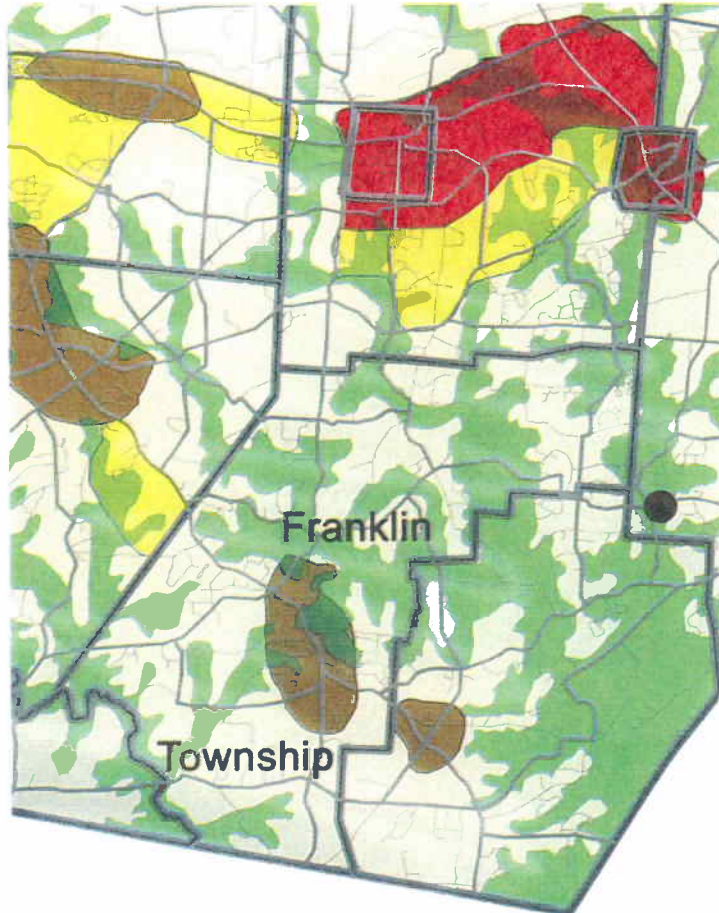


COMPREHENSIVE PLAN

Franklin Township – Chester County, Pennsylvania



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AMENDED TO INCLUDE TRAIL FEASIBILITY STUDY
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CHAPTER 1

INTRODUCTION

This Franklin Township Comprehensive Plan provides the basis for informed decision-making and a different path forward. The Township could continue to receive subdivision and land development applications with no particular order or geographic emphasis. In the alternative, the Township could attempt to direct growth and development as recommended in the Comprehensive Plan. Given the public outreach process that has guided this Plan, the likely outcome is to implement a “growing smarter” initiative that is outlined herein.

The Goals & Objectives in Chapter 2 clearly indicate a vision for a development pattern that is focused, not random. The overall character that has attracted people to Franklin Township can be retained if places like Kemblesville are enhanced, and if places adjoining Fairhill are conserved. In fact, there are still numerous properties in the outlying areas that are appropriate for continued agricultural use and warrant consideration for effective agricultural zoning. Therefore, a meaningful balance should be struck to enable higher intensity development to locate in the Kemblesville area in an attractive and functional way, while the outlying areas are maintained as a low intensity rural landscape.

The Natural Resources Protection Plan and the Cultural Resources Protection Plan that are presented in Chapters 3 and 4 present a thorough display of the environmental assets in Franklin Township that are worthy of protection. The resources can be protected if growth is properly managed and directed to the most appropriate places.

The Land Use Plan presented in Chapter 5 identifies a concept for future development over the next 10 years and beyond. The logical progression of development from the “Kemblesville Village Area”, to a “Moderate Intensity Use Area”, to a “Low Intensity Use Area”, to a “Rural Resource Area” provides an opportunity to transition the intensity of development based on the character zones of Franklin Township, from the village, to the more suburban, to the more rural. The overall pattern proposed for future land use is consistent with the Chester County “Landscapes” Plan in that their 2020 Plan depicts Kemblesville as a “Rural Center” and the fringe areas of the Township are designed as “Rural” and “Natural” Landscapes that mesh with those shown in this Plan. In addition, the “Natural Resource Protection” (overlay) area provides the green underpinnings for a conditional use/land development process based on “mother nature”.

The Housing, Transportation, Community Facilities, Recreation Open Space & Recreation, and Utilities and Water Supply Plans all flow from the Land Use Plan. The Land Use Plan provides the policy framework for the transitional character of future development, that is recommended to be in sync with the infrastructure constraints and opportunities of the Township. Housing, roads, parks, and pipes need to be organized to gracefully function in support of the recommended future land use pattern.

As development proceeds from 2006 to 2016 (when this Plan should be updated), it can meet projected growth needs without resulting in a hodge-podge pattern. While at the crossroads, the Township should take a new path forward. The Future Land Use Plan should be made available to

every property owner, household and applicant. It should be the direction that the Township travels, while maintaining the balance of where to build, and where to conserve and protect. Franklin Township is fully aware of land use and zoning requirements in the Pennsylvania Municipalities Planning Code (MPC), and applicable case law, and has produced a Comprehensive Plan that is fair, balanced and diversified. Franklin Township aspires to meet several critical aspects of the MPC as outlined below.

Unlike Kennett Square, Avondale, West Grove and Oxford, the “Borough corridor” along Baltimore Pike, Franklin Township is located “off-the-beaten-path”, away from the primary path of growth corridor along Route 1/Baltimore Pike that is approximately 5 miles to the north. Jennersville is emerging as a path of growth community due to its proximity to the Route 796 Exit of Route 1 (the limited access road two Townships north of Franklin). Jennersville is a perfect place to form a new growth center due to its superior infrastructure and accessibility. In contrast, a place like Kemblesville is more like a hamlet even though it is called a village. Kemblesville has a very limited infrastructure.

Although Route 896 passes through Franklin, this road is merely a two-lane directional route that traverses a primarily agricultural landscape from the Pennsylvania-Delaware-Maryland state lines to Strasburg Borough in Lancaster County. Further, although Kemblesville is located 8 miles north of the Route 95 corridor, its location along Route 896 provides access for the Village of Kemblesville. Outside of Kemblesville, Route 896 quickly reverts to a back country road.

During several of the Comprehensive Plan Task Force meetings, the project team “re-visited” the MPC to refocus on key words and elements to which this Plan is intended to respond. These key words and elements that serve as the underpinning of this Plan include:

- + A plan for the protection of natural and historic resources including wetlands, aquifer recharge zones, woodlands, steep slopes, prime agricultural land, flood plains, unique natural areas and historic sites. (301.(a)(6))
- + Zoning ordinances should reflect the policy goals of the statement of community development objectives and give consideration to the character of the municipality, and the suitabilities and special nature of particular parts of the municipality. (603.(a))
- + Zoning ordinances may permit, prohibit, regulate, restrict and determine protection and preservation of natural and historic resources and prime agricultural land and activities. (603.(b))
- + Zoning ordinances may contain provisions to promote and preserve prime agricultural land, environmentally sensitive areas and areas of historic significance. (603.(c))
- + Zoning ordinances shall protect prime agricultural land and may promote the establishment of agricultural security areas. (603.(g)(1))
- + Zoning ordinances shall provide for protection of natural and historic features and resources. (603.(g)(2))

- + Zoning ordinances shall encourage the continuity, development and viability of agricultural operations. (603.(h))
- + The provisions of zoning ordinances shall be designed to promote, protect and facilitate preservation of the natural, scenic and historic values in the environment and preservation of forests, wetlands, aquifers and floodplains. (604.(1))
- + Zoning ordinances shall be designed to preserve prime agriculture and farmland considering topography, soil type and classification, and present use. (604.(3))
- + Additional classifications may be made within any district for the regulation, restriction or prohibition of uses and structures at, along or near natural or artificial bodies of water, places of relatively steep slope or grade, places having unique historical, architectural or patriotic interest or value or flood plain areas, agricultural areas, and other places having a special character or use affecting and affected by their surroundings. ((605.(2)(ii), (iii), (vi) and (vii))

While many of the citations above pertain to zoning, this Comprehensive Plan is also intended to provide the underpinnings for the Zoning Ordinance Amendments that will flow from it.

If a reader were limited in time and wishes to skim through this Comprehensive Plan, the following parts should definitely not be missed:

- Chapter 2, Goals & Objectives, that provides the “mission statements”;
- all 12 maps and plans; and
- Chapter 13, Implementation Strategies, that includes an Implementation Matrix.

This 2006 Comprehensive Plan will be updated in 2016. Please help us to implement the recommendations of this plan over the next 10 years.

CHAPTER 2

GOALS & OBJECTIVES

INTRODUCTION

The Goals & Objectives that follow are rooted in the goal writing at Public Workshops in March and April 2005. Elected and appointed officials, residents, property owners, and other stakeholders focused on the major topics that are critical to the future in Franklin Township including:

1. Growth Management
2. Rural Character and Rural Landscape
3. Kemblesville Village
4. Pattern of Land Uses
5. Open Space/Cluster Design
6. Farmland and Prime Agricultural Soils
7. Natural Resources
8. Historic & Cultural Resources
9. Recreation and Parks System
10. Trail Network
11. Transportation/Traffic Improvements
12. Sewage Disposal Systems
13. Water Supply Systems
14. Zoning and Land Development Regulations

Each of these topics is addressed in the statements that follow. The Goals & Objectives below also reflect the philosophy of Franklin Township that flowed from a Community Values Survey that preceded this Plan in September 2004. The Final Results of the 2004 Survey are indicated in Appendix C of this report.

Many of the following Goals & Objectives are consistent with those set forth in the County's Linking Landscapes Plan, as well as the policies of Linking Landscapes. (Refer to Appendix B for the excerpts on Linking Landscapes.)

GOALS & OBJECTIVES

GROWTH MANAGEMENT

Goal:

- 1.0 Manage growth in Franklin Township to ensure that natural and historic resources are preserved to the maximum extent possible.

Objectives:

- 1.1 Identify development opportunities and constraints based upon natural and cultural resource and infrastructure limitations.
- 1.2 Limit and control growth so that it does not degrade natural and cultural resources.
- 1.3 Coordinate growth based on available services, infrastructure and facilities needed for the population (parks, sewage, water, traffic systems).
- 1.4 Utilize Zoning and Subdivision and Land Development Ordinances, as well as county, state and federal oversight, to manage growth so as not to negatively change the character of the Township from rural or semi-rural to “suburban”.
- 1.5 Manage rate of new housing construction to the extent legally possible to keep school district taxes from increasing too fast.
- 1.6 Project “housing needs” relative to future growth.
- 1.7 Provide opportunities for a broader tax base.
- 1.8 Create a build-out plan of the Township that plans an orderly growth pattern, creates highly desirable built environments, and preserves natural and cultural resource areas, in order to preserve the rural character of the Township.
- 1.9 Create a plan that documents the Township’s vision of our ideal future land use.

GOALS & OBJECTIVES

RURAL CHARACTER AND RURAL LANDSCAPE

Goal:

- 2.0 Preserve, protect, and promote the rural character and landscape of Franklin Township.**

Objectives:

- 2.1 Preserve the rural landscape of the Township, and design ordinances with this goal as an overlying theme.
- 2.2 Maintain the rural character by limiting development in/on scenic areas (woodlands, stream corridors, waterways, large fields).
- 2.3 Designate areas to remain undeveloped.
- 2.4 Continue to acquire land utilizing the Open Space Tax.
- 2.5 Encourage development that promotes large amounts of open space.
- 2.6 Designate large acre zoning districts to promote agricultural and equestrian-related land uses.
- 2.7 Preserve land for specialty farming.
- 2.8 Encourage land to be used for equestrian activities.

GOALS & OBJECTIVES

KEMBLESVILLE VILLAGE

Goal:

- 3.0 Create an enhanced Village that has mixed-uses and is walkable and pedestrian-friendly.**

Objectives:

- 3.1 Enhance the village character of Kemblesville by creating opportunities for community interactions (e.g. small scale shopping, sidewalks, community center and farmers market) in this Rural Center as defined in “Landscapes”, the Chester County 2020 Comprehensive Plan.
- 3.2 Maintain the memory of our historic past while creating an expanded, safer, more pedestrian-friendly village with residences and small specialty shops and professional services.
- 3.3 Establish a walkable village that enables vehicular traffic flow, while protecting pedestrians.
- 3.4 Create sidewalks that will link to a Township trail system, so the village can be a walking or biking destination.
- 3.5 Promote the creation of a viable small commercial center with small shops and stores.
- 3.6 Create a specific plan for the “village” to become a special place.
- 3.7 Define Kemblesville Village with final vision in mind. Identify different use areas (commercial, residential) necessary infrastructure (parking, traffic patterns, water/sewage requirements) desirable businesses, and ways to promote the above through a Traditional Neighborhood Development (TND) Overlay District.
- 3.8 Promote efforts to continue to use the (KES) elementary school for a public school, community center, Township building, or other community resource.
- 3.9 Prepare Ordinance provisions to require new buildings to be consistent with the “historic look” of the village streetscape, and to comply with architectural and streetscape standards.
- 3.10 Promote building construction where the architecture blends well with the existing historic buildings and structures.
- 3.11 Require the installation of brick sidewalks and antique-style lamps.
- 3.12 Promote an information center to enable local residents to learn about Township history.

GOALS & OBJECTIVES

PATTERN OF LAND USES

Goal:

- 4.0 Create a functional and attractive pattern of land uses throughout the Township, without damaging natural and cultural resources.

Objectives:

- 4.1 Identify areas of land that are valuable as farmland or scenic vistas that would be destroyed if developed.
- 4.2 Promote a transitional pattern of development ranging from Kemblesville Village (more intense) to the outlying portions of the Township (less intense).
- 4.3 Promote low intensity development.
- 4.4 Promote better planning and better design.
- 4.5 Continue active efforts to acquire open space easements for the land that has been identified by the Open Space Committee, with the open space funding mechanism that the Township has in place.
- 4.6 Maintain as much land in Agricultural use as possible for horses, grapes, hay or other alternative crops.
- 4.7 Promote transitional buffers and setbacks.
- 4.8 Create an agriculture land “buffer zone” next to Fair Hill.
- 4.9 Limit commercial development to smaller stores.

GOALS & OBJECTIVES

OPEN SPACE/CLUSTER DESIGN

Goal:

- 5.0 Refine cluster design regulations to promote usable and continuous open space, and to minimize the impact of new structures and sewage systems on the rural landscape.

Objectives:

- 5.1 Conserve and preserve important open space and natural resources through cluster design.
- 5.2 Create an open space/cluster design ordinance tailored to Franklin's future growth pattern.
- 5.3 Recognize that cluster does not need to apply to whole Township, and balance cluster design so it does not force sewer plants.
- 5.4 Integrate open space across developments to maximize community benefit.
- 5.5 Restrict buildable area and open space calculations to be based only on usable land.
- 5.6 Cluster design should be utilized in order to keep "sprawl" contained, if multiple housing structures are to be built.
- 5.7 Promote cluster design with equestrian, hiking, biking and trail activities in mind.

GOALS & OBJECTIVES

FARMLAND AND PRIME AGRICULTURAL SOILS

Goal:

- 6.0 Preserve farmland and conserve prime agricultural soils to preserve the character of the Township.**

Objectives:

- 6.1 Continue to encourage farmland preservation by providing financial incentives to farm owners through Act 515 and Act 319 to maintain land in agricultural use.
- 6.2 Maintain and preserve existing farms in order to promote sustainable agriculture in the Township.
- 6.3 Conserve current farmland areas.
- 6.4 Preserve farmland through purchasing and transferring development rights.
- 6.5 Attract buyers interested in purchasing eased land.
- 6.6 Continue the education of the farm owners regarding funds available for conservation efforts, and work with landowners to find workable conservation easement alternatives to development of entire parcels.
- 6.7 Capitalize on proximity to Fair Hill by keeping parcels in horse-oriented activities.
- 6.8 Encourage farmers who want to sell their properties to market their farms for alternative agricultural uses (e.g. vineyard, equestrian).

GOALS & OBJECTIVES

NATURAL RESOURCES

Goal:

- 7.0 **Protect and restore natural resources such as woodlands, woodland interiors, wetlands, hydric soils, waterways, wildlife habitats, meadows, steep slopes, and groundwater.**

Objectives:

- 7.1 Develop a plan to identify and insure long-range protection of natural resources and environmentally sensitive areas through effective development regulations and ordinances.
- 7.2 Create greater public awareness of the value of land and water resources to help ensure that water quality is not compromised.
- 7.3 Preserve natural resources to enhance water quality, air quality and quality of life.
- 7.4 Maintain the cleanest water standard possible through prohibiting stream discharge, repairing riparian buffers, and maximizing stream setbacks.
- 7.5 Focus on the “global” aspects of hydrological resources including the White Clay, Elk Creek and Christina River watersheds, headwaters, and aquifers relative to water quality and water quantity.
- 7.6 Discourage the disruption of interior woodlands, expand riparian buffer zones and encourage reforestation along waterways.
- 7.7 Continue to promote zoning and land development ordinances that place a high priority on preserving the natural resources of the Township, such that the identification of the type, extent, and location of specific environmental features should guide where development occurs within the Township.
- 7.8 Promote long-term natural resource conservation to: reduce the impact on wildlife habitats; provide for wildlife corridors to help maintain biodiversity; and to prepare ordinances to maintain large areas of land/forest where wildlife habitats are protected.
- 7.9 Continue to utilize Best Management Practices for stormwater management.
- 7.10 Minimize impermeable or less absorptive land surfaces to reduce flooding of small streams.
- 7.11 Consider subsurface geologic features such as faults, fractures, and fracture traces in construction projects.

GOALS & OBJECTIVES

NATURAL RESOURCES (continued)

- 7.12 Develop opportunities for experiencing nature, and encourage community involvement and interest by sponsoring wildlife walks, and park clean up.
- 7.13 Educate landowners of waterway areas as to what is necessary to improve and enhance stream banks, buffers, water quality, etc. and what help is available to them through conservation organizations.

GOALS & OBJECTIVES

HISTORIC & CULTURAL RESOURCES

Goal:

- 8.0 Protect historic and cultural resources for the enjoyment and benefit of all Franklin Township residents, and future generations.**

Objectives:

- 8.1 Protect the historic structures that remind us of our past heritage and provide for the rural quiet lifestyle and scenic beauty of Franklin Township, through preservation and adaptive reuse opportunities.
- 8.2 Encourage historic property preservation through Ordinances.
- 8.3 Provide incentives for historic resource protection.
- 8.4 Protect the Kemblesville Historic District (DOE: 11-7-02).
- 8.5 Assist owners of Class I and II historic properties with options to help preserve the most important structures.
- 8.6 Protect scenic vistas, scenic roads, stream corridors, and scenic landscapes from adverse visual impacts.
- 8.7 Preserve archaeologically significant sites.
- 8.8 Obtain grants for preservation or purchase of historic properties.
- 8.9 Make the Thomas McKean birthplace a Franklin Township asset and build a library to display his legal papers.

GOALS & OBJECTIVES

RECREATION AND PARKS SYSTEM

Goal:

- 9.0 Maintain and enhance parks and recreational facilities to promote and facilitate healthy lifestyles among residents of all ages.**

Objectives:

- 9.1 Promote additional passive and active parkland with smaller, satellite parks/picnic areas so that all residents have convenient access.
- 9.2 Continue to require developers to contribute land and/or funds to enhance the recreation and park system of the Township.
- 9.3 Acquire as much parkland as possible.
- 9.4 Utilize and leverage open space funds: to buy private land from large lot owners looking to sell; to establish new parks; or extend existing open space and park areas.
- 9.5 Allow open space in land developments to be designed for playfields for children in new residential developments.
- 9.6 Increase the usability of park areas for diversified activities and programs.
- 9.7 Ensure that the existing and future parks, recreational areas and trails are maintained.
- 9.8 Develop an updated Master Plan for Crossan Park.
- 9.9 Evaluate the need for more athletic fields at Crossan Park and at other sites in Township.
- 9.10 Recruit volunteers who are at Crossan Park daily, to maintain and enhance the usability of the Park.
- 9.11 Encourage community use of the parks by sponsorship of educational programs or events.
- 9.12 Assist in providing varieties of safe athletic fields to address the recreational needs of the growing population of children and youth in the Township.
- 9.13 Assist in providing sport facilities for use by athletic organizations for baseball, softball, football, soccer, lacrosse, etc.

GOALS & OBJECTIVES

TRAIL NETWORK

Goal:

- 10.0 Maintain and expand the system of equestrian, walking, hiking and biking trails that provides access to streams and woodlands and that connect parks and recreational access.

Objectives:

- 10.1 Enhance the community by linkage trails – for walking, hiking, horseback riding, biking.
- 10.2 Develop a plan to connect key locations in and out of Franklin Township, linking to Fair Hill and White Clay Creek State Parks, and other places.
- 10.3 Develop a “trail plan” with maps and undertake development and implementation of ordinances to support the trail plan as land development proceeds.
- 10.4 Create a system of trails, allowing for walking, biking and equestrian use, and design trails to discourage/prevent motorized vehicles.
- 10.5 Require all subdivisions and land developments to have a trail plan.
- 10.6 Upgrade current roads to allow for safe and pedestrian-friendly access to trails.
- 10.7 Respect private property.
- 10.8 Implement protected wildlife corridors trails along all streambeds through easements.

GOALS & OBJECTIVES

TRANSPORTATION/TRAFFIC IMPROVEMENTS

Goal:

- 11.0 Take a proactive design approach to help assure safe traffic improvements that compliment a rural community.

Objectives:

- 11.1 Address transportation/traffic issues while maintaining the small, rural character of the roads and encouraging low speed limits.
- 11.2 Design aesthetically appropriate traffic controls and intersections.
- 11.3 Plan motorways to ensure safety to help reduce the number of accidents.
- 11.4 Develop plans to make traffic problem sites safer.
- 11.5 Promote a safer 896, with PennDOT becoming an involved partner.
- 11.6 Encourage PennDOT to provide shoulder width to accommodate disabled vehicles and bicycle traffic/possible foot traffic – especially 896 and Appleton.
- 11.7 Regulate flow of traffic through Kemblesville Village to eliminate blind spots.
- 11.8 Explore possibilities for public transportation to Newark/Wilmington/train stations/university/other places.

GOALS & OBJECTIVES

SEWAGE DISPOSAL SYSTEMS

Goal:

12.0 Balance the demand for development with sewage infrastructure capabilities.

Objectives:

- 12.1 Protect water resources.
- 12.2 Provide a community sewage system for the village of Kemblesville, and maintain it as an aesthetically appropriate system.
- 12.3 Avoid other community sewer plants to the maximum extent possible.
- 12.4 Provide education on the maintenance and management of individual septic systems.
- 12.5 Evaluate the need for ordinances for public sewage, in order to assure that the density of development with in-ground sewage systems is kept safely below levels that could affect adversely groundwater and surface water quality and quantity.

GOALS & OBJECTIVES

WATER SUPPLY SYSTEMS

Goal:

13.0 Balance the demand for development with water infrastructure capabilities.

Objectives:

- 13.1 Continue to use our own groundwater.
- 13.2 Rely on existing wells through careful and planned development, and continue to have wells as the preferred water supply source, versus public water systems.
- 13.3 Promote groundwater infiltration as a Best Management Practice.
- 13.4 Limit development that could adversely affect groundwater quality and quantity.

GOALS & OBJECTIVES

ZONING & LAND DEVELOPMENT REGULATIONS

Goal:

- 14.0 Create a new zoning ordinance that provides a defensible basis for land use regulation; control growth, preserve open space, and plan new growth while preserving open space; and enact context sensitive land development regulations.

Objectives:

- 14.1 Implement the Comprehensive Plan with innovative zoning designed to achieve the goals.
- 14.2 Write new zoning that is specifically designed to address the goals and objectives of Franklin Township.
- 14.3 Revise zoning ordinances so new housing is limited to lowest density the law permits.
- 14.4 Protect wooded areas from being developed.
- 14.5 Design zoning to direct growth to the most appropriate areas, and to protect natural resources and vistas.
- 14.6 Prepare ordinances that will encourage builders to improve the safety of the main roads (e.g. widen shoulders, improve drainage, and remove earthen banks to provide more visibility).
- 14.7 Amend the ordinances to address the transitional aspects of development intensity from the more village-like in Kemblesville, to the more rural in the outlying areas.

CHAPTER 3

NATURAL RESOURCES PROTECTION PLAN

INTRODUCTION

This chapter inventories and analyzes Franklin's natural resources (its land, water, and biotic attributes) and its natural and cultural heritage as regards those resources. Implications for planning and policies are woven throughout the text. This will be followed by specific recommendations for protection and restoration strategies and implementation actions.

Franklin Township is currently in the midst of a second "wave" of rapid land use conversion in its three-hundred year history. The first "wave" occurred when the Township was settled by farmers in the early 1700's: the old growth forests were cleared and the prime agricultural soils they produced were widely plowed and planted to agricultural crops. Over recent decades and now continuing, a second large-scale conversion is occurring as many of those farmlands are being developed into relatively dense residential developments.

These recent changes have major implications for the Township's natural resources. The complex nature of land and water characteristics significantly influences a wide spectrum of planning issues. Historically, natural capabilities and constraints led Franklin Township's settlers to the better farming and building locations. Even in the face of accelerating development activity, continued respect for natural resources, particularly those related to soil, water, and woodlands, can result in a pattern of development that is economically viable while posing the least negative impact on the Township's environment. Emphasis is recommended as much as possible on the restorative and renewable powers of many natural resources, so that the Township can actually improve many of its key environmental and ecological indicators, including watershed health and water quality, woodland cover, and wildlife habitat quantity, health, and variety.

Geologic, topographic, soil, water resource, and biotic resource characteristics are further defined and analyzed to establish the foundation for Township-specific growth management policies, regulatory approaches, and land stewardship practices to be further developed for this Plan. The contents of this Chapter are based on 2004-05 Geographic Information Systems (GIS) analyses of the most recent available data; field observation; and the Inventory of Natural Resources in Franklin's two prior Comprehensive Plans (1982 and 1991) and Open Space, Environmental Resources, and Recreation Plan (1992).

LAND RESOURCES

Franklin Township is approximately 8,282 acres, or 12.9 square miles in size. Before widespread land clearing by early colonial settlers, and for prior millennia, the Township lands were primarily covered in oak-chestnut-hickory old growth forests. Flatter headwater areas and stream margins included wetlands that filtered and slowly seeped water into local streams. This is Franklin's "baseline" natural condition, and was the state of the Township for thousands of years. Although this condition may not ever return, it is still useful to understand what Franklin is "by nature" to compare with today's conditions. Beginning about three hundred years ago, the forests were cleared

and agricultural land uses increasingly dominated the landscape. Since that time all of the woodlands in the Township were cut, though many acres have regrown, much of its wetlands were filled, and much of the original top soil has eroded, according to erosion estimates found in the Chester County Soil Survey (1963, USDA, NRCS).

Today, about 2,246 acres (27.1 percent) of the Township is covered with young to middle-aged woods, and wetland pockets remain scattered across about one percent of the landscape, a fraction of the original wetland acreage (see Table 3-1, *Natural Resource Acreages*, page 3-3). The Township is underlain by approximately 3,464 acres (41.2 percent) of prime agricultural soils (see Map 3-1, *Land Resources*), considered some of the most productive, non-irrigated, farmland soils in the country.

Franklin Township lies entirely within the Piedmont Upland Section of the Piedmont Province of the Appalachian Highlands. The Piedmont is a band of rolling land and underlying geology that stretches from New York to Georgia. The “fall line,” marking the transition from Piedmont to Coastal Plain, is located about 5-10 miles to the southeast of Franklin Township, crossing through northern Delaware at the southern end of the City of Newark, Delaware.

Geology

The characteristics displayed by geologic formations are major determinants of: the slope of the land surface, the soils that form at the surface; the quality and quantity of groundwater supplies; the suitability of certain types of sewage disposal systems; the ease of excavation; and, the soundness of foundations.

The geology of Franklin Township is relatively uniform. It is primarily (96 percent) underlain by Wissahickon schist, a rock type that was once sedimentary shale deposited by wind or water. This shale subsequently recrystallized over millennia under intense heat and/or pressure and hardened into moderately hard schist. The Wissahickon Schist now in Franklin is a moderately hard gray-green rock that has weathered to an estimated depth of 30-50 feet, according to the *Chester County Geology Report*, published by the Chester County Planning Commission (1980). This formation is considered relatively easy to excavate, possessing good groundwater recharge potential, with generally good groundwater yields (between 15 and 130 gallons per minute (gpm), with an average of 75 gpm). Groundwater resources are discussed in more detail in the *Water Resources* section below.

In addition there is a series of six northeast-southwest trending lens-shaped areas composed of mafic gneiss, a coarse-grained hard rock that is weathered to a depth of approximately eight (8) feet. These rock formations appear narrow (perhaps up to a few hundred feet maximum) and from about a half a mile to just over one mile in length. This formation reportedly has limited recharge potential, is difficult to excavate, and offers limited groundwater supplies (approximately 5 to 20 gpm, with an average of 15 gpm). Site-specific testing is particularly recommended for water supply or wastewater disposal in these areas.

A third small but noteworthy geologic feature found in Franklin Township is the set of four granitic diabase dikes that occur in central Franklin Township, primarily in the watershed of the West

Table 3-1. Natural Resource Acreages

Category	Acreage	% of Twp.
Water Resources -		
Streams	See Table 3-2 on pages 3-7, 8 below	
Floodplains	468.5	5.2%
Wetlands	92.8	1.1%
Hydric soils	513.4	6.1%
Headwater areas	4,540.1	54.8%
Land Resources -		
High elevation	450 feet	
Low elevation	190 feet	
Severe slopes (>25%)	293.1	3.5%
Moderate slopes (15-25%)	1,242.9	14.8%
Prime farmland soils	3,463.9	41.2%
Moderately eroded soils	3,408.9	40.5%
Severely eroded soils	2,565.9	30.5%
Biotic Resources -		
Woodlands (84*)	2,246.0	27.1%
By class of woodland		
Class I (10*) –	1,388.9	16.8%
Class II (14*) –	536.0	6.5%
Class III (60*) –	321.1	3.9%
Forest interiors	201.8	2.4%
Wetlands (55*)	92.8	1.1%
Meadows (n/a)	N/A	N/A

* Individual numbers

Branch of the White Clay Creek. These dikes are younger narrow igneous “intrusions” into the older Wissahickon schist. They may vary in width from five to 100 feet, are approximately one mile in length at the surface, and are associated with very low well yields. They likely impede infiltration of surface drainage, which also may literally create a subsurface dam or water blockage, altering the flow of ground water. The linear nature of these dikes makes site-specific testing for adequate water supply and soil percolation/wastewater disposal important in this area. Within the dikes, a range in available water of 0 to 10 gpm is reported, with an average of 5 gpm.

Topography and Landforms

Franklin Township contains four major stream drainages – the West, Middle, and East Branches of the White Clay Creek, and the mainstem of the Big Elk Creek. These streams cross the Township in rough parallels oriented northwest to southeast and divide it into two major types of landforms – stream valleys and uplands. The uplands are generally flatter and the stream valleys steeper. The

Township ranges in elevation from 450 feet above sea level (found in the northwestern part of the Township) to 190 feet above sea level at the southern end of the Township where the Big Elk Creek exits, a difference of 260 feet. This constitutes a fairly considerable drop overall (by comparison, Niagara Falls is a 160 foot drop).

Land slope is a significant factor in determining sensitivity to disturbance and suitability for development. Though all soils are subject to erosion when their vegetative cover is disturbed, disturbance of vegetation on steep slopes especially accelerates runoff and erosion, causing down-gradient sedimentation and water/wetland degradation.

The *Land Resources Map*, Figure 3-1, shows Franklin's moderate (15-25 percent) and severe (> 25 percent) slopes and displays the relatively gentle nature of most of the Township's topography. These slope categories are the same as those used in the Franklin Township Zoning Ordinance (ZO). As noted, steeply sloped areas are concentrated along stream corridors, with flat floodplain areas framing the streams themselves.

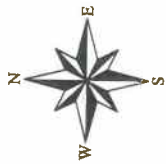
The acreages of moderate and steep slopes are, respectively 1,243 acres (14.8 percent) and 293 acres (3.5 percent). The total acreage of all steep slopes is 1,536 acres, slightly less than 20 percent of the Township total.

Concentration of runoff from the installation of impervious surfaces on sloped areas can diminish groundwater recharge. The potential for erosion from earth-moving is heightened on steep slopes, both during and subsequent to the activity, even with substantial erosion control measures. In contrast, the presence of intact vegetation, especially trees, contributes to slope stability and stormwater control. The Township's ZO currently regulates moderate and severe slopes, allowing minimal vegetative disturbance and grading, based on identified and mapped steep slope categories.

Soils

The suitability of a particular soil type is an important determinant in the location of most land use activities, roadways, and public facilities. Another important characteristic is the ability of a soil type to support on-site sewage facilities. The thickness of the soil (i.e., depth to bedrock), drainage characteristics, erosion potential, and slope factor all combine to determine the potential extent of the limitations on septic systems. Where limitations exist, it is important that they are identified and documented as part of a detailed site investigation. For example, the soil's ability to assimilate and mitigate wastewater disposal (either on-site or from an off-site collector) is a central element of the planning process and a primary determinant in locating land uses. Similarly, a soil's suitability for stormwater management is also important. Due to compaction, permeability, and erodability qualities, certain soils are better suited for certain management and/or disposal techniques than others.

Soil formation is an ongoing process, a complex interaction among factors such as weather, underlying geology, vegetative cover, and time. In Franklin, this process occurred over millennia under old growth chestnut-oak-hickory-dominated forests where rainfall, runoff, and evaporation were in a balance such that leaching of soil nutrients is not as severe as in other more southerly areas of the United States. Accordingly, the Township contains a significant amount of productive farm soils and as such, agriculture is the historically predominant land use in the Township. When the original forest

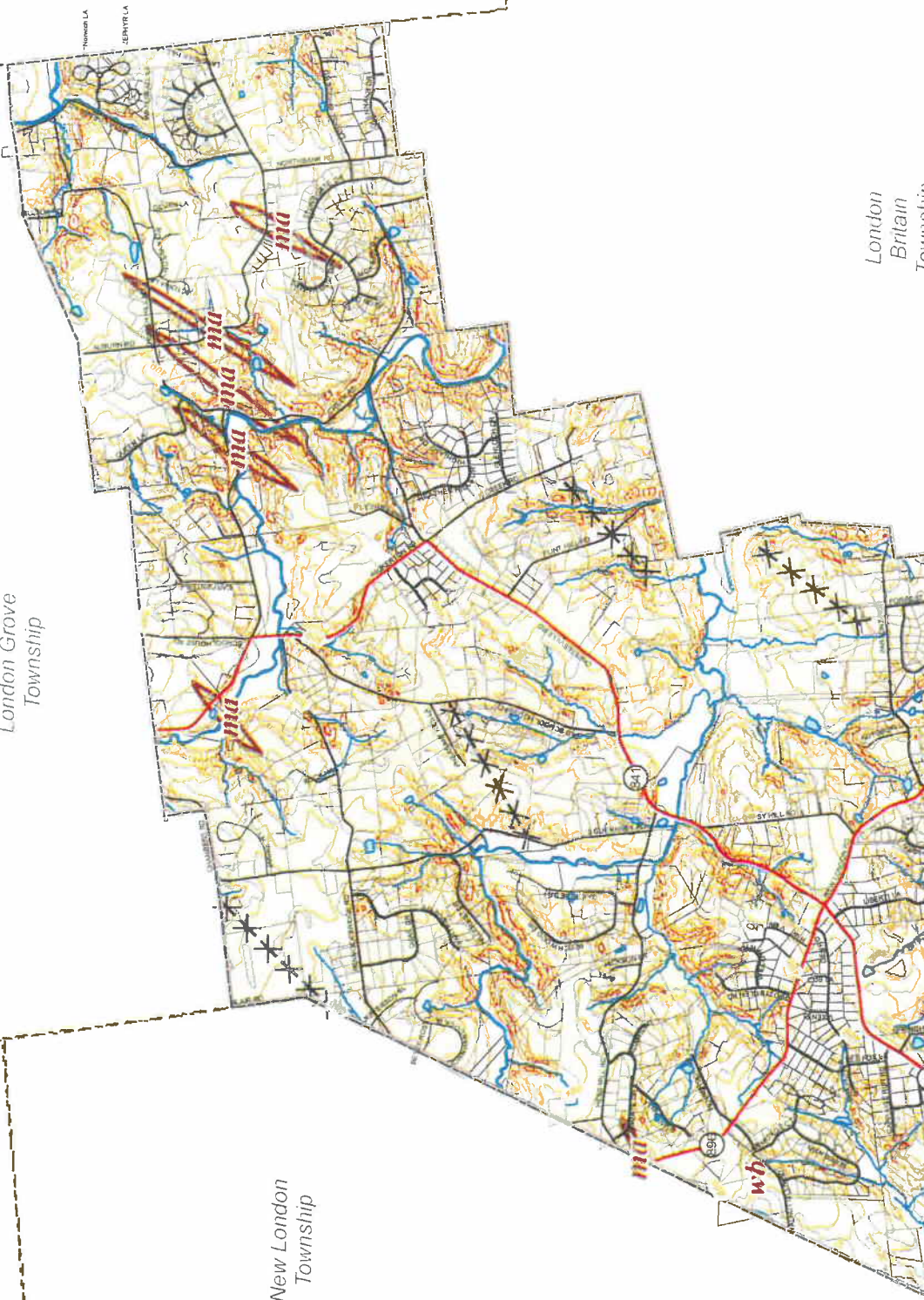


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vegetation was cleared and plowed as a part of the settlement, soil formation and specifically the creation of prime agricultural soils effectively ceased as a natural process. Historically, over decades of farming use, much of the original top soil then eroded, as noted in the USDA – Natural Resources Conservation Service *Soil Survey for Chester and Delaware Counties* (1963) and depicted in the *Historically Eroded Soils and Impaired Streams Map*, Figure 3-2. According to this source, 3,409 acres (40.5 percent) were moderately eroded and 2,566 (30.5 percent) acres were severely eroded, including many of the prime agricultural soils. The total amount estimated to have undergone significant erosion is 5,975 acres, or about 71 percent of the Township.

Franklin's soils today include both highly productive prime agricultural soils and soils that are constrained by specific characteristics. Constrained soils include those with a seasonally high water table (hydric soils); alluvial soils that are subject to stream flooding; soils with shallow depth to bedrock or underlain by soft rock; and, soils susceptible to erosion. Hydric and alluvial soils are discussed under the *Water Resources* section of this chapter.

As mentioned above, over forty percent of Franklin Township is underlain by prime farmland soils – 3,464 acres (41.2 percent, or 5.4 square miles). These soils are deep, fertile, nearly level, well drained, generally devoid of stones and rocks, and are the most productive for traditional agricultural crops. This resource, formed over centuries under old growth forested conditions, has historically been a major driver of Franklin's economy and settlement patterns.

Soils generally are classified into seven “agricultural capability” classes. Prime agricultural soils include the top three of those classes (Classes I, II, III) based on USDA, Natural Resources Conservation Service rankings and “soils of statewide importance” according to Chester County data. According to the USDA, Chester County's prime agricultural soils are some of the best non-irrigated soils in the country for the production of crops and grasses. Like many other Chester County townships, Franklin has lost agricultural land to non-farm uses, though the rate of loss to development has increased in particular over the past 10 – 15 years. Considerable pressure is being applied by developers interested in purchasing Township farms and other open lands for non-farm purposes. It should also be noted that the soil characteristics that create high agricultural value are also valuable in for other uses (e.g., good drainage is important in road construction and wastewater disposal).

