

**Draft #1: July 19<sup>th</sup> 2011**

## Chapter 8 Community Facilities & Utilities Plan

### INTRODUCTION

#### ***Overview***

Community facilities and services can be defined as the infrastructure and services intended for the benefit and protection of the general public. This includes municipal facilities, schools, libraries, emergency and medical facilities, and cultural organizations. Utilities refer to potable water, solid waste disposal, wastewater management, stormwater control, and energy supply.

The East Hanover Township Comprehensive Plan addresses issues related to community facilities, services, and utilities, and seeks to coordinate the provision of these amenities with the development pattern advocated by the Future Land Use Plan. Community facilities and services are planned to be accessible to all Township residents. Utilities are planned to correlate with land uses proposed by the Future Land Use Plan. That is, higher intensity land use should be directed to areas capable of providing public utilities. Further, appropriate services are to be provided to areas of appropriate development. For example low-density development areas may only require on-lot sewage disposal systems (OLDS) if feasible. The aim is to achieve more efficient allocation of facilities, services, and utilities and to minimize adverse sustainability issues and fiscal impacts arising from unmanaged growth.

**GOALS & OBJECTIVES**

- Goal #1**                    **Promote Efficient Delivery and Use of Community Facilities, Services, and Utilities**
- Maximize the utilization of existing infrastructure and alleviate the burden of expansion and maintenance costs.
  - Carefully coordinate residential and commercial development with community facilities and services.
  - Direct community facilities and services to areas experiencing problems, and anticipated future growth.
  - Continue to make municipal services available to Township residents.
- Goal #2**                    **Provide adequate water supply.**
- Require new development to demonstrate adequacy of water supply.
  - Actively engage in research and planning to assure sustainability and protection of the water supply.
- Goal #3**                    **Provide safe and effective sewage disposal.**
- Provide for public sewer service in accordance with the Township's Act 537 Sewage Facilities Management Plan.
  - Ensure that lots not served by public sewer can safely accommodate individual on-lot sewage disposal systems.
  - Promote regular maintenance and management of existing on-lot sewage disposal systems.
- Goal #4**                    **Promote the Use of Alternative Energy Systems and Technologies.**
- Encourage the establishment solar, wind and geothermal energy sources.
- Goal #5**                    **Provide Professional Emergency Services.**
- Continue to support the Township's emergency service providers.

## EXISTING CONDITIONS

***Municipal Services*** East Hanover Township has a five member Board of Supervisors supported by several commissions and community councils. It employs a Township Secretary/Treasurer, Administrative Assistant, Park and Recreation Director, Public Works Director, a Sewage Treatment Plant Operator, assistant operator, and maintenance person. General administrative services are performed by the governing body, hired municipal staff, and contracted firms. The Township Administrative Office is located in the municipal building at 8848 Jonestown Road in Grantville PA.

### Recommendations & Implementation Strategies:

- Continue to provide existing levels of municipal services and adjust services as warranted by future growth, changing needs and changing technological improvements.

### ***Emergency Services***

East Hanover Township has no municipal police force. Police services are provided to the Township by the Pennsylvania State Police. The State Police department servicing the Township is located at the Harrisburg Station at 800 Bretz Drive in Harrisburg. This police station also serves the Townships of West Hanover, South Hanover, Londonderry, Conewago, and Middle Paxton. It serves Dauphin, Royalton, and West Fairview Boroughs when their part-time police departments are not in service.

The Grantville Volunteer Fire Company provides fire protection, rescue, fire police, emergency medical and other support services to East Hanover Township and surrounding areas. The Fire Company is headquartered at 9083 Jonestown Road. In addition to the provision of emergency services, the Fire Company co-sponsors several community activities and events through the year. In late 2003, the Fire Company established a building steering committee to design and construct a new, larger station. Upon completion, the new facility will be capable of housing more equipment and have a more centralized location at the Corner of North Hill Drive and Allentown Boulevard.

The primary ambulance service for East Hanover Township is provided by South Central EMS. The ambulance center is located by the western border of the Township along Allentown Boulevard. Medical emergencies are directed to hospitals in Harrisburg and Hershey.

### Recommendations & Implementation Strategies:

- Continue to support the Township's emergency service providers.

- Maintain SALDO requirements for appropriate design in new developments to ease emergency response vehicles access to properties.

### **Library**

No public library is located in East Hanover Township. Library services are provided for students at the Lower Dauphin School District schools and for the residents via the Dauphin County Library System with branches located in Harrisburg, Elizabethtown, Millersburg, Hummelstown and Likens. The Anderson Family Library, a part of the Historical Society of Dauphin County provides resources for genealogical and local history research. The Anderson Family Library is located at 219 Front Street in Harrisburg.

