

PART III – PUBLIC SEWER SERVICE

Public sewer service represents collection, conveyance and treatment infrastructure that may be owned and operated by a municipality, a Utility Authority operating under the laws of the State of New Jersey or a Public Utility. Planning for public sewer service in Hopewell Township has been the subject of extended debate and environmental scrutiny. Areas previously designated for public sewer service are identified on the Wastewater Management Plan of Hopewell Township. Most of these areas have primarily been located in the southern half of Hopewell Township.

There are two different forms of “public sewer service.” These include systems with *discharge to a surface water body* or systems with *discharge to groundwater*. The Ewing Lawrence Sewerage Authority (ELSA) provides treatment for the Delaware River watershed areas of Hopewell Township⁷ and the Stony Brook Regional Sewerage Authority (SBRSA) provides treatment for the Millstone/Raritan River watershed areas of Hopewell Township⁸. There are no existing “public” facilities within Hopewell Township that discharge to groundwater.

It is typical to plan for wastewater discharge locations within the watershed in which the wastewater is generated. This is due to the fact that there is a balance that must occur between groundwater recharge and groundwater export within each watershed. Groundwater supplies generally are located underneath the same surface watershed that surface water flows from. Water falling on the surface in a particular watershed ultimately recharges into the groundwater in that watershed. Where wells are dependent upon groundwater in a particular watershed for their supply, it is critical to insure the supply is not diminished by groundwater export, also known as groundwater depletion. Public sewer service removes sources for groundwater recharge and, therefore has been found to impact well water supplies.

⁷ Located on Whitehead Road in Lawrence Township, Mercer County.

⁸ Two plants located within Hopewell Township – Aunt Molly Road & Pennington-Centerville Road

Wastewater planning in Hopewell Township includes both the Delaware River and the Millstone/Raritan River watersheds. In 1998, a request made by Hopewell Township for wastewater in portions of the Millstone/Raritan River watershed in Hopewell Township, to be discharged into the Delaware River watershed was approved by the Delaware River Basin Commission and NJDEP.

Prior to designating any area of Hopewell Township for public sewer service on a Wastewater Management Plan, adequate capacity must be determined to exist in the treatment facility and the conveyance systems for the additional wastewater being generated by Hopewell Township. For the purpose of this report, the term “adequate capacity” is defined by the author as:

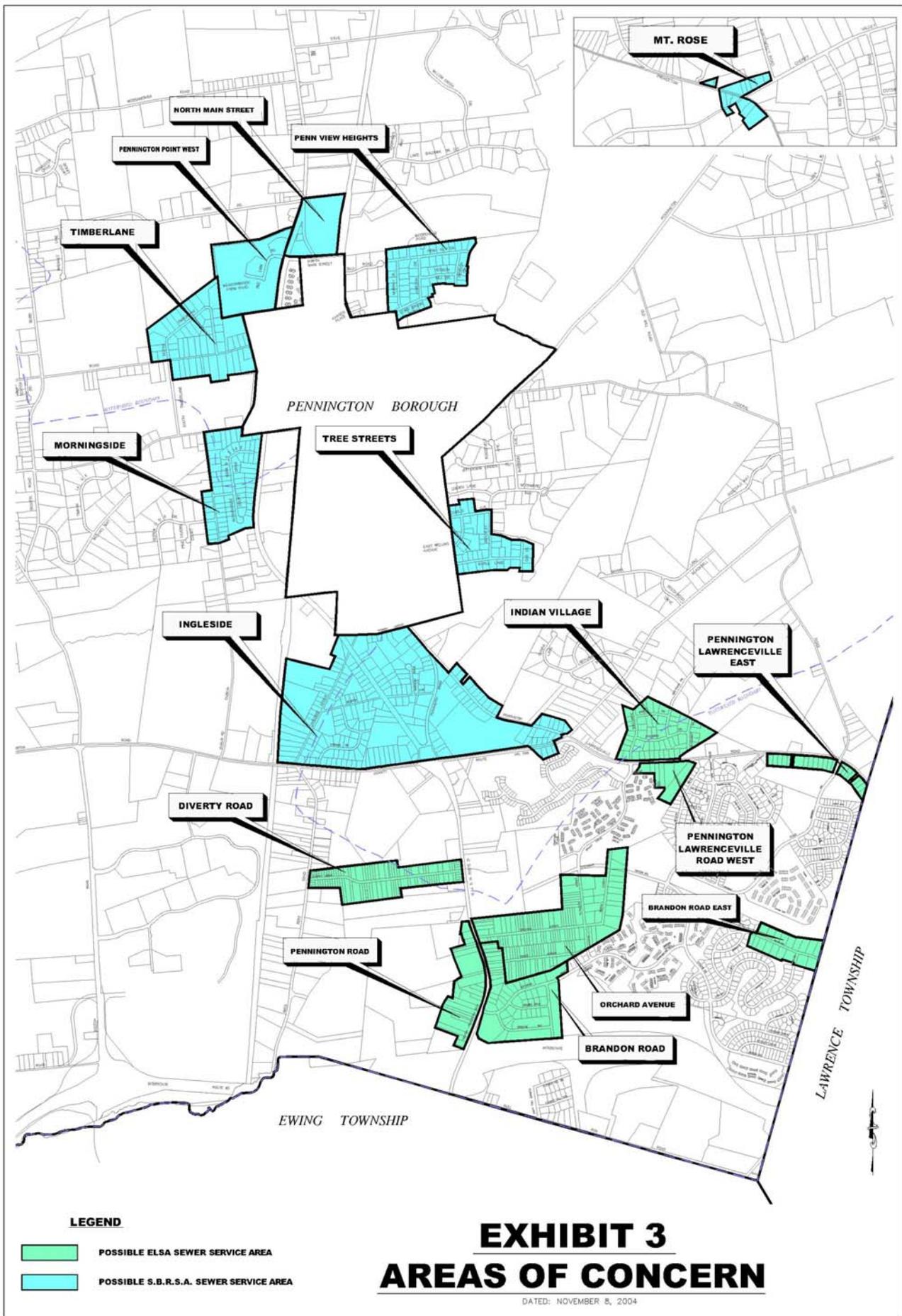
The physical ability of a treatment plant and related conveyance systems to receive and treat wastewater as determined by a detailed engineering analyses, AND the contractual ability to convey wastewater to that facility.

