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MEMORANDUM

To: Highlands Water Protection and Planning Council

From: Eileen Swan, Executive Director
Dan Van Abs, Senior Director of Planning and Science
Christine Ross, Senior Resource Management Specialist

Date: February 29, 2008

Re: Application Type: *Proposed Amendment the Sussex County, Upper Raritan and Upper Delaware WQMPs and HPAA with Waiver*
Name: *Parker/ Circle/ Southard Sanitary Sewer Improvements*
Municipality: *Borough of Mt. Arlington and Township of Roxbury*
County: *Morris*
Highlands Act Area: *Preservation Area*
LUCM Location: *Existing Community Zone*
Property: *45 existing residential parcels located along Southard Road, Parker Road and Circle Drive*
Proposed Project: *Proposed Sanitary Sewer Improvements to Protect Public Health*
Nearest Waterway (Name): *Lake Hopatcong*
Wastewater: *Musconetcong Sewerage Authority Water Pollution Control Plant*

Project Description

The above-captioned project would amend the Sussex County, Upper Raritan and Upper Delaware Water Quality Management Plans (WQMPs) to modify the Musconetcong Sewage Authority (MSA) Wastewater Management Plan (WMP) by expanding the sewer service area to include 45 existing developed residential parcels (44 homes and two apartment buildings) located along Southard Road, Parker Road, and Circle Drive within the Borough of Mount Arlington and Roxbury Township, Morris County (Proposed Amendment). These homes are on very small lots, of roughly 1/8 acre. The Mount Arlington portion of the project, with 38 homes, is 2.294 acres. The Borough of Mt. Arlington is requesting a recommendation from the Highlands Council to the NJDEP regarding a proposed Highlands Preservation Area Approval (HPAA) with waiver for the Parker/Circle/Southard Sanitary Sewer Improvement project on the basis that the project directly

affects the protection of public health (Highlands Act Rules at N.J.A.C. 7:38-6.5, waiver for the protection of public health and safety).

The Proposed Amendment would consist of the installation of 2,169 linear feet of 8-inch diameter polyvinyl chloride (PVC) pipe gravity main, 276 linear feet of 8-inch diameter ductile iron pipe (DIP) gravity main and 502 linear feet of 2-inch diameter PVC low pressure force main. Wastewater from the existing residential area would be conveyed by 8-inch gravity collection mains proposed at each street and would connect to existing manholes. A 2-inch diameter PVC low pressure force main would be utilized on a portion of Southard Street due to the fact that the closest existing sanitary sewer manhole is approximately ten feet higher in elevation than the lowest point of Southard Road. The existing sewer manholes connect via 8-inch diameter PVC pipes in each manhole to the Borough of Mt. Arlington's existing sanitary sewer collection system, which connects to the MSA sewage treatment plant (STP).

The project site is located in the Preservation Area and within the Existing Community Zone (ECZ) of the Land Use Capability Zone Map. The total projected wastewater flow due to the expansion of the sewer service area is 14,325 gallons per day (gpd). No expansion to the MSA STP is proposed to accommodate the projected increase from the expanded service area. The expanded sewer service area only would include the existing developed lots.

Overview and Procedural History

The location of the 45 existing developed residential parcels was previously in an approved proposed sewer service area that had been rescinded as a result of the Highlands Act, which immediately withdrew previously approved sewer service areas in the Preservation Area where wastewater collection systems had not been installed as of August 10, 2004. On March 7, 2006, the NJDEP issued a Highlands Applicability Determination (HAD) and Water Quality Management Plan Consistency Determination for the project. At that time, the NJDEP determined that the proposed activity for the connection of existing single family dwellings to municipal potable water supply and sewer by means of conveyance infrastructure to be installed during the reconstruction and improvements to existing roadways to be *Not Exempt* from the Highlands Act and *Inconsistent* with the areawide WQMPs.

As a result of the NJDEP determination, the applicant (the Borough of Mt. Arlington) pursued approvals for the proposed project activity through the HPAA and waiver process through a formal request dated September 18, 2006. The application indicated that the basis for the waiver was that the proposed improvements, which at that time include water main extensions, were necessary to protect public health and safety pursuant to N.J.A.C. 7:38-6.5 of the NJDEP's Highlands Rules. The NJDEP concluded that the project did not satisfy the criteria for grant of a health and safety waiver due largely to the fact that it was not verified by the Mt. Arlington Borough Health Department that existing wells were contaminated. However, Mt. Arlington did submit information to the NJDEP indicating that the individual subsurface sewage disposal systems serving the existing residential dwellings posed a high potential for failure. Further, in June 2003, the NJDEP established Total Maximum Daily Loads (TMDLs) for phosphorous for four lakes, including Lake Hopatcong. The TMDL study attributes approximately 32% of the Lake Hopatcong total phosphorous load to septic systems in the watershed areas around the lake, including Mt. Arlington.

In September 2007, the NJDEP also established TMDLs for pathogens for eleven lakes including the Lake Hopatcong watershed (specifically, fecal coliform in Lake Hopatcong). The TMDL states that failing septic systems can be a source of fecal coliform. The construction of collection systems to connect the unsewered existing development within the municipalities of the TMDL study area is consistent with the TMDL reports and is recommended by NJDEP. In an effort to assist in the prevention and remediation of the impaired Lake Hopatcong, the NJDEP has given a high priority to reserving/dedicating the MSA STP flow allocation to serve existing unsewered portions of the Lake Hopatcong Watershed. As a result of the findings contained in the Lake Hopatcong TMDL, the NJDEP determined that the proposed connection of the existing 45 aging septic systems would aid in the accomplishment of restoration of water quality and hence, satisfied the criteria for a waiver for the protection of public health and safety (N.J.A.C. 7:38-6.5). Public notice of the Proposed Amendment was published in the New Jersey Register on February 4, 2008 (See 40 N.J. Reg. 811(a)).

Findings and Recommendation

The proposed project was reviewed against the Existing Community Zone policies of the Final Draft Regional Master Plan (RMP). The proposed project is consistent with Policy 2K4, Objective 2K4c (pg. 139) "Allow the expansion or creation of wastewater collection systems beyond Existing Areas Served to serve lands which are appropriate for infill or redevelopment, or to serve areas if they are shown to be necessary for and are approved by the Highlands Council to address a documented threat to public health and safety where no alternative is feasible, to serve cluster development, or to provide for minimum practical use in the absence of any alternative through issuance of a waiver by NJDEP or the Highlands Council, and will maximize the protection of sensitive environmental resources."

With respect to sensitive environment resources, the proposed project location encroaches into the Forest Resource Area, but not into the forested portion of the Forest Resource Area (the project site consists of existing developed residential parcels and roads). The proposed activities do not encroach upon sensitive environmental resources. The project location is bordered by critical habitat to the west, south and east. The critical habitat area should be avoided during project construction activities.

The staff finds that the proposed project is consistent with the goals, policies, and objectives of the Final Draft RMP. Further, because the proposed project would serve existing public health and safety needs, would serve to correct existing environmental degradation (and it is not intended or designed to support future development), and would not encroach upon sensitive environmental resources, the Council staff recommends that the Highlands Council authorize the issuance of a letter stating that the Proposed Amendment and HPAA waiver request is consistent with the Final Draft RMP.