WATERSHED RESOURCES

This section describes a number of important attributes of Franklin's water and watershed resources; these are shown on Figure 3-3, *Water Resources*. It strives to achieve the policies and management approaches set forth in Chester County's Water Resource Plan, *Watersheds* (2002). That document should be referred to for more in-depth discussions of the subject matters in this section.

Water resources, like prime farmland soils, are among Franklin's most important and most sensitive resources. As high land and the meeting ground for four watersheds, headwater areas and first order streams are prevalent in the Township, and a useful focus for thinking about watershed management. The use of water resources often faces competing interests. Surface water as well as groundwater supplies are used to meet domestic, commercial, and industrial needs. Streams are used to assimilate treated (and sometimes untreated) wastewater. Aquatic life depends on clean water for its survival. Streams can provide attractive recreational resources where public access is afforded. In order to sustain



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all of these uses, it is important to protect water resources through proper management of the land uses that directly and indirectly affect adjacent and downstream water resources.

The Water Cycle

The water, or hydrologic, cycle consists of the migration of water, whether in a liquid, solid or vapor phase, from the atmosphere to the surface of the Earth and back again. Water falls to Earth as precipitation. Some evaporative losses occur while rain or snow descends, but that which reaches the surface of the earth meets one of several fates.

Precipitation that reaches the land surface either flows over the surface, penetrates the surface, or evaporates. Water flowing over the surface generally starts as broad "sheet flow" and collects in rivulets, which join to create small streams, leading to larger rivers and eventually large water bodies, such as lakes, seas, or oceans.

Infiltrating water is: taken up by plant roots and returned to the atmosphere through transpiration; evaporates from the upper, unsaturated zone of the soil; or infiltrates to the saturated zone, becoming groundwater, and a part of a larger body of underground water called an aquifer. Although much groundwater that is part of the aquifer eventually discharges to a surface water body, the journey may take months, years, decades, or longer. Some groundwater seeps into bedrock aquifers, such as occur on the Wissahickon schist formations of Franklin. Of course, water that returns to the atmosphere will eventually fall back to the Earth.

The Water Budget

The water cycle in a given watershed follows an established average "water budget" developed over long climatic time periods. Using data from over 25 years, the U.S. Geologic Survey determined an average water budget for the neighboring Brandywine Creek watershed should be roughly representative of all the watersheds in Franklin Township.

- | | |
|-----------------------------------|--|
| • Precipitation - | 46-47 inches/ year |
| • Surface runoff - | 7-8 in/yr. (approximately 17 percent of the whole) |
| • Evapo-transpiration - | 23-27 in/yr. (approximately 56 percent) |
| • Groundwater recharge/baseflow - | 12-14 in/yr. (approximately 28 percent) |

(Note – Since numbers are averaged over many years, they do not add up exactly.)

Overall, slightly more than half of the water that falls to the earth is returned to the skies, some passing through plants first. Only about 17 percent runs off as surface water. However, as a watershed develops and impervious coverage increases, this long-established equilibrium tends to skew - surface runoff tends to increase, causing additional erosion and flooding, and groundwater recharge and the vital baseflow it provides to streams tends to decrease, potentially threatening shallow water supply wells and aquatic communities. With the widespread removal and simplification of vegetation layers, evapo-transpiration rates may decrease as well. This becomes a watershed out of balance, an enormous natural mechanism that cannot simply be re-engineered. Efforts to restore a watershed's balance usually focus on protecting those high-quality sub-basins still

in a relatively natural state, while in areas slated for development, increasing the amount of groundwater recharge that occurs after a rain and reducing the quantity and rate of surface water run off. Planting more trees, especially along streams, is an important additional watershed “best management practice”.

While it is well known that development can and does degrade surface and ground water resources, it is not so well known where some of the critical thresholds lie and how to manage developing watersheds sustainably. Still, the key goals of a sustainable watershed management program should include:

- Sustain the quality and quantity of ground and surface waters
- Minimize impervious coverage
- Maximize woodland and wetland acreages
- Maintain stream base flow especially during droughts
- Maintain the groundwater table
- Protect existing and future water sources and wells
- Prevent groundwater contamination
- Minimize excessive existing and future flooding, while making room for natural flooding
- Minimize impacts from the land on natural stream system morphology (channel and bank geometry), including from excessive stormwater runoff
- Maintain natural stream channel regimes
- Maintain aquatic communities and their habitats, including wetlands
- Minimize point and non-point source pollution in streams and ponds

Watersheds, Drainage Patterns, and Streams

As previously noted, Franklin contains four major stream drainages – the West, Middle, and East Branches of the White Clay Creek, and the mainstem of the Big Elk Creek. Indian Run is a tributary of the Middle Branch of the White Clay. The headwaters of the Christina River lie in southeastern Franklin Township. Franklin’s surface water resources drain into two major river basins – the Chesapeake (Big Elk Creek) and the Delaware (the White Clay Creek and Christina River).

Table 3-2. Watersheds of Franklin Township

Watershed	Specific Tributary	Franklin Acres	Stream Miles	Water Use Designation/ Status	Other
White Clay	East Branch	626.7	3.3	CWF: Impaired stream*	National Wild & Scenic River
White Clay	West Branch	2,681.6	17.9	TSF-MF	National Wild & Scenic River

Franklin Township Comprehensive Plan

White Clay	Middle Branch	1,525.0	9.1	TSF-MF; Impaired stream*	National Wild & Scenic River
White Clay	Indian Run	135.3	1.1	TSF-MF; Impaired stream*	National Wild & Scenic River
Big Elk	Big Elk	2,963.2	23.7	HQ-TSF-MF	Special Protection Water**
Christina	Christina	479.5	2.7	WWF	Headwater Areas
Christina	East Branch	0.5	0	WWF	

Source – Chester County Water Resources Authority, *Watersheds*, 2002

Water Use Designations –

HQ – High Quality

CWF – Cold Water Fishery

TSF - Trout Stocked Fishery

MF - Migratory Fishery (The migratory fish is the American eel. The American shad and other river herring species may one day migrate into Franklin Township, especially from the Chesapeake Bay up Big Elk Creek.)

WWF – Warm Water Fishery

*Impaired streams are those that do not meet applicable water quality standards. Generally these areas are targeted for remedial actions.

**High Quality streams, which include the East Branch of the Big Elk and its tributaries in Franklin Township, are Special Protection Waters subject to “antidegradation” rules implemented through the Department of Environmental Protection. Generally, these require that “best management practices” (BMPs) be used in new developments. New “point source discharges” of wastewater are generally prohibited unless a developer can demonstrate it has no cost-effective or environmentally sound non-discharge alternative.

Groundwater and Aquifers

Groundwater is fresh water found in pore spaces, cracks and fissures in bedrock and below the soil surface. An aquifer is an interconnected underground layer of groundwater that may occur over several geologic strata and may be tapped by people for their use. Not only are most residents of Franklin Township dependent on groundwater for their domestic uses (see further discussion under Chapter 10, *Utilities and Water Supply Plan*, but also, according to scientists, approximately 2/3 of stream flow in the non-carbonate rocks of Chester County, including Wissahickon schist, is derived from groundwater discharge. The amount of groundwater available in an area is related to its geology. In Franklin, where Wissahickon schist is the predominant formation present, available groundwater pump rates vary considerably, from minimal outputs to about 350 gallons per minute, an excellent rate.

Because this region is subject to drought, groundwater levels may vary. It is critically important to replenish groundwater supplies from surface recharge and protect the aquifer’s water quality. Groundwater recharge may be built into new developments in four major ways –

- Require recharge of stormwater for at least the 2-year storm;
- Recharge treated wastewater into the ground, either through a drip or spray field;
- Limit allowable impervious coverage to 10-20 percent total, and,
- Restore forest, wetland, and meadow areas in protected open spaces.

Water Quality

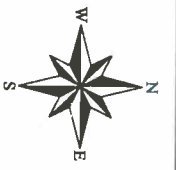
Under the federal Clean Water Act, the United States Environmental Protection Agency (EPA) and Pennsylvania Department of Environmental Protection (DEP) have developed water quality regulations designed to protect the physical, chemical, and biological integrity of streams in the U.S. and Pennsylvania. Specifically, DEP has established a classification system for protected water uses or types. As mentioned above, Big Elk Creek and its tributaries are designated High Quality (HQ) streams. Much of the White Clay Creek, including the Middle and East Branches and their tributaries in Franklin, are classified as impaired or polluted streams. These streams both have municipal wastewater discharges placed into them upstream from Franklin Township (West Grove discharges into the Middle Branch and Avondale discharges into the East Branch). Impaired streams are potentially eligible for federal and state improvement programs and grants designed to help meet water quality standards. For example, there are special federal funds available to help landowners plant trees along White Clay Creek stream corridors and improve water quality (through PL-566). There is also an effort underway to implement a variety of water quality improvements through the Christina Basin Task Force and a grant they received through the EPA.

Land uses in a watershed directly impacts streams and water quality. A particularly important aspect of many Township streams is their “first-order” status, and where applicable, the extent and composition of the contributing watershed (i.e., a “headwaters” watershed). (Refer to the next section of this Chapter for discussion of the values of these resources.)

Headwater Areas/ First-Order Streams

A first-order stream begins at the location where channelized flow occurs as a result of runoff, melting, springs, or groundwater discharge (“base flow”). These streams are important for many reasons including that they carry the majority of the system’s base flow in any watershed to its downstream waterways, contributing significantly to both water quality and quantity in any given stream. Second-order streams are formed at the confluence of two first-order streams, while a third-order stream is created at the influence of two second-order streams, and so on.

Headwaters are those land areas that drain directly into first-order streams, the smallest tributaries of the larger stream system. First-order streams are significant beyond their size in the overall hydrologic regime. Given their importance to both water quality and quantity and in the context of relatively low flow individually, first-order streams are disproportionately vulnerable to sedimentation and other degradation. The regularity of flow from headwaters areas is essential to the health of first-order streams and the wildlife on which they depend, particularly during periods of low flow. Thus, the headwaters watershed to these first-order streams is extremely sensitive to introduction of impervious surfaces, improper grading, discharge of pollutants, or poor agricultural practices. Maintenance or restoration of forested headwaters, particularly in close proximity to first-order streams, is especially important given the ability of wooded areas to: slow and filter flows; control erosion and



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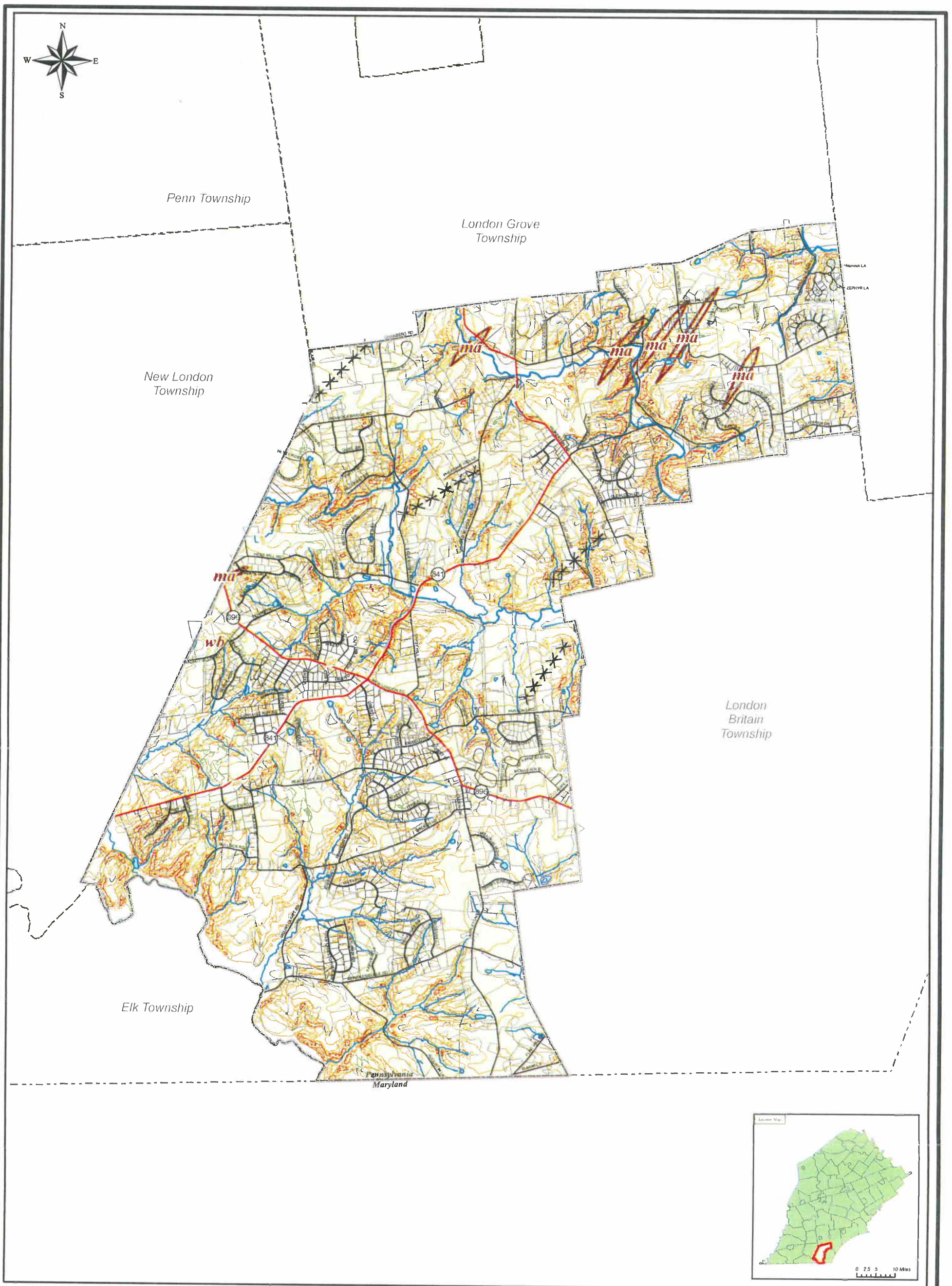


Figure 3-1
Land Resources Map
Franklin Township
Comprehensive Plan

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 Feet



Brandywine Conservancy
 Environmental Management Center

Thomas Comitta Associates, Inc.
 Town Planners and Landscape Architects

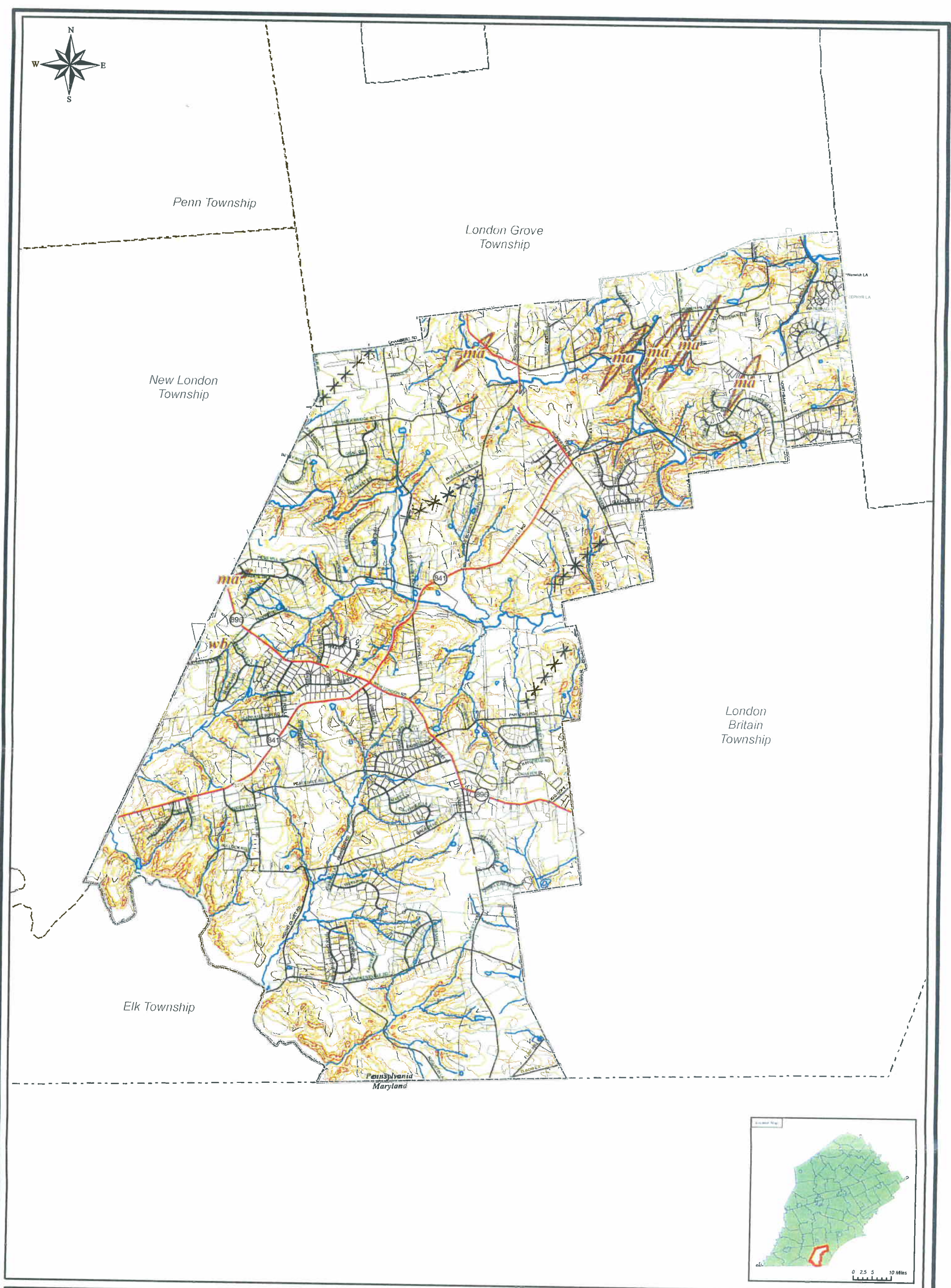
RETTEW

Data Sources: Base Data from Chester County Data Distribution CD, 2003.
 Dikes and Geology from USGS, 1996. Prime Agricultural Soils from
 NRCS, Soil Survey Database, 1998.

Date Plotted: December 5, 2005

Legend

- | | |
|-------------------|---------------------------------------|
| Roads | Township Boundary |
| Major roads | Adjacent municipalities |
| Streams | Prime agricultural soils |
| Contours (25 ft.) | Moderate slopes (15-25%) |
| Dikes | Steep slopes (25% and greater) |
| Water bodies | Geology |
| Tax parcels | <i>ma</i> - Mafic Gneiss, Amphibolite |
| | <i>wh</i> - Wissahickon Schist |



0 1,500 3,000 6,000 Feet

Brandywine Conservancy
Environmental Management Center
Thomas Comitta Associates, Inc.
Town Planners and Landscape Architects
RETTEW

Data Sources: Base Data from Chester County Data Distribution CD, 2003.
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Figure 3-1 Land Resources Map

Franklin Township Comprehensive Plan

- | | |
|-------------------|--------------------------------|
| Roads | Township Boundary |
| Major roads | Adjacent municipalities |
| Streams | Prime agricultural soils |
| Contours (25 ft.) | Moderate slopes (15-25%) |
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| Water bodies | Geology |
| Tax parcels | Mafic Gneiss, Amphibolite |
| | Wissahickon Schist |

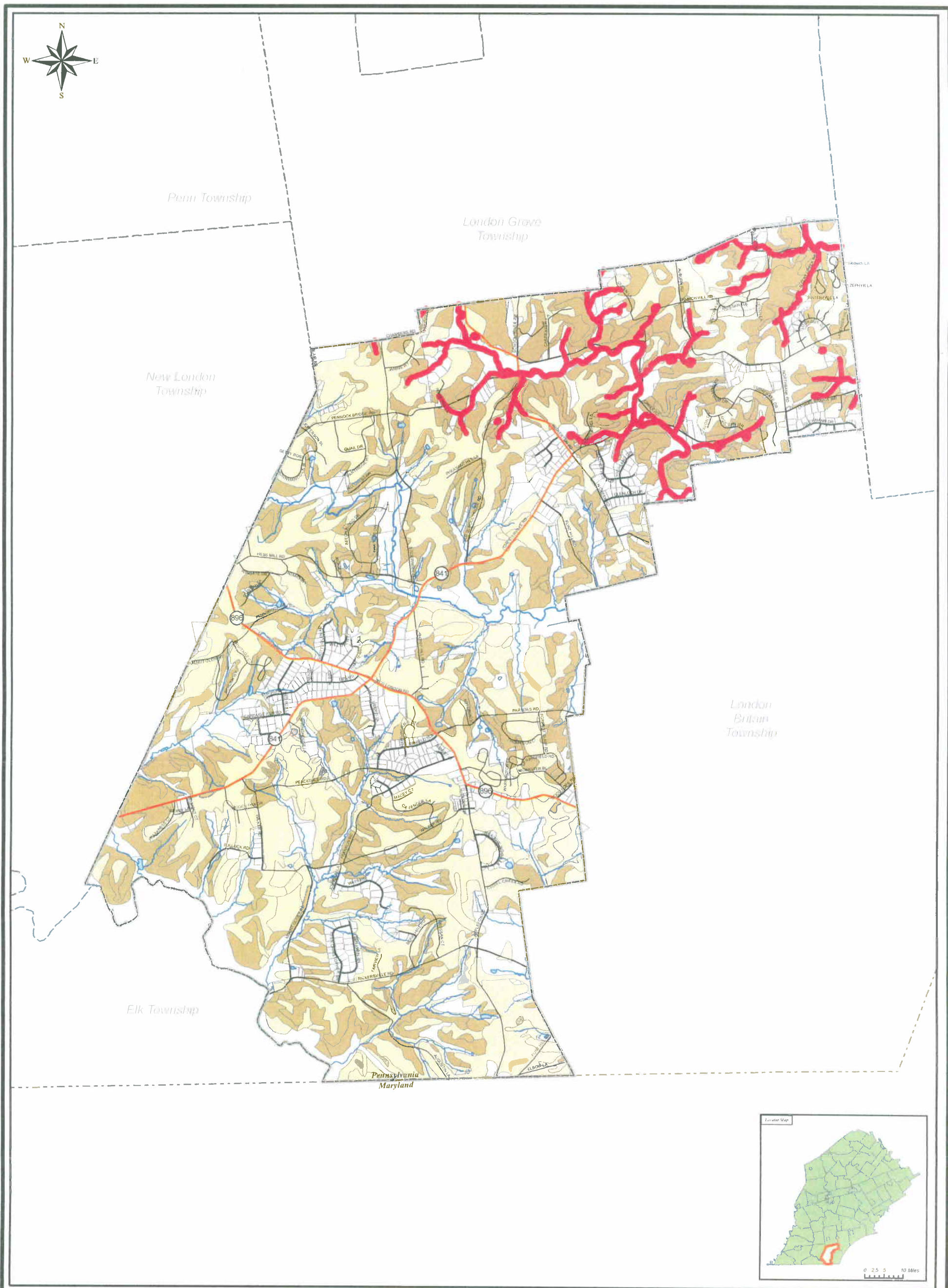


Figure 3-2
Historically Eroded Soils
and Impaired Streams
Franklin Township
Comprehensive Plan

Legend

Roads	Tax parcels
Major roads	Township Boundary
Streams	Adjacent municipalities
Streams (impaired)	Soil Erosion Intensity
Water bodies	Moderate (3408.9 ac.)
Water bodies (impaired)	Severe (2565.7 ac.)

0 1,500 3,000 6,000 Feet

Brandywine Conservancy
 Environmental Management Center
 Thomas Comitta Associates, Inc.
 Town Planners and Landscape Architects

Data Sources: Base Data from Chester County Data Distribution CD, 2003.
 Soils from NRCS, 2000.
 Date Plotted: December 5, 2005

sedimentation; provide shade and water temperature regulation; and supply wildlife food and cover. Because they are sometimes closely associated with cold water seeps and springs, first-order streams can serve as refuge areas for wild trout populations.

As shown on Map 3-2, *Watershed Resources*, over half of Franklin's land area is comprised of headwaters. These are particularly extensive in the central upland areas of the Township. Specifically, headwaters comprise about 4,540 acres, or 54.8 percent of the Township's land area. Route 896 travels along headwater uplands, and the Village of Kembleville is located in a headwater area.

Wetlands

Wetlands are defined as those areas where the soils are saturated for a significant part of the year, where plants typical of saturated soils occur, and where hydrologic conditions provide evidence of surface ponding, flooding, or flow. In Franklin Township, these areas are typically found along streams, where they are often narrow and linear in shape, or in upland depressions in headwater areas, where they may broaden out. In Franklin, these wetlands were identified by the National Wetlands Inventory (NWI) based on aerial photography. There are currently 55 known individual wetlands in Franklin Township, totaling about 93 acres (1.1 percent of the Township). Franklin's largest remaining wetland area is along the West Branch of White Clay Creek, and is about 24 acres in size. Two other wetlands are greater than 6 acres in size, and five more are greater than two acres. It is likely that additional wetlands exist in the Township that went undetected during the NWI inventory, many of which are probably located within hydric soil and floodplain areas (see discussion on hydric soils below).

Wetlands are a key component of watershed management, positively impacting both water quality and quantity issues through regulating different aspects of water on the landscape. By filtering water, they slow it down, allowing sediments to fall to the bottom and allowing plants to uptake nutrients, improving water quality. By storing water during flooding events, they reduce flood damages and moderate high flows. They are sometimes referred to as the "kidneys" of a watershed. Wetlands, like streams, are greatly benefited by vegetated buffers so as not to be overwhelmed by off-site influences. Wetlands' central importance to natural diversity is discussed under the Biotic Resources section of this chapter.

Franklin undoubtedly once supported a far greater acreage of wetlands, however, as many were probably converted with drainage tiles to farm fields and dug out into ponds. Research has determined that slightly more than half (50 percent) of Pennsylvania's wetlands have been filled or

They exhibit shallow depth to water table and, occasionally, display standing water. These soils often correlate to headwater areas that include springs, seeps and marshes at the uppermost terminus of stream corridors. Subsurface water, seeping through hydric soils, supplies groundwater to the surface water system. This subsurface water source forms the base flow in streams and defines a baseline for stream water quality. The native vegetation of these soils, according to the Chester County Soil Survey, was generally wet woodlands, chiefly dominated by red maple.

There are 513 acres of hydric soils in Franklin (6.1 percent of the Township). Hydric soil units between 5 and 10 acres in size occur along many headwater streams, while others parallel larger streams for sometimes over one mile. The largest hydric soil unit is approximately 61 acres located along the West Branch of White Clay Creek.

Floodplains

Floodplains are identified in part by the boundary of the area subject to flooding resulting from a storm event occurring with a frequency of once every 100 years, as delineated by the Federal Emergency Management Agency (FEMA). Areas of the Township in all its watersheds, and especially along Doe Run, are subject to periodic flooding (water rising over the stream banks) or wet conditions and have been identified by FEMA as 100-year floodplains.

During storm events (whether 100-year or more frequent), floodplains serve to absorb and slow flood waters, and take up water-borne pollutants and flood-carried sediments. Where maintained in a relatively natural state, these areas also help limit potential for erosion, downstream sedimentation, non-point-source pollution, and obstruction or alteration of the floodway. As with headwaters, maintenance or establishment of stable, wooded vegetative cover in floodplain areas can help maintain both stream water quality as well as control flooding.

Alluvial soils are soils that have been eroded, transported, and deposited by floodwaters over time; they generally indicate potential for flooding. These soils are typically consistent with the boundaries of the 100-year floodplain. Generally, floodplains are not suitable for residential or commercial use, although flood proofing and engineering are often permitted to allow limited expansion of uses already existing within the floodplain. Floodplains can be used for active recreational purposes, and also make excellent passive open spaces. As defined by FEMA mapping, 100-year floodplains represent 468 acres, or about 5.2 percent of Franklin Township.

BIOLOGICAL RESOURCES

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Wetlands are defined as those areas where the soils are saturated for a significant part of the year, where plants typical of saturated soils occur, and where hydrologic conditions provide evidence of surface ponding, flooding, or flow. In Franklin Township, these areas are typically found along streams, where they are often narrow and linear in shape, or in upland depressions in headwater areas, where they may broaden out. In Franklin, these wetlands were identified by the National Wetlands Inventory (NWI) based on aerial photography. There are currently 55 known individual wetlands in Franklin Township, totaling about 93 acres (1.1 percent of the Township). Franklin's largest remaining wetland area is along the West Branch of White Clay Creek, and is about 24 acres in size. Two other wetlands are greater than 6 acres in size, and five more are greater than two acres. It is likely that additional wetlands exist in the Township that went undetected during the NWI inventory, many of which are probably located within hydric soil and floodplain areas (see discussion on hydric soils below).

Wetlands are a key component of watershed management, positively impacting both water quality and quantity issues through regulating different aspects of water on the landscape. By filtering water, they slow it down, allowing sediments to fall to the bottom and allowing plants to uptake nutrients, improving water quality. By storing water during flooding events, they reduce flood damages and moderate high flows. They are sometimes referred to as the "kidneys" of a watershed. Wetlands, like streams, are greatly benefited by vegetated buffers so as not to be overwhelmed by off-site influences. Wetlands' central importance to natural diversity is discussed under the Biotic Resources section of this chapter.

Franklin undoubtedly once supported a far greater acreage of wetlands, however, as many were probably converted with drainage tiles to farm fields and dug out into ponds. Research has determined that slightly more than half (50 percent) of Pennsylvania's wetlands have been filled or otherwise converted to non-wetlands since the 1700's, mostly due to intensive agricultural uses. In Franklin, probably well more than half and as much as 80 percent of the original wetland acreage has been so converted. This indicates a great opportunity to strategically restore some of these wet acres, especially during the course of new development.

Hydric Soils

Hydric soils are found in upland depressions and along the fringes of floodplains, generally within or adjacent to wetlands. More than simply an indicator of wetland conditions, they often indicate former wetland locations.

They exhibit shallow depth to water table and, occasionally, display standing water. These soils often correlate to headwater areas that include springs, seeps and marshes at the uppermost terminus of stream corridors. Subsurface water, seeping through hydric soils, supplies groundwater to the surface water system. This subsurface water source forms the base flow in streams and defines a baseline for stream water quality. The native vegetation of these soils, according to the Chester County Soil Survey, was generally wet woodlands, chiefly dominated by red maple.

There are 513 acres of hydric soils in Franklin (6.1 percent of the Township). Hydric soil units between 5 and 10 acres in size occur along many headwater streams, while others parallel larger streams for sometimes over one mile. The largest hydric soil unit is approximately 61 acres located along the West Branch of White Clay Creek.

Floodplains

Floodplains are identified in part by the boundary of the area subject to flooding resulting from a storm event occurring with a frequency of once every 100 years, as delineated by the Federal Emergency Management Agency (FEMA). Areas of the Township in all its watersheds, and especially along Doe Run, are subject to periodic flooding (water rising over the stream banks) or wet conditions and have been identified by FEMA as 100-year floodplains.

During storm events (whether 100-year or more frequent), floodplains serve to absorb and slow flood waters, and take up water-borne pollutants and flood-carried sediments. Where maintained in a relatively natural state, these areas also help limit potential for erosion, downstream sedimentation, non-point-source pollution, and obstruction or alteration of the floodway. As with headwaters, maintenance or establishment of stable, wooded vegetative cover in floodplain areas can help maintain both stream water quality as well as control flooding.

Alluvial soils are soils that have been eroded, transported, and deposited by floodwaters over time; they generally indicate potential for flooding. These soils are typically consistent with the boundaries of the 100-year floodplain. Generally, floodplains are not suitable for residential or commercial use, although flood proofing and engineering are often permitted to allow limited expansion of uses already existing within the floodplain. Floodplains can be used for active recreational purposes, and also make excellent passive open spaces. As defined by FEMA mapping, 100-year floodplains represent 468 acres, or about 5.2 percent of Franklin Township.

BIOLOGICAL RESOURCES

As shown on Figure 3-4, *Biological Resources Map*, Franklin's biotic resources consist primarily of wetlands, woodlands, and several rare species sites, including habitat for the federally-threatened and state-endangered bog turtle. To date, no native meadow grasslands have been identified in Franklin Township.

There are no known wildlife surveys that have been conducted within Franklin Township, though it should be noted that the entire southern boundary of the Township is adjacent to the 5,613-acre Fair Hill Natural Resource Management Area located in Cecil County, Maryland, and that the

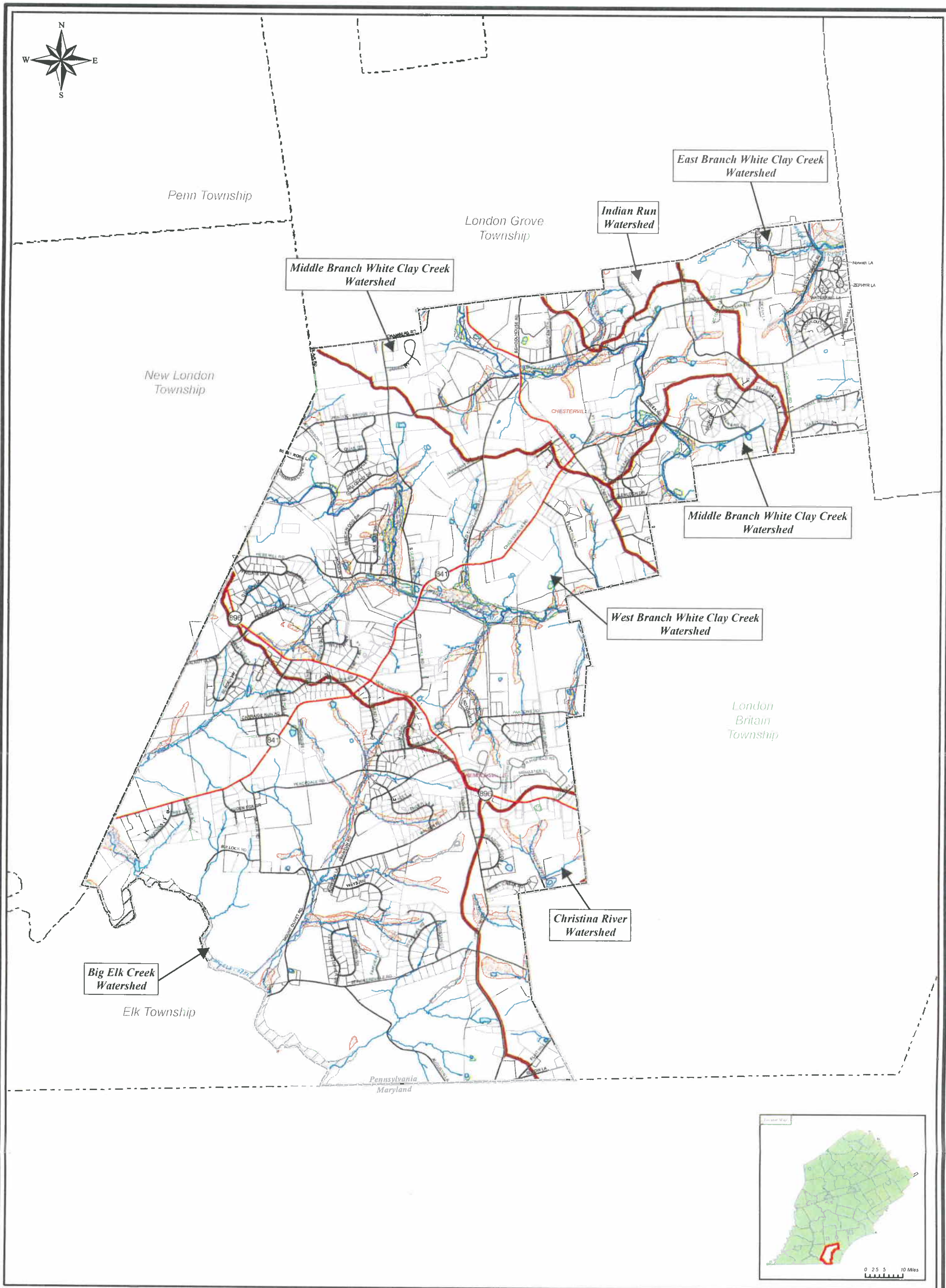


Figure 3-3
Watershed Resources

*Franklin Township
Comprehensive Plan*

Brandywine Conservancy
Environmental Management Center

Thomas Comitta Associates, Inc.
Town Planners and Landscape Architects

RETTEW

Data Sources: Base Data from Chester County Data Distribution CD, 2003. Wetlands from NWI wetlands inventory, 1996. Watersheds from USGS, 1998. Floodplain data from FEMA, 1998. Hydric soils from NRCS, 2001.

Date Plotted: December 5, 2005

1,500-acre White Clay Creek State Preserve lies approximately one-half mile to the east, in neighboring London Britain Township. These two large preserves undoubtedly act as “source areas” for wildlife that use Franklin Township lands, and the major stream corridors – the three branches of the White Clay Creek and the Big Elk Creek – make excellent natural conduits or corridors.

Greenway corridors and the wildlife that may use them are discussed more below.

In addition to inventorying and discussing these biotic resources, a key concept Franklin Township should keep in mind is that of resource restoration, which particularly applies to biotic resources, and secondarily to watershed resources. Of these, restoring forests along stream corridors, often called riparian buffers, is perhaps the single most important natural resource management objective.

Wetlands

In addition to their water resources values, wetlands have significant biological value as they provide rich wildlife habitat. These values include the plants and the animals they provide with food and cover, as well as nesting and breeding sites. While a wide range of animal species utilize wetlands, certain amphibian, reptile, and bird species are wetland specialists. There are several varieties of natural wetlands. They are sometimes forested, but are also at times dominated by native shrubs or graminoid (grass-like) plants and wildflowers.

Wetlands are also important storage areas for both surface and groundwater resources, filtering pollutants, and releasing waters to maintain critical flows (e.g., for fisheries, water supply wells), acting as the “kidneys” of the Township. Given these ecological and public health values, wetlands are regulated by the Pennsylvania Department of Environmental Protection, the U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers. In essence, no development activity may occur within a wetland area without a permit. The permitting process requires investigation of alternatives, and may require mitigation.

Bog turtles, a federally-threatened species, occur in groundwater-fed wetlands, and are discussed under the rare species section more below.

Woodlands

Wooded areas are highly significant for their environmental, social, and economic functions and values. Not only are these lands a vital link in watershed management, but, since most of the northern Piedmont was wooded prior to colonization and settlement, woodlands are the defining characteristic habitat type of this region. Woodlands are the best type of land cover for watershed management since trees absorb large amounts of water through their roots which is stored in the stem and leaves and released as evapo-transpiration. Stands of trees also provide natural erosion and flood control by decreasing the speed and amount of stormwater runoff. They are especially valuable along streams (as riparian buffers), on steep slopes, and in headwater areas. Most native plants and animals are adapted to life in or near woodlands. Many beneficial species (e.g., pollinators), soil organisms, and natural predators (e.g., insect-eating birds) live and breed in such areas. Woodlands also have aesthetic and commercial values [e.g., recreation (passive and active), logging, etc.].

Trees function as natural barriers by reducing the unwelcome impact of noise and of strong winds and wind-transported substances (e.g., dust, snow) and by screening unsightly areas. They also function to reduce temperature extremes and moderate evaporation, acting as the “lungs” of the Township.

There are 84 individual woodlands greater than one-quarter acre in size in Franklin (these are defined using roads as the primary fragmenting feature that divides one woodlands from another), with a total acreage of 2,246 acres or 27.1 percent of the Township. Much of Franklin's woodland areas are located on hydric soils, steep slopes, and floodplains – areas that could not be easily farmed.

Woodland Classes

Woodlands are by no means of equal value. They vary in size, age, quality, and in the biological/ecological functions they perform. In order to assign relative importance to the Township's individual woodlands, a woodland classification system was developed that utilizes Geographic Information System (GIS) mapped data for Franklin Township. Under this system, the presence of a more or less significant amount of these values, combined with ecological values such as extent of forested interior (discussed below), watershed values such as stabilizing steep slopes, headwater areas, and streams, and threat of development, all contributed to the classification of Franklin's woodlands. Franklin's woodlands were compared according to all these attributes, as depicted in the accompanying spreadsheet.