#### Recommendations & Implementation Strategies:

- Continue to support the Dauphin County Library System.

### **Schools**

East Hanover Township is part of the Lower Dauphin School District along with the Borough of Hummelstown, and the Townships of Conewago, Londonderry, and South Hanover. Lower Dauphin Covers close to 90 square miles and is home to 22,545 residents. Approximately 4,000 students attend Lower Dauphin Schools. The District is comprised of five elementary schools (K-5), one of which is located in East Hanover Township, one middle school (grades 6-8), and one high school (grades 9-12). Hummelstown is the home for the middle school, high school, and the district's administrative offices.

#### Recommendations & Implementation Strategies:

- Continue to support the Lower Dauphin School District.
- Partner with the School District to share resources in the Township, such as play fields.

### **Parks & Recreation**

Issues related to this topic are covered in Chapter 9 of this plan.

### **Solid Waste Disposal**

East Hanover Township has contracted municipal curbside trash and recycling with Penn Waste Services. This program is scheduled to last until July 2013.

Dauphin County Department of Solid Waste Management and Recycling offers a one time per year curbside pickup program for Household Hazardous Waste. Access to information on this service is provided to the public via the County's website.

**Recommendations & Implementation Strategies:**

- Continue to provide curbside trash and recycling services.
- Include paper, glass, and all plastics (#1-7) in the recycling service.

***Water Supply***

Currently, there are no existing or planned public water supplies within east Hanover Township. All water provided to residential and commercial land uses come from privately owned wells.

To date the groundwater yields in the Township have been sufficient to accommodate the land development that has occurred. However, water supply is a concern because the Township's underlying geology may not yield sufficient groundwater needed to support higher intensity residential development or additional large draw commercial wells.

In 2010, the Township had completed an Aquifer Study to analyze the yield and recharge potential of geology and soils within the Township. The study utilized remote sensing, well drilling records, geologic and soil techniques to evaluate and stress test the sustainability of the water supply.

The Aquifer Study finds that both the quality and quantity are sufficient to support the current population, however the Aquifer Study indicates that areas of intense residential development and high yield wells are particularly sensitive to potential failure in times of drought conditions. Indications of nitrate and coliform contamination also are found to be potential threats to quality of well and surface water. In particular, the Bow Creek Basin, Manada Creek Basin and areas surrounding the I-81 interchange are cited by the Study to be under the highest levels of stress for both quality and quantity issues.

The Study recommends the use of supply limitations set forth in its findings to guide the drafting of ordinances and provisions of land use controls. The plan supports a targeted TDR approach to more effectively address non-point source pollution issues and recharge needs of the aquifer. The study also provides tools to evaluate both the impact of large-scale commercial and residential developments on drawdown of the aquifer and indirect drawdown on neighboring properties.

In continuation of the Aquifer Study, a Potable Water Study (PWS) is being prepared to identify and evaluate locations of need, supply sources, distribution alternatives, and costs if a public water system may be needed in the future. The PWS follows a planning model similar to that of the Act 537 Plan. At this time, although nearly completed, review of alternatives in the PWS is ongoing. It should be noted by the reader that this study has not yet been completed and the findings introduced below should be considered strictly preliminary and subject to change.

The Study Finds that the primary defect in the existing water supply in East Hanover Township is in quality. All of the alternatives provided in the study address this issue by proposing utilization of new water sources with disinfection. In addition, the Township should also try to address the issue in problem areas by providing public sewers to protect existing private wells.

The greatest benefit would be obtained by providing water service to the Fair Field, Sycamore Lane and Sand Beach Road areas. Consideration for digging a township well in the near vicinity of these areas versus accessing public water from West Hanover Township were both considered. Utilizing an existing water supply system in West Hanover Township could serve the areas of need in a more timely, financially feasible manner than developing and producing a Township owned water system for this location.

A secondary recommendation provided is to develop well areas and provide service to Grantville, Shellsville, and the Partridge Hills and Englewood Land areas. This is recommended to address anticipated growth issues. These areas have, or could have significant growth potential in the Township. Large portions of these areas are or will be served by public sewers, potentially attracting future development. Providing public water in these areas can insure that growth would be sustained.

A wellhead protection plan is also underway to identify groundwater sensitivity near wells and would set forth measures to prevent contamination. When completed, these studies shall be joined within a greater Comprehensive Watershed Protection Plan.

