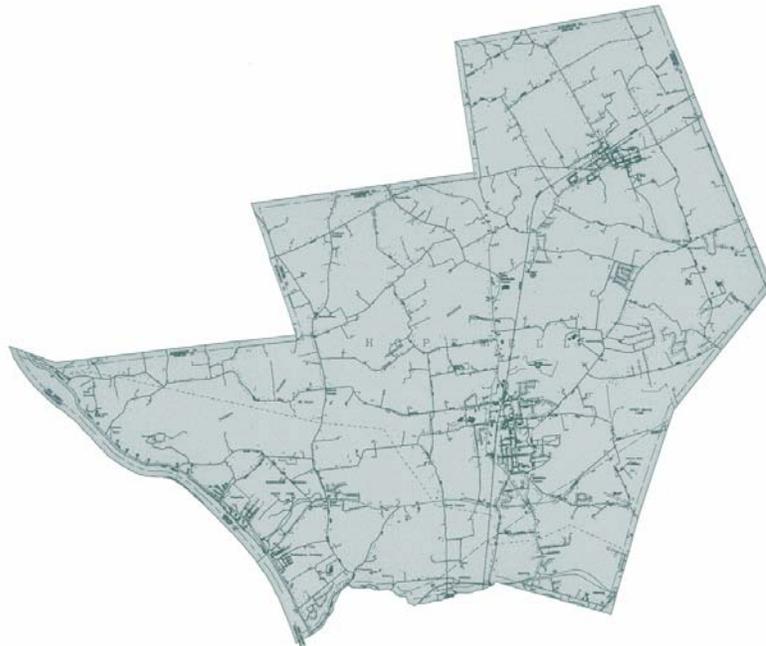


HOPEWELL TOWNSHIP

Recommendations for Wastewater Planning

November 8, 2004



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**RECOMMENDATIONS
For
WASTEWATER PLANNING
Hopewell Township**

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EXECUTIVE SUMMARY

Hopewell Township is required by the New Jersey Department of Environmental Protection to prepare and maintain a wastewater disposal master plan. This master plan is known as the Wastewater Management Plan and its contents regulate the locations and methods for wastewater disposal throughout the entire township. The Wastewater Management Plan is part of the 208 Area-Wide Water Quality Management Plan of Mercer County. The 208 Area-Wide Water Quality Management Plan of Mercer County was prepared as part of the Clean Water Act as promulgated by the federal government.

Hopewell Township's first wastewater management plan was approved for use by the New Jersey Department of Environmental Protection in 1988. This plan has been amended several times through a formal amendment process established by Mercer County and the New Jersey Department of Environmental Protection.

The most significant amendment to the wastewater management plan of Hopewell Township occurred in 1998. This amendment permitted Hopewell Township to provide public sewer service to the southeastern sector of the Township by connecting with wastewater facilities in the City of Trenton. This amendment included several established residential areas where small lots combined with groundwater and bedrock conditions were creating difficulties in managing septic systems, their primary method for wastewater disposal. This amendment, however, spurred significant controversy and, while approved for construction, was ultimately abandoned in 1999. The abandonment, however, came with a commitment by Hopewell Township to the residents of the residential areas that were petitioning for public sewers, that it would continue to review solutions for the stated septic system problems in these areas. This abandonment also came with a requirement by the New Jersey Department of Environmental Protection for Hopewell Township to undertake significant planning, zoning and environmental studies prior to any subsequent wastewater management plan approvals.

Since 1999, Hopewell Township has embarked upon an analysis and evaluation of the entire Township to determine what areas merit further consideration for alternatives to the current on-lot method of wastewater disposal. This effort has included reviews of various septic system alternatives, public sewers, impacts caused by public sewers, and financial impacts. *This document is a series of recommendations to Hopewell Township that represent guidance for changes to septic system design and management currently being practiced in Hopewell Township as well as guidance for defining public sewer areas.* These recommendations were requested by the Hopewell Township Committee in July 2004 and are intended for use in preparing an updated amendment to the Hopewell Township Wastewater Management Plan.

Septic System Recommendations

- ❖ It is recommended that alternative (experimental) septic system design technologies be permitted whenever authorized by NJDEP for new septic systems and as part of septic system repairs. Hopewell Township should adopt ordinances as required by NJDEP to provide assurances it needs to approve such technologies.
- ❖ It is recommended that every new septic system be registered with the Hopewell Township Health Department as part of a mandatory registration program. This program should require registration for new septic systems serving new homes as well as replacement septic systems. This recommendation requires the adoption of an ordinance that could be modeled from the existing similar program in neighboring Montgomery Township, Somerset County.
- ❖ There are many septic system owners in Hopewell that properly serve as their own Responsible Management Entity and who prudently maintain their septic systems. There are many septic system owners in Hopewell Township that are unaware or are uneducated about how septic systems work, how they should be

maintained and why maintenance is important. There are also many septic system owners in Hopewell Township that have been misinformed as to the long-term care and operations of their systems and the importance of the same. It is recommended that Hopewell Township enhance its existing homeowner awareness program on septic system ownership and maintenance. This enhancement could be coordinated with the Stony Brook Millstone Watershed Association which is seeking to assist Hopewell Township in educating the public on matters of non-point source pollution. Such cooperative efforts are encouraged by the NJDEP in its new stormwater management regulations

- ❖ Septic system repairs are not always reported. Yet, information concerning these repairs could be extremely useful in determining a particular course of action for a particular area that might be plagued with septic problems. Septic system repairs have, in some instances, been found to be critical improvements/enhancements to the long-term operation, maintenance and ultimate life of a septic system. It is recommended there be mandatory reporting of any and all septic repairs.