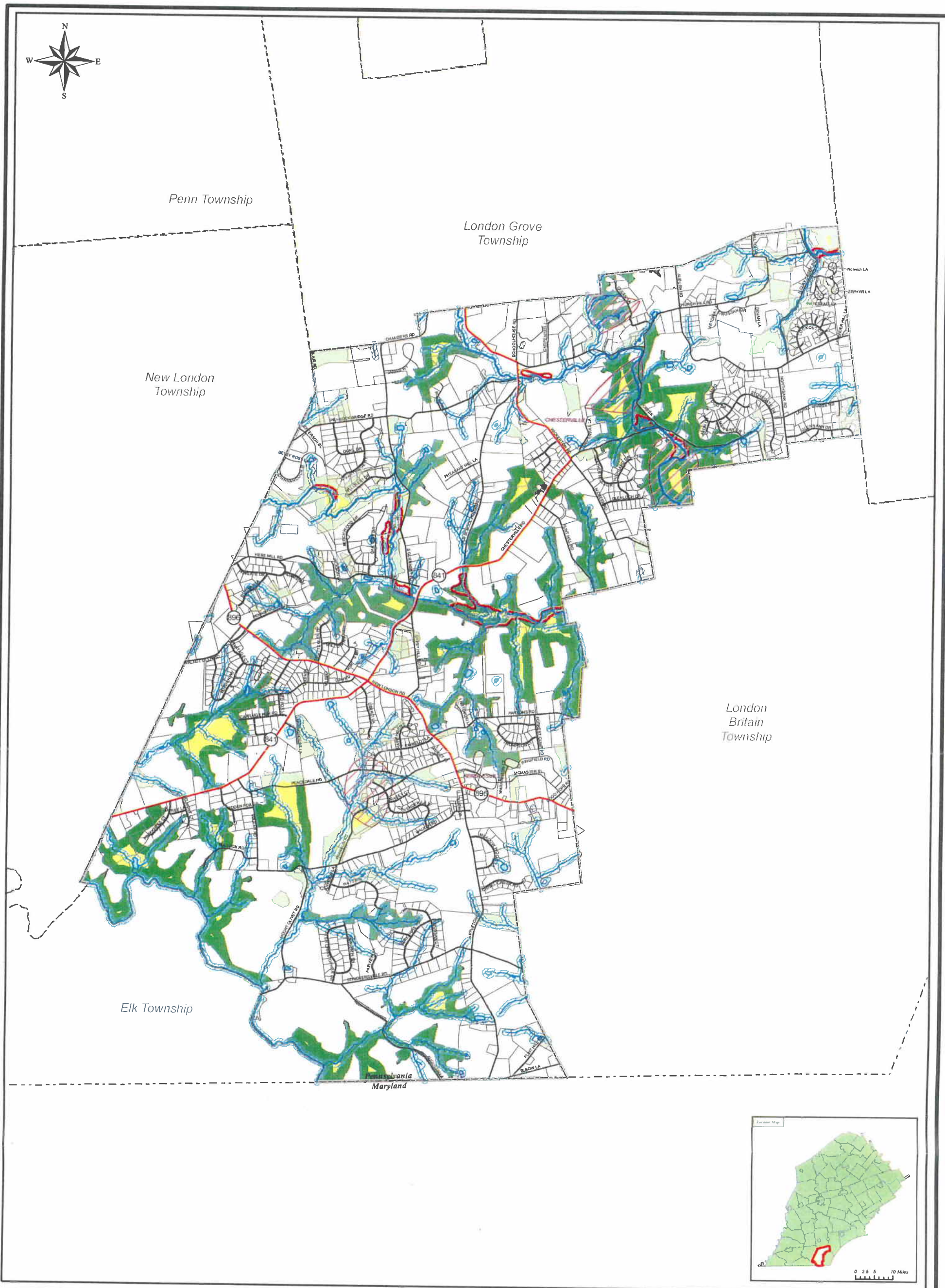
Class I forests are the most important from the standpoint of functions provided and are worthy of a higher level of protection than other woodlands. There are ten (10) Class I woodlands totaling 1,389 acres. Class II woodlands also provide significant ecological services and perform important watershed functions, but not as much as Class I woodlands. There are fourteen (14) Class II woodlands totaling 536 acres. All other woodlands in Franklin (60, totaling 321 acres) are included in Class III, as shown on Figure 3-4, *Biological Resources*. A spreadsheet illustrating the woodland classification calculations may be found as Appendix A.

Forest Interiors

Forested interiors are ‘deep woods’ areas which lie beyond many of the influences that degrade a forest from the outside – light, wind, noise, and non-native species. These interiors are measured at 300 feet from any outer edge. In other words, forested interiors are the “hole” in a “donut” with a 300-foot wide edge. Figure 3-5, *Woodland Classification*, shows the extent of the typically large and mature woodlands that contain forested interiors. Given the ecology of these areas, they are likely to support a considerable variety of native vegetation and wildlife species. Certain species of forest plants and wildlife depend specifically on the unique conditions of a healthy forest ecosystem. Many species of songbirds, for example, are specifically adapted to forest-interior conditions and will not nest elsewhere. Similarly, numerous species of spring ephemeral wildflowers and other rare and unusual species will only bloom on the rich, moist soils of the forest floor. There are only about 202 acres of forested interiors in Franklin, representing 2.4 percent of the Township.

Forested Slopes

Forested slopes occur where steep slopes, both moderate and severe (15-25 percent, >25 percent), and woodland coincide. Here woodlands perform the vital function of protecting against erosion, which steep slopes are prone to.



0 1,500 3,000 6,000 Feet

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DATA SOURCE: Base data from Chester County GIS data distribution, 2001.
Wetlands from FWS National Wetlands Inventory, 1998. Woodlands from
DVRPC Land Use, 2000.

Date Plotted December 5, 2005

Figure 3-4 Biological Resources Map

*Franklin Township
Comprehensive Plan*

Legend

- Roads
- Major roads
- Streams
- Tax parcels
- Township Boundary
- Adjacent municipalities
- ▨ PNDI sites
- Water bodies
- ▨ Wetlands (> 2ac.)
- ▨ Wetlands
- ▨ Riparian buffer (100 ft.)
- Forest Interiors
- Class I woodlands
- Class II woodlands
- Class III woodlands

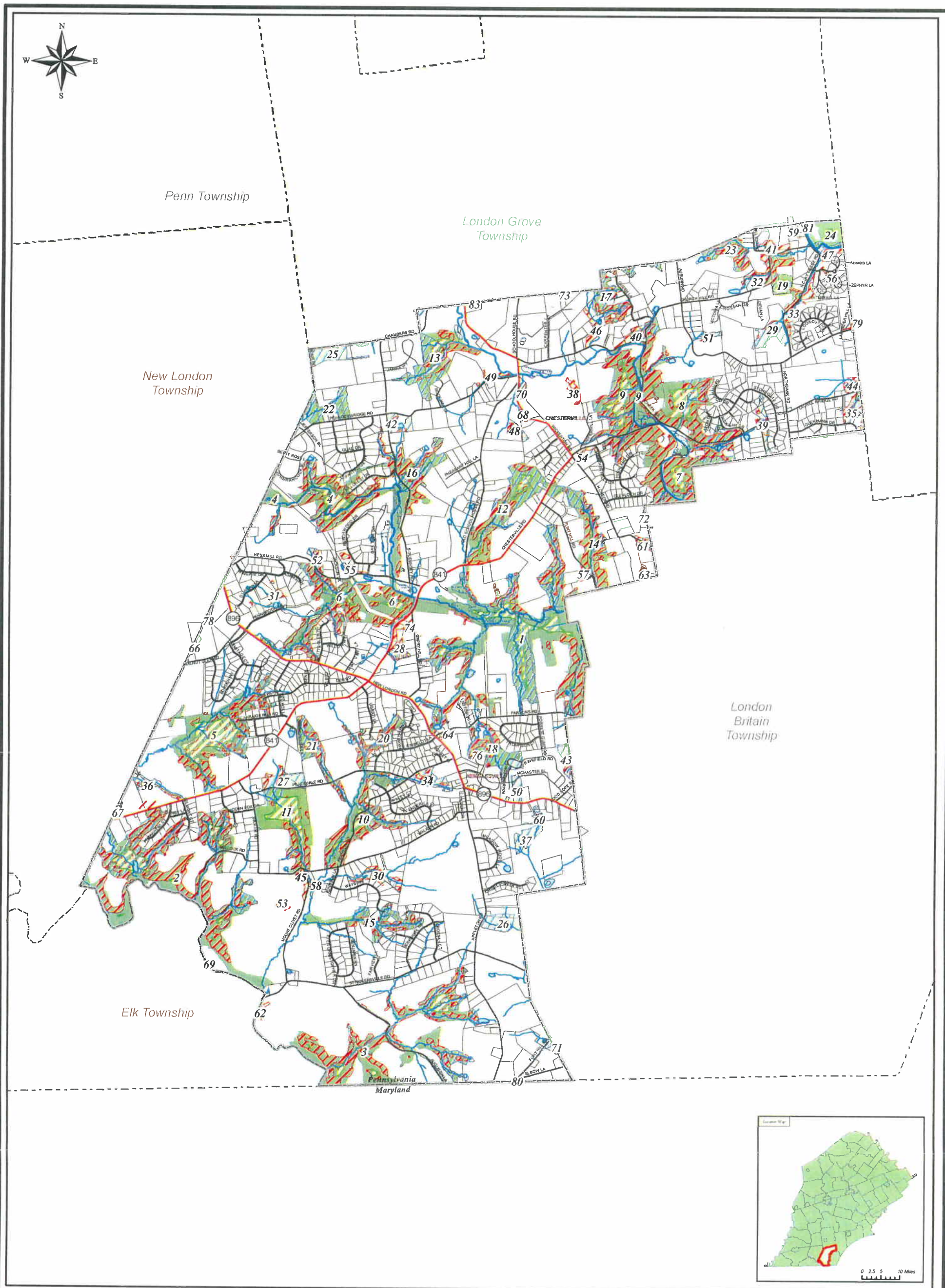


Figure 3-5
Woodland Classification
Map
Franklin Township
Comprehensive Plan

0 1,500 3,000 6,000
 Feet



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Data Sources: Base Data from Chester County Data Distribution CD, 2003.
 Wetlands from FWS National Wetland Inventory, 1996. Woodlands from
 DVRPC Land Use, 2000. Headwaters from USGS First Order Drainage Areas.
 Date Plotted: December 5, 2005

Legend

- | | |
|-------------------|--------------------|
| — Roads | Slopes (>15%) |
| — Major roads | Wetlands |
| — Streams | Forest interiors |
| Water bodies | Class I Woodland |
| Tax parcels | Class II Woodland |
| Township Boundary | Class III Woodland |

Forested Headwaters

As previously described, headwaters areas are the watersheds for first-order streams, the smallest tributaries within a watershed and are the most sensitive resources to grading and other land disturbances. Forest areas directly adjacent to a stream (a wooded riparian buffer, also previously detailed) are also very important for high quality streams. Accordingly, forested headwaters are particularly valuable to maintaining and protecting the quality and quantity of first-order streams.

Forested Riparian Buffers

Forests along streams represent the combination of two of the Township's most important resources. Forested streams are also called forested riparian buffers. These areas are transitional between the flowing waters of streams and rivers, and upland areas. Protecting these land areas is widely recognized as one of the most important ways to protect a stream's overall health. Given that Chester County's watersheds evolved under primarily forested conditions, riparian buffers function best when they are forested. Wooded stream buffers: cool water temperature; provide wildlife habitat in the form of food, water, and shelter; supply important nutrients from leaves; contribute woody debris to regulate stream flow and to create resting spots; and, filter runoff from surrounding lands through their roots and vegetative growth underlying the trees. Culturally, riparian forests make excellent flood control areas, recreational corridors, and are highly scenic.

Although the presence and relative amount of forested riparian buffers was one factor that went into the analysis resulting in the woodland classification, riparian buffers are important enough to warrant Township-wide analysis as a natural resource. To accomplish this analysis, Figure 3-6, *Forested Riparian Buffers Map*, and a spreadsheet were created identifying lands with riparian buffer gaps, areas where few to no trees occur within 100 feet of either side of a stream. They indicate that 212 parcels occur where there are riparian gaps greater than one-quarter acre. On five of these parcels the gap is greater than ten acres, and on nineteen that gap is greater than five acres.

A total of 1,403 acres occur as riparian lands (lands within 100' of streams) within the Township. Of these, 52 percent, or 726 acres, are fully buffered; 22 percent, or 313 acres, are partially buffered, and 26 percent, or 365 acres, are without forested buffers. These "gap" lands should be highlighted for future reforestation.

Wildlife and Rare Species

As discussed above, there are no known general wildlife population surveys from Franklin Township. Nevertheless, with two large habitat areas in close proximity (Fair Hill Natural Resource Management Area and White Clay Creek State Preserve), it is likely that Franklin serves as extension habitat for many species that use those larger areas. Adjacent wooded stream corridors are especially likely to conduct wildlife from these larger "source" areas.

There are several different kinds of "target species" that are of more ecological concern to support or restore to Franklin Township. The presences of these species indicate overall good habitat conditions for their particular habitat.

- Endangered, threatened, and rare species, discussed below;
- Riparian species, including beaver, mink, river otter, Cooper's and red-shouldered

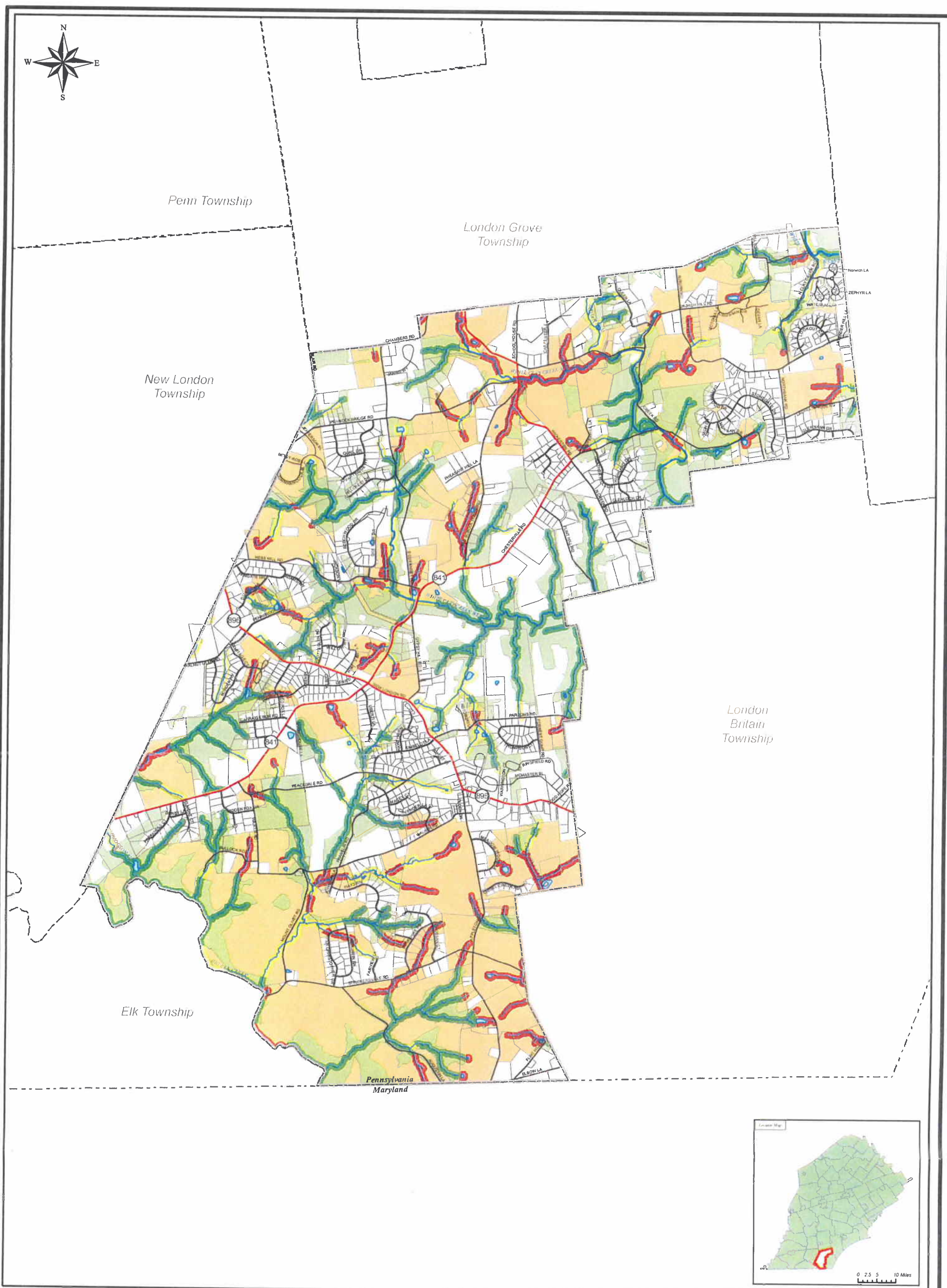


Figure 3-6
Forested Riparian
Buffers Map
Franklin Township
Comprehensive Plan

- Legend**
- Roads
 - Major roads
 - Streams
 - Water bodies
 - Tax parcels
 - Township Boundary
 - Adjacent municipalities
 - Riparian opportunity lands
 - Woodlands
 - Full buffers
 - Partial buffers
 - Gaps

0 1,500 3,000 6,000 Feet

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RETTEW

DATA SOURCE: Base data from Chester County GIS data distribution, 2001.
 Woodlands from DVRPC Land Use, 2000.
 Date Plotted: December 5, 2005

- hawks;
- Habitat-restricted species, for example, forest interior habitat species, especially birds, reptiles, and amphibians;
- Wide-ranging mammals, which make excellent greenway target species, potentially including bobcat, river otter, and gray fox.
- Migratory fishes, such as American shad, mentioned above.

A different set of target species are the non-native and invasive ones, including both plant and animal species. Based on township botanical surveys from other Chester County townships, non-native plants generally total about *one-third* of a township's plant species. A township the size of Franklin may be expected to support approximately 600 – 800 plant species, so some 200- 300 plants are not native to the area. Of these, at least several dozen are invasive. This means that they did not evolve in the area, and were introduced at some point whether intentionally (such as multi-flora rose) or accidentally (such as garlic mustard and Japanese stilt grass). Invasive plants are a serious ecological threat to a township's natural areas and require extensive efforts and eternal vigilance to minimize, much less eradicate.

Franklin Township contains five known rare species locations. Information about rare species is closely guarded, as poaching and trespassing can jeopardize the continued survival of rare species. While not all of the rare species identities are known, it is known that Franklin supports at least two rare orchid species and one rare sedge species, known in Chester County only from this one site. One of the orchid populations is considered "one of the best populations of the plant in Chester County and possibly in eastern Pennsylvania," according to *The Chester County Natural Areas Inventory*, 1994, updated in 2000.

The federally threatened bog turtle is also known to reside in Franklin Township. Bog turtle habitat is quite specialized: the turtle needs almost treeless seepage meadows where ground water typically sheet flows over a relatively flat, mucky surface. The vegetation consists of a variety of sedges and grasses, with some of the sedges being tussock-forming. Less commonly, the vegetation can be sphagnum moss. Shrubs can occur within the habitat and are more common on habitat edges. Shrub pedestals often serve as over-wintering sites. Tree cover is generally detrimental, since nests need full sunlight in order for the eggs to hatch. Tree cover also reduces basking opportunities. Home ranges of individual bog turtles are small – often well less than two acres - consistent with the generally small sizes of the wetlands they inhabit, although great variation has been seen among individual animals. However, individual turtles have been noted to move long distances between habitats, sometimes crossing barriers or moving through dry upland habitats

More broadly, both the White Clay and Big Elk Creek watersheds contain numerous remaining bog turtle sites. A planning process is underway to identify potential larger scale "recovery areas" for the turtle that would protect clusters of turtles in relative proximity to each other, and try to create safe travel ways for them to interact with each other. Parts of Franklin Township may make a good choice for such a recovery area.

NATURAL RESOURCE RESTORATION

The restoration of biological and watershed resources has been a major development in resource

management philosophy and practice over the last fifteen years or so. Many resources are not static but dynamic, changing over time. They can and do change in quantity and quality, and people, through their decisions and actions or inactions, make a difference in how that occurs. *Renewable resources* are those which inherently renew or regenerate themselves over a relatively short time span. Most biological resources are renewable on one time span or another. An example is a woodland where trees, if allowed to grow, will, form a canopy on their own and a new woodland will exist. *Restorable resources* are those which human intervention can assist in the process of renewing or re-establishing themselves even if once damaged or degraded. The human action generally takes advantage of the inherent renewability of the resource in the process. An example is a wetland which may have been drained by a field tile in the 1800's. If the field tile is removed, barring other changes in hydrology, the wetland is likely to become wet again. People can further the process of wetland restoration by replanting wetland plants into the restored wetland. Gradually, that wetland will begin to perform some of the same watershed functions and provide some of the same benefits it did before.

Ten biological and water resources are identified here as renewable and restorable (see Table 3-3, below). This has involved the discovery, invention, and application of ecosystem restoration principles, which generally follow natural laws and processes like ecosystem succession.

Using these principles, it is possible to restore high-functioning mature, diverse, and healthy forest, wetland, stream, and meadow ecosystems. These systems can perform more functions useful to humans, including managing stormwater and improving water quality. It is also possible to restore certain rare and disappearing plant and animal species. It is theoretically possible to restore species that once occurred in an area but now no longer do. It is possible to restore a living fabric of woodlands in a network of stream and cross-country corridors, and attract and retain new species of plants and animals into these habitats.

Table 3-3. Renewable and Restorable Resources

Watershed Resources

1. Streams (habitat, water quality, and water quantity)
2. Wetlands
3. Floodplains
4. Aquifers (through groundwater recharge)
5. Headwater Areas

Biological Resources

1. Woodlands
2. Meadows
3. Wetlands
4. Natural Areas/ Rare Species
5. Wildlife diversity
6. Streams

*Soils, such as prime agricultural soils, are renewable too, but only over very long time periods

Part of Franklin Township's approach to resource conservation should thus take full advantage of this relatively new approach to natural resource management, sometimes called *ecological restoration*.

This approach sometimes requires taking a long-term view to achieving resource conservation and management goals however, as, for example, restoring water quality in the White Clay Creek or restoring an old growth forest can take over 100 years. Nevertheless, some resources can take a relatively short time to restore, such as a meadow or a wetland, as described above. This long-term view is supported by the fact that much of the landscape of Franklin Township is protected from further development, and is therefore relatively stable. Here a new stage begins where landowner education and participation becomes more important, as do Township and other government incentives which foster such active participation.

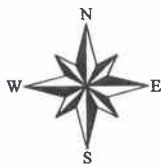
Through relying on the inherent renewability of many natural resources and carefully applying the arts and techniques of ecological restoration, natural elements of the landscape will slowly but surely return to more vibrant health and vigor, supplying local residents with more wildlife, water quality, natural scenic beauty, and other ecosystem services.

LANDSCAPE NETWORKS – CORRIDORS AND GREENWAYS

One of the primary opportunities in undertaking a mapping exercise where layers of data are collected and then overlapped with one another is to ascertain what patterns emerge. Such patterns suggest a way to move from a lower to a higher organizational level – in the case of natural resources from an individual site to an integrated system of sites, a *network* where the whole is greater than the sum of its parts. When designed well, these networks promote the broader environmental health and public welfare of the area in question. They are also well-designed when they are multi-purpose in nature, benefiting watershed and biodiversity resources certainly, but also steep slopes, farmland, scenic, recreational, and historic resources. In Franklin Township, the natural resource patterns are present to make a strong case for proposing an interconnected network of corridors based primarily on stream corridors and woodlands.

This type of planning follows recent thinking in resource management and open space planning, as in the growing popularity of “greenways” for example. Across the United States numerous federal agencies, states, counties, regions, non-governmental organizations, and others have promoted open space corridor plans. The State of Delaware has developed a conceptual greenways plan, and in June 2001, the Commonwealth of Pennsylvania published *Pennsylvania's Greenways: An Action Plan for Creating Connections*. This new effort led by the Department of Conservation and Natural Resources (DCNR) targets the creation of a statewide network of greenways in Pennsylvania, with the goal of establishing a local greenway *in every community* by 2020. The Plan strategy for achieving the statewide network depends on the development of greenway plans for each of the 67 counties. DCNR guidelines for county greenway planning were finalized in 2002.

Chester County has already developed a greenways plan, though it is not known by that name. All three County policy plans of its Comprehensive Plan – *Landscapes*; *Linking Landscapes*; and *Watersheds* – promote the establishment of landscape-level natural corridors, including both stream- and woodland-based corridors. For Franklin Township, the County has suggested protecting lands along all three major stream corridors in *Landscapes*; establishing sound riparian buffers along all streams in *Watersheds*; and developing a cross-country east-west woodland corridor in *Linking*



Penn Township

London Grove
Township

New London
Township

London
Britain
Township

Elk Township

Pennsylvania
Maryland



0 1,500 3,000 6,000
Feet



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Data Sources: Base Data from Chester County Data Distribution CD, 2003.
Protected Lands from Chester County Protected Open Space CD 2003.
Date Plotted: December 5, 2005

Figure 3-7 Greenways

Franklin Township Comprehensive Plan

Legend

- | | |
|-------------------------|----------------------------------|
| Roads | Protected Lands |
| Major roads | Steep slopes (25% or greater) |
| Streams | Floodplain |
| Proposed greenways | Woodlands |
| Water bodies | Class I woodlands (>50 acres) |
| Tax parcels | Class II woodlands (30-50 acres) |
| Township Boundary | Class III woodlands (<30 acres) |
| Adjacent municipalities | |

Landscapes. Most of these corridors would continue into adjacent jurisdictions, ultimately requiring a regional approach to implement these concepts. See especially Chapter 13 of *Linking Landscapes* for more information on greenways as wildlife corridors.

Franklin's stream corridors and woodlands represent a resource-rich overlap area that already forms natural resource networks. Most of the Township's wetlands, floodplains, hydric soils, and many steep and very steep slopes, Class I and Class II woodlands, and headwater areas are contained in these areas. The confluence of so many environmentally sensitive features along the streams is by "natural design." Figure 3-7, *Greenways*, was produced by analyzing these confluences of natural resources and joining them together into one natural resource network. The corridors widen where the woodlands are larger, sometimes growing into a larger woodland that serves as an "anchor point" or "node" for the larger system.

Redundancy is intentionally built into the proposal, so that if one corridor is blocked by a new development or substantially degraded by logging, another may be used in its place. Roadways can also be an obstacle to smooth wildlife movement, but special wildlife crossing design techniques can mitigate their impact.

While this system probably functions, though imperfectly, today, it is far from completely implemented. Certain "greenway opportunity areas," or gaps, were identified that will need to be reforested as much as possible to improve the system.

RECOMMENDATIONS

1) Headwater areas –

Maintain and restore water balances within individual headwater areas. Protect headwater areas from development impacts such as impervious coverage wherever possible. Restore headwater areas to natural conditions, generally emphasizing forested wetlands, on public lands and other open spaces where possible. Strategies include –

- 1) Reforest headwater areas, especially along streams, on public lands and with willing landowners. The Conservation Reserve Enhancement Program (CREP) is one program that can provide funding for this.
- 2) Make headwater areas one priority for open space designation within a development proposal, and for riparian reforestation efforts (see next item below).
- 3) Where new development does occur in headwater areas, limit impervious coverage percentages to no more than 10% for residential and 20% for commercial developments. Review and revise municipal ordinances to reduce any unnecessary requirements for impervious cover for proposed land development projects (such as by reducing cartway and roadway widths, reducing building setbacks for shorter driveways, and so on).
- 4) Where existing development occurs within headwater areas, and especially within the Kemblesville area, identify opportunities to provide retrofitted stormwater management. Pursue funding to implement, for example, through a DEP Growing Greener grant.

2) Riparian buffers –

Promote protection and restoration of 100-foot wide forested riparian buffers, as measured from each stream bank, through the zoning and subdivision ordinances. Limit development encroachment into these buffers, especially closer to a stream. Require reforestation of unforested stream corridors at the time of development approval, through the conditional use process for example.

Using the riparian forested buffer map and landowner spreadsheet developed through this Comprehensive Plan, identify priority landowners for riparian restoration outreach and education purposes. Work with landowners on a voluntary basis to promote the reforestation of riparian buffers through private land stewardship efforts, including through the CREP program (see #1 above). Support similar efforts of conservation organizations such as the White Clay Creek Wild & Scenic Management Committee. Work with the Chester County Conservation District, the White Clay Committee, Stroud Water Research Center and others to educate landowners concerning the importance of forested stream corridors to the Township's water quality and wildlife habitat.

3) Stormwater management –

Utilize stormwater/best management practices within Township regulatory ordinances based, at a minimum, on the Commonwealth Department of Environmental Management's BMP standards and the model stormwater ordinance of the Chester County Water Resources Authority. Require consideration of stormwater recharge and water quality objectives and standards early in the development approval process (i.e., at time of sketch plan) when the development design can be oriented to utilize natural-based, non-structural measures for intercepting run-off at the source, significantly reducing site run-off volumes (at least to the two-year storm), peak rates, and achieving water quality standards by preventing stream pollution and sedimentation. Consider requiring higher recharge standards for headwater areas.

4) Hydric soils –

Avoid excessive new development within hydric soils where possible by establishing limits to disturbance of hydric soil units. Promote the restoration of hydric soils by requiring drain tile identification, disabling, and removal during the land development approval process.

5) Woodlands –

Implement ordinance provisions based on the woodland classification approach and map adopted as a part of this Plan through adopting natural resource language definitions, development-related disturbance limits of 10-25%, tree replacement standards, and timber harvesting limits as part of the Zoning Ordinance. Provide increased protection to forest interiors and higher classes of woodlands. Increase tree replacement requirements while making them more flexible, including allowing for higher numbers of smaller trees and for off-site tree replacement, especially to reforest riparian buffers and implement greenways. Regulate commercial timber harvesting using the woodlands classification system. Minimize destructive "high-grading" forestry practices by requiring retention of a minimum amount of higher value trees.

6) Greenways corridors –

Adopt the greenways plan proposed here through the Zoning Ordinance, possibly as an overlay district. Ensure as much as possible that new development occurs outside of greenway corridors, for example by subjecting developments that include greenways to the conditional use process. Require that the open space set aside through the development process is designed to implement a greenway corridor. Also, applicable bulk, area, and design standards should be modified as part of the conditional use process.

Where applicable and where not undertaken voluntarily by the affected landowner(s), as condition(s) of conditional use approval, the Board of Supervisors may require establishment of formal conservation easements and/or public trail easements, in order to permanently secure the benefits of the greenway corridor subject to application.

In the context of an application for approval of a conditional use, subdivision or land development plan, special exception, variance, or building permit, the Township should consider requiring reforestation within designated greenway corridors. A landscape plan should accompany the application and adequately illustrate proposed reforestation plans, including a list of native trees and shrubs to be provided, and defining the long-term management provisions. All plantings should be established prior to final occupancy permit approval.

Alteration of natural ridgelines within any designated greenway corridor through grading or earthmoving should be avoided or, if not feasible, should be minimized to the greatest extent feasible.

Promote continuance of the adopted greenway corridor network based on existing and future developments on adjoining properties. Review and revise as necessary open space design guidelines, or provide other incentives, to ensure the protection and enhancement of these greenway corridors through a development site.

Where greenway corridors are already a part of protected lands, work with landowners on a voluntary basis, as with the reforestation of riparian buffers, to promote sensitive management of the corridors.

7) Natural areas restoration –

Implement natural area (woodland, wetland, stream, and meadow) protection and restoration on Township-controlled and Homeowner Association-owned (HOA) lands (see page 9-11, *Recommendations* for Chapter 9, also). Natural areas on these lands should have management/restoration plans developed for them where they do not already exist. Mechanisms and techniques for funding natural area restoration should be explored.

Consider forming a Franklin Township Environmental Advisory Committee (EAC) that takes on the mission of natural area restoration at appropriate sites throughout the Township. The EAC could promote landowner education concerning natural resource and natural area (woodland, wetland, stream, and meadow) protection and restoration. The EAC and Open Space Committees should work with the White Clay Wild & Scenic Watershed Management Committee to prepare a Franklin Township Natural Areas Survey. The EAC should write articles for the Township newsletter and hold public informational meetings at least once per year; promote voluntary

management measures; become familiar with federal farm cost-share programs like CREP, CRP, WHIP, and so on, that may provide funding for local landowners to better manage their lands.

Significant open space areas should be protected through conservation easements wherever possible. New developments should be required to develop and implement Open Space Management Plans that promote natural areas restoration as much as practicable, including removal of key invasive species, and replanting native species in key areas. Natural areas should be buffered with sensitive land uses wherever possible.

CHAPTER 4

CULTURAL RESOURCES PROTECTION PLAN

Franklin Township's cultural resources consist of scenic resources, which include natural and man-made features appreciated for their aesthetic quality, and historic resources – the old homes, barns, outbuildings, and other structures that comprise Franklin's architectural heritage. While there is significant overlap between the two, this chapter treats each set of resources separately, in part because strategies for their protection differ, but also because what is scenic is not always historic and *vice versa*. Both are vital to the Township's cultural identity and important contributors to its quality of life.

SCENIC RESOURCES

INTRODUCTION

Despite the subjective attributes of scenery, residents are generally united in their appreciation for the aesthetic quality of Franklin Township. Results from the 2004 Community Values Survey underscore the importance of scenic quality to Township residents. When asked why they chose to live in Franklin, "rural, quiet lifestyle" and "scenic beauty" were the top two reasons selected. Additionally, "retention of rural atmosphere" and "conservation of scenic landscapes" were among the top three issues survey respondents urged the Township to consider in future planning efforts.

Concerns about retention of rural atmosphere and scenic beauty were later reinforced in three public workshops held in early 2005. To an extent, workshop participants acknowledged that scenic resource protection is closely tied to agricultural preservation and natural and historic resource protection. Yet they also acknowledged the impact development can have on scenic resources in particular, and established as a goal, "Preserve, protect, and promote the rural character and landscape of Franklin Township" (See Chapter 2, Goal 2). The objectives derived by workshop participants and later refined by Task Force members further confirms community interest in protecting the Township's remaining scenic assets, including its prominent views, historic structures, and woodlands.

Resources defined as "scenic" – which include vistas, open fields, roads, woodlands, historic structures, and streams – are "visually significant" landscapes or features that are characteristic of early and pre-settlement Franklin. From the standpoint of the public interest, they are also resources visible from public vantage points (primarily roads). This section describes the general attributes of the Township's scenic resources and identifies their location based on windshield surveys conducted by Task Force members and planning consultants (See Figure 4-1).

Once scenic resources have been identified and described, proper siting and screening of future development can ensure their visual quality is maintained or enhanced. Accordingly, this Chapter also analyzes the degree to which Franklin's scenic resources are threatened given existing land use regulation. Chapter 13, "Implementation Strategies," includes both short and long term actions to better protect the Township's scenic resources.

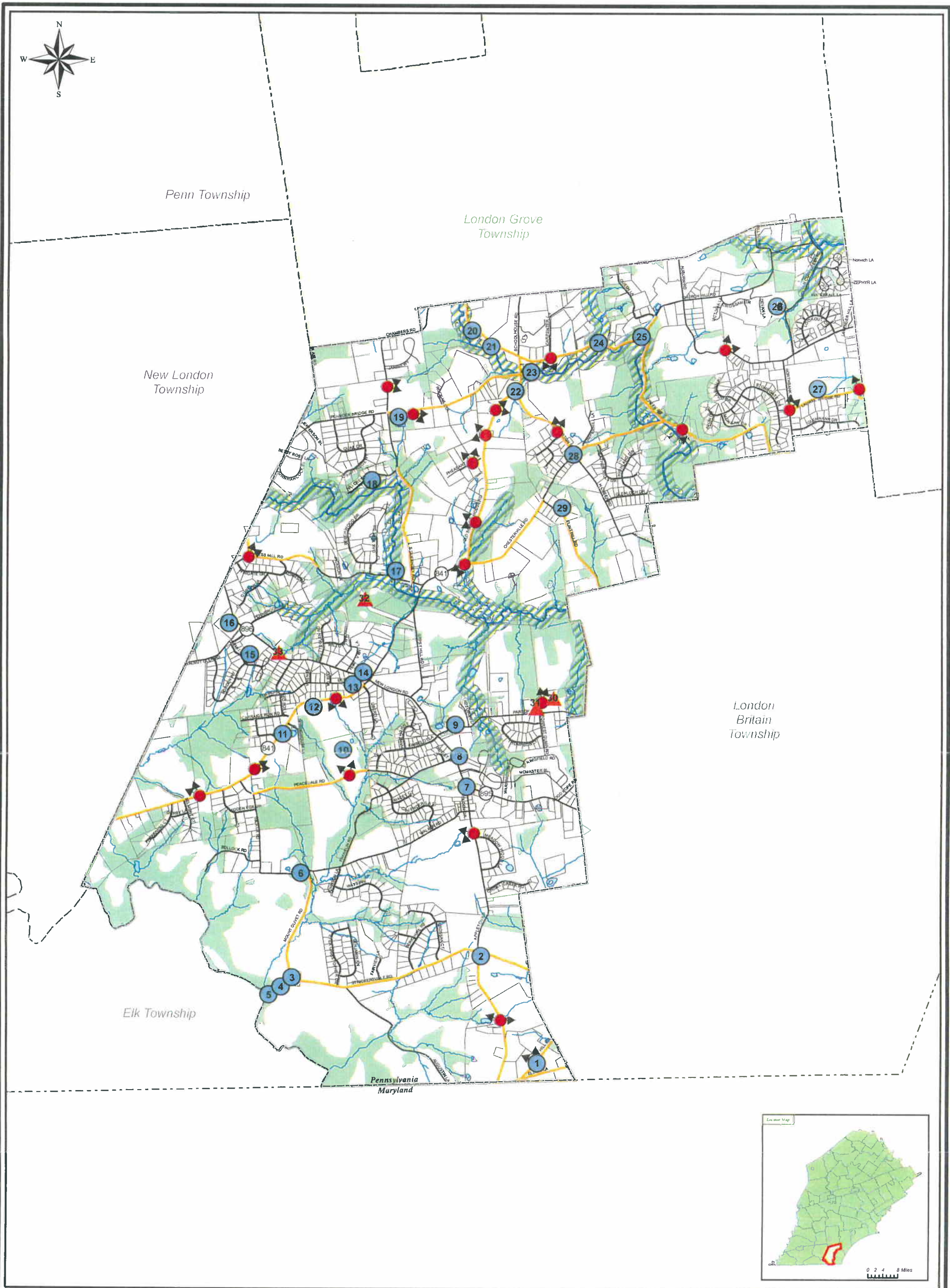


Figure 4-1
Scenic Resources
Franklin Township
Comprehensive Plan

Brandywine Conservancy
 Environmental Management Center

Thomas Comitta Associates, Inc.
 Town Planners and Landscape Architects

RETTEW

Data Sources: Base Data from Chester County Data Distribution CD, 2003. Tax Parcels from Chester County, 2005. Scenic resources updated by Brandywine Conservancy 1/18/2005.