#### Recommendations & Implementation Strategies:

- Completion of the Township's analysis of potable water resources and promote measures of protection of well water.
- Use an Official Map to locate potential municipal large draw well areas and areas identified for wellhead protection.
- Complete and adopt the Wellhead Protection Plan if a Township water source is identified.
- Coordinate future Zoning and SALDO regulations with ongoing potable water research and recommendations from the Aquifer Study.
- Review and modify existing ordinances such as the Mobile Home Park Ordinance of 2003 to ensure effectiveness in protecting potable water resources.

- Maintain the correlation between higher intensity land development and presence of infrastructure by encouraging development in areas with existing infrastructure.
- Discourage high-density development in areas further from infrastructure and having natural restrictions. This may be done through the requirement of developer contribution for extension of sewers to less developed areas
- Continue to investigate options presented in the Potable Water Study including discussions and planning with outside water utilities in neighboring municipalities.

### **Wastewater Management**

A new revision of the East Hanover Township Act 537 Sewage Facilities Plan is currently under review by the Pennsylvania Department of Environmental Protection (PADEP). This plan is the first complete update of the plan in over fifteen years. The plan recognizes several areas of need in the township for extension of the current sewer system as well as improved municipal ordinances and establishment of a municipal authority.

The majority of the Township is served by OLDS. No community on-lot sewage disposal systems are known to exist in the Township. There are currently two small-flow sewage treatment facilities serving mobile home parks in the western portion of the Township particularly including properties in the Sycamore Lane and Fair Field Land Development areas.

There is one privately owned and operated sewage treatment facility in the Township. This treatment plant serves the Penn National Raceway and Hollywood Casino property, and is contracted to serve the Holiday Inn Hotel and a small restaurant on Mountain Road. Representatives of Penn National have stated that although some capacity remains at the plant, limitations on the receiving stream have placed a cap on the volume that can be output. The Township has been informed that no additional connections to the Penn National System will occur.

Preliminary discussion regarding potential sewer capacity sharing with West Hanover Township sewage collection system and treatment facility is currently awaiting response from the neighboring Municipality.

Currently, the only "public" wastewater treatment facility within the Township is the Dairy Lane Wastewater Treatment Plant. The facility is presently permitted by Pennsylvania Department of Environmental Protection (PADEP) for 400,000 gallons per day (GPD) and currently treats an estimated average of 150,000 GPD according to the Township's 2010 Chapter 94 wasteload management report.

Portions of Jonestown Road, Crawford Road, Caren Drive, Sanjo Drive, Hill Road, Bow Creek Road, Short Drive, *Chesapeake Estates* (300 unit

mobile home community) and the *Preserve At Bow Creek Land Development* are served by the Dairy Lane Wastewater Treatment Plant. Service is also provided for the Interstate-81 rest area. The sanitary sewer system primarily serves the Highway Commercial, Interchange Commercial, Village Residential, and Residential Medium Density Zoning Districts. The sewage facilities are owned and operated by East Hanover Township.

The East Hanover Township Zoning Ordinance of 2003 provides incentives for developing in sewerred areas by adjusting design standards depending on presence of public sewer and water.

The Township is currently engaged in the construction of an extension of the sewer system to the land developments of Englewood and Partridge Hills in the southeastern quarter of the Township. These developments were built in the late 1970's. These projects are a result of the findings of a component 3M special study required by PADEP. Evidence of OLDS malfunctions and well water contamination problems were indicated in this study. The resulting expansion of the system will provide service for an additional 114 homes. Construction of this project is scheduled for completion by January 2012. Financing for this project will be from a matching funds grant from the Commonwealth Financing Authority. This grant was secured in 2009 under the H2O PA Water / Wastewater Program.

There are a number of additional sanitary sewer needs areas in the Township. This is particularly the case in the Rural Agricultural zoning district and in older land developments, where malfunctioning OLDS and evidence of nitrate and coliform contamination are present in well water. Various areas throughout the Township present these conditions to varying degrees. The Act 537 Plan has identified these problem areas and the Township has selected sewer alternatives for the areas of greatest need. These areas are as follows:

- Dairy Lane Properties – These properties are to be connected the current system being constructed for Englewood and Partridge Hills. Completion is anticipated by 2013.
- Pheasant Road Properties – These properties are to be connected as an extension to the Englewood and Partridge Hills Project. Completion is anticipated by 2015.
- Southwestern Portion – This area has been identified in the areas immediately north and south of Route 22 (Allentown Boulevard). Completion is anticipated by 2023.

The largest funding will be for the construction of alternative 4.F that conveys sewer from 180 homes on the western portion of the Township to the Dairy Lane WWTP via a pump station. This is estimated to have a construction and project costs of approximately \$8,900,000.

