



# TOWNSHIP OF LONG HILL

## UTILITY SERVICE ELEMENT of the MASTER PLAN

Prepared for:  
The Long Hill Township  
Planning Board  
12 December 2017

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Master Plan Committee and  
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**LONG HILL TOWNSHIP  
PLANNING BOARD RESOLUTION**

**Adopting the Utility Service  
Element of the Long Hill Master Plan**

**WHEREAS**, the Long Hill Township Master Plan was adopted in 1996; and

**WHEREAS**, the Planning Board determined that a complete rewriting of the Master Plan was warranted; and

**WHEREAS**, the Planning Board instructed the Master Plan Committee formed by the Mayor and Township Committee to study all Elements of the Master Plan; and

**WHEREAS**, the Master Plan Committee met on multiple occasions between January 2017 and November 2017, and drafted the Utility Service Element to replace the 1996 version of the Utility Service Element; and

**WHEREAS**, the Long Hill Township Planning Board has given considerable thought to the prior Element based upon public comment and has prepared a new Utility Service Element of the Master Plan with the assistance of the Master Plan Committee and Board Planner Kevin O'Brien; and

**WHEREAS**, the Utility Service Element has been discussed by the Planning Board at several meetings and a noticed public hearing was held on 12 December 2017.

**NOW, THEREFORE, BE IT RESOLVED** that the Long Hill Township Planning Board hereby adopts the December 2017 Utility Service Element of the Master Plan, as referenced above; and

**BE IT FURTHER RESOLVED** that the Planning and Zoning Administrator/Secretary be directed to send a copy of the adopted report with this resolution to the Morris County Planning Board and to the clerks of each adjoining municipality.

**ROLL CALL VOTE:**

Those in Favor:

Those Opposed:

I, , Planning Board Secretary of the Township of Long Hill in the County of Morris, do hereby certify that the foregoing is a true and correct copy of a resolution duly adopted by the Planning Board at a regular meeting held on the 12 December 2017.

Dated: 12 December 2017

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Planning Board Secretary

## UTILITY SERVICE PLAN ELEMENT

### INTRODUCTION

Adequate utility infrastructure is essential to the support of land use and development. Accordingly, land use planning must take into consideration and be consistent with utility infrastructure. The two utility systems most frequently generating concern in developing a realistic land use plan are water supply and wastewater disposal systems. Electric, telecommunications and natural gas utilities are discussed herein as well. Additionally, comments regarding Stormwater Management have also been included in order that future development or redevelopment incorporates adequate stormwater runoff control measures. Additional amplifying information regarding the objectives of Stormwater Management measures is detailed in the Conservation Element.

### WATER DISTRIBUTION PLAN

New Jersey American Water is the supplier of potable water to most sections of the Township. A number of properties continue to be serviced by privately owned wells. The operation of New Jersey American Water's network within the Township is regulated by the New Jersey Board of Public Utilities. The Township is located within the Baltusrol Gradient in New Jersey American Water's Short Hills System (PWS ID: NJ0712001). This system is a public community water system consisting of 25 wells, 4 surface water intakes, 12 purchased ground water sources, and 3 purchased surface water sources. All water source intakes are located outside the Township. Source water comes from the Passaic River and the Brunswick aquifer. Within the Township, approximately 306 fire hydrants are maintained by the company and serve as the primary sources of water for fire suppression purposes. At the present time, New Jersey American Water has no plans for any significant expansion of their service territory within the Township. However, the company continues to invest heavily in the rehabilitation or replacement of existing mains to enhance reliability and quality of service. The Township should coordinate future capital public works improvements, most notably roadway rehabilitation and main rehabilitation and replacement, with the company.

## WASTEWATER MANAGEMENT PLAN

The Township manages wastewater at a municipally owned and operated treatment plant located on S. Warren Avenue built in the 1930s and enlarged in 1975, 1984 and 1991. The plant is now licensed to process 900,000 gallons of wastewater per day. Treated effluent from this plant is discharged to the Passaic River, downstream of the Great Swamp National Wildlife Refuge.

Approximately 88% of the Township's residential housing units and nearly 100% of the commercial/industrial sites are connected to the wastewater system. The system services the majority of the Township's populated areas. However, the system's collection network does not service some portions of the Township, where residences utilize individual septic systems regulated by the municipal Board of Health.

Any redevelopment or new development in the Township would require that the wastewater treatment plant have sufficient treatment capacity to address increased flows. This capacity issue would need to be addressed by either constructing an expansion to the plant, and/or by implementing a comprehensive strategy to address inflow and infiltration into the system, both from publically-owned mains and by privately-owned wastewater laterals.

In all instances, future improvements to and rehabilitation of the treatment plant and collection network is required to comply with current environmental regulations and any future requirements, which may be stricter in nature.

## ELECTRIC POWER AND TELECOMMUNICATIONS UTILITIES PLAN

Electric power service is provided in the Township by Jersey Central Power & Light (JCP&L), whose operations are regulated by the Board of Public Utilities.

Telecommunication lines are provided by Verizon and Comcast. All new electrical utility distribution lines and telecommunication lines should be installed below-grade and existing above-grade utilities should be relocated below-grade whenever they are rehabilitated, relocated or renewed. Any development or re-development efforts in the Millington and Stirling Villages should be required to relocate all utilities below grade. Relocation efforts should be coordinated with planned municipal road reconstruction efforts. However, when utilities are relocated below grade, JCP&L will need to continue to

maintain existing pole-mounted street illumination that is not privately owned or owned by the municipality. When development or redevelopment impacts existing aerial utilities or entails the installation of new electrical, telecommunication or traffic control equipment, special emphasis must be placed on ensuring that screening, location, and size of above-grade utility cabinets is harmonious with the surrounding landscape and respects the sight triangle. When this equipment is planned or is requested by the Township, any formal notification should be forwarded to the Planning Board, where the available finishes, designs and configurations which best integrate into the aesthetic of the local area should be considered.