Date Plotted: December 5, 2005

Legend

- Township boundary
- Roads
- Water bodies
- Streams
- Tax parcels
- Visual Accents
- ▲ Visual Intrusions
- Vista Points
- Scenic Roads
- White Clay Creek
- Wetlands
- Woodlands
- Adjacent municipalities

CHARACTERISTIC LANDSCAPES

Like most of Chester County, Franklin is situated in the Piedmont, a physiographic region characterized by hilly topography. As a result, Franklin's visual landscape is most strongly influenced by two factors: a relatively dense network of streams and broad uplands conducive to agriculture and development. Settlement in Franklin has responded to and taken advantage of these landforms in a variety of ways: major roads, farms, and residential subdivisions tend to be located in uplands because of their level terrain, well-draining soils, and prominent views, while development in stream corridors is generally low density and linear due to flooding, hydric soils, and/or the presence of steep slopes.

Generally, Franklin has three characteristic landscapes: broad uplands, stream valleys, and woodlands. These have evolved over time as a result of natural processes and settlement patterns unique to Franklin. Recognition of the broader context in which perceptions of the landscape are organized is important when planning for the protection of scenic resources, at both landscape and site scales.

Broad Uplands

Open and relatively flat, uplands are found throughout Franklin. Because uplands are ideal for farming, woodlands – which were historically dominant – were largely removed during settlement. As a result, views from public roads in uplands are often lengthy, providing travelers visual access to open fields in addition to the site-specific features common in rural landscapes such as hedgerows, farm complexes, small streams, ponds, and wetlands.

Historically, Franklin's agricultural economy resulted in a low density network of farm clusters and villages. Yet the same qualities that give agriculture an edge in Franklin are especially attractive to developers, who place premiums on the views, terrain, and soils offered in upland landscapes. Most, if not all, development that has occurred in the last 10 years has taken place in uplands.

Stream Valleys

Stream valleys are linear landforms that include streams, adjacent floodplains and wetlands, and the sloping hillsides or valley walls that mark the transition to upland areas. Though not as visually prominent as the upland landscape, stream valleys are an important component of Franklin's "characteristic" landscape. Perhaps more than any other natural feature, Franklin's high density of streams makes it visually unique among other Chester County communities.

In contrast to the Township's higher elevation neighbors, the streams that crisscross Franklin vary in channel size. As a result, mills were established early in the Township's history along the wider, heavier volume branches of the White Clay and Big Elk Creeks (the ruins of some of these mills are still visible today). With the exception of Route 896, many roads cross streams or run parallel to them, greatly enhancing their scenic quality and the scenic quality of nearby homes.

Woodlands

Woodlands may be found throughout the above mentioned landscapes, but are more commonly associated with stream valleys, steep slopes, and other areas not suitable for agriculture or development. There are, however, a few important exceptions to this including the Natural Land Trust's Foote Farm, portions of the Strawbridge property along Big Elk Creek, Crossan Park, and lands recently protected by homeowners' associations in clustered housing developments. Woodlands may also be found in narrow swaths adjacent to roads and between properties, enhancing aesthetic value or functioning as visual buffers between incompatible uses.

Generally comprised of tulip poplar, white and red oak, hickory, and beech, Franklin's woodlands are relatively young (50 to 70 years old). Though the dense undergrowth found in young woodlands can impair views from public roads (often a result of invasive species growth), woodlands add greatly to rural character. Where present in large contiguous patches, woodlands appear as a discrete landscape type, offering a stark and aesthetically pleasing contrast to the open fields and subdivisions found in much of Franklin's uplands. They also frame views, as in the case of the woodlands adjacent to vistas along Route 841 (see Figure 4-1).

CHARACTERISTIC LANDSCAPE ELEMENTS

Characteristic landscape elements are discrete, visually significant features set within each of the previously described characteristic landscapes. Natural or manmade, often small in scale and detail, these elements are an essential component of overall visual quality.

Scenic Water Elements

Water bodies are almost universally appreciated as scenic elements. As noted above, streams make strong contributions to scenic quality as a result of their winding and partially wooded, partially open appearance. Similarly, wetlands – historically perceived as unproductive and hence worthy of draining for agriculture – contribute greatly to scenic quality, especially where visually prominent. Those found along Creek Road adjacent to the middle branch of White Clay Creek serve as excellent examples. As flat, open water bodies, ponds offer a sharp visual contrast to rolling uplands and steep-walled valleys. From an ecological perspective, ponds with natural shoreline vegetation have greater biotic value and support a healthier ecosystem than do ponds lacking shoreline vegetation. Yet for many viewers, both types of ponds may be aesthetically pleasing and perceived as tranquil or calming.

Farmstead Clusters

Many of the farmsteads in Franklin Township represent almost idealized rural scenes. Surrounded by open fields, they are often visible from great distances. The barns are typically old, and are usually surrounded by a cluster of smaller outbuildings (hence the term "farmstead cluster"). These structures are built from a diversity of materials and are of obviously different ages, reminding observers that farms evolve and change through time. Silos, while not massive, are strong vertical elements that dominate the landscape and may also serve as points of reference. Not infrequently, roads bisect farmstead clusters, with barns and outbuildings on one side, and the house on the other.

A few common characteristics of farmstead clusters are described as follows:

- Few farm clusters are visible at any one time. From any given point on a public road, the perceived density is very low.
- Farm clusters, because they are relatively compact, are viewed as singular objects in the context of an overall agricultural landscape. By contrast, residential subdivisions, as they are usually configured, are designed at a density too low to be perceived as a distinctive place, but too high to retain a sense of openness.
- Building placement in farm clusters is irregular. Setbacks from public roads vary, as does the spacing between buildings.
- Buildings adjacent to and within a few hundred feet of a public road usually “address” the public road; i.e., there is an obvious relationship between the road and the direction the building faces – usually parallel or at a right angle to it.

Along with the few “working” farmstead clusters of Franklin are several “gentleman farms” that contribute greatly to landscape quality. In many cases, the rolling landscapes of open fields, hedgerows, and woodlands of farms devoted to equestrian uses provide unique aesthetic value and complement the farms and rural residential lands found elsewhere in the Township.

Villages and Crossroads Clusters

Franklin Township has two historic population centers: Kemblesville and Chesterville. In contrast to Chesterville, Kemblesville is a proper village, with a mix of residential, institutional, and commercial uses. Generally, lot sizes and setbacks are smaller than those found elsewhere in the Township and buildings are sited to address the road and each other.

Much of Kemblesville is historic and the Township recently adopted a Historic District Ordinance to preserve its character (See “Historic Resources,” below). Although the Kemblesville Historic District is not listed on the National Register, it has received a Determination of Eligibility (DOE) for listing from the Pennsylvania Historical and Museum Commission (PHMC), which essentially qualifies it for listing should the Township decide to apply (if not altered substantially in the meantime). Clearly, Kemblesville represents one of Franklin’s most scenic and historic assets; feedback in planning workshops underscores the value of Kemblesville as a visual focal point.

Comprised of only several structures, Chesterville is more accurately characterized as a hamlet or “crossroads cluster”. As in Kemblesville, buildings are clustered around a significant historic intersection, offering the visual impression of a single landscape unit. Also like a village, buildings in Chesterville are generally sited to address the road and each other. Rural land uses, including the Hocking Farm and nearby North Creek Nursery, help give Chesterville its hamlet feel by framing it within a larger rural landscape.

Historic Structures

The built environment forms a vital component of our perception of the landscape. In Chester County, older buildings and other prominent structures (such as bridges) were generally constructed of field stone or field stone covered by stucco. Log, frame, and brick buildings are also found in the rural landscape. Historically, the placement of structures was often derived from the character of the landscape itself, rather than for example, adherence to zoning codes. They were often sited to gain protection from the elements; a house nestled in a hollow serves as an example.

Figure 4-2 (page 4-22) identifies Franklin Township's historic resources, including all structures 50 years and older. Though each of the Township's historic resources are not necessarily scenic, many of the historic structures identified in Figure 4-2 have scenic qualities or are a component of a larger scenic element, such as farmstead and crossroads clusters. Particularly scenic historic structures are displayed on Figure 4-1 as visual accents.

FRANKLIN TOWNSHIP SCENIC ASSESSMENT

To complement the general description of Franklin's scenic resources described above, windshield surveys were conducted by Task Force members and planning consultants to identify and map the locations of Franklin's most scenic or "visually significant" resources. To be considered scenic, resources must be or contribute to one or several of the characteristic landscapes and landscape elements described above. Specifically, this section identifies and maps the approximate location and/or extent of the scenic resources described below (see Figure 4-1):

- Vista Points – Mapped along public roads, vista points are points where relatively long and undisturbed directional views of the landscape are attained. Broad views of stream valleys, woodlands, and farmsteads are examples.
- Visual Accents – Visual accents are landscape elements characteristic of Franklin's early-settlement landscape. Accents include crossroads and farmstead clusters, specimen vegetation, and historic bridges, buildings, and other structures.
- Visual Intrusions – In contrast to accents, visual intrusions are atypical of Franklin Township's early-settlement landscape. Intrusions include junkyards, abandoned and/or deteriorating structures, above-ground utility lines, and cell phone towers.
- Scenic Roads – Scenic roads provide visual access to open spaces, farmsteads, and other scenic landscape elements and are relatively free from visual interruptions or intrusions. Expressive of the topography they traverse, scenic roads often link other scenic resources together and border a diversity of characteristic landscapes.
- Scenic Rivers – Scenic rivers are watercourses that have received special designation by state or federal authorities for their outstanding scenic, recreational, and ecological value. In the case of Franklin, these include the East, Middle, and West Branches of the White Clay Creek.
- Woodlands – As described earlier, woodlands are a valuable scenic resource for the buffering and screening functions they provide in addition to being scenic themselves. Franklin has

approximately 2,245 acres of woodlands, excluding fragments of woodlands and individual trees not captured during the mapping process. Readers are referred to Chapter III for more information on the character and condition of local woodlands.

Vista Points

Franklin has 22 vista points scattered throughout the Township. For the most part, these provide visual access to open fields, though some overlook or provide views within stream valleys. Examples of the former include the broad views attained along Old School House Road and from Crossan Park. Vistas overlooking or within stream valleys include the view at the intersection of Old School House Road and Route 841 and the atypical but visually significant view of the East Branch of White Clay Creek from Laurel Bridge Road, near Franklin's border with New Garden Township.

At the time of this writing, views from three of the 22 vista points are threatened by development projects that have either been approved or are in the plan review process. Views from the remaining vista points are not assured, with the partial exception of the vista point in Crossan Park. In contrast to other Chester County communities where agriculture plays a more dominant role in the local economy, Franklin lacks the critical mass of protected lands needed to preserve the pastoral views attained from most vista points.

Visual Accents and Intrusions

Figure 4-1 depicts the location of 29 visual accents and four visual intrusions. These are listed and further described on the following page in Table 4-1. Noteworthy accents include several historic homes and barns, the Village of Kemblesville, a house which once served as a stagecoach stop, mill ruins, and several heritage trees (trees of exceptional girth, principally sycamores).

To be considered a visual intrusion, an object must be both atypical of Franklin Township and be located in such a way as to provide a strong negative or intrusive focal point for the public view. Franklin has four visual intrusions, two associated with electric lines, one cellular phone tower, and one abandoned mushroom house near Crossan Park. The mushroom house will likely be demolished as a result of land development.

The protection of Franklin Township's visual accents is not assured, with the partial exception of structures located in the Kemblesville Historic District. Other visual accents may be modified or removed at the discretion of landowners. Moreover, even if visual accents are preserved, their quality may be degraded as a result of insensitive development in adjacent areas.

1. Visual Accent: Wesley Methodist Cemetery with nearby vista.	2. Visual Accent: Historic red brick barn with diamond designs in brick.
3. Visual Accent: Historic brick farmhouse.	4. Visual Accent: Historic brick miller's house and farmhouse.
5. Visual Accent: Old mill/raceway (John Tweed Mill, c. 1780).	6. Visual Accent: Ruins of Mt. Olivet Church (1848).
7. Visual Accent: Kemblesville Historic District.	8. Visual Accent: Kemblesville Methodist Church and Cemetery.
9. Visual Accent: Historic farmhouse and barn (Louden Barn).	10. Visual Accent: Prominent stone barn surrounded by open landscape.
11. Visual Accent: Victorian farmhouse and outbuildings (McMillan Farm).	12. Visual Accent: Farmstead cluster (Nowland Farm).
13. Visual Accent: Historic farmhouse and barn (c. 1750).	14. Visual Accent: Plough and Harrow Farm (barn/old stagecoach stop).
15. Visual Accent: Farmstead cluster (Joseph Pierce Farm).	16. Visual Accent: McKean Farm (colonial farmhouse and outbuildings).
17. Visual Accent: Historic mill and farm (John K. Steele Mill).	18. Visual Accent: Lisle Barn (converted barn with old house ruin).
19. Visual Accent: Specimen vegetation (large sycamore) next to scenic pond.	20. Visual Accent: Historic red barn (Joseph E. Pennock Farm).
21. Visual Accent: S.A. Pennock Mill (brick).	22. Visual Accent: Specimen trees in open, sloping field.
23. Visual Accent: Specimen trees (sycamores) along creek.	24. Visual Accent: Farmstead cluster (Thomas Marvel Farm).
25. Visual Accent: Federal style stone house (late 18 th century).	26. Visual Accent: Farmstead cluster.
27. Visual Accent: Stone farmhouse and barn (Laurel Bridge Farm).	28. Visual Accent: Chesterville – crossroads cluster.
29. Visual Accent: Federal-style house (Thomas Hindman House).	30. Visual Intrusion: Cell phone towers in Crossan Park.
31. Visual Intrusion: Abandoned mushroom house.	32. Visual Intrusion: PECO transmission line.
33. Visual Intrusion: Utility junction box.	

Table 4-1. Visual Accents and Visual Intrusions

Scenic Roads

Scenic roads in Franklin generally fall into one of two categories: roads through broad uplands or roads through stream valleys. As defined in this plan, they satisfy some (but not necessarily all) of the following criteria:

1. The roads provide visual access to a particularly scenic landscape, including visual accents and vista points;
2. The roads offer a pleasant sense of movement through the landscape, or a heightened awareness of adjacent landforms, and/or;
3. The roads are relatively free from visual interruptions or intrusions.

Figure 4-1 displays 18 individual segments of scenic roads totaling 16.2 miles. Some of these roads traverse uplands, including Old School House Road, Appleton Road, and the southern portion of Route 841. Others wind in and out of stream valleys, such as Creek Road, Mount Olivet Road, and the northern portion of Route 841. Each road segment identified in Figure 4-1 is further described and correlated with roadway classification in Table 4-2. Significant potential exists to create a longer, interconnected scenic corridor composed of several road segments.

Scenic Rivers

As previously noted, Franklin's streams contribute greatly to scenic quality. While each of the Township's watercourses have scenic attributes, three streams in particular – the East, Middle, and West Branches of the White Clay Creek – have received National Wild and Scenic River designation by the Federal government.

Recognized for its “outstandingly remarkable” historic, scenic, geologic, and biological resources, the White Clay Creek National Wild and Scenic River was added to the National Wild and Scenic River System by Congress in 2000 (Public Law 106-357). Though the management plan jointly prepared by the National Park Service, the Commonwealth of Pennsylvania, the State of Delaware, and local municipalities applies to the entire watershed, official designation (in terms of the area in which Federal review standards apply) is limited to second-order tributaries and extends 250 feet on either side of streams (or to the limits of the 500-year floodplain, whichever greater). This places approximately 720 acres of Franklin Township within the White Clay Creek Wild and Scenic River corridor. Designated reaches and their corridors are displayed in a hatched pattern in Figure 4-1.

The White Clay Creek Wild and Scenic River is classified by the National Park Service as a “Partnership” Wild and Scenic River. Management of Partnership Rivers is the joint responsibility of local, state, and federal authorities. While Wild and Scenic status prohibits the Federal government from assisting in water resources projects (issuing permits, funding, construction, etc...) that would have adverse effects on the White Clay, implementation of the Watershed Management Plan's local land use recommendations is voluntary. Though the plan doesn't discuss scenic resources *per se*, it does offer municipalities a series of goals, guidelines, and actions for the

Franklin Township Comprehensive Plan

Roadway Classification	Scenic Road Segment*	Scenic Attributes
Minor Arterial	(None Scenic)	
Minor Collector	Route 841 - from Twp. line to Liberti Lane, between Old School House and Flint Hill Roads, and from Chesterville to Twp. line.	Provides critical visual access to scenic, rural farmlands. Links several accents and vista points. Northern segment parallels Middle Branch of White Clay Creek.
Local Distributor	Chesterville Road	Views of woodland/floodplain along Middle Branch of White Clay Creek.
	Flint Hill Road, in southeast corner of Twp. and from Twp. line to Route 841.	Open, farmed landscape in southeast. Scenic, wooded roadside with visual access to historic house near intersection with Route 841.
	Appleton Road, from Twp. line to Strickersville Road	Broad views of rural landscape; access to vista points and accents.
	Strickersville Road	Provides visual access to farmland; terminates at historic cluster along Big Elk Creek.
	Mt. Olivet Road	Dirt road providing scenic views of Big Elk Creek tributary; links visual accents.
	Hess Mill Road	Broad, open views facing northeast.
	South Guernsey Road, from Hess Mill Road to Hillcrest Drive	Roadway offers pleasing sense of movement through wooded/floodplain landscape.
	Pennock Bridge Road, from S. Guernsey Road to Route 841	Open, farmed views and access to visual accents.
Local Road	Peacedale Road, between Walker Road and Big Elk tributary	Broad views of open land and visual accent, visual access to woodland/Foote farm.
	Old School House Road	Numerous vista points; views of uplands and stream valleys.
	Church Hill Road	Vista across Middle Branch of White Clay Creek; 2 visual accents.
	Landenberg, Creek, and Church Hill Roads – from Twp. Line to Queens Lane	Roadway offers pleasing sense of movement through wooded/floodplain landscape.
	Laurel Bridge Road	Views of farm, open field, and East Branch of White Clay Creek; steep, winding road near Twp. line.
	Elbow Lane	Broad views of rural landscape.
* For reference only; see Figure 4-1 for location of specific scenic road segment		

Table 4-2. Scenic Roadway Classification

protection of water quality, stream habitat, open space, and historic, cultural, and archaeological resources. Representatives from Franklin Township participated in the preparation of the Watershed Management Plan and ongoing municipal participation in the Watershed Management Committee – the inter-agency, inter-municipal organization charged with implementing the Management Plan – is encouraged. Indeed, the plan could not be implemented without municipal cooperation.

IMPLICATIONS

Recent development patterns underscore the impact insensitive development can have on Franklin's scenic resources. For example, new subdivisions in upland landscapes can block views obtained from vista points and erode rural character. Development in and adjacent to Kemblesville – if not designed to replicate and complement its architectural style and density – can detract from the Village's historic character and result in a visually non-distinct environment.

As stated earlier, the protection of Franklin's scenic resources is not assured, with the partial exception of structures in the Kemblesville Historic District. Moreover, the broad views of Franklin's characteristic landscapes attained from many vista points are not guaranteed, in part because so little land in Franklin is protected in open space, either through regulation or voluntary land conservation. While Franklin Township has several tools in place to prevent the wholesale destruction of its scenic assets, the protection of scenic quality is largely up to individual landowners, and to a lesser extent, Township officials charged with the review of development proposals.

Franklin's existing land use regulations and related policies and programs can be used to preserve scenic resources. The Township has two sets of tools to protect scenic quality – regulatory tools (the Zoning Ordinance, the Historic District Ordinance, and the Subdivision and Land Development Ordinance) and non-regulatory tools (including municipal open space acquisition and landowner education).

Franklin's Zoning Ordinance (ZO) includes a variety of regulations explicitly aimed at protecting rural character and scenic quality. Open space design, for example, is currently required on all tracts greater than 15 acres in the majority of the Township, and standards for open space subdivisions require the maximum, "conservation of site features identified as having particular conservation value, historical significance, or recreation value," including mature trees, hedgerows, and historic sites and structures (ZO Section 1510.F.1.a.2). Section 1510 also requires that buildings in open space subdivisions be situated below ridgelines to preserve existing vistas. Other noteworthy examples of regulations in the ZO that protect scenic resources include: Article 24 ("Natural Resource Protection"), which limits the clearing of woodland for development, prohibits development on steep slopes, and requires protection and replanting of riparian buffers; and Section 1501 ("Screening and Landscaping"), which requires that screening be installed between incompatible structures or uses. Sign regulations, also contained within the ZO, have a significant impact on scenic quality. Signs for commercial uses in the Village District, for example, must be one of three types, each designed to promote the attractiveness of Kemblesville.

Similarly, Franklin's Historic District Ordinance, described in greater detail below, was adopted by the Board of Supervisors in 2003. Designed to protect the character and condition of the Kemblesville Historic District, the Historic District Ordinance established Franklin's Historical

Architectural Review Board (HARB). The HARB gives recommendations to the Board of Supervisors regarding the issuance of “Certificates of Appropriateness” in connection with exterior architectural alterations, demolitions, and new construction for all structures in the District.

While the ZO protects scenic resources as they relate to land use, density, and the massing of structures, provisions in the Township’s Subdivision and Land Development Ordinance (SLDO) have an important impact on the protection and maintenance of scenic resources at the site level. For example, Section 610 of the SLDO (“Screening and Landscaping”) describes in greater detail than the ZO the landscaping requirements for subdivisions and land developments. Among other standards, this section requires the inventory and preservation of large caliper trees and that the majority of new landscaping be native to the area.

One non-regulatory tool available in Franklin to protect scenic resources is the Township’s open space fund. Franklin’s open space committee is in the process of prioritizing parcels for open space acquisition, many of which have scenic value in addition to environmental and recreational value. The type and location of scenic resources identified in Figure 4-1 are components of the open space prioritization plan, which is nearing completion at the time of this writing.

The preceding discussion illustrates the complexities involved in scenic resources management; namely, that because scenic resources span several scales (from entire landscapes to specific structures), a variety of tools are needed to protect them. While the Township already has several tools in place, some are inadequate and others are missing. For example, structures of historic (and scenic) value outside the Kemblesville Historic District may be modified or demolished without the input of Franklin’s Historical Commission. Standards for the protection of the Township’s scenic roads are also missing in its land use regulations. Additionally, input from public workshops and the Community Values Survey suggests many residents are unhappy with the Open Space Design development option preferred by the Township. According to some respondents and workshop participants, open space design – though an improvement on conventional design – still results in the fragmentation of scenic landscapes and often protects land of little scenic or recreational value.

Yet even if all the necessary regulatory tools were in place, successful scenic resources protection is still largely dependent on the attentive review of development proposals. While generic standards grant the Planning Commission and Board of Supervisors broad discretion in the review of development plans, they often fail in providing reviewing bodies with specific criteria to hold applicants against. Thus, appeals for scenic resource protection are often likely to trigger non-cooperation on the part of applicants, a situation further complicated by the subjective quality of the term “scenery.” This underscores the importance and value of submitting sketch plans and holding preliminary meetings with applicants (which the Township currently encourages), adequately mapping scenic resources on “existing features plans,” conducting site walks, and utilizing consultants with experience in scenic resource protection in development review.

RECOMMENDATIONS

1. Consider adopting scenic or rural road protection standards for the scenic roads identified in this Plan. These standards should require, to the maximum extent practicable, the preservation of those elements that contribute to rural character. These standards should be linked to the functional classification and ownership of the Township's roads or Zoning Districts.
2. Consider adopting a Scenic Rivers Overlay District along designated reaches of the White Clay National Wild and Scenic River. The extent of the Scenic River Corridor should be based on the *White Clay Creek and its Tributaries Watershed Management Plan* (2001). Development on sites within the Scenic River Overlay should be limited to areas not visible from within the river corridor and should protect external views of the corridor from public roads. Structures should be situated below ridgelines to preserve existing vistas and standards for retention and replacement of vegetation should be modified to protect a higher proportion of existing woodland than currently required by Article 24.
3. Consider inclusion of lands comprising significant scenic resource areas as Transfer of Development Rights (TDR) sending areas if a TDR program is adopted by the Township. Scenic resources include vista points, scenic roads, and visual accents. Lands with scenic resources in designated growth areas (i.e., Kemblesville) could also become TDR receiving areas if standards for scenic resource protection are developed.
4. Periodically review the adequacy of landscaping and screening regulations to ensure they protect and enhance scenic resources. Assess the adequacy of screening requirements as recently-built developments age. Evaluate whether particular areas, such as the White Clay Creek corridor, should have more stringent landscaping standards. Consider requiring woodland replacement in addition to street tree and ornamental landscaping where woodlands are disturbed in the course of land development.
5. Encourage the use of conservation easements to protect visual accents and frontage along scenic roads.
6. Utilize the conditional use process to achieve scenic resource protection objectives. Subdivisions and land developments requiring conditional use approval are often designated as such because their impacts are district-wide and may affect the entire community. As a result, these developments require close scrutiny by the Board of Supervisors, which may require additional safeguards to ensure impacts – including those to the public viewshed or other scenic resources – are minimized. Where reasonable, conditions of approval should always include the protection of scenic resources and cite specific actions applicants must take to do so. The Township may also consider expanding conditional use designation to other uses based on their perceived impacts to scenic resources.

7. Consider adopting the proposed Historic Preservation Zoning Article, or a modified version of it, to protect the scenic quality of historic resources located outside the Kemblesville Historic District.
8. Prepare a National Register Nomination for the Kemblesville Historic District (see recommendations in “Historic Resources,” below).

HISTORIC RESOURCES

INTRODUCTION

Settled by European immigrants as early as the 1720s, Franklin Township's history is rich, colorful, and closely tied to the success of agriculture. While the majority of historic structures in the Township reflect its early development as a farming community, they span the full gamut of architectural styles commonly found in the region, from Colonial to Craftsman. These resources provide valuable public benefits. Collectively, they tell the unique story of Franklin's development and help foster a sense of community identity. They also greatly contribute to the Township's rural appeal and scenic quality.

Yet as the demand for new homes increases, so too does pressure to demolish old structures, in part because historic structures are perceived as liabilities and/or too costly to rehabilitate, but also because options for their reuse may be limited. Already, development has left an indelible mark on Franklin's historic fabric. Between 1982 and 2002, the Township lost approximately one tenth of its historic resource base to land development.

Several recent Township actions attest to the community's growing concern over the loss of historic resources. Thanks largely to the work of Franklin's Board of Supervisors and Historical Commission, the Village of Kemblesville is now a Pennsylvania Certified Historic District, a HARB has been established in Kemblesville, and a detailed inventory of all structures in Franklin 50 years of age and older was completed in 2004.

Results from the 2004 Community Values Survey further underscore community interest in historic preservation. Retention of rural atmosphere (of which Franklin's historic farmsteads and landscapes are a critical component) ranked first among the most important planning issues selected by respondents. "Changes in unique local character" ranked a close third behind "area becoming over-developed" and "taxes too high" in the list of factors that might cause residents to move out of the Township. Participants in the Comprehensive Plan visioning workshops also emphasized their interest in historic preservation and established historic and cultural resources protection as one of the Plan's principal goals.

Following a broad overview of Franklin's history, a summary of the 2004 Historic Resource Survey is presented along with a map identifying and classifying parcels according to their historic value. As of this writing, few communities in Chester County have an inventory of this depth. An assessment of the Township's current historic preservation policies and programs and whether or not they meet the objectives of the 1991 Comprehensive Plan is also provided to serve as a baseline for future planning efforts.

COMMUNITY HISTORY

Officially created in 1852, Franklin Township was named in honor of Benjamin Franklin, who was thought to have owned a 160-acre parcel of land in the Village of Kemblesville and frequented the area while living in Philadelphia. Not unlike many other Chester County communities, Franklin's development is closely intertwined with the success of agriculture, the gradual construction and

improvement of roadways, and more recently, suburban growth in Chester County and the Wilmington-Newark metropolitan area.

To understand the landscape of Franklin today, it is important to review the historic trends that shaped the land, the built environment, and the community over time. The following, modified from the 1991 Comprehensive Plan and supplemented with information from Franklin's recently completed Historic Resource Survey and Historical Commission, provides a broad overview of the Township's history.

Original Settlers

The earliest inhabitants of the area now known as Franklin Township were Indians of the Lenni Lenape tribe, which had many settlements throughout the Delaware River Valley. Although the Lenni Lenape were joined as a confederacy, they were largely independent and governed by their own chiefs. The only documented site associated with the Lenni Lenape in the area is the village called Minguannan on the White Clay Creek in adjoining London Britain Township. The peaceful Indians of this area were often the targets of raids by the Susquehannoks and other warlike tribes such as the Minquas, Iroquois, and Shawnees.

Though the PHMC has no archaeological records for Franklin, the Commission has rated certain sites as having "high probability of pre-contact [Native American] artifacts," particularly in recently plowed fields and areas within approximately 50 feet of a stream or creek.

European Settlement

The land area that comprises the northeastern portion of Franklin today was once part of a 65,000 acre parcel extending from the Delaware River to the Chesapeake Bay known as the London Tract. The remainder of Franklin Township to the south and west was originally located in a number of small grants of land.

The London Tract, originally owned by William Penn, was sold in 1699 to the London Land Company, a group of four men from London, England, who were to control the Tract for 124 years. Much of this land originally leased for a term of years, with stipulations that a certain number of acres be cleared and plowed yearly. According to an advertisement circulated in the 1720s, the leases generally comprised 50 acres per person with 10 families required to settle together on every 5,000 acres for the purpose of promoting "good neighborhood convenience."

Settlers within the London Tract began to obtain deeds to their lands in 1722 and 1723 from the London Land Company. This marks the beginning of settlement in Franklin. These deeds were prepared in England using the metes and bounds technique. Consequently, individual parcels were irregular in shape due to the random settlement of the Tract.

During the early part of the eighteenth century, the portion of the London Tract within Chester County was divided into individual townships to provide more effective political representation. London Grove was formulated in 1723, New London in 1724, and London Britain in 1725. At that time, Franklin was part of southeastern New London Township and would remain so until 1852. Municipal boundaries followed parcel lines, resulting in irregular shaped townships. This is apparent in the northern and eastern borders of Franklin.

Throughout the eighteenth century, the land now contained in Franklin was the location of large farms with widely dispersed farmsteads. Most of the first residences were one-story buildings with a single interior room, sometimes with a loft. Though few exist today, some examples remain, including the Susan Fury House on Den Road. Other early eighteenth century houses were log buildings, which were often enlarged and added on to in subsequent years. The Cornelius Lynch House on North Creek Road, demolished in March 2005, was possibly the last example of this early colonial architecture in Franklin.

Another example of a house design during the first wave of the Township's settlement is exemplified by the McKean Farmhouse (pronounced "McCane"), constructed c. 1720 for the wealthy Susannah McKean. Its side-hall plan – though common at the time in Philadelphia – is one of the earliest examples in rural Pennsylvania. Franklin-born Thomas McKean (1734-1817), son of William and Letitia Finney McKean, was a signer of the Declaration of Independence and the only continuous member of the Continental Congress. He later served as Chief Justice of Pennsylvania and Second Governor under the 1790 Constitution. As a result of its architectural integrity and historical significance, the McKean Farmhouse was determined eligible for the National Register of Historic Places in 1984, the only such individual distinction in the Township.

Milling also began to grow in prominence during the eighteenth century and would remain so through the nineteenth century. At that time, farmers would transport grain to mills to be ground into flour. While most mills were grist mills, many were equipped with a saw or paper mill. Breou's Atlas of 1883 shows six different mills in Franklin situated on the West and Middle Branches of the White Clay Creek and on Big Elk Creek. Of these, three remain standing today, one of which, the John K. Steele Mill on Hess Mill Road, was built c. 1749.

By 1750, the road from Lancaster to Newark, Delaware, was laid out. Now called New London Road (Route 896), it was a major route for the transportation of agricultural products from Chester County farms to markets in Delaware. Roadway improvements led to the establishment of inns and stagecoach stops, including the Plough and Harrow Inn (c. 1758) and Kemblesville Hotel (c. 1763) as well as Franklin's villages – Kemblesville (originally called Fox Chase) and Chesterville.

Nineteenth Century

By the early 1800s, Fox Chase was a prosperous and busy village along the road from Newark to Lancaster boasting three mills, a hotel, and a pottery works (Darlington Cope's pottery). By 1816, Fox Chase was renamed Kimble, and later Kimbleville, after the prominent John J. Kimble family who settled in the area in 1783. John's youngest son, George, was a storekeeper who opened the village's first post office in his shop in 1823 and served as postmaster for 33 years. George's brother Samuel, whose house stands on the southern limits of Kemblesville, operated the hotel and tavern, which became the local polling place. Family members spelled the name "Kimble" or "Kemble," and throughout the nineteenth century the name of the village vacillated between "Kimbleville" and "Kemblesville."

The Presbyterian Church in Kemblesville was constructed in 1852 under the sponsorship of New London Presbyterian Church. One acre of ground was purchased from Samuel Kimble, Sr. and his wife for \$50.00 for the Church's construction. The original building burned in 1990 and has been replaced by the current structure. On December 6, 1868, permission was given to the Flint Hill Methodist Church – which had a church and cemetery in southeastern Franklin on Flint Hill Road

– to hold services at the Presbyterian Church on the second and fourth Sunday of each month. The Flint Hill congregation became increasingly strong throughout the latter half of the nineteenth century and in 1899 purchased the Presbyterian property in Kemblesville.

The original Flint Hill Methodist Church and cemetery remain as ruins. Ruins of the Mt. Olivet Church and cemetery (Plummerite Baptist) are also visible today along Walker Road. The Auburn Baptist Church (south side of Auburn Road in northeast Franklin) was also built in the mid-1800s. This Church remains active today, and though its core is historic, it has undergone alterations and additions since 1980.

Chesterville, another settlement in Franklin, was a compact village with several buildings. A post office opened there in 1848 in a store operated by Samuel Byles. On the opposite corner was the William Missimer Farm. Missimer, whose house remains standing on the corner today, operated a wheelwright and blacksmith shop. Chesterville was never as large or important to the Township's economy as Kemblesville and today lacks the historic setting it once had as a result of demolition and modern residential development.

Generally, residential architectural styles in the nineteenth century reflected the prevailing styles throughout Chester County. The Federal Style was a refinement of earlier architectural trends. Fifty examples were documented in the 2004 Historic Resource Survey (see below). Perhaps the best example in Franklin is the Thomas Hindman House on Flint Hill Road, with its three stories, shallow roof slopes, and double brick chimneys. By the mid-nineteenth century, the prevailing architectural style for new construction in Franklin became Gothic Revival. These residences are characterized by a centered cross-gable on the main elevation which lights the third floor/garrett space.

Agriculture continued to be a profitable enterprise throughout the nineteenth century in Franklin. Increasing output of grain in the early decades of the century led to the construction of larger barns. The common English Lake District barns of the eighteenth century gradually gave way to double-decker barns in the early nineteenth century. This new barn type represented a means of accommodating larger grain harvests. The ramp system became a more visible feature, leading over a passageway to a threshing floor on the third level. The hay mows on each end were two-story elements above the stall. A variety of historic farm outbuildings, including springhouses, corncribs, and sheds, may also be found on nineteenth century farmsteads. Franklin's Connecticut-style corncribs are unique among other Chester County corncribs because of their extended gables found on the end wall where the doors were located.

Lastly, schools became more common throughout Pennsylvania in the mid-nineteenth century. Before the 1830s, most schools were subscription organizations funded by parents. In the 1830s, however, the "Common School System" was introduced, which required municipalities to be divided into local school districts each served by its own schoolhouse. Franklin was divided into seven school districts, with the majority of districts building one-room schoolhouses. Of the first round of schoolhouses, only the Spencer School House on Old School House Road remains. Four one-room schoolhouses were in operation between 1875 and 1956, when the Kemblesville Elementary School was built and the system became part of the Avon Grove School District.

Twentieth Century

At the beginning of the twentieth century, Kemblesville became increasingly important as a commercial center. Dr. J.G. West became one of the leading citizens of the village. A medical doctor, West lived in a brick house facing New London Road. He added a wing onto his house in the late 1800s where he operated a drug store and post office. Another leading citizen, C.T. Richards, opened a saddlery shop and owned a half interest in the village's blacksmith shop.

Modern conveniences of the early twentieth century became available in Franklin Township at this time. Gas lines and steam heat were installed in the Kemblesville Hotel in 1905 and electricity arrived in the village in 1908. When telephone lines came to Kemblesville the exchange was established in the West Drug Store. In subsequent decades, phone lines and electricity were extended throughout the Township. In 1911, a stagecoach service carried mail and passengers between Kemblesville and Newark twice a day. In 1920, the Franklin Township Board of Supervisors adopted a resolution to borrow \$30,000 for improving New London Road (Route 896) from London Britain to New London. This was completed in the spring of 1922.

Residents petitioned and voted to have Franklin Township declared "dry" in 1933, the same year Congress adopted the 21st amendment to the U.S. Constitution repealing the national prohibition on liquor. It has been implied that before then, Cecil County was "dry" and workers from Elk Mills found Kemblesville to be a lively spot on Saturday nights.

The earliest residences in the twentieth century reflected the American Foursquare Style. This low-cost building type was made possible in part by mail-order businesses, which shipped a kit of materials and directions for its construction. An example of this type is found in Kemblesville, a two-and-a-half story, two-bay building with a pyramidal roof, sleeping porch, and typical hipped-roof dormers. A second Foursquare house constructed on Strickersville Road came with a special machine used to produce "cast stone," a concrete block with a molded face for the exterior wall. In addition to American Foursquare houses, another building type of the early twentieth century was the Craftsman or Bungalow Style. This was also a "kit" house, selected from a catalog of various house plans and types.

The widespread use of the automobile beginning in the twentieth century left an indelible mark upon Franklin Township, as elsewhere. Historic roads were upgraded and widened to accommodate growing traffic. Unlike earlier decades, new residential construction reflected the one-story tract housing of the time; the most common styles were Ranch and Minimal Traditional. The latter represented a break with the traditional housing assumptions; it consisted of a rectangular building with an ell (right angle extension) on the front rather than the rear. Most Minimal Traditional houses do not have a front porch; rather than sitting on the porch facing the road, residents had a private deck or patio off the rear of the house.

Many of the residents of these smaller houses did not work in nearby fields but drove to work elsewhere. The wide availability of automobiles changed the nature of shopping, making it possible for consumers to drive to Newark or Wilmington for a greater selection of consumer goods and tax-free shopping. This movement had a negative impact on Kemblesville. As its obsolescent businesses, such as the saddlery and blacksmith shop, closed with the times, other businesses also ceased operating, such as the general store (1955) and the hotel (1969).

As the twentieth century drew to a close, Franklin Township changed dramatically from an agricultural township to a bedroom community. Corporations in Delaware and the nearby University of Delaware became large employers, and the demand for housing spilled into Franklin. Many of the farms throughout the Township became residential developments. Demolition of historic buildings was often the result.

HISTORIC RESOURCE SURVEY

An in-depth survey of all structures 50 years of age and older was completed in 2004 by preservation consultant Wise Preservation Planning.¹ Funded by the Township with a matching grant from the PHMC, the intent of the survey was to inform land use decision-making by documenting and registering all structures of historic value. Generally, inclusion in the survey (in addition to each structure's age) was based on National Park Service criteria for listing on the National Register of Historic Places (30 CFR 60.4). These criteria include:

- A. Property is associated with events that have made a significant contribution to the broad patterns of history;
- B. Property is associated with the lives of persons significant in the past;
- C. Property embodies the distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction; and
- D. Property has yielded, or is likely to yield, information important in prehistory or history.

Pennsylvania Historic Resource Survey Forms (HRSF) were completed for each property constructed up to 1955. Additionally, the consultants classified historic properties into three categories varying in historical significance. Classification was based on exterior architectural details *only*. According to the consultants' report, "A complete evaluation would include an assessment of the integrity of a building's exterior *and interior*. Thus, it is possible that the recommended classification of a particular building could change" (Wise, 2004: 11). These categories are as follows:

- **Class I** properties include individual properties listed on the National Register or that have received a Determination of Eligibility (DOE) for listing. Contributing properties in any National Register-listed or DOE historic district are also included.
- **Class II** properties have the potential to be individually eligible for the National Register. Class II also includes properties of local significance but not necessarily eligible, such as farmsteads and schoolhouses.