Public Sewer Service Recommendations

- ❖ All existing areas served by public sewer service should remain designated as they are presently designated on the Wastewater Management Plan of Hopewell Township, unless otherwise recommended herein.
- ❖ Where possible, the boundaries of sewer service areas should terminate along physical features such as roadway centerlines, along restricted open spaces, or conservation easements. Physical features provide the clearest definition of boundary limits. Open space and conservation easement areas can be well defined by markings. These limits do not often change, and if they change, the change requires some form of public consideration/hearing.

- ❖ All areas that are the subject of new planning that result in development densities in excess of current zoning ordinances for single family lots with wells and septic systems, should be considered for public sewer service. In areas other than designated ELSA or SBRSA service areas, public sewer service could be provided by a Board of Public Utilities regulated Utility, operating under a Franchise Agreement with the Hopewell Township Committee. Wastewater franchise areas are public sewer service areas and must be designated on the Wastewater Management Plan.

Delaware River Watershed

- ❖ A 2000 Settlement Agreement with the Ewing Lawrence Sewerage Authority, obligates Hopewell Township to remove all ELSA sewer service areas that do not have contractual capacity within the ELSA Wastewater Treatment Facility, as of the date of the agreement.
- ❖ In order to comply with the settlement agreement it is recommended the area of Titusville be deleted from the ELSA sewer service area. Alternative systems should be considered as individual on-lot solutions to specific problems in the Titusville area. If an area-wide wastewater issue arises, then that specific problem should be reviewed and the feasibility of a solution for that specific problem be determined at that time. The settlement agreement requires the removal of the Titusville area from a sewer service area.
- ❖ It is recommended the ELSA sewer service area that presently exists between Ewing Township, New Jersey State Highway Route 31, Mercer County Route 546 and Lawrence Township remain a designated ELSA sewer service area. This sewer service area includes the Areas of Concern known as Brandon Road, Brandon Road East, Orchard Avenue, Pennington-Lawrenceville Road East, and Pennington Road on the east side of Route 31. There are also a limited number of lots fronting upon and located on the west side of Route 31 just north of

Interstate 95 that should also remain designated as ELSA sewer service area. Public water is required if public sewers are constructed in these areas in order to mitigate potential groundwater table impacts. The physical infrastructure required to provide both public water and public sewer exists within close proximity to these areas.

- ❖ The Areas of Concern known as Diverty Road and Indian Village should remain designated for public sewers discharging into the ELSA system. These areas are presently designated for public sewer service discharging to ELSA. Groundwater impacts, under all conditions, are expected with public sewer installation in Diverty Road and under drought conditions for Indian Village. Diverty Road is located within the franchise area of Trenton Water. Indian Village is not located within the franchise area of Trenton Water and an amendment to the franchise agreement to include Indian Village will be required to provide public water service to this area. Public water mains exist in close proximity to both areas.

- ❖ It is recommended that the Area of Concern known as the Ingleside area remain designated for individual on-site septic systems except that an area adjacent to the Pennington Circle should receive public sewers discharging to the ELSA system. This area is not presently designated for public sewer service. This recommendation is conditioned upon Hopewell Township providing the ability to use alternative technologies as a means of septic repair. If the use of alternative technologies is not permitted, this entire Area of Concern should be considered for public sewers. Providing public sewers to this area will not result in the need for public water.

Millstone/Raritan Watershed

- ❖ It is recommended that the Areas of Concern known as Morningside, Penn View Heights and Timberlane remain designated for individual on-site septic systems. This recommendation is conditioned upon Hopewell Township providing the ability to use alternative technologies as a means of septic repair. These areas are not presently designated as public sewer service areas. The construction of public sewers would result in impacts to groundwater in the Morningside and Penn View Heights areas during drought conditions and there are no anticipated groundwater impacts in the Timberlane area.

- ❖ The Area of Concern known as Tree Streets should remain as a designated SBRSA public sewer service area. This area is presently designated as an SBRSA public sewer service area. Public sewer installation in the Tree Streets area will not require the installation of public water.

- ❖ It is recommended the Area of Concern known as North Main Street receive public sewers. This area is not presently designated as a public sewer service area. Public water supply is not required to support public sewers in this area.

- ❖ Pennington Point West is an Area of Concern where there is ongoing planning for affordable housing. This area is not presently designated as a public sewer service area. Current zoning anticipates high density housing on this tract. If the ultimate density for this area exceeds that permitted by Hopewell Township ordinances for single family lots with wells and septic systems, public sewer service is recommended. In the absence of such density, this area should remain with wastewater disposal being provided by individual on-site septic systems, as presently exists. The high density development permitted by current ordinances for Pennington Point, requires the installation of public water.

- ❖ The Mount Rose Area of Concern should be designated for public sewer service by SBRSA. This area is not presently designated as a public sewer service area. Public sewer construction will require public water service to this area.