The Township seeks to embrace outdoor illumination principles which minimize the amount of illumination, minimize the area of illumination, minimize the duration of illumination, minimize the amount of "cold" wavelength illumination and minimize wasted energy, while not compromising the safety, security, and well-being of persons engaged in outdoor night time activities. The goal of adopting these principles is to control the obtrusive aspects of excessive and careless outdoor lighting usage while preserving, protecting, and enhancing the lawful nighttime use and enjoyment of any and all property.

Unused, abandoned or functionally-obsolete above-grade utilities must be promptly removed by the utility owners. Particular emphasis is placed on the prompt and proper removal of all utility elements which contain hazardous materials or whose presence represents a hazard in the event that the facility is subject to damage by a man-made or natural disaster.

Two high-voltage electrical transmission rights-of-way are currently located within the Township. The future upgrade or replacement of electrical transmission lines and substations, including the replacement of existing towers with monopoles is acceptable, provided the replacement facilities are located within the existing right of way. While the NJ BPU Vegetation Management Rules govern vegetation management along utility rights-of-way, existing vegetative buffers between the utility right-of-way and adjacent residential properties should not be unnecessarily reduced. All vegetation management activities along the right-of-way should incorporate arboricultural and landscape best-management-practices that maintain the health of existing vegetation and limit the use of

herbicides. The width of clear zones should be guided by site-specific technical requirements to maintain reliable service, not uniform application of non-site-specific standards.

Ground-mounted electrical transformers or substations should be located away from occupied structures and adequately screened with evergreen vegetation and secured with perimeter fencing that matches the aesthetics of neighboring areas.

#### NATURAL GAS UTILITY PLAN

Natural gas utility service is provided in the Township by Public Service Electric & Gas. An interstate natural gas transmission pipeline is located within the same right-of-way as high-voltage electrical transmission lines. The Master Plan supports future efforts by the utility to replace existing aging cast iron gas pipes with new, durable plastic and/or coated steel piping to improve reliability, reduce the possibility of methane leaks, and facilitate the installation of excess flow valves on service lines that dramatically reduce gas flow if a pipe is damaged. The installation of new mains that allow for elevated pressure that provide better support for high-efficiency appliances like furnaces and water heaters is a benefit to the Township. The Township should coordinate future capital public works improvements, most notably roadway rehabilitation and main rehabilitation and replacement, with the company.

#### STORMWATER MANAGEMENT PLAN

According to the New Jersey Department of Environmental Protection there are four principal subdrainage areas within the Township, three that discharge directly to the Passaic River and one that discharges to the Black Brook in the Great Swamp National Wildlife Refuge. The ridge of the Watchung Mountains running roughly parallel to Long Hill Road functions as the dividing line between the watershed that discharges directly to the Great Swamp and the watershed that discharges directly to the Passaic River. The majority of the waterways in the Great Swamp are classified as Category One water by the New Jersey Department of Environmental Protection. This Category One antidegradation designation provides additional protection to waterbodies that helps prevent water quality degradation and discourages development where it would impair or destroy natural resources and water quality.

Future development or redevelopment within the Township must address groundwater recharge, stormwater quantity, and stormwater quality impacts by incorporating stormwater design and performance enhancements. These projects must minimize the adverse impact of stormwater runoff on water quality and water quantity and the loss of groundwater recharge that provides base flow in receiving water bodies. Site improvements within the watershed of the Great Swamp should be held to the high standards described in the *New Jersey Best Management Practices Manual* due to the presence of high value waters in the Great Swamp National Wildlife Refuge. All site improvements which discharge to an area within the Township historically prone to flooding should demonstrate that they do not increase or further aggravate existing flooding conditions.

## RECOMMENDATIONS

1. Coordinate future Township infrastructure capital improvements with the water, natural gas, telephone, cable and wastewater utilities to economize and synchronize efforts.
2. Embrace outdoor illumination principles which minimize the amount, area and duration of illumination, minimize the amount of "cold" wavelength illumination and minimize wasted energy, while not compromising the safety, security, and well-being of persons engaged in outdoor night time activities.
3. Complete wastewater service to all areas in the Township where practical and economically feasible.
4. Manage the wastewater treatment plant and collection system network infrastructure assets in a manner that ensures that sufficient treatment capacity is provided to address increased flows associated with any redevelopment or new development in the Township, particularly that described in the Housing Element.
5. Install, where feasible, new electrical utility distribution lines and telecommunication lines below-grade and relocate existing above-grade utilities below-grade whenever they are rehabilitated or renewed.
6. Require prompt removal of unused, abandoned or functionally-obsolete above-grade utilities by the utility owners. Particular emphasis is placed on the prompt and proper removal of all utility elements which contain hazardous materials or whose presence represents a hazard in the event that the facility is subject to damage by a man-made or natural disaster.
7. Site improvements within the watershed of the Great Swamp should continue to be held to the existing high standard for stormwater management, as described by the *New Jersey Best Management Practices Manual*.
8. Continue to support Township Ordinances which address stormwater discharge particularly within flood prone areas or worsen/aggravate existing flooding conditions.



9. When utility or traffic control equipment is planned or requested, any formal notification should be forwarded to the Planning Board, where the available finishes, designs and configurations which best integrate into the aesthetic of the local area should be considered.

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