¹ Copies of the "Franklin Township Historic Resource Survey" (Wise Preservation Planning, 2004) are available at the Franklin Township office for public review.

- **Class III** properties are all other resources constructed before 1955 which do not retain the architectural significance to be listed on the National Register.

Figure 4-2 on the following page displays the location of Franklin's Class I, II, and III historic resources. Because several historic structures may be located on a single property, tax parcels rather than the location of individual structures are identified. Classification is based on each parcel's primary historic resource. HRSFs for each property are available for review at the Franklin Township office.

Altogether, Franklin Township has 28 Class I resources, 63 Class II resources, and 64 Class III resources. The Class I resources include the McKean Farm (DOE 1984) and all contributing properties in the Kemblesville Historic District (DOE 2002). Complete documentation of the District's resources is necessary for the Act 167 (Historic District Ordinance) design review process, which the Township adopted in 2003.

Property Types

The historic resources documented in the 2004 survey are highly varied, including many architectural styles and eras. Most reflect the rural background of the Township, including those in Kemblesville, which historically functioned as Franklin's commercial and civic hub. These resources fall into a variety of property types, identified in Table 4-3, below.

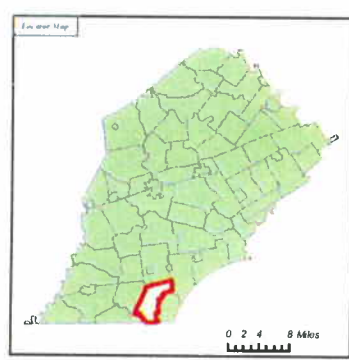
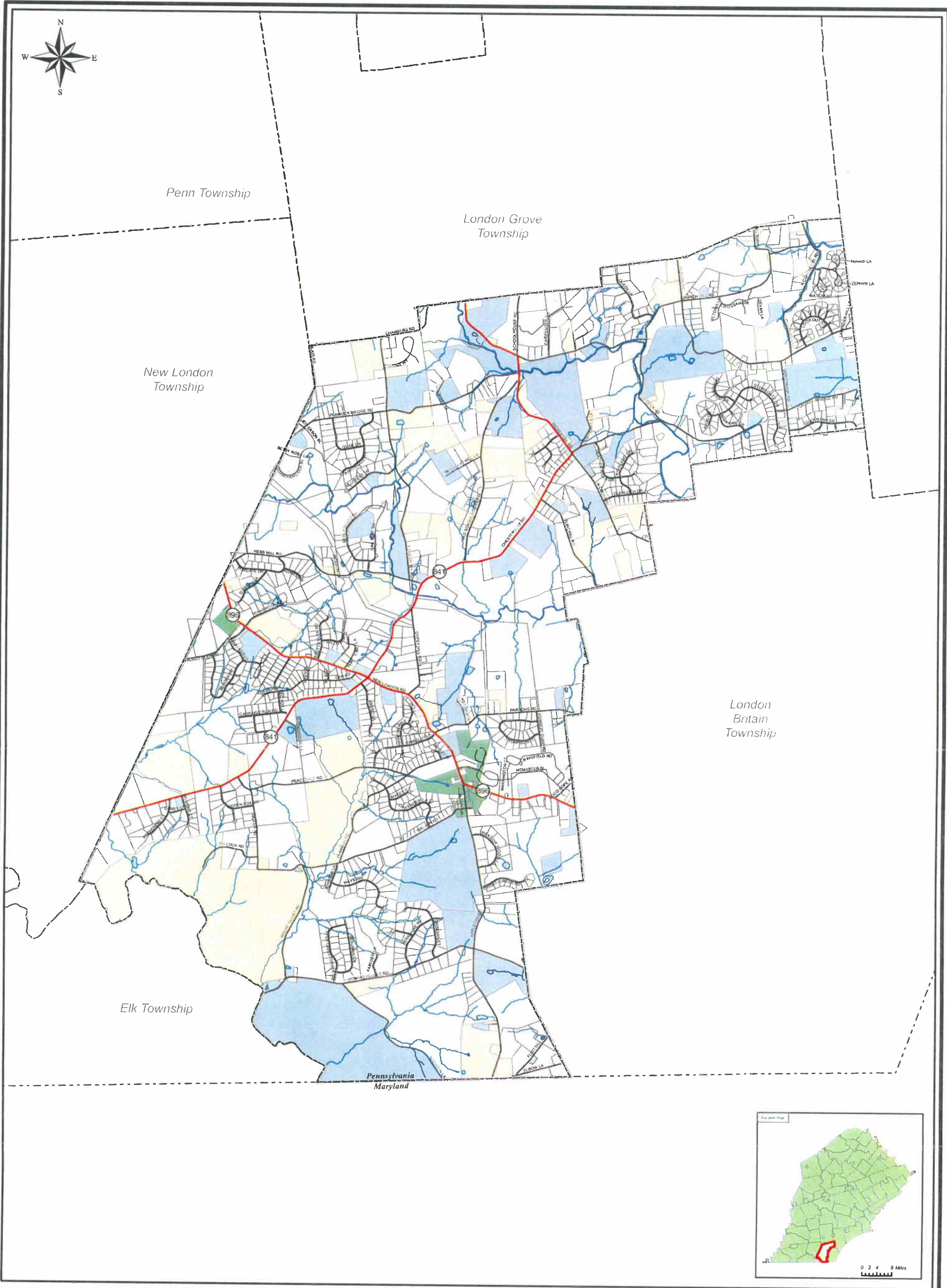
Table 4-3. Property Type of Historic Resources, Franklin Township, 2004

Property Type	# of Survey Forms
Intact Farms	29
Farmsteads	20
Individual Resources	63
Residential Village Lots	27
Non-Residential	15
Demolished	11
Ruins	4
Properties not documented	4

Intact farms are properties with a farmhouse, barn, and outlying agricultural fields, while farmsteads represent properties with a farmhouse and barn but lacking fields. Individual resources are properties with either a farmhouse or a barn, but not both. Residential village lots represent the contributing properties in the Kemblesville Historic District. Non-residential properties include mills, churches, cemeteries, schools, stores, and inns. Ruins include properties with substantial ruins as the primary resource while demolished properties are those that were surveyed from 1979 to 1982 (in the Chester County Historic Sites Survey) but could not be found in 2004. Lastly, four properties were not documented because they were not visible from public roads.

Resource Styles

The vast majority of structures surveyed in 2004 were houses (133), followed by barns (52), and various domestic and agricultural outbuildings. Table 4-4 presents the architectural styles of the primary historic resource associated with each Class I, II, and III property. The majority of styles reflect colonial and early American rural building traditions.



0 1,500 3,000 6,000
Feet

Brandywine Conservancy
Environmental Management Center
Thomas Comitta Associates, Inc.
Town Planners and Landscape Architects
RETTEW

Figure 4-2
Historic Resources
Franklin Township
Comprehensive Plan

Legend	
Township boundary	Tax parcels
Major roads	Adjacent municipalities
Roads	Class I Resource
Water bodies	Class II Resource
Streams	Class III Resource

Data Sources: Base Data from Chester County Data Distribution CD, 2003. Tax Parcels from Chester County, 2005. Historic resource data provided by Wise Preservation Planning, 2004.

Table 4-4. Style of Historic Resources, Franklin Township, 2004

Principal Resource Style	Number of Principal Resources
Federal	44
Vernacular	31
Colonial (including Penn Plan)	19
Gothic Revival	11
Modern	7
Mid-Nineteenth Century	7
Ranch	6
Early Republic	6
Early Twentieth Century	5
Folk Victorian	3
American Foursquare	2
Craftsman/Bungalow	2
Tudor Revival	2
Victorian	2
Twentieth Century	1
Greek Revival	1
Cape Cod	1
Italianate	1
Mid-Twentieth Century	1
Queen Anne	1
Other Styles	6

IMPLICATIONS

Up until recently, Franklin Township's approach to historic resource protection was largely voluntary. Preservation of historic structures was for the most part a private activity, though some standards in the ZO and SLDO required developers to identify structures of historic value in site plans and protect them where feasible. For example, the Township's current standards for open space design require the maximum "conservation of site features identified as having particular conservation value, historical significance, or recreation value" (ZO Section 1510.F.1.a.2). Yet interviews with Township officials and Historical Commission members suggest that resources were often demolished without Township knowledge. Indeed, this was one impetus for the Historic Resource Survey finished in 2004.

Recognizing the need for a more proactive approach to preservation, starting in 2001 the Township's Historical Preservation Committee (which in 2003 became an ordinance-enabled Historical Commission) worked with the Township to obtain grant funding from Chester County's Vision Partnership Program to create and adopt tools for historic resource protection. The Township contracted with a preservation consultant to accomplish the following tasks:

- Survey and document the Village of Kemblesville, enabling it to obtain a DOE for listing on the National Register of Historic Places. The PHMC issued a DOE for Kemblesville in 2002, making it eligible for both listing on the National Register and the formation of a Pennsylvania Certified Historic District (pursuant to Act 167).

- Obtain certification from the PHMC naming Kemblesville a Certified Historic District, and develop language for an Historic District Ordinance which creates an HARB for Kemblesville. In 2003, the Historic District Ordinance was adopted by the Board of Supervisors and Kemblesville became a state-certified Historic District. Franklin's seven-member HARB is responsible for reviewing all proposed alterations and demolitions to the exterior of existing structures and the design of new construction within the Kemblesville Historic District. Following its review, the HARB makes recommendations to the Board of Supervisors regarding the issuance of "Certificates of Appropriateness." These COAs are approval statements signed by the Supervisors certifying the historical appropriateness of architectural alterations and new construction that can be seen from a public right-of-way.
- Draft an Historic Preservation Zoning Overlay Article to protect historic resources located outside the Kemblesville Historic District. The draft Historic Preservation Zoning Article, which basically functions as an overlay district, has undergone extensive edits but has not been adopted, largely due to disagreement over the extent of resources subject to additional review criteria. The intent of the Article is to grant the Historical Commission input, similar to what the HARB has in Kemblesville, for major alterations and demolitions to Class I and II historic resources located outside the Historic District. Regulatory incentives for preservation – such as special exceptions from the use and area/bulk regulations of the underlying zoning district – are also included in the draft ordinance.

A fourth element, which is really part of the third task, is the Historic Resource Survey completed in 2004. Franklin Township was the only township in the Commonwealth to receive funding from the PHMC in 2003 for a municipal-wide historic resource survey. Adoption and implementation of the draft historic preservation overlay is contingent on an accurate inventory and resource classification system, which the 2004 Historic Resource Survey provides.

Altogether, Franklin Township has taken several important steps in recent years to protect historic resources. In fact, nearly all the recommendations made in the 1991 Comprehensive Plan have been implemented: ordinance amendments protecting historic resources have been adopted, an Historical Commission and HARB have been established, the resource inventory has been updated, and the Township has utilized County grant funding to further preservation initiatives. Yet several important tasks remain, including deciding whether or not to further pursue the draft Historic Preservation Zoning Overlay Article.

RECOMMENDATIONS

1. Consider adopting a revised form of the draft Historic Preservation Zoning Article.
2. Should the proposed Historic Preservation Zoning Article not be adopted, utilize the Historic Resource Survey in plan review and to promote historic preservation throughout the Township (not just in Kemblesville).
3. Prepare a National Register Nomination for the Kemblesville Historic District. A listing will strengthen the ability of the HARB to examine and make recommendations in the Certificate of Appropriateness process. A National Register listing can also help protect the district from federal and state funded projects, such as road widening.
4. Encourage private historic preservation measures, such as conservation easements, deed restrictions, or restrictive covenants.
5. Apply to become a Certified Local Government (through the PHMC and the National Park Service; benefits include technical assistance and small grants for preservation activities).
6. If a Transfer of Development Rights (TDR) program is adopted by the Township, consider lands with Class I and II historic resources as TDR sending areas. Lands with Class I and II historic resources in designated growth areas (i.e., Kemblesville) could also become TDR receiving areas if design guidelines for new construction are developed.
7. Consider the use of Township monies for the purchase of façade easements.
8. Promote voluntary efforts by recognizing business owners and homeowners who undertake historic character-sensitive construction, rehabilitation, or restoration. Individuals and businesses could be recognized in Township newsletters or other local publications and be awarded certificates of merit demonstrating the Township's appreciation of their work.
9. Finish developing preservation design guidelines for Kemblesville, and should the Historic Preservation Zoning Article be adopted, for the entire Township.
10. Encourage traffic calming in the Kemblesville Historic District to improve walkability, safety of pedestrians, bicyclists, motorists, and historic structures, and appreciation of the historic atmosphere.
11. Create a comprehensive signage system for Franklin's Class I and II historic resources. Such a system might include plaques for historic structures and entrance signs to Kemblesville Historic District and/or the Township (including founding dates).
12. Continue to provide training to Historical Commission and HARB members on preservation techniques and funding opportunities.
13. Target outreach and education to landowners in the Kemblesville Historic District, as well as throughout the Township, regarding restoration techniques, funding opportunities, and historic architectural design guidelines.

14. Apply to become a stop on the annual Chester County Town Tours & Village Walks summer program (sponsored by the Chester County Parks and Recreation Department).
15. Explore opportunities to make the McKean Farmstead a Township asset. This might include supporting a National Register application, private preservation efforts, building a library or interpretive center to display legal papers, or focusing Historical Commission activities and scholarship on Thomas McKean's life-story.

CHAPTER 5

LAND USE PLAN

Future Land Use in Franklin Township is one of the most important elements for effective growth management over the next 10 years and beyond. Before outlining a strategy for 2015 or 2020, Existing Land Use is presented to visualize the types, distribution and acreages of agricultural, residential, commercial, recreational, etc. development in 2005. Figure 5-1, Existing Land Use, depicts 11 types of activity currently found in parcels in Franklin Township. Single-family residential and rural residential land use account for approximately one-third of the existing land use, while agricultural lands comprise approximately 55% of the total 8,412 acres in the Township. Only 10% of the Township is comprised of multi-family residential, commercial, institutional, recreational, utilities, and road rights-of-way. Given Franklin Township's relatively remote location away from the growth corridors of Routes 1 and 95, it is not surprising that only 10% of the land varies from the predominant agricultural and lower intensity residential uses.

Over the next 10 years, the uses that comprise the 10% non-agricultural and non-single-family residential may only grow to a combined 15% total (a 5% net increase). Therefore, the real challenge for future land use, is for it to happen in such a way that the agricultural landscape is retained, while selective infill of residential development is directed to the most appropriate areas.

The Future Land Use Plan, Figure 5-2, provides a simple but effective future view for Franklin Township. Development intensity is intended to transition from the Kemblesville Village Area along Route 896 as the core and hub of activity, to the Rural Resource Area where existing farms on prime agricultural soils are maintained. Along the way, Moderate Intensity Use Areas are recommended to adjoin Kemblesville, and Low Intensity Use Areas are recommended to adjoin the Rural Resource Areas. The best gift that we can give future generations in Franklin Township is that of an orderly, logical, and balanced pattern of land uses.

The key attributes shown on the Future Land Use Plan include five (5) areas as noted below:

1. Rural Resource Area, which is intended for:
 - a. existing farmland protection;
 - b. prime agricultural soils protection;
 - c. "farmettes" and equestrian activity opportunities and retention; and
 - d. scenic road network retention.

These areas are appropriate for continued agricultural use.

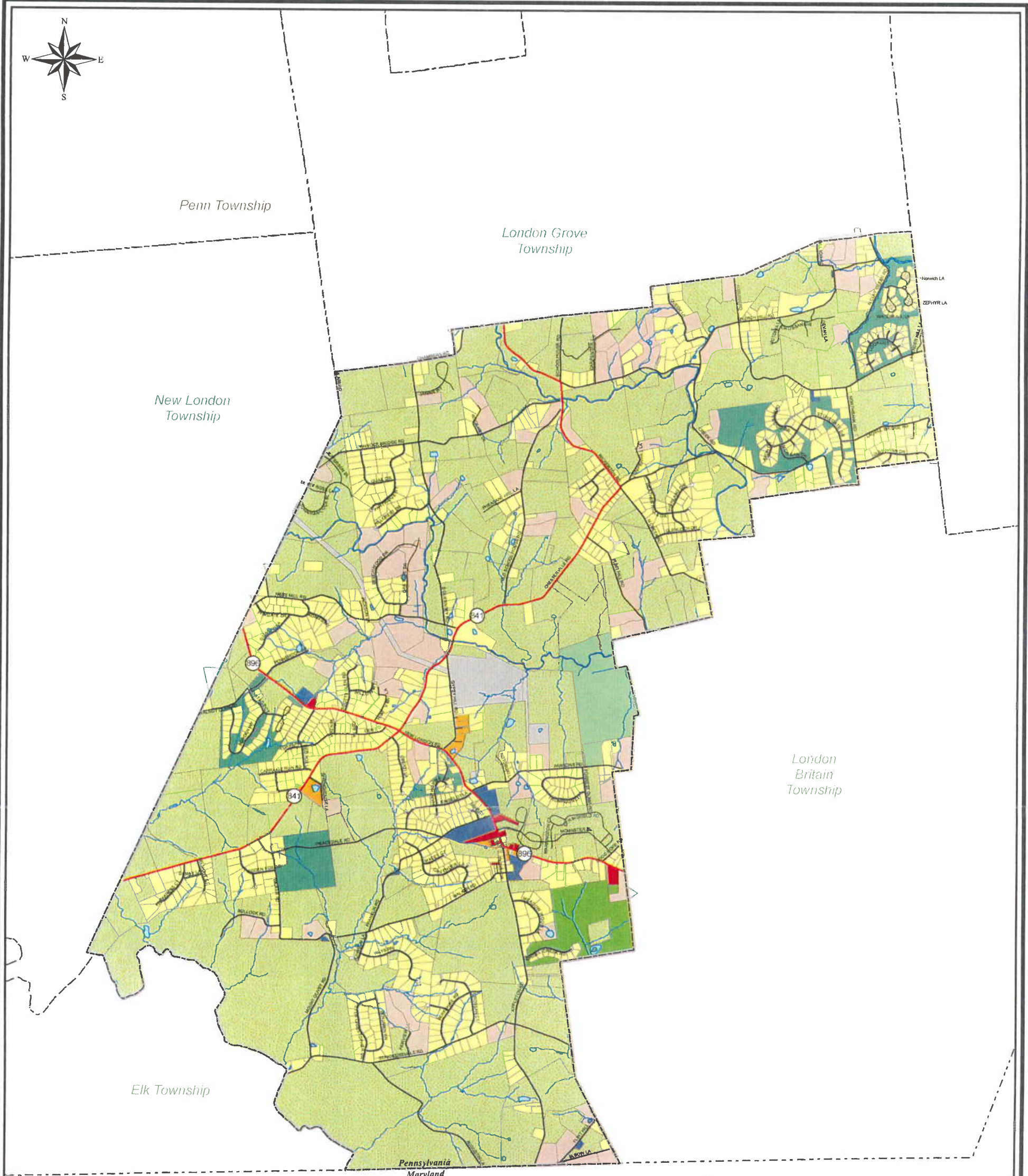



Figure 5-1: Existing Land Use

Land Use Category	Acreage	Percent of Total
Agriculture/Open Space	4,633	55.1
Rural Residential	650	7.7
Single Family Residential	2,186	26.0
Multifamily Residential	24	0.3
Commercial	17	0.2
Institutional	38	0.4
Protected Open Space	238	2.8
Recreation, Commercial	108	1.3
Recreation, Public	131	1.6
Utilities	108	1.3
Residual (Roads/ROWs)	279	3.3
Total	8,412	100.0



Figure 5-1 **Existing Land Use** *Franklin Township* *Comprehensive Plan*

0 1,500 3,000 6,000 Feet

 **Brandywine Conservancy**
Environmental Management Center

Thomas Comitta Associates, Inc.
Town Planners and Landscape Architects

RETTEW

Data Sources: Base Data from Chester County Data Distribution CD, 2003. Tax Parcel data from Chester County, 2005.

Date Plotted: December 5, 2005

- Legend**
- Township boundary
 - Major roads
 - Roads
 - Water bodies
 - Streams
 - Tax parcels
 - Adjacent municipalities
 - Rural Residential
 - Single Family Residential
 - Multi-Family Residential
 - Commercial
 - Institutional
 - Protected Open Space
 - Recreation, Commercial
 - Recreation, Public
 - Utilities
- Existing Land Use**
- Agriculture/Open Space

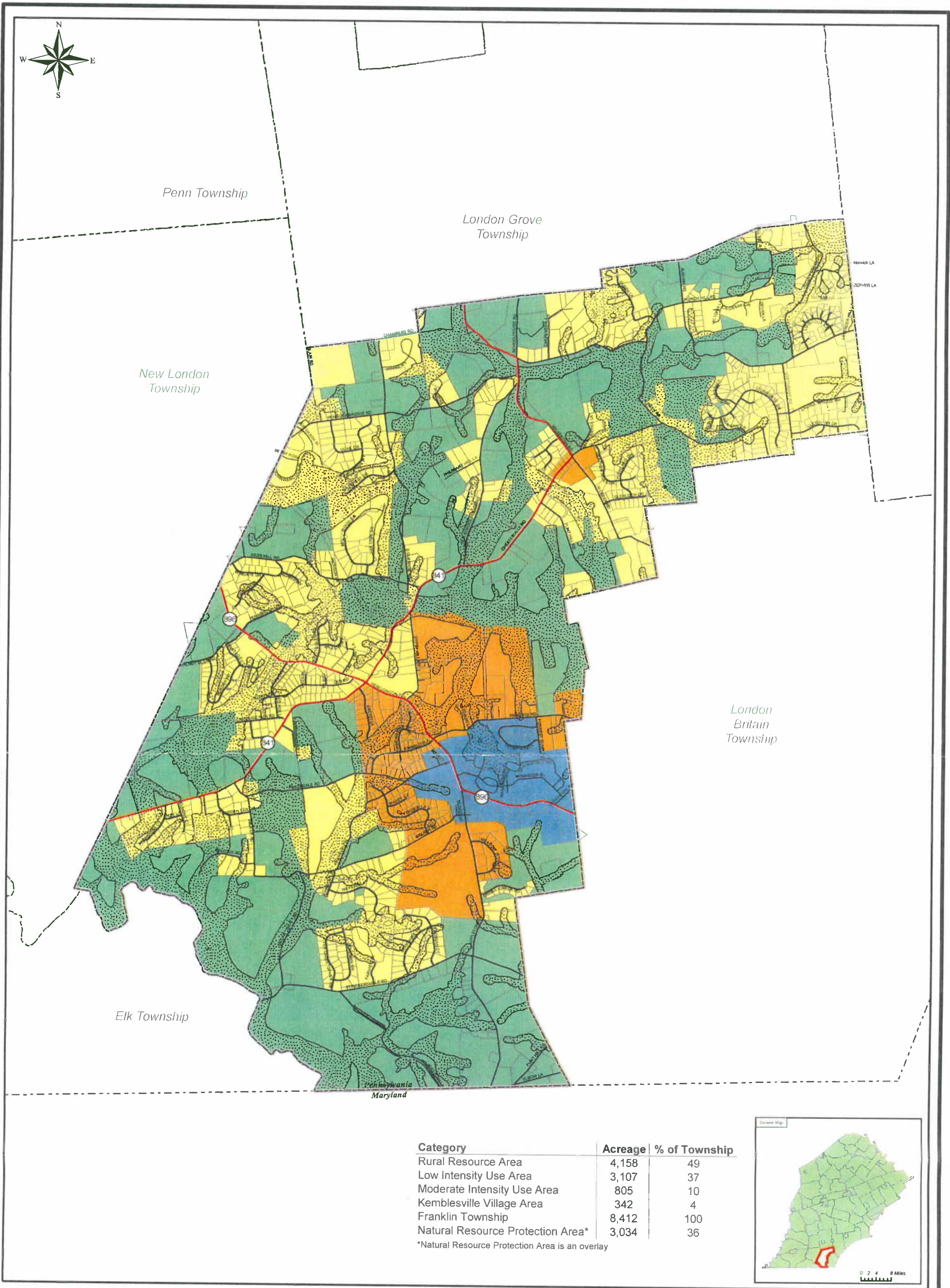


Figure 5-2
Future Land Use Plan
Franklin Township
Comprehensive Plan

0 1,500 3,000 6,000
 Feet

Brandywine Conservancy
 Environmental Management Center

Thomas Comitta Associates, Inc.
 Town Planners and Landscape Architects

RETTEW

Data Sources: Base Data from Chester County Data Distribution CD, 2003. Tax parcel data from Chester County, 2005.

Date Plotted December 5, 2005

Legend

— Roads

— Major roads

□ Tax parcels

□ Township boundary

□ Adjacent municipalities

Future Land Use

■ Rural Resource Area

■ Low Intensity Use Area

■ Moderate Intensity Use Area

■ Kemblesville Village Area

■ Natural Resource Protection Area

LAND USE PLAN

2. Low Intensity Use Area, which is intended for:

- a. existing single-family development retention on lots less than 10 acres;
- b. on-lot and community sewer systems retention and maintenance; and
- c. narrow road network retention serving areas lying outside the Village of Kemblesville.

These areas are appropriate for limited development and limited subdivision due to limited infrastructure. Future lot sizes in these areas should average two acres per dwelling unit, with limited use of the open space designation.

3. Moderate Intensity Use Area, which is intended for:

- a. existing single-family and multi-family development retention;
- b. more intensive development opportunities than the Low Intensity Use Area;
- c. proximity to Kemblesville; and
- d. the Village of Chesterville.

These areas are appropriate for open space design and clustered subdivisions with natural resource conservation areas. Future lot sizes or lot area equivalents in this Area should not exceed an average of one dwelling unit per acre.

4. Kemblesville Village Area, which is intended for:

- a. historic village neighborhood retention and graceful expansion;
- b. mixed-use retention and graceful expansion; and
- c. municipal services center retention and expansion.

The Village is appropriate as a more compact and walkable neighborhood. The residential densities for this Area could be two dwelling units or more per acre depending on available utilities and infrastructure.

5. Natural Resource Protection Area, which is intended for:

- a. composite natural features retention (stream corridors, woodlands, steep slopes, wetlands, and including the greenway network as detailed in Chapter 3);
- b. a protection zone regardless of which area it overlays; and
- c. biological diversity, scenic beauty, and watershed management retention and enhancement.

This Area should be considered as an overlay zone that is intended to protect important natural features in all areas of the Township.

Amending the Zoning Ordinance to reflect the ideas expressed in the Future Land Use Plan will result in several advantages in the future, including:

- + the creation of a compact, mixed-use, pedestrian-oriented Village of Kemblesville;
- + the concentration of infrastructure to support development in and adjoining Kemblesville;
- + the protection of the Rural Resource Areas;
- + the protection of the natural resource network;
- + the overall transition of development intensity, from the rural center in Kemblesville to the natural landscape beyond the Village;
- + the long-term viability of farming; and
- + reducing pressure on the Township to provide increased services, by fostering only moderate population.

Various Implementation Strategies related to future land use and development are profiled in Chapter 13, relative to the recommendations below.

RECOMMENDATIONS

1. Amend the Open Space Design (cluster) provisions of the Zoning Ordinance to be more in keeping with the character zones expressed on the Future Land Use Plan. Vary lot size, density and open space provisions to promote greater intensity of development in the Kemblesville Village Area and Moderate Intensity Use Area, a lower intensity of development in the Low Intensity Use Area, and the lowest intensity of development in the Rural Resource Area.
2. Create an Official Map, in accordance with Article IV of the Pennsylvania Municipalities Planning Code, to identify sites and routes that should be reserved for such items as: open space, parks and recreational sites, trails, sidewalks, civic uses and land for a municipal building.
3. Amend the Zoning Ordinance to create a Traditional Neighborhood Development (TND) Overlay District for the Kemblesville Village Area.
4. Amend the Zoning Ordinance and the Subdivision and Land Development Ordinance to create new Definitions, using terms from the Comprehensive Plan so that the ordinance lexicon matches the plan.

CHAPTER 6

HOUSING PLAN

INTRODUCTION

The residents of Franklin Township, through both survey responses and public participation work sessions, expressed the significance of housing in the comprehensive planning process. The major consideration in choosing to live in the Township was its “rural, quiet lifestyle” and the “retention of rural atmosphere”. The single largest factor that would motivate residents to leave was the “area becoming over-developed.”

This chapter profiles the existing housing within the Township, including the number of housing units, housing occupancy, local trends in housing prices, number of building permits issued, and the nature of new housing in the community. In addition to creating an inventory, this chapter also compares housing in Franklin Township to adjacent municipalities in Pennsylvania, Maryland, and northern Delaware. This chapter also explores various demographic and socio-economic trends that influence housing patterns.

Beyond the profile of housing, and the values of community on housing, this component of the Comprehensive Plan includes recommendations for future housing in Franklin Township. These recommendations will focus on the nature and locations of future housing, and its impacts on the community and existing housing stock. Ultimately, this portion of the Plan seeks to direct the Township towards a policy that deals with future housing needs in a strategic manner, consistent with its goals of maintaining its rural atmosphere, and its vision to promote an orderly pattern for growth ranging from the Kemblesville Village area to the rural fringes of the Township.

Section 301.(a)(2.1) of the Pennsylvania Municipalities Planning Code (MPC) sets forth the overarching requirements of the housing plan, including:

- a plan to meet housing needs of present residents; and
- a plan to meet the housing needs of those individuals and families anticipated to reside in the Township.

The MPC indicates that the housing plan may include:

- + conservation of presently sound housing;
- + rehabilitation of housing in declining neighborhoods;
- + the accommodation of expected new housing in different dwelling types; and
- + the accommodation of expected new housing at appropriate densities for households of all income levels.

Before describing how this Plan component addressed the MPC requirements, we look at:

- population trends and projections;
- age composition of population;

- housing characteristics;
- projected housing units;
- subdivision activity;
- building permit activity; and
- housing sales price.

The factors were evaluated when preparing the recommendations at the end of the chapter.

DEMOGRAPHIC TRENDS

Table 6-1: Franklin Township Population Projections (U.S. Census, PA Dept. of Health)

	Census	Linear	Exponential	Cohort (without Migration)	Cohort (with Migration)
1960	817	817	817	817	817
1970	1,043	1,043	1,043	1,043	1,043
1980	1,920	1,920	1,920	1,920	1,920
1990	2,779	2,779	2,779	2,779	2,779
2000	3,850	3,850	3,850	3,850	3,850
2010	***	4,422	6,029	3,913	5,040
2020	***	5,203	9,067	4,052	6,310

Linear Model:

$$Pop = m \cdot year + b$$

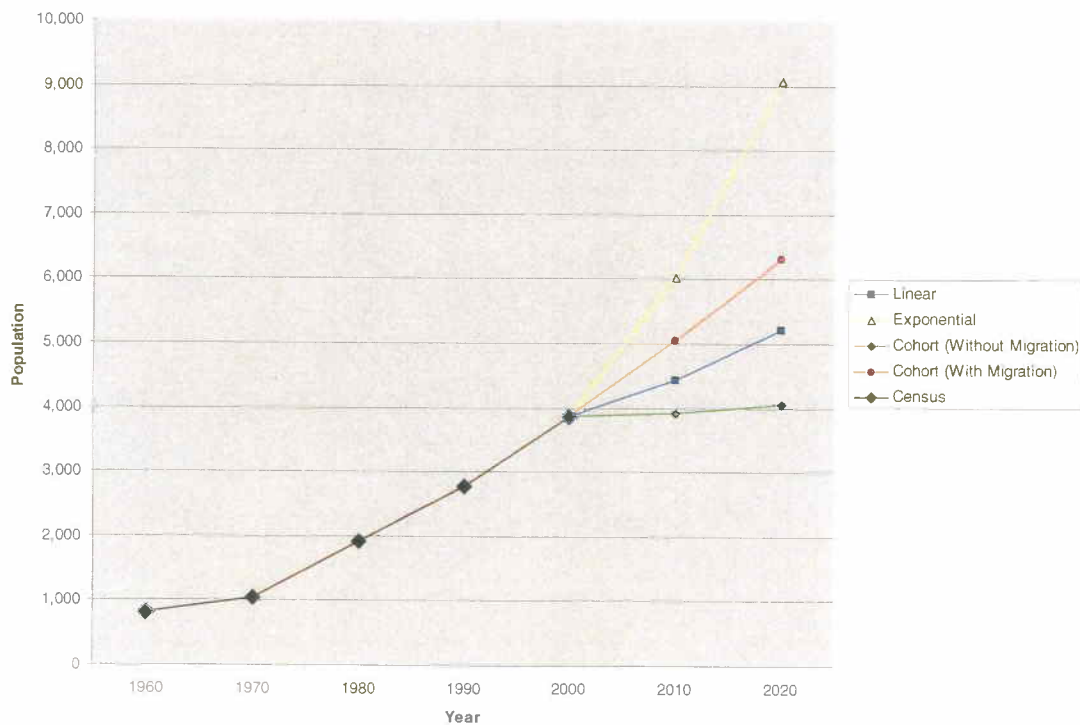
Cohort Model without Migration:

$$Pop = Pop_{year} + birth_{2000} - death_{2000}$$

Cohort Model with Migration:

$$Pop = Pop_{year} + birth_{2000} - death_{2000} + migration_{2000}$$

Figure 6-1: Franklin Township Population Projections (U.S. Census, PA Dept. of Health)



With the exception of the simple cohort model (no migration), all projections point towards the Township increasing in population. As these models are each estimates, our determination is to see them as a ranger, rather than a specific, discrete amount. In this case, we believe a range between the linear and exponential models represents the likely population of the Township.

Table 6-2: 1990 Age Composition (U.S. Census)

1990 Census - Age Composition

	Total	Pre-School (0 - 4)	School-Aged (5 - 17)	College-Aged (18 - 24)	Workforce (25 - 64)	Seniors (65+)
Franklin Township	2,779	215	623	194	1,576	171
Greater Newark CCD, DE	61,003	3,640	8,570	16,545	27,637	4,611
Piedmont CCD, DE	24,402	1,442	4,777	1,687	13,101	3,395
Pike Creek CCD, DE	38,733	2,757	5,900	3,494	22,185	4,397
Fair Hill District, MD	6,570	504	1,499	570	3,544	453
Avondale Borough	954	81	170	107	480	116
Elk Township	1,129	110	188	95	645	91
London Britain Township	2,671	212	585	170	1,555	149
London Grove Township	3,922	313	740	323	2,149	397
New Garden Township	5,430	410	921	622	3,026	451
New London Township	2,721	287	651	144	1,505	134
Penn Township	2,257	179	388	185	1,220	285

Table 6-3: 2000 Age Composition (U.S. Census)

2000 Census - Age Composition

	Total	Pre-School (0 - 4)	School-Aged (5 - 17)	College-Aged (18 - 24)	Workforce (25 - 64)	Seniors (65+)
Franklin Township	3,850	304	1,017	206	2,132	191
Greater Newark CCD, DE	67,114	3,691	9,768	16,785	30,594	6,276
Piedmont CCD, DE	29,388	1,798	5,800	1,384	16,011	4,395
Pike Creek CCD, DE	42,312	2,653	7,056	3,259	23,302	6,042
Fair Hill District, MD	8,082	603	1,746	592	4,532	609
Avondale Borough	1,108	89	201	132	576	110
Elk Township	1,485	97	346	79	846	117
London Britain Township	2,797	163	645	130	1,641	218
London Grove Township	5,265	438	1,162	363	2,846	456

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New Garden Township	9,083	726	2,063	744	4,894	656
New London Township	4,583	386	1,335	227	2,425	210
Penn Township	2,812	182	509	155	1,392	574

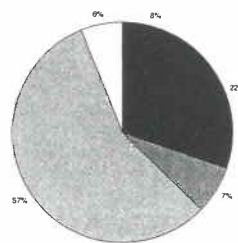
Table 6-4: Change in Age Composition (U.S. Census)

Percent Change: 1990 - 2000 Census - Age Composition

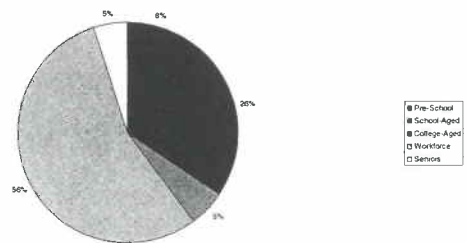
	Total	Pre-School (0 - 4)	School-Aged (5 - 17)	College-Aged (18 - 24)	Workforce (25 - 64)	Seniors (65+)
Franklin Township	39%	41%	63%	6%	35%	12%
Greater Newark CCD, DE	10%	1%	14%	1%	11%	36%
Piedmont CCD, DE	20%	25%	21%	-18%	22%	29%
Pike Creek CCD, DE	9%	-4%	20%	-7%	5%	37%
Fair Hill District, MD	23%	20%	16%	4%	28%	34%
Avondale Borough	16%	10%	18%	23%	20%	-5%
Elk Township	32%	-12%	84%	-17%	31%	29%
London Britain Township	5%	-23%	10%	-24%	6%	46%
London Grove Township	34%	40%	57%	12%	32%	15%
New Garden Township	67%	77%	124%	20%	62%	45%
New London Township	68%	34%	105%	58%	61%	57%
Penn Township	25%	2%	31%	-16%	14%	101%

Figure 6-2: Change in Age Composition

1990 Census - Age Composition



2000 Census - Age Composition



While all groups grew between 1990 and 2000, the Workforce, School-Aged, and Pre-School cohorts experienced the largest growth. This steeper increase in these groups indicates families with children moving into the Township, likely due to the high quality of public schools. Seniors and College-Aged population groups trailed the Township average, as well as most other communities in the area. In most cases, municipalities in Pennsylvania out-paced the growth in nearby Delaware and Maryland communities, possibly indicative of countywide planning in both states, more complex subdivision and zoning ordinances, and in the case of New Castle County, Delaware, little remaining developable land. Although the Township exceeded the growth in neighboring states, it was significantly less than New Garden and New London Townships.

HOUSING CHARACTERISTICS

Residential land use represents roughly one third of the Township's land, with the majority of the Township being rural areas such as woodlands, crops and meadows. This is consistent with the Landscapes plan put out by the Chester County Planning Commission, which classifies the entirety of Franklin Township as either rural or natural. Increasingly, small farmettes of approximately 10 acres in size have become popular, especially those with stables.

Table 6-5: Current Housing Types (2003 Chester Co. Planning Comm.)

