinance. Nor did they dispute the development opportunities available under that Ordinance.

In the case of Mr. Wilson, his testimony disclosed as to Block 72, Lot 1.12 (Parcel Q), he had an approval in place for a lot that fully conformed to the density provisions of Ordinance 02-1268 and there was nothing to preclude his development of that lot in accordance with the approval. Wilson's testimony concerning the Planning Board's denial of his application for a two lot minor subdivision of that parcel added nothing to support his facial challenge to Ordinance 02-1268. He had a prior approval in place, the lot was protected by the grandfathering provisions of Ordinance 02-1268 and the net effect of his testimony was that he simply wanted more development without offering any evidence to show that Ordinance 02-1268 was arbitrary, capricious or unreasonable.

As to Block 65, Lot 13 (also Parcel Q), Wilson acknowledged it was farmland assessed, engaged in agricultural activity and evidenced the very characteristics of the VRC District. As to his 56 acre parcel in Block 75, Lot 1.02 (Parcel R), Wilson admitted that the inability to develop this parcel had nothing whatsoever to do with Ordinance 02-1268. Instead, he failed to make all the required submissions to the Township to facilitate the development application being deemed complete.

Plaintiffs' expert testimony was limited to Dennis Hudacsko. Quite frankly, while this witness reviewed broad concepts of planning, his testimony was void of any empirical analysis of the Township. While challenging the hydrogeologic findings by Mulhall, he offered no sound basis to do so. Hudacsko conceded he was not a geologist, hydrogeologist and had performed no independent hydrogeologic evaluation of the Township's groundwater resources, even though he claimed, as a planner, he had knowledge and experience with respect to hydrogeologic issues. The conclusion that there was a disconnect between the recharge area calculations of Mulhall and Bolan's density recommendations for the VRC and MRC Districts in the 2002 Master Plan was shown to be without substance. Hudacsko's mischaracterization of the Mulhall groundwater evaluation report and recommendations as a carrying capacity analysis demonstrated a fundamental misunderstanding of the scope of that analysis.

The Township, through Bolan, clearly explained the concepts of carrying capacity and nitrate dilution and how Mulhall's recharge area calculations were used as base data upon which to calculate the densities recommended in the 2002 Master Plan for the VRC and MRC Districts. In fact, Mulhall testified that because of the inability of water to penetrate impervious surfaces, lot density calculation necessarily requires an upward adjustment to account for impervious coverage, steep slopes, wetlands and other constraints. That is precisely what Bolan did. Likewise, the opinions offered by Hudacsko concerning the Township's sewer history and infrastructure policies were shown to be devoid of merit and factual foundation. This was aptly demonstrated through the testimony of James Coe, the Township's wastewater management consultant.

The plaintiffs, while challenging the Township's water resource policies, produced no competent expert testimony in geology or hydrogeology. In sharp contract, the testimony of Mulhall provided a compelling and well-documented case for the lower densities in the VRC and MRC Districts because of their hydrogeologic characteristics and limitations. It was clear from Mulhall's testimony the Board, as part of the master planning process, sought an independent empirical analysis of the Township's water resources. This decision was based on a desire, by the Board, to secure information and documentation

with respect to regulating the density of land development in a way to protect and conserve the Township's groundwater resources.

As part of the groundwater resources study, ultimately incorporated by reference in the 2002 Master Plan, Mulhall undertook an empirical analysis of the Township's hydrogeologic characteristics. The analysis established two distinctly different hydrogeologic zones; the Stockton-Passaic Formation and the Lockatong/Diabase Formation. It is clear from Mulhall's analysis the different hydrogeologic character of these two formations had major implications with respect to aquifer recharge areas and nitrate dilution. As a result, he concluded densities had to be reduced in the surface lands above those formations to adequately protect the Township's water supply and quality. He found the Lockatong/Diabase Formation roughly corresponded with the Township's mountainous area and the Stockton-Passaic Formation corresponded to the Township's valley area, those areas ultimately becoming the MRC and VRC Districts under the 2002 Master Plan and the Ordinance.

It is clear the hydrogeologic evaluation formed an integral part of the ultimate decisions reached by the Planning Board in recommending establishment of the MRC and VRC Districts. There was more than substantial evidence, through the testimony and reports of Bolan and Sullivan to support the planning rationale

for the MRC and VRC Districts based upon their character. The character includes land use by property class; land use/land cover; lot sizes; slopes; surface water quality; high priority forest and grassland habitat; high priority wetland; farmland soils; open space and preserved farmland; agricultural and environmentally sensitive features; and mapping under County and State planning documents as Rural, Rural Environmentally Sensitive and Environmentally Sensitive. The Mulhall groundwater resources evaluation provides compelling scientific support for the establishment of those districts.