The physical ability to treat wastewater is a matter of science and engineering and has a predictable outcome. Securing the contractual ability to treat wastewater, however, involves issues that include detailed negotiations with multiple parties and does not have a predictable outcome. Both the physical ability AND contractual ability must be met in order for adequate capacity to exist.

In addition to those areas shown on the current Wastewater Management Plan, the Hopewell Township Committee has been considering the addition of 16 areas (Areas of Concern) for public sewer service since 1998. No conclusion on the outcome of providing sewers has been reached for these areas, primarily due to issues of adequate capacity and environmental consequence. To date, considerations have included reviews of Health Department records, homeowner surveys, infrastructure cost analyses, and groundwater quality and quantity impact studies. These areas are graphically identified on Exhibit 3, and are specifically listed as follows:

1. Morningside
2. Timberlane
3. Pennington Point West
4. North Main Street
5. Penn View Heights
6. Ingleside
7. Tree Streets
8. Mount Rose
9. Diverty Road
10. Orchard Avenue
11. Brandon Road
12. Pennington Road
13. Pennington-Lawrenceville Road East
14. Brandon Road East
15. Indian Village
16. Pennington-Lawrenceville Road West

Timberlane, Pennington Point, North Main Street, Penn View Heights, Tree Streets, and Mount Rose are located entirely within the Millstone/Raritan River Watershed. Orchard Avenue, Brandon Road, Pennington Road, Pennington-Lawrenceville Road East and West, and Brandon Road East are located entirely within the Delaware River Watershed. Morningside, Ingleside, Diverty Road, and Indian Village are located in both the Millstone/Raritan and Delaware River Watersheds. The Delaware River Basin Commission formally approved the discharges of all wastewater generated within the Morningside, Ingleside, Diverty Road, and Indian Village areas from the Millstone/Raritan watershed into the Delaware River watershed; (ELSA) sewer service area.



In many meetings that have occurred between Hopewell Township and with the various municipalities and Utility Authorities that have regulatory authority over the ability to provide sewer service to Hopewell Township, several key factors have been identified that will influence any decision to provide public sewer service to any area within Hopewell Township:

- The designation of any area for public sewer service will have direct financial impacts upon the Utility providing wastewater treatment. This impact will be passed on to Hopewell Township and its users through capacity, connection and user fees.
- Adequate capacity must be determined to exist. This determination can only be made by detailed engineering evaluations that are costly and time consuming. The costs of evaluation are out-of-pocket expenses, funded either by the general taxpayer or by the utility system users until such time as the areas under consideration are connected.

In the case of SBRSA, it is presently known that the existing plant serving Pennington Borough does not have any adequate capacity for receiving wastewater flows from the Areas of Concern in Hopewell Township. In order to determine what will be required to provide adequate capacity, it will be necessary to first analyze the ability of Stony Brook to assimilate additional wastewater that Hopewell Township will create. Because this work must precede an actual determination that adequate capacity can be made available, expenses will be out-of-pocket, funded by either the general taxpayer or by the utility system users until such time as the areas under consideration are connected.

- In the case of both ELSA and SBRSA, adequate capacity between Hopewell Township and the treatment facility must be determined⁹. This determination can only be made by detailed engineering evaluations that are also costly and time consuming. These evaluations also approximate the costs of providing the capacity. These expenses will be out-of-pocket, funded by either the general taxpayer or by the utility system users until such time as the areas under consideration are connected.
- In the ELSA system, the reservation of capacity for Hopewell Township prior to wastewater being generated, will preclude the allocation of that capacity elsewhere. Since that capacity was previously funded, its reservation will result in an immediate loss of potential revenue to ESLA. Therefore, the mere designation of an area for sewer service in Hopewell Township consumes available capacity to other consumers and may require an annual reservation fee. This capacity would normally be reserved at the time construction permits are issued, thus funding its reservation by connection and user fees. In Hopewell Township's case, however, it will be necessary to reserve this capacity well in advance of any user or connection fees being paid. These reservation fees will be out-of-pocket expenses, funded by either the general taxpayer or by the utility system users until such time as the areas under consideration are physically connected.
- For both ELSA and SBRSA possibilities, approvals from constituent municipalities are required in order for productive negotiations to occur to provide sewer service to Hopewell Township. In the case of any SBRSA service area, Pennington Borough Officials have indicated that there is no desire to extend sewer service beyond Borough boundaries.

⁹ In order to get wastewater from Hopewell Township to a treatment plant, the use of some portion of existing conveyance piping within another municipality is required. The use of this existing capacity prevents use by the entity that constructed the piping and, quite often, charges will be assigned to compensate the entity for that use.