Current Housing by Type	Total	Percent
Single Family Detached	1,079	87%
Single Family Attached	40	3%
Multi-Family	41	3%
Mobile Homes	21	2%
Unknown/Other	56	5%
Total	1,237	100%

Table 6-6: Average Developed Residential Lot Size by Zoning District (Chester Co. GIS)

Average Developed Residential Lot Size

Zone	Size (Acres)
AR - Agricultural Residential	2.23
C - Commercial	1.28
HDR - High Density Residential	2.62
LDR - Low Density Residential	1.73
LI - Light Industrial	1.75
V - Village	1.03
SU - Special Use	N/A

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Table 6-7: 1990 Housing Occupancy (U.S. Census)

1990 Census Housing Occupancy

	Housing Units	Occupied		Owner Occupied		Renter Occupied		Vacant	
Franklin Township	942	911	97%	803	85%	108	11%	31	3%
Greater Newark CCD, DE	21,307	20,293	95%	12,316	58%	7,977	37%	1,014	5%
Piedmont CCD, DE	8,794	8,345	95%	7,099	81%	1,246	14%	449	5%
Pike Creek CCD, DE	15,777	15,241	97%	12,093	77%	3,148	20%	536	3%
Fair Hill District, MD	2,191	2,123	97%	1,842	84%	281	13%	68	3%
Avondale Borough	347	339	98%	224	65%	115	33%	8	2%
Elk Township	399	383	96%	323	81%	60	15%	16	4%
London Britain Township	901	867	96%	806	89%	61	7%	34	4%
London Grove Township	1,310	1,271	97%	1,060	81%	211	16%	39	3%
New Garden Township	1,778	1,699	96%	1,121	63%	578	33%	79	4%
New London Township	922	860	93%	777	84%	83	9%	62	7%
Penn Township	848	829	98%	706	83%	123	15%	19	2%

Table 6-8: 2000 Housing Occupancy (U.S. Census)

2000 Census Housing Occupancy

	Housing Units	Occupied		Owner Occupied		Renter Occupied		Vacant	
Franklin Township	1,237	1,210	98%	1,103	89%	107	9%	27	2%
Greater Newark CCD, DE	24,014	23,151	96%	14,525	60%	8,626	36%	863	4%
Piedmont CCD, DE	11,044	10,654	96%	9,236	84%	1,418	13%	390	4%
Pike Creek CCD, DE	17,645	17,173	97%	13,794	78%	3,379	19%	472	3%
Fair Hill District, MD	2,948	2,805	95%	2,356	80%	449	15%	143	5%
Avondale Borough	361	345	96%	203	56%	142	39%	16	4%
Elk Township	527	515	98%	456	87%	59	11%	12	2%
London Britain Township	979	957	98%	900	92%	57	6%	22	2%
London Grove Township	1,698	1,633	96%	1,393	82%	240	14%	65	4%
New Garden Township	2,831	2,700	95%	2,086	74%	614	22%	131	5%
New London Township	1,390	1,365	98%	1,254	90%	111	8%	25	2%
Penn Township	1,093	1,026	94%	879	80%	147	13%	67	6%

Projecting the number of housing units is a key step in determining future housing needs. As of 2000, for the Township's 3,850 residents, 1,237 units were available for occupancy. With 2% (27) of these units vacant, that yielded a total of 1,210 occupied units, or 3.8 residents per housing unit.

Table 6-9: Projected Housing Units (Rettew, U.S. Census)

Year	Low Estimate (Linear)	High Estimate (Exponential)
2010	1,390	1,895
2020	1,635	2,850

The Township's rural nature positions it to accommodate future growth well into the future, even with conservative zoning.

Table 6-10: Subdivision (URS Corporation – Franklin Township Act 537 Plan)

Subdivision Name	Units
Bristle Knoll	21
Brothers Riding	37
Carriage Run	25
Chisel Creek	13
Crossan Estates	43
Fox Knoll	72
Franklin	10
Franklin Hill	53
Franklin Hollow	28
Hess Mill Run	46
Hidden Valley Farm	18
Hunters Crossing	19
Hunting Hills	69
Kemblesville West	33
Kimbelot	33
Landenburg Highlands	48
Meadow Woods	15
Quail Hill	39
Southview Estates	25
Stonegate	68
Strawbridge Farms	6
Thomson Estates	32
Twin Bridges	25
Wingate Farms	44
Total	822

Franklin Township currently has 25 named subdivisions, encompassing 822 housing units. Nearly as many units (831 - 839) in new subdivisions are currently planned, or under construction. Of these subdivisions, 3 were developed under the Township's cluster ordinance and represent 152 units. (Two are townhome developments in Kemblesville representing 367 units (Miller – 254, and McMaster – 113).) If these units were representative of the 2000 average household size of 3.18, this would yield roughly 2,650 additional residents, or a total of 6,500. While this number slightly

exceeds the high estimate (+7.8%), it's important to note that with many of these structures either in the planning stage, or currently under construction, these do not yet represent a block of occupied homes. Instead, these numbers would only be realized after the approval, construction, and occupancy of each planned unit. With these considerations, the population projection range seems to portray reality.

The largest number of building permits in 2004 were in the AR – Agricultural Residential zoning district, as indicated in Table 6-11.

Table 6-11: 2004 and 2005 Building Permits (Franklin Township)

Building Permits by Zoning Districts		
Zone	2004 Permits	2005 Permits
AR – Agricultural Residential	54	
C – Commercial	0	
HDR - High Density Residential	2	
LDR - Low Density Residential	12	
LI - Light Industrial	2	
V - Village	2	
SU - Special Use	2	
Unknown	4	
Total	78	110

In 2005, a total of 110 building permits were issued.

Figure 6-3: Average Annual Sale Price (Chester Co. GIS, CPI)

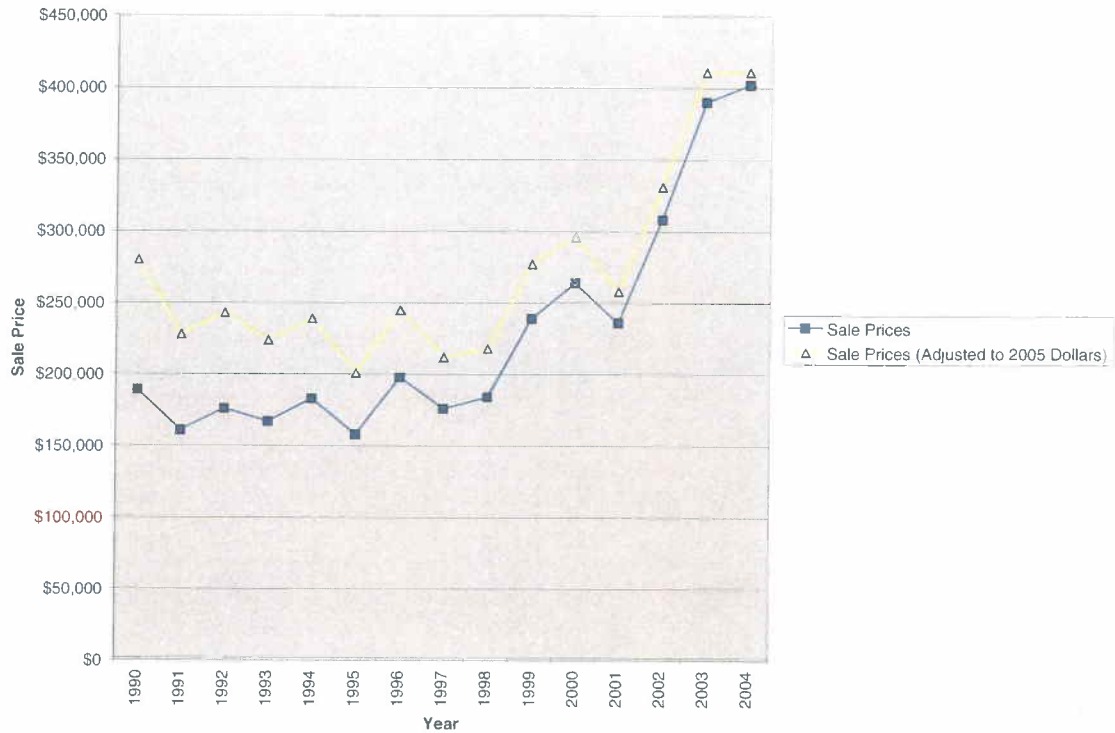
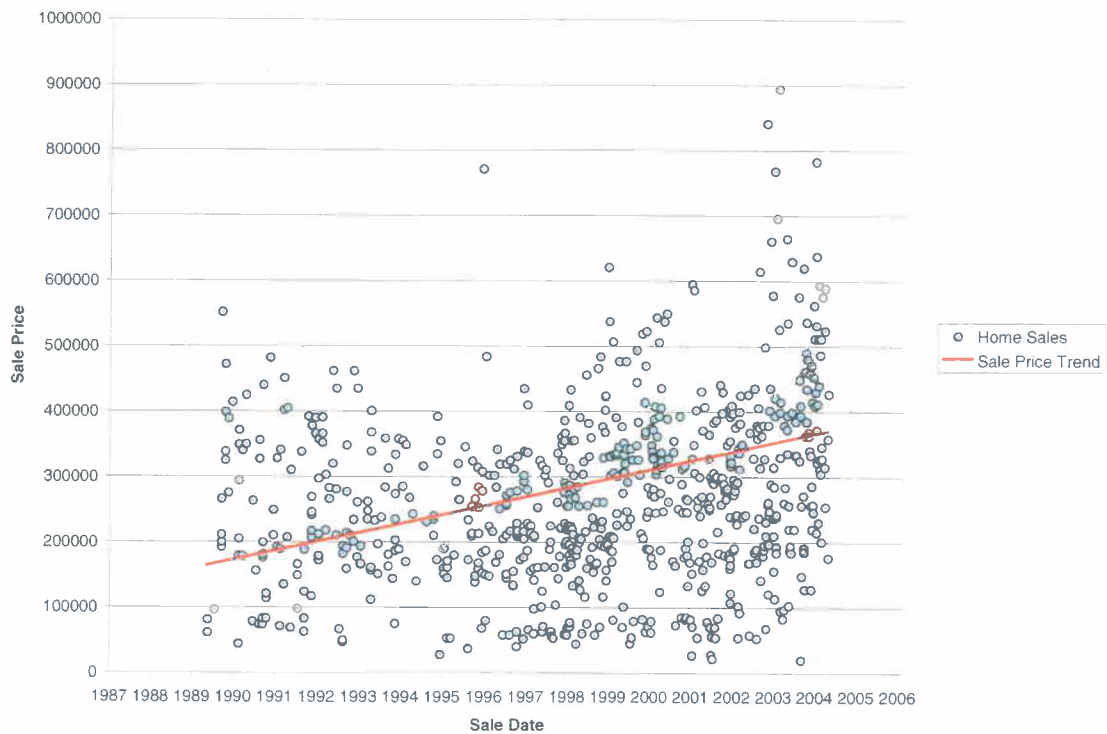


Figure 6-4: Inflation Adjusted Sale Values 1/1/99 to 1/1/2005 (Chester Co. GIS, CPI)



CONCLUSION

While the Township has experienced some growth in the past years, this growth was far outpaced by neighboring Townships, indicating Franklin Township is not the epicenter of regional growth. The increased popularity of farmettes bolsters the rural atmosphere. Indeed, with only one-third of the Township's land occupied by housing, the majority of land is still in rural agricultural or open space uses.

RECOMMENDATIONS

In light of the above information, and in the context of all other related chapters of the Plan, the recommendations for housing are:

1. Accommodate a fair share of growth and development, in sync with the Future Land Use Plan, Figure 5-2, through Ordinance Amendments that direct growth proportionately to the four character areas: Kemblesville; Moderate Intensity Use; Low Intensity Use; and Rural Resource.
2. Focus on higher intensities of residential land use, including multi-family residential uses, in Rural Center of Kemblesville, minimizing impacts on more rural areas, and environmentally sensitive areas.
3. Maintain the rural character of the Township by directing new housing away from environmentally sensitive areas. (Strengthen various overlay districts such as steep slopes and riparian corridors.)
4. Encourage the consolidation of lots ("Reverse Subdivision") where applicable, to preserve the rural character.
5. Maintain the existing housing stock.
6. Rehabilitate substandard housing units to improve their viability and livability into the future.
7. Encourage the use of a modified open space design option, especially for the Moderate Intensity Use Areas, to incorporate the recommendations in the Future Land Use Plan, Figure 5-2.
8. Promote a more walkable neighborhood form of development in Kemblesville Village through Traditional Neighborhood Development (TND) options.
9. Promote subdivision that helps to maintain the rural character of the Township in the proposed Low Intensity Use Area.

CHAPTER 7

TRANSPORTATION PLAN

INTRODUCTION

A community's transportation network affects the daily lives of virtually all its residents. An efficient transportation system is considered vital to a high quality of life, and is a basic requirement for community stability. From a long-range planning perspective, the transportation network is a significant element affecting both how a community plans its growth and its physical design. In this way, Franklin Township's transportation system plays a key role in maintaining the municipality's rural character.

ROADWAY INVENTORY

The roadway network in Franklin Township is completely rural in character, with cartways and traffic volumes that are low relative to other areas of Chester County. This scale is quite appropriate to land use in the Township, and facilitates both intra-municipal traffic and through traffic:

Table 7-1: Roadway Network (Chester County Planning Commission)

Road Name	Ownership	ID	Functional Classification	Cartway	Volumes
Appleton Rd.	State	SR 3007	Rural Local Distributor between 896 and Lewisville – Stricklersville Rd.	20'	2000
Appleton Rd.	State	SR 3007	Rural Local Distributor between Lewisville Strickersville Rd and Maryland State Line	20'	700
Strickersville	State	SR 3006	Local Distributor between Elk Township State Line and Appleton Rd.	16'	450
Strickersville	State	SR 3006	Local Road between Appleton Rd. and London Britain Township Line	20'	850
Good Hope Road	State	SR 3009	Rural Local Distributor	19'	1400
Lewisville-Chesterville Rd.	State	SR 841	Rural Minor Collector between New London Township Line and 896	21'	1700
Lewisville-Chesterville Rd.	State	SR 841	Rural Minor Collector between London Grove Township Line and 896	21'	1400
Newark – New London Rd.	State	SR 896	Minor Arterial between Kemblesville and London Britain Township Line	21'	9200
Newark – New London Rd. ¹	State	SR 896	Minor Arterial between New London Township Line and Kemblesville	21'	8800
North Creek Rd.	State	SR 3103	Rural Local Distributor	18'	1600
Chesterville – Landenberg Rd.	State	SR 3024	Rural Local Distributor	22'	1100
Pennock Bridge Rd.	State	SR 3022	Rural Local Distributor	19'	350
Clay Creek Rd.	Local		Rural Local Distributor	N/A	N/A
Flint Hill Rd.	Local		Rural Local Distributor	N/A	N/A
Mount Olivet Rd.	Local		Rural Local Distributor	N/A	N/A
Walker Rd.	Local		Rural Local Distributor	N/A	N/A
Gypsy Hill Rd.	Local		Rural Local Distributor	N/A	N/A
Hess Mill Rd.	Local		Rural Local Distributor	N/A	N/A

Indicative of this rural character, no traffic volumes exceed 10,000 daily trips, and no cartwidths are in excess of 22 feet. None of the County's larger roadway classification (Expressways, Major Arterials, Major Collectors) are found in the Township. Instead, the four smaller roadway classification of Minor Arterials, Minor Collectors, Local Distributors and Local Roads describe the Township's roads. The classifications are useful in showing the character of the Township's roads, as well as their relative scale in other parts of the County.

Minor arterials are roadways with greater concern for mobility than property access and can handle daily traffic volume range of 8,000- 20,000 vehicles. Posted vehicle speed is 35-55 miles per hour. These roads have some control of property access and maintain a corridor length of over 10 miles. Connections are made between multiple landscapes, centers, and some inter-county trips. Minor Arterials sustain high truck mobility with wide lanes and shoulders- no medians or turning lanes. On-street parking is limited to urban areas and bicycle/ pedestrian access is only through adjacent facilities and crossings. Through traffic makes over 50% of the total traffic.

Minor collectors are roadways with even priority for mobility and access and can handle daily traffic volume range of 1,000- 5,000 vehicles. Posted vehicle speed is 35-55 miles per hour. All roads and properties have access to this road with a corridor length of 2-10 miles. Connections are made between villages and multiple neighborhoods, (primarily intra-county trips.) The Minor collector sustains moderate truck mobility with two lanes, no medians and limited turning lanes. On-street parking is discouraged outside "center" areas and bicycle/ pedestrian access is only through adjacent facilities and crossings. Through traffic makes up 25-50% of the total traffic.

Local distributors are established for accessibility more so than mobility and handle daily traffic volumes of less than 1,500 vehicles. Posted vehicle speed is less than 45 miles per hour. Priority is given to property access with a corridor length of less than 4 miles. Connections are made between neighborhoods, with some inter-municipal trips. Local distributors sustain local delivery only with narrow lanes. On-street parking is limited outside "centers" and bicycle/ pedestrian access is given high priority. Through traffic makes up less than 25% of the total traffic.

Local roads are established with no priority for mobility and handle daily traffic volumes of less than 1,000 vehicles. Posted vehicle speed is less than 35 miles per hour. Priority is given to property access with a corridor length of less than 2 miles. These roads link individual properties to distributors and collectors. Local roads sustain delivery only with narrow lanes. On-street parking is appropriate on selected streets and bicycle/ pedestrian access is given high priority. Through traffic makes up less than 10% of the total traffic.

On state routes, PennDOT also assesses roads. Some data collection is out of date, though these figures are still useful in assessing the impacts of truck traffic on roads.

Table 7-2: State Route Volumes and Truck Traffic (PennDOT)

Road	State Route	Section	ADT	Truck	% Truck	Year
Appleton Rd.	3007	MD to Strickersville Rd.	1,519	137	9.0%	2004
Appleton Rd.	3007	Strickersville Rd. to New London Rd.	2,113	190	9.0%	2000
Strickersville Rd.	3006	Appleton Rd. to London Britain Twp.	1,080	97	9.0%	2003
Strickersville Rd.	3006	Appleton Rd. to Berkshire Rd.	457	43	9.4%	1976
Strickersville Rd.	3006	Berkshire Rd. to Elk Twp.	420	41	9.8%	1976
New London Rd.	0896	MD to Appleton Rd.	9,495	759	8.0%	2003
New London Rd. ¹	0896	Appleton Rd. to Chesterville Rd.	9,300	837	9.0%	2000
Newark/New London Rd.	0896	Chesterville Rd. to Hess Mill Rd.	7,570	680	9.0%	2000
Chesterville Rd.	0841	New London Rd. to Lewisville Rd.	1,778	135	7.6%	1991
Chesterville Rd.	0841	New London Rd. to N. Creek Rd.	1,789	161	9.0%	2000
Wickerton Rd.	0841	Chesterville Rd. to Church Hill Rd.	1,951	175	9.0%	2002
N. Creek Rd.	3103	Chesterville Rd. to London Britain Twp.	1,666	150	9.0%	1998
Chesterville Rd.	3024	N. Creek Rd. to Skycrest Drive	1,111	99	8.9%	2001
N. Bank Rd.	3011	Chesterville Rd. to London Grove Twp.	236	17	7.2%	1976
Mercer Mill Rd.	G634	Hunters Run Dr. to Running Deer Trl.	1,067	0	0.0%	1999
Pennock Ridge Rd.	3022	Wickerton Rd. to New London Twp.	360	57	15.8%	2000
Good Hope Rd.	3009	New London Rd. to London Britain Twp.	1,466	132	9.0%	2002

Newark Road / New London Road (SR 896)

SR 896 is the principal transportation corridor in the Township. A study of the 896 corridor has been commissioned and is currently underway. The study is being supported by New London, Penn, Upper Oxford and Franklin Townships and the Chester County Planning Commission. That study is considering present and future conditions along 896 in terms of Land Use, Access Management, and Utilization, but no major recommendations for increasing capacity are anticipated. A number of recommendations are made within this comprehensive plan that should be considered in the 896 corridor study.

While SR 896 is the Township's primary travel route, it remains only a minor arterial. The route does experience some truck traffic however, which can be detrimental to the rural atmosphere of the Township. Additionally, concerns such as speeding, and access management make for dangerous situations at a number of intersections.

Norfolk-Southern Railroad is currently working on an initiative that would utilize the Susquehanna River mainline to the Amtrak mainline for the transportation of goods south into Delaware. Many of the goods currently coming into the Harrisburg rail depot and subsequently loaded onto trucks for points south, would now travel directly by rail to Delaware, bypassing Franklin Township and significantly reducing truck traffic on SR 896.

¹ The preliminary drafts of the SR-896 Corridor Study indicate that in 2005, this segment of SR-896 experienced a daily volume of 9,800 vehicles. While this exceeds both Chester County and PennDOT figures, it is still within the bounds of its current functional classification.

A significant influencing factor of SR 896 is traffic (trucks in particular) originating from SR 41. A project currently underway that may have a significant impact on traffic along the SR 896 corridor is the study of the SR 41 corridor that is currently underway. SR 41, though outside of Franklin Township, is a road which is currently deficient in capacity, and which has exceptionally heavy truck traffic, by some estimates as much as 30 percent, with 18 percent of that traffic being eighteen wheeled tractor-trailers. The current study of the SR 41 corridor has encountered significant political opposition to the idea of expanding the capacity of the roadway. In fact, this study was one of 27 projects currently announced by the Governor's office as in need of re-evaluation, which has put completion of the draft Environmental Impact Statement (EIS) on hold, thereby putting the entire project indefinitely on hold. Opposition has also led to a study of traffic calming measures along SR 41 including the idea of establishing a series of roundabouts along the roadway.

Currently, the status of the SR 41 study, as a viable, active project, has drawn increased attention to that corridor. This could have significant impacts on traffic patterns along SR 896. Unfortunately for Franklin Township, as SR 41 is outside of the Township's jurisdiction, the Municipality is rather limited in its ability to stake-out a position for maintaining the function of SR 896 as a rural major collector and maintaining the status of SR 41 as a main arterial. Perhaps the Township's greatest opportunity in the area is as part of the SR 896 corridor study, where it can incorporate the potential effects of any future improvements to SR 41 on the SR 896 corridor. These results must be made known to state legislators and an active effort made to prevent the politicizing of the SR 41 study to the point where the hazards of dumping traffic from SR 41 to SR 896 are ignored.

In conjunction with the effort to reduce truck traffic on SR 896, the Township must address the residential growth that is occurring in the Township with its accompanying growth in automobile traffic. In order to ensure the continued efficient movement of vehicles along the roadway, the Township should develop, as part of the SR 896 study, an access management plan for any development along the SR 896 corridor, and perhaps for other major roadways in the Township as well. Each development should be required to submit, as part of a Traffic Impact Statement (TIS) a study of how the proposed construction will affect the movement of traffic along the roadway. Also, roadway intersections along SR 896 and along all Township roads where possible should have opposite side street centerlines lined up with one another to prevent a series of opposite road intersections separated by only a few hundred feet. This type of roadway development is safer and more efficient in almost all cases, despite what might be an increase in developer costs.

Any increase in traffic volume on SR 896 will generate additional flows on periphery roads. For this reason, as well as the increase the Township's flexibility when dealing with future traffic concerns, the focus should be on developing fluid road networks throughout the Township to facilitate intra-municipal traffic. These connections should have the locality as their primary focus, with attention given to discourage the migration of through traffic from SR 896 onto local roads.

Of critical concern to this network are the intersections of SR 896 with SR 841, and SR 896 with Appleton Road. Increased traffic volumes, truck traffic, and limited sight distances have created dangerous situations at these intersections. Beyond safety concerns, these intersections diminish the usefulness of other portions of the Township's road network, complicating travel for local residents. Key to these improvements are considerations of rural character, particularly with regard to low

impact traffic control devices and preventing the radial influence of through traffic. In this way, roundabouts may be appropriate at these intersections, as they would facilitate better local movement and safety, without the impacts associated with traffic signals and lane widening or lane additions.

The land use portion of this comprehensive plan has addressed the appropriateness of development along the SR 896 corridor. The Township should institute the zoning and land use changes outlined in the Future Land Use chapter in order to minimize strip development along SR 896, with its accompanying array of access points, and where development is to occur, the Township should make maximum use of interior access drives which collect traffic from entire development areas and deposit that traffic at a limited number of ingress/egress points. Ultimately, it is paramount that the Township use Transportation as a tool in concert with land use goals to maintain its rural character.

Turnback Program

There are a number of roads within the Township that may be considered initially for turnback by the state to the Township. The Township should be very careful about accepting turnback of the state roads that are located within its borders. Many of these roads are narrow, two lane roads that, based on history, may have been paved without the construction of solid and sufficient road bases. Maintenance issues that arise from deterioration of the road base can be costly, and will not be repaired by PennDOT prior to turnback. The Township should have any road that it is considering for turnback carefully evaluated.

Current Commuting Patterns

Franklin Township remains a bedroom community. The vast majority of the residents, who work outside of the home, also work outside of the Township. As a result, there is a significant dependence on the automobile for travel within and outside of the Township.

Table 7-3: Commuter Patterns (2000 U.S. Census)

Place of Work	Number	Percent
Chester County	717	39.68
Bucks County	8	0.44
Delaware County	107	5.92
Lancaster County	18	1.00
Montgomery County	42	2.32
Philadelphia County	21	1.16
Other PA Counties	29	1.6
New Castle County, DE	782	43.28
Cecil County, MD	29	1.6
Other	54	3.0

Table 7-4: Commuter Means of Transportation (1990, 2000 U.S. Census)

	1990		2000	
	Total	Percent	Total	Percent
Drive Alone	1236	86.55	1489	82.4
Car Pool	112	7.84	136	7.5
Public Transportation	0	0	13	.7
Walked	17	1.19	45	2.5
Worked at Home	49	3.43	119	6.6
Bicycle	8	.56	0	0
Motorcycle	0	0	0	0

While the means of transportation have remained relatively constant, one notable exception is the number of people now working at home. This segment of the population nearly doubled between 1990 and 2000. With the advent of information technologies making home employment more feasible, the Township should take these trends into account in future transportation planning.

Public Transportation

There is currently no public transportation available in Franklin Township. The nature of the Township, particularly its low density, makes the establishment of public transportation by a traditional provider, such as SEPTA, unlikely. There are some possibilities for limited future public transportation in the Township, however, and they include the possibility that a subscription service may be started by a corporation or group of corporations to serve the 896 corridor and the large population of Franklin Township residents that commute outside of the Township each day. The Township may want to consider, both for the purposes of facilitating such a service, and in order to encourage carpooling, the establishment of a strategically located park and ride lot along the 896 corridor. All of these are endeavors that would be well suited to intermunicipal cooperation, and well as coordination with area churches, whose parking facilities are largely vacant on weekdays.

For those using public transportation, SEPTA's R-2 line, serving Delaware is the nearest access

point.

Table 7-5: SEPTA R-2 Delaware Station Ridership FY 2005 (SEPTA)

Station	Average Daily Boardings
Newark	279
Churchman's Crossing	177
Wilmington	637
Claymont	475

These stations provide access to Philadelphia, as well as access to Amtrak's Northeast Corridor. The Newark station, the closest to Franklin Township, is on DelDOT's Capital Improvement Plan for relocation, and development into a transportation center. This follows on the heels of recent improvements to the station at Wilmington. These may all have potential to increase ridership in general and public transportation usage in particular in Franklin Township.

Bicycle Routes

Chester County's Long Range Transportation Document – Connecting *Landscapes* currently shows a number of possible bicycle routes through the Township. These routes include:

Table 7-6: Possible Bicycle Routes

Route	Status	Rider Level
SR 896	Major Improvements Needed	Advanced
Appleton Road	No Major Improvements Needed	Beginner
Stricklersville W. of Appleton	Widen/Resurface Shoulders	Intermediate
Stricklersville E. of Appleton	No Major Improvements Needed	Intermediate

Sidewalks/Trails

The Township's rural development does not lend itself particularly well to a large network of sidewalks. The cost of traversing the significant distances between residences in much of Franklin is a significant component to making paved/concrete pedestrian connections practical. However, this is not the case with Kemblesville Village, where an improved network of sidewalks could prove quite beneficial. Increasing the walkability of Kemblesville would also benefit farther reaching goals of Traditional Neighborhood Development (TND). Pedestrian connections elsewhere in the Township should focus on an integrated trails network, which is outlined in Chapter 9: Open Space and Recreation.

Chester County Long Range Transportation Planning

The Township currently has a limited number of projects on the County's Long-Range Transportation Plan. These projects include:

- Replacement of SR 841 bridge over Tributary of White Clay Creek

- Replacement of Mt. Olivet Road Bridge over Mackey's Run

Of these two projects, the first is targeted to receive funding for engineering in years 5-8 of the 12 year plan, while the second project included on the list is scheduled to receive funding for engineering in years 8-12 of the twelve year plan.

Also included in the County's long-range plan is a list of *operational improvements not funded*, or what can accurately be described as a true wish list of projects. Franklin Township projects found on this list include:

- Safety improvements at SR 896 and Den Road
- Safety improvements at SR 896 and Peacedale Road
- Safety improvements at SR 841 and Flint Hill Road
- Safety improvements at SR 841 and School House Road
- Safety improvements at SR 841 and N. Creek Road
- Safety improvements at SR 841 and Gypsy Hill Road

These projects occupy positions 96, 97, 134, 138-140 and 151, respectively, on the prioritized list of improvements, which currently makes their funding and completion a long-term proposition.

Notable omissions from these lists are the intersections of SR 896 with SR 841, Appleton Road, and Good Hope Road. These intersections are of high concern in the township, however, and the Township may want to consider advocating for their inclusion.

In general, the County uses a number of criteria when developing its long-range transportation plan. Among these are safety, the functional classification of the roadway, regional benefit of the project and the willingness or commitment shown by the affected municipality or municipalities to the project. One way of improving a project's location on the priority list, therefore, is by demonstrating that commitment, perhaps, through the commissioning of a feasibility study for the project. Completion of a feasibility study is something that may be within the financial capability of the Township, while other costs such as engineering and construction may not be within the Township's means.

Maintenance

With a majority of its transportation infrastructure already in place, a properly integrated and regular program of maintenance will be of equal, if not greater importance, to new capital projects when it comes to maintaining the functionality of the Township's roadway system. Improperly maintained roads will deteriorate leading to non-budgeted emergency expenditures for repairs, or to drivers bypassing those routes and thereby putting an ever increasing traffic load on the limited number of remaining roadways, leading to deterioration of these routes, and setting up an endless cycle of deterioration that the Township maintenance staff will not be able to keep up with as the years go by. Additionally, intersections where sight distance is inadequate, or where drainage problems lead to frequent flooding, or where alignment issues make turns difficult, all act as bottlenecks in the transportation system and increase the number of accidents. In order to minimize these future issues the Township should continue to implement its multi-year *Streets* program,

similar to a capital improvements program, but focused on maintenance issues.

CONCLUSION

The township's rural transportation network is well suited to servicing the needs of the residents. However, through traffic will strain this capacity. Therefore, it is critical the Township take steps to limit transportation impacts, and to plan for future land use to compliment rural transportation patterns rather than aggravate them. Traffic calming measures, access management, increased public transit options, and improving local road network flows can all contribute to a manageable transportation network.

RECOMMENDATIONS

1. Having already taken the steps of inventorying and pricing its *Streets* program, the Township should continue to develop a prioritized list of maintenance needs, whether they be mill and overlay, tree/brush removal, or sight distance improvements. These projects should then be placed into a three to five year program with a multi-year budget established. The road survey should be conducted on an annual basis and the prioritized list updated so that the municipality can continue to accurately fund its maintenance needs on a three to five year cycle. During the survey, the Township should ensure that residents are not encroaching upon dedicated rights-of-way and clear sight triangles, and take action to restore the sanctity of those areas when found.
2. The Township should give very careful consideration to any new traffic patterns created by new residential or commercial development. Access management at ingress/egress points of each development in the Township should be the top concern in this regard, particularly along the SR-896 corridor.
3. To preserve rural character, increase the predictability of new traffic patterns, and to enable the municipality to plan according, Franklin Township must use the Future Land Use chapter as a guide to the placement of new development.
4. Make Route 896 less desirable as a truck route.
5. The Township should initiate a project to improve the intersection of SR 896 and Appleton Road. Currently, this project is not on PennDOT's list of projects or even on the County and DVRPC long-range transportation plan. The Township should fund a feasibility study that would determine an appropriate project for improving the intersection. After the completion of the study, the Township should seek to have the project placed on the County's long range transportation plan, and contact state legislators to ensure that the project makes it to the TIP and is fully funded.
6. Along with neighboring municipalities, the Township should explore the possibilities of operating a scale to reduce traffic along SR 896. This may provide a sufficient deterrent to heavy trucks, and reduce the overall volume of traffic traveling through the corridor, whether on 896 itself, or between US 1 and SR 796. If the Township chooses to pursue this option, it should be certain to involve PennDOT in the planning, to avoid possible conflicts regarding access to the weigh station. The lack of a municipal police force also complicates matters, though this could be mitigated if other communities along SR 896 are involved in the effort. This could also reduce costs related with the operation of the weigh station, and the provision and maintenance of the equipment.
7. Explore the use of a rural roundabout for dangerous intersections along SR 896. This would serve to calm traffic, as well as alleviate the dangerous situation currently at the intersection, particularly in locations such as SR 841, Appleton Road, and Good Hope Road. Additionally, the township should advocate for each of these intersection improvements being added to the County's Long-Range Transportation Plan.

8. When necessary to initiate projects, and financially practicable for the municipality, feasibility studies of various transportation projects should be undertaken by the Township.
9. Franklin Township should make other Townships along the SR 896 corridor aware of the efforts of Norfolk Southern. Support for this initiative should be expressed in the SR 896 study currently underway. Franklin and other Townships should contact Norfolk Southern regarding this project and express their support, as well as expressing support for the idea to state and national representatives
10. Improve the Township's transportation network with a focus on intra-municipal movement.
11. Any sidewalk improvements within the Township should be focused on Kemblesville.
12. Manage access to new developments and commercial locations to minimize dangerous intersections, particularly with SR 896. This should include traffic TISs from all developers, as well as street centerline alignments with existing roadways, all towards the goal of reducing the number of dangerous intersections in the Township.
13. Carefully evaluate any road under consideration for turnback, to assess the viability of the project within the Township.
14. Promote Park-and-Ride and carpooling options to Newark and associated transit with neighboring municipalities.
15. Use the Route 896 Corridor Project to influence transportation planning along the SR 41 corridor.
16. The Township should consider the impacts of home employment on future traffic patterns.
17. Employ traffic calming measures, particularly in residential areas, to increase safety for local residents and deter through traffic from deviating onto local roads.

CHAPTER 8

COMMUNITY FACILITIES PLAN

INTRODUCTION

This chapter of the Comprehensive Plan profiles the existing community facilities within the Township. This profile will include government institutions, educational facilities (public and private), and health and emergency services.

While the municipal survey did not address the issue of community facilities in detail, it does indicate certain preferences of the township citizenry that are applicable. Members of the community identified issue areas where it would like to foster inter-municipal cooperation, particularly in “trails” and “parks and recreation” and “watershed planning” (See “Recreation and Open Space,” “Utilities and Water Supply,” and “Natural Resource Protection” Chapters). While other services such as “police,” “fire/emergency services” and “library” garnered less support, the survey indicates that the community does not oppose cooperating on these matters. In general, people seem satisfied with the current level of service.

After creating an inventory of community facilities serving Franklin Township, this Plan Component moves to making recommendations for utilizing community facilities to their fullest to achieve the various goals laid out in the Plan’s other components. Ultimately, this portion of the plan seeks to direct the Township towards policy that will take advantage of the wealth of resources already contained in community facilities.

EXISTING FACILITIES

Government Institutions

The Township’s own municipal offices, located on the south side of Kemblesville, serve as the main location for administration. The facilities are sufficient for small meetings and the management of the Township’s affairs, though their size is inadequate for larger community engagements.

The Township is served by three separate post offices. Adjacent to the Township building is the Kemblesville Post Office (19347), offering retail service to those located in the immediate vicinity of Kemblesville proper. The remaining two post offices are outside of the municipality’s borders. The majority of the Township (all but the westernmost portions and Kemblesville itself) is served by the Landenberg Post Office (19350), located in New Garden Township. Finally, the westernmost portions of the Township are served by the Lincoln University Post Office (19352), located in Lower Oxford Township.

Educational Facilities

Franklin Township is part of the Avon Grove Area School District. As of the start of the 2004-2005 school year, the enrollment of the district was 4,991, and its estimated revenue was roughly \$58

million. The district maintains an elementary school (grades K through 2), an intermediate school (grades 3 through 6), a middle school (grades 7 and 8) and a high school (grades 9 through 12). In addition to these facilities, the School District also operates the Avon Grove Charter School (grades K through 11) with 973 students and an operating budget of \$7.5 million. The school district also contains a charter school with grades K through 12, focusing on “Inquiry Learning.” Until recently, the district operated an elementary school within the Township (Kemblesville Elementary School), however the facility is not currently in use. The school district still owns and manages the facility, but has yet to determine the future use of facility, or whether it will retain the property in the future.

After the closure of the elementary school, the district operates no educational facilities in the Township. Whatever the use, any anticipated changes to the facility could have a large potential impact on the community, and its consideration in the Comprehensive Plan is important.

In addition to facilities maintained by the Avon Grove Area School District, there are private educational facilities in the Township. The Kemblesville Christian Day School offers primary education for nursery school aged children. Rockin’ Horse-ABC and the Preschool Workshop offer preschool education in the Township. The Landenberg Christian Academy offers pre-K through third grade, and leases facilities at the Cornerstone Presbyterian Church.

Health and Emergency Services

Due to the Township’s small size, it does not provide its own police, fire or ambulance services. Less than half of the respondents to the municipal survey felt the Township should “promote cooperation with neighboring townships and Maryland” on these issues, but with these services being provided from outside sources, it is a matter of necessity.

Police service is provided by the Pennsylvania State Police. The officers charged with patrolling Franklin Township work out of the Avondale barracks. These officers provide services traditionally offered by municipal police in other jurisdictions, in addition to the duties performed in other posts where local police are present. The barracks maintain personnel continually dedicated to patrolling Franklin Township and adjacent areas. The Township’s low crime rate allows this arrangement to work fairly well, though at times, due to the large coverage areas of the troopers, it can at times be as much as 45 minutes before assistance arrives in non-emergency situations.

Fire and ambulance services are provided by the West Grove and Avondale Volunteer Fire Companies. The West Grove Fire Company maintains two facilities, one in West Grove, a second station in New London, and is the primary responder for the majority of the township. In addition to these two stations, the company is considering creating a third station in the vicinity of Flint Hill Road and PA-896, which, in addition to its emergency management work, could provide a future resource for meetings within the community. Avondale Volunteer Fire Company maintains one facility.

**West Grove Volunteer Fire
Company**

Rescue Truck/Engine (*WG*)
Ladder/Engine 75' (*WG*)
Class A Pumpers (*NL: 2, WG: 1*)
3,000 Gallon Tank Truck (*WG*)
Brush Truck (*NL*)
Squad Unit Personnel Transport
(*NL*)
Traffic Unit (*NL*)
Ambulances (*NL: 1, WG: 2*)
~75 Active Members

**Avondale Volunteer Fire
Company**

Engines (*3*)
Ambulance
~Tanker
~40 Active Members

West Grove Police Dept.

Squad Cars (*2*)
WMD Training (*All
Officers*)
7 Officers (3FT, 4PT)

Chester County manages emergency management operations from West Chester (Edward J. Atkins, Coordinator). In addition to coordinating larger relief efforts, the County maintains 911 dispatch service for emergency calls. The emergency management center also coordinates with PEMA, and when necessary, Maryland officials, and is capable of handling calls in over 200 different languages.

Franklin Township does not have its own hospital; however Jennersville Regional Hospital in Penn Township is nearby. The hospital offers a wide variety of medical services including emergency care. Across the state line into Delaware, Christiana Care Health System also maintains a full service hospital outside of Newark.

RECOMMENDATIONS

1. Continue to coordinate with neighboring municipalities for the provision of regional services.
2. Channel new community facilities towards the 896 corridor and Kemblesville to provide a central location, and easy access to residents.
3. Develop an expanded or new Township Administrative Offices Complex (Township Building) preferably in the Kemblesville Village Area.
4. Play a lead role in representing concerns to the Avon Grove School District relative to the loss of Kemblesville Elementary School. (Any future use of the facility should have the community's needs in mind, particularly local groups given the fact that this is the only large publicly owned meeting space in the Township.)
5. Facilitate West Grove Fire Company's new station. The new station would improve response times within the Township, and could potentially reduce the risk to life and property as well as homeowners' insurance rates.
6. Amend the Zoning Ordinance to permit a broad range of community facilities in the Kemblesville Area.
7. Communicate the presences of new developments with the local fire departments and the school district.

CHAPTER 9

OPEN SPACE & RECREATION PLAN

“Open space” is a general term that refers broadly to agricultural, recreational, and natural lands. These lands often collectively form a rural atmosphere and a backdrop to a township that provide scenic, economic, and environmental benefits that are sometimes taken for granted. As the area develops, it becomes clear that unprotected open space is vulnerable to being lost, primarily to new residential subdivisions. Therefore, the goal of an open space plan must be to establish *protected* open space. Legally protecting open space requires considerable planning as well as financial resources, and generally involves a landowner and general public education and outreach program, since it is virtually always conducted on a voluntary basis with landowners with broad community support.