Notably, plaintiffs offered no evidence to refute the compelling evidence offered by the Township to support the validity of the Ordinance and, in particular, the sound planning basis for establishment of the VRC and MRC Districts.

The following nine (9) purposes of zoning under N.J.S.A. 40:55D-2 are clearly advanced by the creation of the VRC and MRC Districts:

> To encourage municipal action to guide the appropriate use or development of all lands in this State, in a manner that will promote the public health, safety, morals and general welfare;
>
> [N.J.S.A. 40:55D-2a.]
>
> To secure safety from fire, flood, panic and other natural and manmade disasters;
>
> [N.J.S.A. 40:55D-2b.]

To provide adequate light, air and open space;

[N.J.S.A.40:55D-2c.]

To ensure that development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the county and the State as a whole;

[N.J.S.A. 40:55D-2d.]

To promote the establishment of appropriate population densities and concentrations that will contribute to the well being of persons, neighborhoods, communities and regions and preservation of the environment;

[N.J.S.A. 40:55D-2e.]

To provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational, commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens;

[N.J.S.A. 40:55D-2g.]

To encourage the location and design of transportation routes that will promote the free flow of traffic while discouraging location of such facilities and routes that result in congestion or blight;

[N.J.S.A. 40:55D-2h.)

To promote a desirable visual environment through creative Development techniques and good civic design and arrangements;

[N.J.S.A. 40:55D-2i.)

To promote the conservation of historic

> sites and districts, open space, energy resources and valuable natural resources in the State and to prevent urban sprawl and degradation of the environment through improper use of land;
>
> [N.J.S.A. 40:55D-2j.]

The evidence offered by the Township's professionals more than adequately demonstrated and documented that the above MLUL purposes are clearly advanced by the Ordinance. The Ordinance is consistent with the Township's 2002 Master Plan, the 2002 Reexamination Report, and the State Plan. Contrary to the allegations of plaintiffs, establishment of the VRC and MRC Districts represent a reasoned response to a broad range of legitimate planning objectives embraced by the Township and the State.

The Township's Master Plans have long articulated the goals of ground and surface water protection, natural resource conservation, agricultural retention for the countryside and maintaining scenic character. The State Plan supports these planning objectives for its Rural, Rural Environmentally Sensitive and Environmentally Sensitive Planning Areas (PA4, PA4B and PA5) which encompass the VRC and MRC Districts. The 2002 Master Plan and Ordinance 02-1268 represent a logical extension of these policies.

The Township's resource protection objectives, which form the backbone of the VRC and MRC Districts, are responsive to the

resources found in these zones and on the properties at issue. Efforts to preserve and protect these resources have a substantially greater likelihood of success under Ordinance 02-1268. This was clearly supported by the testimony of the Township's consultants and professionals and the myriad of reports and exhibits introduced during trial.

MLUL articulates a wide range of public purpose objectives. Hopewell's 2002 Master Plan promotes these objectives in its Goals and Objectives, Land Use Plan and Conservation Plan. The MLUL is rooted in public welfare concerns. There is simply no requirement that requires municipalities to zone for the highest level of possibly acceptable development. Conversely, it delegates to municipalities the power to attentively respond to a broad range of local and regional public welfare concerns, including the conservation of farmland and sensitive natural resources, prevention of sprawl and degradation of the environment. The 2002 Master Plan advances these and other statutory goals and Ordinance 02-1268, which implements the 2002 Master Plan was and is a valid exercise of legislative judgment. This was demonstrated in a compelling manner by all of the Township's professionals and consultants.

The Ordinance meets the test in Riggs v. Long Beach Tp. which sets forth four "objective criteria" by which the validity of a zoning ordinance is to be judged:

> (1) Does the ordinance advance one of the purposes of the municipal land use law set forth in N.J.S.A. 40:55D-2?
>
> (2) Is the ordinance substantially consistent with the land use plan element and the housing plan element of the Master Plan or designed to effectuate such a plan element?
>
> (3) Does the ordinance comport with constitutional constraints on the zoning power, including those pertaining to due process, equal protection and prohibition against confiscation?
>
> (4) Was he ordinance adopted in accordance with statutory and municipal procedural requirements?
>
> [Id. at 611-13.]