This will be funded through the creation of a capital reserve plan and public or private financing. Once implemented, new and existing debt

service will be balanced with the rates established and the only rate increases necessary will be for inflationary or staffing increases. The Township has an existing Pennsylvania Infrastructure and Investment Authority (PENNVEST) loan set to mature in 2026. For the financing of sewers in the Western Portion of the Township, an additional loan will be required. The source of that loan is not known at this time due to the time frame of this plan.

In order to institute this plan, including the financial portion the Township must create an Authority. The Authority will execute the plan, develop the capitol reserve and secure financing in the future.

In the Conservation and Residential Agriculture zoning districts, constituting the majority of the Township land, lots typically are greater than 1 acre and are expected to have sufficient suitable area for a replacement soil absorption system should the primary system fail. However the draft revision of the Act 537 plan finds that for many areas of these zoning districts, extensive natural restrictions (steep slopes, limiting soils, floodplains, and wetlands) may impinge on the potential for effective replacement. For these areas of the Township, the continued use of OLDS with proper operation and maintenance is considered a viable long-term method of sewage disposal.

For areas with OLDS where public sewage would be infeasible, the Township will review its sewage management program for effectiveness. The program indicates that all systems will be inspected by responsible management entity on a three-year cycle and maintained as required. Soil absorption areas are to be inspected in order to assure the area is protected from physical damage. Any problems or suspected concerns shall be reported to a responsible management entity.

The Dauphin County Comprehensive Plan encourages municipalities to promote the centralization of sewer systems. The Plan also promotes the direction of development toward existing infrastructure and away from undeveloped areas. The location of mixed use, commercial, village, and medium density residential land use areas in this Comprehensive Plan support the County's position.

The current draft Act 537 Plan alternatives under consideration indicate the Township's commitment to environmental protection and sustainability by prioritizing existing sewer capacity for existing problem areas. Once system capacity has been reached, further expansion to support new development would potentially be a result of developer contribution, timing controls, or impact fees.

#### **Recommendations & Implementation Strategies:**

- Adopt, and actively engage the alternatives and implementation schedule of the Township's Act 537 Sewage Facilities Plan.
- Establish a Sewer Authority and Capital Reserve Plan to finance the Act 537 Plan's Selected Technical Alternatives.

- Review the Township's on-lot sewage management ordinance for effectiveness and continue regular monitoring of on-lot septic systems.
- Maintain requirements for on-lot sewage system replacement areas in the event of primary system failure.
- Complete the Englewood and Partridge Hills Sewer Project.
- Maintain the correlation between higher intensity land development and presence of infrastructure by encouraging development in areas with existing infrastructure.
- Discourage high-density development in areas further from infrastructure and having natural restrictions. This may be done through the requirement of developer contributions for extension of sewers to less developed areas.

### **Energy**

East Hanover Township currently has no public energy utility. Electric service is provided to residents primarily by Metropolitan Edison Company. Electrical Infrastructure is owned and maintained by the electric companies. The system consists of two high-tension line corridors running east to west. The southern corridor connects to a major electrical sub-station west of Laudermilch Road on Wolfe Lane. The remainder of electrical supply is in the form of residential and commercial/industrial service conduits throughout the Township.

Natural gas transmission pipelines are also present in the Township. Buckeye Partners LP, UGI, and Texas Eastern have transmission mains present in the Township. The UGI and Texas Eastern pipelines are serviced at a substation north of I-81. Although not owned by the Township, measures of public safety and physical protection of this infrastructure of regional importance must be maintained.

The Township recognizes the potential benefits of promoting the use of renewable resources such as solar, wind, and geothermal energy. The use of renewable energy sources could potentially reduce dependency on fossil fuels, and reduce emission of carbon. Use of renewable sources of energy also is also viewed as a means to reduce the long-term cost of "on the grid" service.

#### Recommendations & Implementation Strategies:

- Amend the SALDO to require placement of electrical lines underground in new developments for safety and aesthetic value.
- Continue to encourage the use and development of alternative energy sources through public education.

## PLANNING IMPLICATIONS

### ***Summary***

Municipal facilities and services appear to be regularly used and sufficiently serve Township residents. Although currently adequate, the Township should regularly assess the sustainability of community services based on population and development patterns. The planned expansion of the sewer system may spur development pressure in periphery areas. The Township must ensure, however, that new developments plan responsibly to support and sustain infrastructure and services to the populations they create. The importance of the protection of aquifer and potable water resources is recognized. The Township also recognizes the potential benefits of promotion of renewable sources of energy.