This chapter describes the important attributes of Franklin’s open space resources; and discusses how to protect them. It strives to achieve the policies and management approaches set forth in Chester County’s Open Space Plan, *Linking Landscapes* (2001). That document may be referred to for in-depth discussions of the subject matters presented in this chapter.

Properties can be protected through easements – both conservation and agricultural easements – and through fee simple ownership, whether purchase or donated. Deed restrictions are not generally considered enforceable enough, and zoning restrictions and limitations alone can be subject to change. Even municipal lands, including parks, are sometimes subject to re-use, though that rarely happens.

The goal of an open space plan should include a discussion of how protected open space can fit into a community’s goals for its future. Protected open space, to maximize its benefits and effectiveness, should be linked into a network or a system whereby the whole is greater than the sum of its parts. A natural greenway corridor is one example; a recreational trail system is another; and a viable farming community is a third. Additionally, the plan should lay the groundwork for meeting the future recreational needs of the Township.

BACKGROUND

Franklin Township has a relatively small amount of protected land to date, and no lands protected as agricultural lands. The largest single piece of protected land is the Township’s Crossan Park, 130.5 acres located along the West Branch of the White Clay Creek in the eastern portion of the Township. Additionally, Natural Lands Trust, a land conservation group, owns a piece of mostly wooded property called the Foote Farm. Other than that, the only protected lands are those set aside as part of the development process. One of these sites includes an approximately 50-acre wooded area held under conservation easement to the Brandywine Conservancy. There are no County or State lands in Franklin Township.

In all, currently (2005) protected land includes:

- Township lands: Crossan Park 130.5 acres
- Natural Lands Trust owned: Foote Farm 60.2 acres

- Brandywine Conservancy eased: Stonegate 129.9 acres
- Other HOA lands: 21 parcels 104.3 acres.

This total of 424.9 acres represents approximately 5% of the Township's 8,282 acres. However, no discussion of Franklin Township's Open space resources is complete without mention of Fair Hill Natural Resource Management Area, located in Maryland along Franklin's entire southern border. This public park is about 5,600 acres in size (two-thirds the size of all of Franklin Township), and contains many nature-oriented and recreational facilities, including a large portion of Big Elk Creek and many trails. It is a well-known destination for horse-riders.

Additionally, one private (unprotected) recreational area occurs in the Township - Chisel Creek Golf Course, which is 107 acres in size.

Many opportunities still remain for significant open space preservation in Franklin, however. For example, there are 4,764 acres of land in the Township on parcels greater than 10 acres in size. Franklin residents approved an open space referendum in the fall of 2002 by about a 70-30 margin. This referendum, held under the terms of Act 153, asked residents if they wished to levy a new property tax on themselves at the rate of \$0.05 per \$100 assessed property valuation for open space preservation purposes. The Board of Supervisors enacted the tax after the vote, and the Township now earns approximately \$125,000 per year in open space preservation funds.

To better implement the Township's open space preservation goals, the Board formed an Open Space Committee, which is currently very active. The Committee meets twice per month and has educated itself about preservation techniques and opportunities. With assistance from the Brandywine Conservancy, the Committee has developed a set of priority natural resource and agricultural parcels for preservation, as well as a conceptual greenways plan, which is discussed in Chapter 3, and a trails plan, which is presented here. Armed with new training and priority parcel information, the Committee has begun contacting landowners with whom the Township wishes to engage in dialogue about the future of their properties.

FARMLAND PRESERVATION

With strong support from a Community Values Survey undertaken for the Township in 2003-04, the Committee and the Township in general has a new enthusiasm for preserving farmland in the Township. Farmland with prime agricultural soils is also specifically identified in the Municipalities Planning Code (MPC) as a natural resource worthy of protection (see pages 1-2 and 1-3). Indeed, Chester County's plan for protecting open space, *Linking Landscapes*, makes the argument that Chester County contains some of the most productive non-irrigated farmland soils in the country.

Although the Township has lost hundreds of farmed acres to development, much in recent years, there are still thousands of farmed acres left. There are approximately 938 acres of Agricultural Security Areas (ASAs) in Franklin, for example, which appears to include less than half of the actual farmed acreage. ASAs are voluntary, and confer no protective status to a farm as a property can relatively easily drop out of the program. Properties under Pennsylvania's Act 319 and Act 515, both of which assess a property based on its agricultural rather than its "fair market" value, are more numerous, totaling 3,957 acres in Act 319 and 171 acres in Act 515, for a total of 4,128 acres (almost exactly half of the Township) enrolled in both programs. Again, neither of these programs

confers long-term protection to farmland, although they do show that a large amount of the Township is still actively farmed.

There is an annual combined County-State grant program available to purchase agricultural easements on farmed properties that meet certain criteria. This is a very competitive program, however, and obviously farmers must be willing to apply. For that to occur, farmers must believe in the future of farming in Franklin Township, and they must be prepared to accept less than full residential market value. The County-State grant program can offer no more than \$12,000 per acre for an agricultural easement, which is less than what developers can pay on most properties. With its own funds, however, Franklin Township can make the offer more competitive. Moreover, with its own funds, Franklin Township can participate in a new County-wide agricultural easement grant challenge program with Chester County. Under the terms of this program, the County will pay half up to \$12,000 per acre for an agricultural easement with matching Township funds.

One of the important aspects of a farmland preservation program is to ensure the long-term viability of farming as a business. This can involve retaining a certain “critical mass” of farms in an area, and has ramifications beyond the borders of Franklin alone. To date, not one single farm has been permanently preserved in Franklin Township, although the Strawbridge tract, the southern most property in Franklin Township adjoining Fair Hill, is a worthy candidate. Most of the townships to the east and north of Franklin are not remaining heavily in farming, and even those to the west are questionable. Yet all of those surrounding townships do contain farms that are preserved as farms.

However, immediately south of and adjacent to the privately owned portion of Fair Hill in Franklin Township is the Fair Hill Rural Legacy Area, a 16,045-acre area in northern Cecil County, Maryland (also known as the Fair Hill Natural Resource Management Area). Maryland’s Rural Legacy Program was created in 1997 to protect large, contiguous tracts of the State’s valued cultural and natural resource lands through grants made to local applicants. Described on the program website (www.dnr.state.md.us/rurallegacy/rlprogram/allrurallegacyareas.html) as “Cecil County’s most productive and economically important agricultural region,” the goal of the Area “is to improve water quality in the Big and Little Elk Creek watersheds and buffering and expanding the state-owned Fair Hill Natural Resource Management Area, a landscape indicative of Cecil County’s rural and natural heritage.”

Two forms of agricultural use that seem to be remaining strong in the Franklin area are the mushroom industry, which needs a steady supply of hay as a mushroom-growing substrate, and the equine industry, including the breeding, boarding, and riding of horses. In addition to that, there are a small but growing number of specialty farms in the area, including a vineyard, a native plant nursery, and an ostrich farm. Collectively these agricultural uses are worthy of preservation and conservation. (See Goals & Objectives on page 2-7.)

NATURAL RESOURCES PRESERVATION

Natural resources in Franklin have been described and discussed above in Chapter 3. To summarize, Franklin Township has over 2,000 acres of woodlands, including 24 individual woodlands that have been proposed herein as woodlands of higher value, or Class I and II woodlands. There are also about 100 acres of wetlands, including one over 20 acres in size, and over 50 miles of streams, including many miles of the nationally-designated Wild and Scenic White Clay Creek. There are a

handful of rare and endangered plant and animal species in the township, including the federally-threatened bog turtle. There are resources well-worth protection and proper management.

As mentioned above, a set of priority natural resource (and agricultural) parcels for preservation have been identified through the work of the Open Space Committee. These resources largely come together in the proposed greenways plan, which is a set of natural resource and wildlife corridors that tie the Township's natural resources into one larger whole, a system that is designed to be larger than the sum of its parts. The proposed greenways are described in detail in Chapter 3.

As with agricultural lands, there are County and State grant programs that can help fund preservation work. These programs are not as well funded as agricultural preservation programs, however.

One additional factor, however, is that in *Linking Landscapes*, a lack of County parks in the Franklin Township area was identified (see Figure 4.8: County Park 7.5-Mile Service Areas). County parks are described as “sub-regional,” and are to reach between 400 and 999 acres in size, according to Chester County park standards. County parks are designed primarily to provide passive recreational uses, focusing on wildlife and natural resources. Due to limited land availability, instead of one large 400-999-acre facility, however, the County expects that “future County parks may consist of a small number of nearby parcels linked by trails or wildlife corridors, all of which total 400-600 acres” (*Linking Landscapes*, p. 4-18). Although Franklin Township might provide such a combination of sites, an initial investigation into the willingness of the County to acquire lands has led to the conclusion that a new County park here or elsewhere is not likely in the near future.

A TRAILS NETWORK

The only existing trail in Franklin Township is located within the Township Park, Crossan Park. Yet with all the residential development in the Township, and with trail destinations located both inside and outside of the Township, a trails system could be very popular. The most common form of recreation participated in by respondents to the 2004 Community Values Survey was “walking, hiking, or jogging,” and that by a sizeable margin (71% versus 51% for the next highest response). Walking, hiking, or jogging was also selected as that activity which most respondents would support Township action to facilitate.

A proposed trails plan was developed under the auspices of the Open Space Committee that includes approximately 19.6 miles, identifies 10 “destinations,” 5 regional trail corridors (that cross into adjacent municipalities), and roughly 5 local trail corridors (that are primarily within Franklin Township). Figure 9-1, *Recreational Resources Plan*, depicts trail opportunities, along with other open space and recreation opportunities. One goal of the network would be to connect all residential communities to a trail. Another is to provide for equestrian, but not motorized recreational, uses.

Trail destinations include two locations within the Township – Crossan Park and the Village of Kemblesville, though of course scenic areas and fishing spots along the White Clay Creek and elsewhere are also destinations, though difficult to pinpoint.

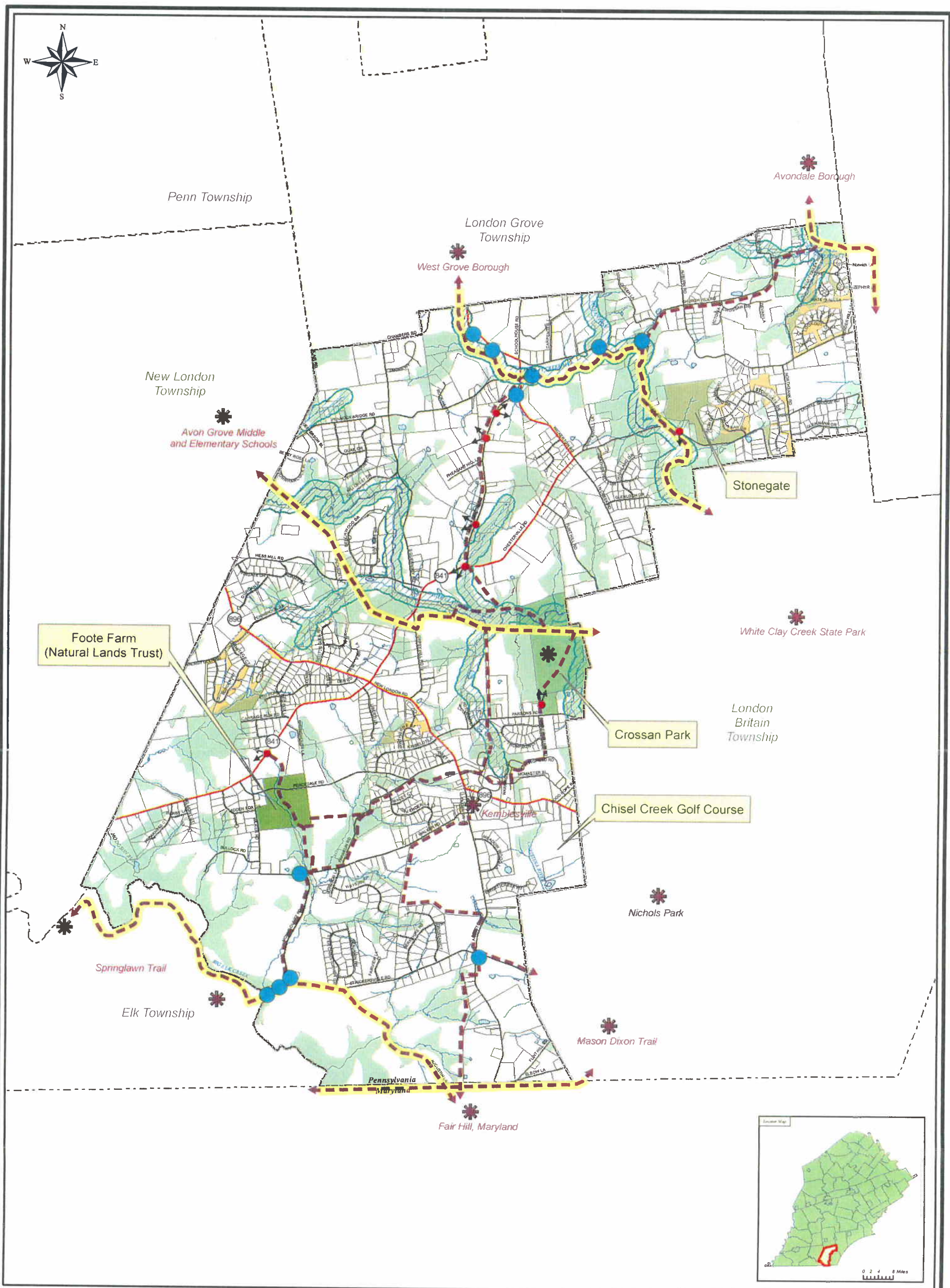


Figure 9-1
Recreational Resources
Plan
Franklin Township
Comprehensive Plan

0 1,500 3,000 6,000
 Feet

Brandywine Conservancy
 Environmental Management Center

Thomas Comitta Associates, Inc.
 Town Planners and Landscape Architects

RETTEW

Data Sources: Base Data from Chester County Data Distribution CD, 2003. Scenic resources updated by EMC Staff 1/18/2005.

Date Plotted: December 5, 2005

Legend

- Roads
- Major roads
- Streams
- Water bodies
- Tax parcels
- Township boundary
- Adjacent municipalities
- Woodlands
- W & S Designated Corridor
- Homeowners' Open Space
- Municipal Open Space
- Preserved Lands (Non-Profit)
- Conceptual trail alignment
- Regional Recreation Corridor
- Destinations
- Visual Accents (Trailside)
- Vista Points (Trail Side)

The eight trail destinations located outside of Franklin Township are generally connected by a regional trail, which is, by definition a trail that involves multi-municipal jurisdictions and efforts. Five such regional trails are proposed and discussed below:

- 1) Along the East Branch, White Clay Creek
- 2) Along the Middle Branch, White Clay Creek
- 3) Along the West Branch, White Clay Creek, including a PECO powerline corridor
- 4) Along and parallel to Big Elk Creek
- 5) Along the southern boundary of the Township

The East Branch, White Clay Creek flows between London Grove and New Garden Townships through the far northeast corner of Franklin Township on just one tax parcel. A trail along that branch could eventually connect Avondale Borough, located about 1.5 miles to the north, and White Clay Creek State Park, located about 1.5 miles to the south. Both other Townships are working on protecting properties and constructing trails on their portions of the stream corridor. All three White Clay Creek corridors are seasonal trout fishing streams.

The Middle Branch, White Clay Creek flows about 2.8 miles across northern Franklin Township within a largely rural landscape that includes four historic structures and properties and one scenic vista point. State route 841 parallels the stream part of the distance, after which the stream flows to the east before taking an almost right-angle turn to the south. Here it enters a deep wooded glen, which it largely maintains, with the exception of the Chesterville Road crossing, until it exits the Township. A trail along this branch could connect West Grove Borough, located about 1.5 miles to the north, with White Clay Creek State Park, located about one mile to the southeast. London Grove Township is actively establishing a trail along their portion of this corridor.

The West Branch, White Clay Creek flows about 2.5 miles across central Franklin Township through a mostly wet and wooded corridor, including a 23-acre wetland, the largest in Franklin Township and the largest in the Pennsylvania portion of the White Clay watershed. The stream exits the Township within Crossan Park. The western end of the stream corridor is wet and wooded within the immediate stream corridor, with houses nearby. Here it is thought best to move away from the stream and utilize an existing PECO powerline corridor. This trail could connect from the Avon Grove Middle and Elementary schools, located about 3.5 miles to the northwest, and White Clay Creek State Park, located about one mile to the east.

The trail corridor along Big Elk Creek includes a trail under development in Elk Township along Springlawn Road (which parallels the creek for about 1.8 miles). There are three historic structures located near the Big Elk on Strickersville Road. From there it's less than one mile and only across one property to Fair Hill NRMA, Maryland.

The regional trail corridor proposed along the southern boundary of the Township (and the Commonwealth) follows the historic Mason-Dixon Line and could connect to a trail by the same name under development in London Britain Township. That trail, in turn, is designed to connect to White Clay Creek State Park.

There are also roughly (5) local trail corridors proposed, depending how you count them. These corridors serve to connect local residents to the regional trails, as well as having their own accents and points of interest.

One trail corridor parallels Appleton Road, connecting Kemblesville Village to Fair Hill NRMA. This trail will pass through a new development underway. A second trail corridor follows the unpaved Mount Olivet Road from the Big Elk Creek where it splits into two branches. The western branch crosses the Foote Farm and continues on to Route 841 and a scenic vista there. The eastern branch follows Franklin Road, and weaves through existing developments to Kemblesville.

Going north from Kemblesville are two proposed trails, both of which lead to the West Branch of the White Clay Creek, one at Crossan Park. Another proposed trail connects the West Branch trail to the Middle Branch trail primarily by following School House Lane, which affords several scenic overlooks of the West Branch and Middle Branch landscapes and other surrounding areas. Finally, a trail corridor is proposed that connects the Middle Branch trail to the East Branch trail along Church Hill Road.

This conceptual trails plan would benefit from further detailed site-specific analysis. Many of the trails can be established or provided for during the development process. There are County and State trail planning, acquisition, and construction grants. Additionally, there are two small private local grants administered through SECCRA (Southern Chester County Refuse Authority) and PECO that may be able to provide funding for trail planning work.

The overall trails plan is consistent with "Linking Landscapes", the Open Space Element of the Chester County Comprehensive Plan. More information on Linking Landscapes can be obtained through the Chester County Planning Commission. The Linking Landscape Plan, adopted February 2002 and subtitled "A Plan for the Protected Open Space Network in Chester County, PA" includes numerous policies to which this plan is consistent. The Goals, Objective and Policies of Linking Landscapes are included in Appendix B.

RECREATIONAL FACILITIES

The Chester County Planning Commission, in the "Linking Landscapes" component of its comprehensive plan, provide standards for parks as follows:

Table 9-1: Recreation Park Standards (Chester County Planning Commission)

Type of Recreational Park	Service Radius	Minimum Acreage Standard	Maximum Population	Size of Recreational Park
Regional Park	30 miles (Equal to a 60 minute drive)	20 acres per 1,000 people	None	1,000 acres or more
Sub-regional Park	7.5 miles (Equal to a 15 minute drive)	8.5 acres per 1,000 people	100,000	400 acres to 999 acres

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Community Park	2.5 miles (Equal to a 5 minute drive or a 30 minute walk)	3.0 to 6.0 acres per 1,000 people	25,000	20 acres to 399 acres
Neighborhood Park	0.5 miles (Equal to a 15 minute walk)	2.5 to 3.5 acres per 1,000 people	5,000	0.5 acre to 19.9 acres
Mini Park	0.25 miles (Equal to an 8 minute walk)	0.25 acres per 1,000 people	2,000	0.01 acre to 0.49 acre

Franklin Township has ample service for regional parks, both inside and outside of Pennsylvania. Of Chester County's four state parks (White Clay Creek, Ridley Creek, Marsh Creek, and French Creek), Franklin lies within the service area of all but French Creek. Additionally, several state parks in Delaware (Brandywine Creek, Lums Pond, and Delaware portions of White Clay Creek) and Maryland (Fair Hill Natural Resource Management Areas) are also providing many recreation activities for regionally scaled parks. Fair Hill, in particular, offers a great opportunity to Township residents, with its 5,613 acres directly adjacent to the Township. White Clay Creek State Park, located approximately three miles southeast of Kemblesville is closest to Franklin Township. In 2005, the State of Delaware purchased a 125 acre golf course (the former Deerfield Golf & Tennis Club) to add to White Clay Creek State Park.

Sub-regional parks, generally provided in the form of County Parks, are less accessible to residents. At present, the nearest county parks are at least 10 miles from the Township. These parks often fill the gap between larger parks oriented towards passive recreation, and smaller, local parks with greater focus on active recreation. This absence goes beyond Franklin, and extends over much of the portions of Chester County near the PA-DE-MD line.

At present, Franklin Township has good access to community and neighborhood parks. Elwood Crossan Park is the principal park in the Township open for public use. The park, occupying 125 acres, has a number of facilities for active recreation, including tennis courts, 2 baseball diamonds, a basketball court, pavilions, picnic areas, gardens, a playground, walking trails, and a general purpose field. The Township is in the process of removing a defunct skateboard park, adapting the location to other uses.

The Kemblesville Elementary School grounds provide a secondary area for active recreation. Though the school is no longer in active use, the grounds still have a multi-purpose athletic field, playground equipment, and a small trail.

A number of municipal parks are located outside of the Township. A survey of area facilities showed Franklin Township has more per capita facilities for active recreation than a majority of its neighboring municipalities.

Franklin Township Comprehensive Plan

Table 9-2: Area Sports Facilities (Franklin Township)

Municipality / Borough	Athletic Fields (current)	Athletic Fields (pipeline)	Population
New Garden Township	1 soccer 1 baseball 1 beach volleyball	7 soccer fields Southern Chester County Soccer Association has approval to build 7 soccer fields on land jointly bought (or to be bought) by them and the Township. – Date not yet known.	9,083 (2002 census)
East Nottingham Township	0	Oxford Area Recreation Authority is in the Preliminary Stages – Number not known yet.	5,000
New London Township	1 (used for baseball, football practice and soccer practice)	0	5,000
Avondale Borough	2 softball	0	1,108
West Grove Borough	3 baseball 1 soccer 2 football	0	2,652
London Grove Township	0	Beginning stages of a master plan for an 80 acre park, will have athletic fields of some kind. Date not yet known.	6,500
London Britain Township (Nichols Park under Expansion)	1 baseball / soccer (outfield)	0	3,054
Penn Township	0	0	2,812 (2000 census)

Franklin Township Comprehensive Plan

Elk Township	0	0	1,485
Kennett Township	Various Sports – No Concrete Numbers	0	7,100

RECREATIONAL NEEDS

In general, the citizens of Franklin Township are quite satisfied with the state of recreation within the Township. Of the 406 respondents to the “Community Values Survey,” 287 individuals (71%) felt the Township’s facilities were adequate to meet the needs of local residents. That was the greatest response affirming adequate facilities of any of the areas in question 4 of the survey. This is compared with only 58 respondents (14%) who felt there were inadequate opportunities for parks and recreation areas. An additional 61 respondents (15%) had no opinion on the matter.

The public indicated a gravity towards passive recreation. At the top of their preferences was “Walking/hiking/jogging”, with 289 (71%) persons currently participating in the activity. This was followed by the “Nature enjoyment/study” (208 respondents or 51%) and “Sight-seeing or pleasure driving” (189 respondents or 47%). These pursuits are only minimally dependent upon dedicated facilities, making them ideal for a rural township such as Franklin. The interest in these activities was followed by Bicycling (126 respondents or 31%), Fishing (95 respondents or 23%) and Swimming (92 respondents or 23%). Like the top three responses, these again indicate activities (with the exception of swimming) minimally dependent upon the provision of facilities by the Township.

FUTURE NEEDS

The “Linking Landscapes” component of the Chester County Comprehensive Plan assessed Franklin Township’s recreational needs as of 2000 and also projected them into the future. The County estimates the current community park needs at 23.1 acres, with no need for neighborhood or mini-parks. This need is met sufficiently by Elwood Crossan Park. By 2025, the County estimates this need to increase to 39.2 acres (an increase of roughly 70%), with the additional need of a neighborhood park. Though the Township would still have sufficient acreage, the neighborhood park would provide access to residents who may be on the opposite ends of the Township from Crossan Park. Additions to parkland adjacent to Township in London Britain Township would provide some service to Franklin residents, and may factor into the location of any future neighborhood park. Were this park to be created, at a current cost for park development of \$100,000/acre, this additional park space would cost nearly \$4 million to develop (not including the cost for land acquisition).

A vocal group representing athletic leagues within the Avon Grove School District expressed its desire for a number of facilities within Franklin Township for organized sporting activities. These facilities were centered primarily around athletic playing fields, and ancillary facilities such as parking lots and other amenities to support league play. However, despite a dedicated lobby, these interests were not reflected by respondents to the survey, and there was no indication that residents desire expansion of these facilities.

This juxtaposition of wide interest in passive recreation, but less interest in Township action to facilitate these activities narrows the opportunities for Franklin, but also helps to define them. In

particular, the Township can take advantage of gearing their facilities towards passive recreation. In addition, many of the most popular activities (walking, hiking, jogging, bicycling, etc.) would be well served by a trail system. Such a system would have the benefits of providing recreational opportunities, while fully leveraging existing park and recreational space.

RECOMMENDATIONS

1. The Township should provide continued support for all kinds of open space preservation, and should initiate a special farmland preservation effort focused on prime agricultural land.
2. The Open Space Committee, in coordination with the Board of Supervisors, should continue to train and educate its members concerning open space preservation issues and practices, and take the lead on open space planning, landowner cultivation, and grant writing.
3. Township efforts should be uniform and integrated through all staff, and all consultants, Committees, Commissions, and the Board, with appropriately open lines of communication.
4. The Township should explore partnerships with Chester County regarding protection, development, and management of new open space lands.
5. The Township should be prepared to eventually own and manage a set of nature preserves or natural areas.
6. Natural resource areas that become protected should have natural area restoration plans developed for them that address invasive species issues and the lack of healthy populations of native plants and healthy natural areas (see page 3-21, *Recommendations for Chapter 3, Natural Resources*, as well).
7. Township park personnel should become more familiar with these concepts and practices.
8. Open Space Management Plans written for Homeowner Associations should also address these biological management issues. New turfing areas/ lawns should be minimized in Open Space Management Plans. Mechanisms for funding natural area restoration on HOA lands by developers should be explored.
9. A more detailed Township trails plan and feasibility study should be completed. A more detailed and refined trails plan should be incorporated into an Official Map of the Township.
10. Meanwhile, the Planning Commission and Township Engineer in particular should become more familiar with the trails plan, and work to incorporate trails and/or trail options into development proposals. The Township should be prepared to be the leading organization implementing the trails plan in Franklin Township.
11. The Township should explore the formation of a local Land Trust. The Land Trust could own and facilitate the management of small pieces of land that no other conservation entity

may wish to own. The Land Trust should ease significant lands owned by Homeowner Associations created through the development process.

12. The Township should explore future sites for a new neighborhood park. The park between 0.5 and 19.9 acres would be sufficient for the purpose. Additionally, the park should be situated to provide recreational access to residents living outside of range of other parks.
13. Future park planning should be focused towards passive recreation opportunities. This is especially important given the lack of a county facility to provide these services.
14. The Township should leverage mandatory dedication of land for recreation and open space purposes with new development, to meet any new recreational and open space needs. This could be especially advantageous with the addition of any new neighborhood park. Incentives should be provided to offer connectivity between dedicated open space and existing park infrastructure.
15. The Township should coordinate with neighboring municipalities on future park needs to prevent redundant facilities. This could include intermunicipal park considerations at Elwood Crossan Park, possibly integrating it with facilities in London Britain Township. This would have the added benefit of helping minimize the effects of the lack of a County park at present.

CHAPTER 10
UTILITIES PLAN
AND
WATER SUPPLY PLAN

INTRODUCTION

The proper facilitation of sewage, water, and energy in the township are necessary to maintain a high quality of life. However, if these tools are missapplied, they have the potential to lead to disorderly growth, in a manner inconsistent with the Township's character, needs, and future well being. The comprehensive planning process examines the presence of these utilities and how to adequately meet the needs of residents while achieving the Township's broader goals that contribute to quality of life. In essence, this means a disciplined balance of the application of utilities and the community's future vision.

UTILITIES INVENTORY

Electricity

Since 1996, Pennsylvania's consumers of electricity have had the opportunity to select their provider from a variety of providers. However, individual lines in the Township are still maintained by specifically dedicated utilities. These utilities are charged with meter readings in the area regardless of the provider from whom the consumer purchases electricity. PECO Energy maintains service in the Township.

In addition to direct provision of electricity, utilities also transmit across the Township. Within the Township are two substations, one dropping 230KV lines to 39KV, and a second which steps down power from 39KV to 4KV.

Sewage

The majority of the Township is served by On-Lot Disposal Systems (OLDS). Kemblesville Elementary School, is one of two notable exceptions, utilizing a small sewage facility. However, with the school currently being unused, little waste is being collected. The second exception is a community system serving the Heritage Village Apartments on Gypsy Hill Road. The system located on Hickory Hill Road is currently 14 years old, and serves 36 apartment units.

The majority of the Township's soils are suitable for OLDS. The soil conditions are adequate for the use of OLDS with maximum densities in all of the current zoning districts with the exception of the High Density Residential (HDR), Commercial (C), and Limited Industrial (LI) districts. Due to narrower lots in the village area, installing new systems in the area is not an appropriate option. To address these problems, the Township, through its Act 537 Plan, is exploring various public sewer options in Kemblesville. If a future use is determined for the school, its sewage collection system would need to be readdressed.

Water

The overwhelming majority of the Township is served by on-site wells. The aquifers in the Township are adequate for groundwater to be the primary source of water. With this in mind, the Township has adopted a strong water ordinance that requires the use of ground water for both public and private systems. With the majority of the area served by OLDS, water from local wells provides a far better water balance in the Township, by ensuring that aquifers are not only drained, but also recharged.

A small area near Kemblesville is served by the Pennsylvania division of Aqua America (formerly Philadelphia Suburban Water Company), and a few homes receive service from the Chester Water Authority, which also sells wholesale to retail purveyors of water in the vicinity of Franklin Township. The Artesian Water Company also has nearby facilities, but is not providing service to customers at present.

Telephone and Cable Television

Land-based telephone service in Franklin Township is provided by Verizon. Cable television is provided by Comcast. Both networks also provide for the provision of Internet service to the Township's residents.

Pipelines

Two pipelines traverse the Township, for purposes of transport only (no local utility provision). The first, operated by Chesapeake/Eastern Shore, carries natural gas, and runs between a major line outside of Parkesburg to the north and points south in Delaware. Additionally, Colonial operates a multi-fuel liquid pipeline through the township, running parallel to US-1, roughly 5 miles to its south. The pipeline enters Chester County from Maryland roughly 10 miles east of the Octoraro Creek, and follows the Pennsylvania side of the arcing border with Delaware.

RECOMMENDATIONS

1. The future provision of utilities must be tied to the Future Land Use Plan (Figure 5-2) of this Comprehensive Plan, directing utilities to future growth areas in and adjoining Kemblesville in the Kemblesville Village and Moderate Intensity Use Areas.
2. Discourages a patchwork of multiple water providers for future subdivisions. (Such a provision of water would encourage haphazard development, and threaten the Township's rural character.)
3. Revise the Township's cluster ordinance to discourage the use of community water systems from outside of the Township. As lines extend to new subdivisions, they provide a convenient path for new development, which may not always be in the Township's interest.
4. Monitor and enforce OLDS management regulations, requiring more regular pumping of systems, and periodic well monitoring in troubled areas.
5. Take a proactive approach towards septic system management (given the fact that the vast majority of Township residents use on-lot wells and OLDS). To this end, make septic system education a priority. This is particularly important for residents unfamiliar with these systems.
6. Explore contracting with a local waste disposal company to handle septic maintenance. This

would reduce the risk of system malfunctions and with proper negotiation, would provide lower pumping fees.

7. The preservation of natural features such as environmentally sensitive areas and steep slopes, and farmland preservation to temper the haphazard utility application.
8. The Township should explore local interest in high-speed internet options via T-1 networks. This would be particularly beneficial to individuals working out of their homes.
9. Promote the use of spray systems over drip systems in OLDS.

CHAPTER 11

PLAN INTERRELATIONSHIPS

The best part of this Comprehensive Plan initiative is the process of plan preparation. The process involved public outreach, consensus building, and the writing, rewriting, and editing of a comprehensive set of goals, objectives, recommendations and strategies addressing all of the components of the plan. Therefore, the plan is very interrelated and unified from a policy perspective.

The second best part of the Comprehensive Plan initiative is the designation of growth areas as Future Land Use and Natural Resource Protection Areas, as shown in the Future Land Use Plan, Figure 5-2.

The environmental, energy conservation, fiscal, economic development, and social consequences to the Plan will rise or fall based on a simple proposition: Keep the Rural Resources Areas “green” in productive agricultural use; and keep the “Kemblesville Village Areas” and the “Moderate Intensity Use Area” as viable habitats for residences, institutions, businesses and related development.

Franklin Township is notable for its rural character. The greatest legacy we can leave future generations is to retain the heritage landscape qualities of the Rural Resource Area and the Natural Resource Protection Area by limiting the encroachment of sprawl into these areas.

This Plan is clear that the incremental encroachment into the heritage landscape will have an adverse consequence on the rural character of the Township. In contrast, the improvement and enhancement of the Kemblesville Village Area will provide an opportunity for appropriate infill development and redevelopment.

Given the overarching concepts related to Future Land Use, Natural Resource Protection Areas, Cultural Resource Protection, and Open Space, the functional components of the plan are placed in perspective. For example, the Housing Plan, Transportation Plan, Community Facilities Plan, Recreation Plan, and Utilities and Water Supply Plan, are all intended to be moderated by the future land use areas. The Kemblesville Village Area should have sidewalks, the Rural Resource Area should have trails. Kemblesville could have curbs, the Rural Resource Area should not have curbs. Walk to the corner store in Kemblesville, horseback ride to Fair Hill Nature Preserve. Build townhomes in Kemblesville, and protect the cabin in the woods in the Rural Resource Area. You get the picture: transition development from the more civilized core to the more wilderness edge.

This Plan is intended to promote and protect the public health, safety, and welfare of Franklin Township. The stated goals and objectives of this Plan and the recommendations are designed to achieve these ideals.

CHAPTER 12

COMPATIBILITY STATEMENT

This Comprehensive Plan is compatible with the Chester County Comprehensive Plan, Landscapes, especially for the following reasons:

- the Kemblesville Village Area as shown in the Future Land Use Plan, is compatible with the “Rural Center” designation for the Kemblesville Area as shown in the plan titled “Livable Landscapes for Chester County – 2020”;
- the Natural Resource Protection Areas as shown in the Future Land Use Plan, is compatible with the “Natural Resources” designation in the County’s 2020 Plan; and
- the Rural Resource Area as shown in the Future Land Use Plan, is compatible with the County’s designation for the “Rural” landscape.

In addition, as it relates to London Britain, New Garden, London Grove, New London, and Elk Townships, this Comprehensive Plan is compatible with the adjoining municipalities due to:

- low intensity land use proposed by the Township, along borders with our neighboring municipalities of the same general character; and
- natural resource protection proposed by the Township, along stream corridors adjoining our neighboring municipalities.

There are, however, three important issues that need to be clarified relative to regional compatibility.

1. Although Franklin Township is host to a portion of Rt. 896, the Township does not assume that strip commercial development is inevitable over the next 10 or 20 or 30 or more years. Instead, the Township sees Kemblesville as a village, a hub, and a mixed-use core wherein development is contained, not extruded, along a portion of the directional route highway.
2. Although public water pipes run near and through the Township, this does not mean that intensive development is inevitable along these conduits. Instead, the Township sees a managed growth pattern as expressed in the Future Land Use Plan.
3. Although the Township sits at the edge of the County and the State, this does not mean that it should be the “dumping ground” for development that oozes from other places in the County. It also does not mean that it should be considered as the new frontier for growth for people who want to flee from Delaware or Maryland. Instead, the Township sees itself as one holistic place in Beautiful Southern Chester County in which a balanced pattern of development is envisioned as shown in the Future Land Use Plan.

And we really mean it.

CHAPTER 13

IMPLEMENTATION STRATEGIES

The Implementation Matrix, Table 13-1, provides a summary of the Recommendations & Implementation Strategies from the previous Chapters, and indicates the responsible entity for action along with a timeline. The Board of Supervisors, Township Manager, Planning Commission, and other Township officials should consider this Matrix each year when drafting the annual budget.

The timeline indicates “On-Going”, and short-term, mid-term, and long-term. Short-term is intended to be up to three (3) years after this Plan is adopted. Mid-term is intended to be 3 to 6 years after adoption. Long-term is intended to be 7 to 10 years after adoption. On-Going is intended to be short-term, mid-term, and long-term.

The abbreviations in Table 13-1 are for the following:

BOS	=	Board of Supervisors
EAC	=	Environmental Advisory Committee
HARB	=	Historic and Architectural Review Board
HC	=	Historic Commission
HOA	=	Homeowners Association
LA	=	Landscape Architect
OSC	=	Open Space Committee
PC	=	Planning Commission
P+R	=	Park & Recreation Committee
TE	=	Township Engineer

The timelines indicated in this chapter must be updated in 2016, in accordance with Section 301.C. of the Pennsylvania Municipalities Planning Code.