The evidence adduced at trial, through testimonial and documentary evidence, overwhelming meets the Riggs test. The State Plan is a legitimate and valid basis upon which to measure the reasonableness of Ordinance 02-1268. The law creating the State Planning Commission, N.J.S.A. 52:18A-196, emphasizes the pressing need for sound and integrated statewide planning and coordination of state planning with local and regional planning. N.J.S.A. 52:18A-196(a) calls for the establishment of s State Plan. N.J.S.A. 52:196(c) encourages a cooperative planning process and full participation of State, county and local governments which became known as Cross Acceptance, N.J.S.A. 52:18A-196(e), and calls for State assistance to develop land

use plans and procedures based upon sound planning information and procedure and to develop local plans consistent with the State Plan, N.J.S.A. 52: 18A-196(f)(D9).

Consistent with the objectives of the State Planning Act, the Township actively participated in the Cross Acceptance process leading to the adoption of the 1992 and 2001 State Plans and with the objective of ensuring that its Master Plan was consistent with the goals and objectives of the State Plan. The evidence reflects the Ordinance was a further evolution of that process. The Ordinance is consistent with the State Plan's intent, goals, objectives and policies for its Rural, Rural-Environmentally Sensitive and Environmentally Sensitive Planning Areas (PA4, PA4B and PA5) which subsume the VRC and MRC Districts.

In Mount Olive Complex v. Tp. of Mt. Olive, the Court squarely held that "a municipality's voluntary compliance with the State Plan should be a significant factor in a reviewing court's determination respecting the validity of a zoning or rezoning ordinance." 340 N.J. at 518. Mt. Olive comprehensively discussed the significance of the State Plan in assessing the reasonableness of local planning judgments. It recognized that:

> [a] major goal of the State Plan is to halt suburban sprawl, characterized as a pattern of development that destroys the character of the cultural landscape, is inefficient in terms of public facilities and services and

> devoid of the sense of place that has long defined the character of life in New Jersey.
>
> [Id. at 541.]

Recognizing that the State Plan is not intended to validate or invalidate any municipal code or zoning ordinance, see N.J.A.C. 17:32-6.1(b), the Mt. Olive Court nevertheless acknowledged that the MLUL requires municipalities to include in their master plans a statement indicating the relationship of the proposed development of the municipality to the State Plan. Id. See also N.J.S.A. 40:55D-28d(3). Mt. Olive explains that the State Plan generally divides the state into five planning areas: the Urban (PA1); Suburban (PA-2); Fringe (PA3); Rural (PA4); and Environmentally Sensitive (PA5). 340 N.J. at 541. Focusing specifically upon the Rural Planning Area (PA4), Mt. Olive states those areas are "meant to identify productive farmland," where development and infrastructure are discouraged." Id.

The evidence demonstrated Ordinance 02-1268 and the underlying 2002 Master Plan, were crafted to conform with the goals, objectives and policies of the State Plan for its Rural, Rural Environmentally Sensitive and Environmentally Sensitive Planning Areas, PA4, 4B and 5. Mt. Olive is unwavering in its conclusion that:

> [W]e do not hesitate to conclude that a municipality may consider and rely on the State Plan in redesigning its land use

> regulations. … c]onsequently, the municipality's voluntary adherence to the State Plan guidelines may support a determination that amendment to its zoning regulations advance the purposes of zoning defined by the MLUL.
>
> [Id. at 542, 544-45 (citing Sod Farm, 298 N.J. Super. at 86, which sustained the rezoning of the plaintiff's property to three acre zoning in part because of the Township's reliance on the State Plan guidelines.]

Kirby v. Tp. Comm. of the Tp. of Bedminster, and the underlying Trial Court decision there also recognized the significance of the State Plan in assessing the reasonableness of local planning judgment. The Appellate Division (quoting the trial judge) stated that the State Plan is reasonable to consider "as supporting the planning judgment of Bedminster." 341 N.J. Super. at 287.

In New Jersey Farm Bureau v. Tp. of East Amwell, 380 N.J. Super. 325 (App. Div. 2005) certif. denied. 185 N.J. 596 (2005), Judge Skillman, writing for a unanimous Court in upholding ten acre zoning in the Amwell Valley Agricultural District, again stressed that "although the State Plan's designation of an area as a Rural Planning or Environmentally Sensitive Planning Area is not dispositive of the validity of large-lot zoning designed to preserve the area's rural character, these designations are supportive of the reasonableness of such zoning." Id. at 335,

citing Kirby, supra at 286-89.

C. CONCLUSION

For all of the above reasons, judgment is entered in favor of the Township. The complaint is dismissed with prejudice as to all remaining claims. Counsel for the Township shall prepare an order consistent with this opinion.