Table 13-1. Implementation Matrix

INITIATIVE	RESPONSIBILITY	TIMELINE
3-1 NATURAL RESOURCES		
3-25.1 Headwater areas ordinance provisions	BOS; PC	Short-term
3-25.2 Headwater areas retrofitting	BOS; PC	Long-term
3-26.3 Riparian buffers ordinance provisions	BOS; PC	Short-term
3-26.4 Riparian buffers restoration	OSC? New EAC?; HOAs	Ongoing
3-26.5 Stormwater management ordinance provisions	BOS; PC	Short-term
3-26.6 Hydric soils ordinance provisions	BOS; PC	Short-term
3-26.7 Hydric soils restoration	OSC? New EAC?; HOAs	Ongoing
3-26.8 Woodlands ordinance provisions	BOS; PC	Short-term
3-26.9 Greenways ordinance provisions	BOS; PC	Short-term
3-27.10 Natural areas restoration	OSC? New EAC?; HOAs	Ongoing

Table 13-1. Implementation Matrix (continued)

INITIATIVE	RESPONSIBILITY	TIMELINE
4-1 SCENIC RESOURCE PROTECTION		
4-13.1 Adopt scenic road protection standards.	BOS; PC	Mid-Term
4-13.2 Adopt a Scenic Rivers Overlay District along designated reaches of the White Clay Creek National Wild and Scenic River.	BOS; PC	Mid-Term
4-13.3 Include lands of scenic value in TDR sending areas if a TDR program is adopted by the Township.	BOS; PC; OSC	Mid-Term
4-13.4 Periodically review adequacy of landscaping and screening regulations.	BOS; PC; LA	Ongoing
4-13.5 Encourage the use of conservation easements to protect visual accents along scenic roads.	BOS; PC; OSC	Ongoing
4-13.6 Utilize the conditional use process to achieve scenic resource protection objectives.	BOS; PC	Ongoing
4-14.7 Adopt a revised form of the draft Historic Preservation Zoning article.	BOS; PC; HC	Short-Term
4-14.8 Prepare a National Register nomination for the Kemblesville Historic District.	HC; HARB; BOS	Mid-Term

Table 13-1. Implementation Matrix (continued)

4-2	HISTORIC RESOURCE PROTECTION		
4-25.1	Adopt a revised form of the draft Historic Preservation Zoning article.	BOS; PC; HC	Short-Term
4-25.2	Utilize the Historic Resource Survey in plan review.	BOS; PC; HARB; HC	Ongoing
4-25.3	Prepare a National Register nomination for the Kemblesville Historic District.	HC; HARB; BOS	Mid-Term
4-25.4	Encourage private historic preservation measures, such as conservation easements, deed restrictions, and restrictive covenants.	PC; HARB; HC	Ongoing
4-25.5	Apply to become a Certified Local Government through the PHMC and National Park Service	HC; BOS	Mid-Term
4-25.6	Include lands with Class I or II Historic Resources in TDR sending areas if a TDR program is adopted by the Township.	BOS; PC; HC	Mid-Term
4-25.7	Consider use of Township monies for the purchase of façade easements.	BOS; PC; HC; OSC	Ongoing
4-25.8	Promote voluntary preservation efforts by recognizing business owners and homeowners in Township newsletters or awarding Certificates of Merit.	HC	Mid-Term
4-25.9	Develop preservation design guidelines for Kemblesville.	HARB; HC	Mid-Term
4-25.10	Encourage traffic calming in the Kemblesville Historic District.	PC; BOS; HARB	Ongoing
4-25.11	Create a comprehensive signage system for Class I and II Historic Resources.	HC; HARB	Long-Term
4-25.12	Provide training to Historical Commission and HARB members on preservation techniques and funding opportunities.	HC; HARB; BOS	Ongoing
4-25.13	Target outreach and education to landowners in the Kemblesville Historic District.	HARB; HC	Mid-Term
4-26.14	Apply to have Kemblesville become a stop on the Chester County Villages and Towns Tour.	HC; HARB	Mid-Term
4-26.15	Explore opportunities to make the Thomas McKean birthplace a Township asset.	HC; BOS; PC	Long-Term

Table 13-1. Implementation Matrix (continued)

INITIATIVE	RESPONSIBILITY	TIMELINE
5-1 LAND USE PLAN		
5-5.1 Amend the Open Space Design (cluster) provisions of the Zoning Ordinance to be more in keeping with the character zones expressed on the Future Land Use Plan	BOS; PC	Short-Term
5-5.2 Create an Official Map in accordance with Article IV of the Pennsylvania Municipalities Planning Code (See Note below)	PC; BOS	Short-Term
5-5.3 Amend the Zoning Ordinance to create a TND Overlay District for the Kemblesville Village Area	BOS; PC	Short-Term
5-5.4 Amend the Zoning Ordinance and the Subdivision and Land Development Ordinance to create new Definitions, using terms from the Comprehensive Plan so that the ordinance lexicon matches the plan	PC; BOS	Short-Term

Note:

Franklin Township should create an Official Map, as per item 5-3.2 above and Article IV of the MPC. According to Section 401. MPC, the Township shall have the power to show elements of the comprehensive plan on the Official Map with regard to public lands and facilities, including such features as: public streets, watercourses, public ground, public parks, playgrounds, open space reservations, pedestrian ways and easements, flood control basins, stormwater management areas, and drainage easements.

Table 13-1. Implementation Matrix (continued)

INITIATIVE	RESPONSIBILITY	TIMELINE
6-1 HOUSING PLAN		
6-10.1 Accommodate a fair share of growth and development, in sync with the Future Land Use Plan, Figure 5-2	BOS;PC	Ongoing
6-10.2 Direct higher intensity development, including multi-family development, towards Rural center, away from sensitive areas	BOS; PC	Short-Term and Ongoing
6-10.3 Strengthen steep slope and riparian corridor overlay districts	BOS; PC	Short-Term
6-10.4 Encourage lot consolidation	BOS; PC	Ongoing
6-10.5 Maintain the existing housing stock	HOA; HC; PC	Ongoing
6-10.6 Rehab substandard housing	HOA; HC; PC; BOS	Mid-Term
6-10.7 Encourage a modified Open Space Design Option in Moderate Intensity Use Areas	BOS; PC	Short-Term
6-10.8 Promote a more walkable village through TND	BOS; OSC; HC; PC	Long-Term
6-10.9 Promote subdivision with rural character in Low Intensity Use Area	BOS; PC	Short-Term

Table 13-1. Implementation Matrix (continued)

INITIATIVE	RESPONSIBILITY	TIMELINE
7-1 TRANSPORTATION		
7-10.1 Focus on budgeting and implementation of <i>Streets</i> program	BOS; TE	Ongoing
7-10.2 Manage access and traffic patterns of new residential and commercial development	PC; TE	Ongoing
7-10.3 Follow recommendations of Future Land Use chapter for transportation benefits	BOS; PC	Ongoing
7-10.4 Make SR 896 less desirable as a truck route	BOS; TE; PC	Long-Term
7-10.5 Initiate SR 896/Appleton Rd. intersection project	PC; HC	Short-Term
7-10.6 Explore truck scale to cut SR 896 traffic	BOS; PC; TE	Long-Term
7-10.7 Explore roundabouts at dangerous intersections	BOS; PC; TE	Mid-Term
7-11.8 Conduct feasibility studies at municipal level	PC; TE	Ongoing
7-11.9 Support Norfolk-Southern corridor efforts	BOS; PC	Ongoing
7-11.10 Improve intra-municipal transportation network	PC; TE	Ongoing
7-11.11 Focus sidewalk improvements on Kemblesville	BOS; PC; TE; P+R	Ongoing
7-11.12 Enforce TISs and safer intersection alignments from developers	PC; BOS; TE	Short-Term and Ongoing
7-11.13 Carefully evaluate roadway turnbacks	TE; BOS	Ongoing
7-11.14 Promote park and ride to Newark	PC	Short-Term
7-11.15 Use SR 896 Corridor Project to influence planning on SR 41	PC	Short-Term
7-11.16 Consider impacts of home employment	PC	Short-Term
7-11.17 Employ traffic calming measures	PC; TE	Ongoing

Table 13-1. Implementation Matrix (continued)

INITIATIVE		RESPONSIBILITY	TIMELINE
8-1	COMMUNITY FACILITIES		
8-4.1	Continue coordination with neighboring municipalities	BOS	Ongoing
8-4.2	Channel new community facilities towards Kemblesville	BOS; PC; HC; P+R	Mid-Term
8-4.3	Develop new Township Administrative Offices in Kemblesville	BOS; PE; LA	Long-Term
8-4.4	Be advocate in future use of Kemblesville Elementary School	BOS; HC; P+R	Ongoing
8-4.5	Facilitate West Grove Fire Company's new station	BOS; PC	Short-Term
8-4.6	Amend zoning for easier community facilities creation in Kemblesville	BOS; PC	Short-Term
8-4.7	Work with local fire department and school district to coordinate new development	PC	Ongoing

Table 13-1. Implementation Matrix (continued)

INITIATIVE	RESPONSIBILITY	TIMELINE
9-1 OPEN SPACE & RECREATION PLAN		
9-11.1 Initiate a special farmland preservation effort focused on prime agricultural land.	BOS; OSC	Short-term and Ongoing
9-11.2 Continue to train and educate Open Space Committee members concerning open space preservation issues and practices	OSC	Ongoing
9-11.3 Township open space preservation efforts should be uniform and integrated	BOS; OSC	Ongoing
9-11.4 The Township should explore partnerships with Chester County regarding new open space lands	BOS; OSC	Short-term
9-11.5 Establish a set of Township nature preserves or natural areas	BOS; OSC	Ongoing
9-11.6 Natural resource areas should have natural area restoration plans developed for them	BOS	Ongoing
9-11.7 Township park personnel should become more familiar with these concepts and practices	BOS	Ongoing
9-11.8 Open Space Management Plans written for Homeowner Associations should also address these biological management issues	BOS	Short-term
9-11.9 A more detailed Township trails plan and feasibility study should be completed	OSC; BOS	Short-term
9-11.10 The Planning Commission and Township Engineer in particular should become more familiar with the proposed trails plan, and work to incorporate trails and/or trail options into development proposals	PC; BOS; TE	Short-term
9-11.11 The Township should explore the formation of a local Land Trust	OSC; BOS	Mid-term
9-12.12 The Township should explore future sites for a new neighborhood park	P+R; PC; BOS	Short-Term; Ongoing

Table 13-1. Implementation Matrix (continued)

INITIATIVE	RESPONSIBILITY	TIMELINE
9-1 OPEN SPACE & RECREATION PLAN (continued)		
9-12.13 Future park planning should be focused towards passive recreation opportunities	BOS; P+R	Ongoing
9-12.14 The Township should leverage mandatory dedication of land for recreation and open space purposes with new development, to meet any new recreational and open space needs	BOS; PC; P+R; OSC	Ongoing
9-12.15 The Township should coordinate with neighboring municipalities on future park needs to prevent redundant facilities	P+R; PC; BOS	Ongoing

Table 13-1. Implementation Matrix (continued)

INITIATIVE	RESPONSIBILITY	TIMELINE
10-1 UTILITIES PLAN AND WATER SUPPLY PLAN		
10-2.1 Tie future utilities to the Future Land Use Plan, in and adjoining Kemblesville in the Kemblesville Village and Moderate Intensity Use Areas	BOS; PC; TE	Short-Term and Ongoing
10-2.2 Discourage a patchwork of water providers to prevent haphazard development	BOS; PC; TE	Ongoing
10-2.3 Revise cluster ordinance to discourage extra-municipal water usage	BOS; PC	Ongoing
10-2.4 Monitor and enforce OLDS management	BOS; TE; HOA; SEO	Ongoing
10-2.5 Proactive OLDS management	BOS; TE; HOA; SEO	Short-Term and Ongoing
10-2.6 Explore contracting with local waste disposal company for OLDS	BOS; SEO	Short-Term
10-3.7 Use natural features to encourage better implementation of utilities	PC	Mid-Term and Ongoing
10-3.8 Explore expanding high-speed internet in Township	BOS; PC; TE	Long-Term
10-3.9 Promote the use of spray systems over drip systems in COLDS	BOS; TE; SEO; HOA	Long-Term

OLDS = On-Lot (sewage) Disposal Systems

COLDS = Community On-Lot (sewage) Disposal Systems

Appendix A

Franklin Township Woodland Classification Calculations

Franklin Township Woodland Classification Calculations

Map Number	Patch Acres	Headwater Acres	Forest Interior Acres	Steep Slope Acres	Headwater Stream Miles	Stream Miles
Class I Woodlands						
1	295.9	102.6	28.7	68.6	2.2	7.5
2	218.8	102.7	17.7	113.4	0.79	3.1
3	161.8	41.5	9.1	66.4	1.2	3.3
4	124.7	21.2	15.7	54	0.8	4.4
5	117.6	47	32.2	40.8	1.2	2.1
6	117.1	30.2	5.8	50.7	1	2.6
7	104.2	33.2	6	70.1	0.7	0.9
8	94.5	26.5	14.7	54.2	0.1	0.5
9	80.5	33.2	13.3	42.8	0.7	1.2
10	73.5	24.5	7.9	26.8	0.8	1.8
Class II Woodlands						
11	71.8	8.1	18.8	17.3	0.3	0.9
12	65.6	43.1	6.1	19.1	0.3	0.7
13	52.4	36.6	7.4	16.4	0.6	0.8
14	51.9	19.5	0.8	22.4	0.3	0.9
15	39.6	22.7	0	7.8	0.7	1.4
16	35.6	27.5	0.9	16.4	0.5	0.6
17	31.7	30.4	0	9.4	0.4	0.6
18	30.7	30.1	0	9.9	0.5	0.5
19	25.8	6.2	0.2	9.6	0	0.2
20	22.7	14.6	0	11.8	0.5	0.9
21	22.6	22.6	0.4	7.4	0.5	0.5
22	21.1	21.1	0	0	0.4	0.4
23	20.3	13	0	10.3	0.3	0.5
24	18.6	0	0.9	0	0	0.2
Class III Woodlands						
25	16.3	16.3	0	0.1	0	0
26	16.2	11.9	0	0	0.3	0.4
27	16.2	13.3	0	3.6	0.1	0.1
28	14.8	5.4	0.1	6.6	0.1	0.1
29	14.6	14.5	0	1	0.2	0.2
30	13.2	3.6	0	3.5	0.1	0.5
31	13.2	0	0	1.1	0	0.3
32	12.8	11.1	0	5.5	0.2	0.2
33	12.6	1.4	0	5.1	0	0.4
34	12.5	12.5	0	2.4	0.3	0.1
35	11.4	8.1	0	6.2	0.1	0.3
36	10.4	9.9	0	2.6	0.3	0.3

37	10.4	9.8	0	0	0	0.3	0
Map Number	Patch Acres	Headwater Acres	Forest Interior Acres	Steep Slope Acres	Headwater Stream Miles	Stream Miles	0
38	10.2	0	0	3.3	0	0.1	
39	9.5	9.5	0	2.5	0.1	0.2	
40	9.0	5.8	0	7	0	0.2	
41	8.0	0	0	5.7	0	0.2	
42	7.7	7.7	0	1.4	0	0.1	
43	7.4	7.4	0	1.3	0	0	
44	7.3	1.1	0	4.8	0	0.2	
45	6.5	0	0	3.4	0	0	
46	6.3	0	0	5.9	0	0.1	
47	5.5	0	0	2.7	0	0.2	
48	5.3	5.3	0	0.7	0	0	
49	5.3	0	0	1.7	0	0.3	
50	5.2	5.2	0	0	0	0	
51	5.1	2.8	0	0.1	0	0.1	
52	4.9	4.9	0	2.8	0	0.1	
53	4.8	0	0	1.3	0	0	
54	4.7	4.7	0	1.5	0	0	
55	4.6	0	0	2.3	0	0	
56	3.7	0	0	0.3	0	0	
57	3.6	0	0	1.8	0	0	
58	3.4	0	0	0.4	0	0.2	
59	3.1	0	0	1.8	0	0	
60	2.9	0	0	0	0	0	
61	2.9	0	0	1.6	0	0	
62	2.7	0	0	1.4	0	0	
63	2.6	2.5	0	1.8	0	0.1	
64	2.5	2.6	0	0.3	0	0	
65	2.2	2.2	0	0	0	0	
66	2.2	2.2	0	0.1	0	0.1	
67	2.1	2.1	0	1	0	0	
68	2.0	2	0	0.7	0	0.1	
69	1.9	0	0	0.1	0	0.1	
70	1.9	0	0	1.4	0	0	
71	1.7	1	0	0	0	0	
72	1.7	0	0	0.1	0	0	
73	1.4	0	0	0	0	0	
74	1.3	0	0	0.3	0	0	
75	1.2	0	0	1.2	0	0	
76	1.1	1.1	0	0	0	0	
77	1.0	1	0	0	0	0	

78		1.0		1		0		0		0		0		0
80		0.8		0		0		0		0		0		0
Map Number														
81		0.8		0		0		0		0		0		0
82		0.5		0		0		0		0.1		0		0
83		0.4		0		0		0		0.2		0		0
84		0.3		0		0		0		0		0		0

Appendix B

Goals, Objectives and Policies of “Linking Landscapes”, A Plan for the Protected Open Space Network in Chester County, PA

Open Space and Landscapes

In 1996, the Chester County Commissioners updated the County Comprehensive Plan by adopting a Policy Element entitled *Landscapes, Managing Change in Chester County 1996-2020*. This document was all encompassing, and dealt with many factors that could affect the County's anticipated growth, from utilities and housing to human services and public health. Simply stated, *Landscapes* sketched out a plan for the future of Chester County.

Although *Landscapes* is commonly called the "County Comprehensive Plan," it is in reality only the Policy Element of the larger County Comprehensive Plan. In fact, the County Comprehensive Plan for Chester County is composed of many documents called elements, such as the Transportation Plan and the Water Resources Management Plan. *Linking Landscapes* is also an element of the County Comprehensive Plan. Since *Landscapes* is the Policy Element, it sets the overall policies that are followed in all of the other County Comprehensive Plan Elements. As a result, *Linking Landscapes*, which is the Open Space Element of the County Comprehensive Plan, follows all of the policies set forth in *Landscapes*.

This chapter presents the goals, objectives and policies presented in *Landscapes* that deal with the protection or restoration of open spaces within Chester County. It also describes how the policies presented in *Landscapes* were used as the foundation that guided the development of *Linking Landscapes*. Lastly, this chapter discusses some of the practical considerations and challenges that municipalities and other organizations should always keep in mind when planning any open space project.

Goals

Landscapes presented a series of ten "guiding goals" which were developed to provide an overall picture of what Chester County could be like by the year 2020. Each goal presented a broad vision without specific details. None of the ten guiding goals within *Landscapes* dealt exclusively with open spaces, but five of them did address issues that affect the protection or restoration of open spaces. These five guiding goals were:

- **Land Use Goal** – Preserve and enhance the diversified mix of urban, suburban and rural land uses through municipal cooperation by concentrating development.

- **Resources Goal** – Sustain and enhance natural, scenic, and historic resources for the benefit of current and future generations while accommodating planned growth.
- **Economic Development Goal** – Achieve and maintain a healthy business climate to ensure continued, sound economic growth, and to preserve the quality of life that has made Chester County an attractive place to live and work.
- **Transportation Goal** – Provide an intermodal transportation system which optimizes mobility, strengthens the economy, protects the environment and is compatible with the vision for Chester County.
- **Community Facilities Goal** – Provide accessible community facilities and services which meet the residents' needs through the cooperation of the public and private sectors.

As this list indicates, protecting and restoring Chester County's open spaces will help fulfill fully half the ten guiding goals presented in *Landscapes*. This listing also illustrates how the protection and restoration of open space enhances not only the quality of life, ecology and economy of Chester County, but also its transportation system. It is quite clear that *Landscapes* considers protected and properly functioning open spaces as an essential component of the County's overall infrastructure, and not simply an added benefit.

Objectives

Within *Landscapes*, each of the guiding goals was broken down into "objectives." These objectives are more practical activities that could possibly be realized in the near future. Each objective that deals with open space protection or restoration is listed in **Figure 2.1** beneath the guiding goal with which it is associated. These open space objectives are the foundation for all open space planning within the County. If Chester County is to coordinate the protection and restoration of its open spaces – and establish a functioning Protected Open Space Network – it is important that each individual open space project be consistent with these objectives.

Figure 2.1: Open Space Objectives from Landscapes

Open Space Objectives of the Land Use Goal (1.0)

- 1.1 Urban Landscape Objective - Strengthen urban centers to serve as mixed-use centers of concentrated commercial activity, employment opportunities, institutions, and residential variety to increase diversity and provide a sense of community.
- 1.2 Suburban Landscape Objective - Concentrate new residential development in Suburban Landscapes and concentrate industries and offices at locations adequately served by necessary infrastructure and accessible to employees.
- 1.3 Rural Landscapes Objective - Preserve the open, rural character of Chester County, supporting agriculture as the primary land use while enhancing villages to accommodate future development.
- 1.4 Natural Landscapes Objectives - Restrict development in areas with significant natural resources, including stream corridors, woodlands, wetlands, groundwater recharge areas, steep slopes, and ridge tops.

Open Space Objectives of the Resources Goal (2.0)

- 2.1 Natural Resources Objective - Achieve and sustain a high-quality natural resource system to protect public health and safety, and support and protect a diversity of ecosystems.
- 2.2 Scenic Resources Objective - Conserve and enhance scenic resources that reflect the County's natural and cultural heritage.
- 2.3 Historic Resources Objective - Preserve historic and cultural resources and their appropriate settings; use historic resources and the County's existing cultural landscape as a basis for creating strong community character.

An Open Space Objective of Economic Development Goal (3.0)

- 3.1 Business Retention and Expansion Objective - Retain and expand existing businesses to preserve the tax base and provide employment opportunities.

Open Space Objectives of the Transportation Goal (4.0)

- 4.1 Highway Objective - Provide a highway system that ensures the highest degree of mobility and accessibility, enhances the economy, protects the safety of its users, and supports the future land use pattern.
- 4.3 Non-motorized Travel Objective - Promote alternative means of travel to reduce automotive dependency, increase accessibility, and improve air quality.

Open Space Objectives of the Community Facilities Goal

- 5.1 Parks and Recreation Objective - Maintain and improve the quality of life and environment for residents of Chester County through the provision of parkland and recreational facilities.
 - 5.5 Cultural Objective - Enhance cultural opportunities to maintain a high quality of life.
-

Policies and Challenges

Of course, setting open space goals and objectives is of little value if no actions are taken to implement them. For this reason, *Landscapes* included a list of policies, which if followed, will protect or restore open space. Each of these policies, and its *Landscapes* reference number, is presented in *Figures 2.2* through *2.13* presented at the end of this chapter.

In the ideal world, a well thought out plan for protecting open spaces should lead to actions that improve the landscape and the community in a timely manner. In reality however, there are a great number of complications and problems that can arise when trying to implement such a plan. Open space projects can be derailed by inadequate funding, environmental permitting or even the unpredictable forces of nature. For this reason, *Figures 2.2* through *2.13* also include some of the practical considerations and challenges commonly faced when trying to protect open spaces. These challenges have been included to highlight the level of work and commitment required in establishing and maintaining protected open spaces. Although they may appear daunting, it is better to be aware of these challenges before beginning an open space project, than to find out about them after it has begun.

Policies Supporting an Open Space Network

Although all the policies listed in *Figures 2.2* through *2.13* encourage the protection and restoration of open spaces, the following six policies specifically recommend the establishment of a Protected Open Space Network:

- Develop a permanent open space system (1.2.5.)
- Create an open space network of natural resources (1.4.1.)
- Preserve and enhance the existing network of stream valleys (2.1.3.)
- Link concentrations of development through a network for non-motorized travel (4.3.2.)
- Establish a County-wide greenway system of protected natural resources (5.1.2.)
- Link the County-wide open space system to a regional network (5.1.8.)

Key Challenges

There are a number of key challenges that appear repeatedly in the *Figures 2.2* through *2.13*. The need to inventory resources, and assess future needs appears on most of the tables. Likewise, the role that private property owners play in preserving open space is frequently listed. Coordinating actions between government, private and non-profit land trusts is a common challenge, which will always be a part of open space planning. Similarly, the need to secure funding is also an ongoing – but essential – element of open space enhancement and preservation. Meeting these challenges will require creativity, resourcefulness, and a good measure of elbow grease, but that is what the citizens of Chester County must do if they want to implement the open space policies presented in *Landscapes*.

Figure 2.2: Open Space Policies of the Urban Landscapes Objective

<i>Landscapes Policy</i>	<i>Challenges</i>
(1.1.7.) Acquire, develop, and maintain community and neighborhood parks.	<ul style="list-style-type: none"> • There is a limited supply of undeveloped or naturalized land in many urban areas. • Urban property can be very expensive to acquire. • Hazardous wastes and other environmental concerns should be investigated before acquiring urban land.
(1.1.9.) Protect and restore urban historic and natural resources.	<ul style="list-style-type: none"> • Urban parks are more likely to suffer from vandalism, and need ongoing maintenance. • Providing staffing and maintenance of urban parks requires a consistent source of funding.

Figure 2.3: Open Space Policies of the Suburban Landscapes Objective

<i>Landscapes Policy</i>	<i>Challenges</i>
(1.2.5.) Develop a permanent open space system linking existing areas and adding new areas.	<ul style="list-style-type: none"> • Implementing this policy will require extensive cooperation and coordination. • The permanent preservation of open space usually requires the purchase of property or easements.

Figure 2.4: Open Space Policies of the Rural Landscape Objective

<i>Landscapes Policy</i>	<i>Challenges</i>
(1.3.1.) Encourage agricultural preservation, with priority given to areas with prime agricultural soils, and Agricultural Security Areas.	<ul style="list-style-type: none"> • Private land owners may not choose to participate in agricultural preservation.
(1.3.2.) Encourage cluster development on non-prime agricultural soils which maintains open space and retains the overall rural character.	<ul style="list-style-type: none"> • Private land owners may not choose to participate in cluster development for prime agricultural soils preservation. • Local officials may not want to include clustering in their ordinances.

Figure 2.5: Open Space Policies of the Natural Landscapes Objective

<i>Landscapes Policy</i>	<i>Challenges</i>
(1.4.1.) Create an open space network of natural resources for the many environmental benefits it provides.	<ul style="list-style-type: none"> • Inventories of natural resources must be periodically updated. • Implementing this policy will require extensive coordination.
(1.4.2.) Encourage municipal programs for natural resource preservation throughout Chester County.	<ul style="list-style-type: none"> • Funding is required for such municipal programs. • Municipalities may not have the staff available to administer natural resource preservation programs.
(1.4.3.) Encourage cooperation among conservation groups, municipalities, and the County to protect natural features.	<ul style="list-style-type: none"> • Implementing this policy will require extensive cooperation and coordination. • Conservation groups and municipalities may not choose to participate together in resource preservation.
(1.4.5.) Encourage cooperation between conservation and preservation groups to protect both natural features and historic resources.	<ul style="list-style-type: none"> • Conservation and preservation groups may not choose to participate together in resource preservation.

Figure 2.6: Open Space Policies of the Natural Resources Objective

Landscapes Policy	Challenges
(2.1.3.) Preserve and enhance the existing network of stream valleys and their aquatic habitats.	<ul style="list-style-type: none"> • An inventory of aquatic life will be required.
(2.1.4.) Prevent development in floodplains to protect public safety and water quality, and reduce public costs from flood damage.	<ul style="list-style-type: none"> • Certain development in floodplains can be legal and necessary. • Removing existing development in floodplains can be impractical.
(2.1.5.) Preserve wetlands for their ecological and hydrological functions.	<ul style="list-style-type: none"> • Detailed studies are needed to identify wetlands.
(2.1.6.) Preserve and enhance buffer areas around water bodies to mitigate environmental and visual impacts from adjacent uses and activities.	<ul style="list-style-type: none"> • Detailed studies are often required to determine the appropriate buffer area around a stream. • Private land owners may choose not to participate in stream preservation.
(2.1.8.) Support upgrades of stream quality designations by the Pennsylvania Department of Environmental Protection.	<ul style="list-style-type: none"> • Certain landowners may oppose the upgrade of quality designations for streams on their property.
(2.1.10.) Preserve and manage large woodland areas for their wildlife habitat and scenic values and their contributions to groundwater recharge, improved air quality, and erosion control.	<ul style="list-style-type: none"> • The permanent preservation of woodland usually requires the purchase of property or easements. • Managing woodlands requires a long-term commitment by trained staff.
(2.1.11) Preserve and manage habitats necessary for survival of existing rare, threatened and endangered species identified in the PNDI and the Chester County Natural Areas Inventory.	<ul style="list-style-type: none"> • Inventories of existing habitats must be updated periodically. • The permanent preservation of habitat usually requires the purchase of property or easements. • Managing habitats requires a long-term commitment by trained staff.
(2.1.17) Protect existing woodlands and encourage reforestation.	<ul style="list-style-type: none"> • Reforestation requires long-term commitment by trained staff. • Reforestation can be extremely labor-intensive.

Figure 2.7: Open Space Policies of the Scenic Resources Objective

Landscapes Policy	Challenges
(2.2.1.) Retain agriculture and villages to preserve the Rural Landscapes of the County.	<ul style="list-style-type: none"> • The viability of agricultural operations is greatly influenced by free market conditions that cannot be controlled. • Private land owners may choose not to participate in rural preservation.
(2.2.2.) Support the protection of designated scenic rivers and designation of additional stream segments.	<ul style="list-style-type: none"> • Private land owners may choose not to participate in scenic stream preservation.
(2.2.3.) Preserve visible ridgelines which contribute to the scenic character of the community.	<ul style="list-style-type: none"> • Private land owners may choose not to participate in scenic ridgeline preservation. • Preserving scenic ridgelines requires the preservation of both the ridge and the surrounding landscape. • Hilltops are ideal locations for transmitters and antennas.
(2.2.4.) Preserve and enhance scenic qualities along major roadways, especially gateways to the County and State.	<ul style="list-style-type: none"> • Most properties along scenic roadways are privately owned. Private land owners may choose not to participate in scenic roadway preservation. • Preserving scenic roadways requires the preservation of both the roadway and the surrounding landscape.
(2.2.5.) Encourage the design of new development to complement a community's scenic and historic character.	<ul style="list-style-type: none"> • Private land owners may choose not to participate in scenic preservation. • Local zoning ordinances may not include certain scenic preservation techniques.

Figure 2.8: Open Space Policies of the Historic Resources Objective

Landscapes Policy	Challenges
(2.3.1.) Promote an understanding of and appreciation for the County's historic and cultural landscape resources.	<ul style="list-style-type: none"> • Public education requires a long-term commitment by trained staff.
(2.3.2.) Promote and encourage a cultural landscape approach to the County's historic resources.	<ul style="list-style-type: none"> • Private land owners may choose not to participate in historic preservation.
(2.3.3.) Use the County's historic resources and cultural landscape as a basis for revitalizing and creating strong urban, suburban, and rural landscapes	<ul style="list-style-type: none"> • Implementing this policy will require extensive coordination. • The revitalization of communities is greatly influenced by free market conditions, and may require considerable incentives.
(2.3.4.) Encourage compatible development within and adjacent to historic districts and significant cultural landscapes.	<ul style="list-style-type: none"> • Private land owners may choose not to participate in historic preservation.
(2.3.5.) Promote the County's historic and cultural heritage in tourism and economic development programs.	<ul style="list-style-type: none"> • Implementing this policy will require extensive coordination. • The tourism industry is greatly influenced by free market conditions that cannot be controlled.
(2.3.7.) Support the identification and designation of eligible national, state, and local historic properties.	<ul style="list-style-type: none"> • Private land owners may choose not to participate in historic preservation. • Studies required to properly identify and designate an historic site may be too expensive for private property owners.

Figure 2.9: Open Space Policies of the Business Retention and Expansion Objective

<i>Landscapes Policy</i>	<i>Challenges</i>
(3.1.4.) Maintain agriculture as a significant sector of a growing, diversified economy.	<ul style="list-style-type: none"> • Agriculture operations are greatly influenced by free market conditions that cannot be controlled.
(3.1.6.) Encourage public/private partnerships to maximize opportunities to create a County-wide infrastructure of open space.	<ul style="list-style-type: none"> • Implementing this policy will require extensive coordination.
(3.1.7.) Retain and expand the cultural heritage of the County and use it as a basis to promote tourism.	<ul style="list-style-type: none"> • The tourism industry is greatly influenced by free market conditions that cannot be controlled.

Figure 2.10: An Open Space Policy of the Highway Objective

<i>Landscapes Policy</i>	<i>Challenges</i>
(4.1.6.) Create, enhance, and protect the aesthetic and scenic qualities of the entire road network.	<ul style="list-style-type: none"> • Most properties along scenic roadways are privately owned. Private land owners may choose not to participate in scenic roadway preservation. • Preserving scenic roadways requires the preservation of both the roadway and the surrounding landscape.

Figure 2:11: Open Space Policies of Non-motorized Travel Objective

Landscapes Policy	Challenges
(4.3.1.) Protect existing corridors and create new corridors to provide opportunities for non-motorized travel with links to other means of travel.	<ul style="list-style-type: none"> • Adding non-motorized traffic in areas where the existing motor vehicle roadways are congested even with improvements can create unsafe conditions. • Widening existing roadways and the installation of median barriers eliminate road crossings for non-motorized traffic.
(4.3.2.) Link concentrations of development through a network of corridors for non-motorized travel.	<ul style="list-style-type: none"> • Implementing this policy will require extensive coordination. • Private land owners may choose not to participate in non-motorized travel preservation.
(4.3.3.) Enhance pedestrian and bicycle connections within and between residential, commercial and employment areas, and between community facilities.	<ul style="list-style-type: none"> • An inventory of existing trail conditions will be required.
(4.3.5.) Provide separate bicycle facilities and pedestrian facilities to avoid user conflicts.	<ul style="list-style-type: none"> • Without extensive signing and education, pedestrians and bicyclists often use the same trails.

Figure 2:12: Open Space Policies of the Parks and Recreation Objective

Landscapes Policy	Challenges
(5.1.1.) Promote the protection of natural resources with park land acquisition and stewardship.	<ul style="list-style-type: none"> • Creating parkland requires extensive planning and construction efforts. • Land stewardship requires a long-term commitment by trained staff.
(5.1.2.) Establish a County-wide greenway system of protected natural resources.	<ul style="list-style-type: none"> • An inventory of potential greenways will be required. • Land acquisition requires funding for purchases, or extensive coordination to facilitate donations.
(5.1.3.) Provide new land for open space and recreational facilities to meet forecasted needs.	<ul style="list-style-type: none"> • Land acquisition can be costly and requires funding for purchases, or extensive coordination to facilitate donations. • Forecasts of open space and recreation facilities needs must be regularly updated.
(5.1.4.) Establish a trail and bikeway network to link residential areas, business uses, community facilities, and parks.	<ul style="list-style-type: none"> • An inventory of potential trails will be required. • Land acquisition requires funding for purchases, or extensive coordination to facilitate donations.
(5.1.5.) Ensure that special needs populations have access to parks, recreational facilities, and neighborhood parks.	<ul style="list-style-type: none"> • An assessment of special needs populations is required. • Adding handicap access to existing facilities can be expensive.
(5.1.6.) Provide diverse active recreational facilities and programs.	<ul style="list-style-type: none"> • Organizing and funding recreational activities can be time consuming and expensive.
(5.1.7.) Encourage and support joint recreational use of facilities among state, county, and municipal governments, local organizations, and school districts.	<ul style="list-style-type: none"> • Implementing this policy will require extensive coordination.
(5.1.8.) Cooperate with surrounding areas to link the County open space system to a regional network.	<ul style="list-style-type: none"> • Implementing this policy will require extensive coordination. • An inventory of open space outside the County will be required.

Figure 2.13: Open Space Policies of the Cultural Objective

<i>Landscapes Policy</i>	<i>Challenges</i>
(5.5.1.) Preserve, restore, and utilize historic resources to help to protect and promote the cultural heritage of Chester County.	<ul style="list-style-type: none"> • Private land owners may choose not to participate in historic preservation. • Restoring historic properties can be much more expensive and time consuming, than demolishing and rebuilding. • Historic sites may not meet modern standards, such as handicapped accessibility or electrical wiring.
(5.5.2.) Expand cultural opportunities by supporting the arts, including the development of theaters, arts schools, concert/music halls, museums, galleries, studios, publishing houses, etc.	<ul style="list-style-type: none"> • Commercial theaters, concert/music halls, and galleries are greatly influenced by free market conditions that cannot be controlled. • Art institutions often require extensive funding sources such as charitable foundations.
(5.5.3.) Increase coordination among school districts, colleges, and municipal governments to provide arts and cultural programs.	<ul style="list-style-type: none"> • Implementing this policy will require extensive coordination. • An inventory of cultural programs will be required. • Public education requires a long-term commitment by trained staff.

Appendix C

Community Values Survey (September 24, 2004)

Brandywine Conservancy
P.O. Box 141
Chadds Ford, PA 19335
610-388-8314

Franklin Township
2004 Comprehensive Plan/ Open Space Plan Updates
Community Values Survey
FINAL Results with Analysis
September 24, 2004

Overview -

In November 2003, about 1500 Franklin Township Community Values Surveys were mailed to Franklin Township landowners. A total of 406 surveys were received and tallied by volunteers from Franklin Township, representing slightly more than a 25% return rate.

Below are the results of the Survey, tabulated as the number of responses to each option, followed by Commentary on those results.

1. Why did you choose to live in Franklin Township? (Please select the three most important reasons from the following list.)

42	Lived here all my life
350	Rural, quiet lifestyle
118	Housing availability or cost
101	Close to work
63	Family and friends nearby
282	Scenic beauty
162	Quality of schools
20	Low taxes
1	Other

***Comments** – Two responses (shown in bold above) stand out as the most important factors – “Rural, quiet lifestyle” (86% response rate), and “scenic beauty” (69%). “Quality of schools” rates a fairly distant third (40%), with less than half the ‘votes’ received by the “rural, quiet lifestyle” choice. More than merely “quality of life” issues or amenities (i.e. nice to have, but decidedly secondary), these factors appear to be central in residents’ decision-making processes.*

2. Other than a change in your place of employment, which of the following factors would be most likely to cause you to leave Franklin Township? (Again, please select the three most important reasons from the following list.)

235	Changes in unique local character
4	Inadequate parks and recreation

97	Quality of schools
348	Area becoming over-developed
289	Taxes too high
81	Crime rate
3	Inadequate housing opportunities
13	Inadequate shopping opportunities
10	Inadequate community services
18	Inadequate farming opportunities
70	Environmental hazards
5	Other

Comments - By far the greatest reason (86%) some people might leave Franklin Township is if the township is "over-developed." This ranks notably higher than worries over spiraling taxes (71%), which is perhaps why the open space referendum was successful in 2002. In general, respondents do not favor additional tax increases by significant margins (see response to Question 16, below). "Changes in unique local character" scored third place here (58%), which ties in with a fear of over-development. Part of the visioning process for the Comprehensive Plan update could address what these perceived "unique" local character traits are and what being "over-developed" means, though distinct clues are given in the responses to several questions, including Question 11 below, on how to spend the new open space preservation funds.

3. Which of the following issues do you believe are the most important to consider when planning the future of Franklin Township? (Please select the three issues you feel are most important.)

104	Agricultural preservation
8	Community recreation opportunities
195	Conservation of scenic landscapes and views
14	Housing affordability
172	Traffic and road conditions
37	Adequate sewage disposal
111	Conservation of quality water supply
9	Employment opportunities
17	Protection of historic resources
236	Natural resource protection (e.g., groundwater, floodplains, wildlife habitat, woodlands, etc.)
4	Diversity of housing types
14	Shopping opportunities
250	Retention of rural atmosphere
0	Other

Comments - Again, retention of Franklin Township's rural atmosphere received the strongest support (62%), with "natural resource protection" a close second (58%). Both of these contribute directly to the third-placed selection, "conservation of scenic landscapes and views" (48%). "Traffic and road conditions" are worth noting as a close fourth (42%). Interestingly, agricultural preservation ranked only sixth (26% as a planning issue), though that is the usual means used to preserve rural character. It is

often forgotten or ignored. It also relates to the retention of the rural atmosphere.

4. What in your opinion, is the adequacy of the following services in meeting the needs of Township residents? (Please check either adequate, inadequate, or no opinion for each category.)

Category	Adequate	Inadequate	No opinion
Maintenance of State Roads (<i>Map on opposite page</i>)	255	114	37
Maintenance of Township roads (<i>Map on opposite page</i>)	167	194	45
Police protection	247	80	79
Fire protection	273	33	100
Parks and recreation areas	287	58	61
Overall effectiveness of Township government	99	175	132
Trash removal in the Township	283	29	94
Public water and/or sewer service (where applicable)	90	36	280
Cable services	216	87	103
Recycling opportunities	284	35	87
Other			

Comments – Generally respondents felt that most of the services listed did meet their needs, and by fairly wide margins. Two apparent exceptions are 1) Township road maintenance, and 2) Overall effectiveness of Township government, though in neither case was there a majority, if one factors in the “No Opinion” votes (which one probably should). 48% felt the “maintenance of Township roads” is inadequate, and 43% felt Township government is ineffective overall. It is worth noting that most of these votes were cast prior to the Supervisors elected after the November, 2003 elections either took office or had been in office long.

5. Are there any roadway locations or intersections within the Township which you believe to be dangerous or need to be better maintained? If so, please state where.

Comments - A complete tally can be provided on a separate sheet. The two intersections that were the most frequently cited as either dangerous or in need of better maintenance are both along State Route 896:

1. Rtes. 896 and 841 (72 respondents)
2. Rte. 896 and Appleton (69 respondents)

Next were seven roadways/ intersections that received between 15-19 votes each.

6. Do you favor the use of traffic lights as a means to control traffic, or would you prefer to use other means, such as four-way stops or roundabouts? (Please check one box.)

102	Traffic lights
268	Other means of controlling traffic
20	No opinion

Comments – Respondents favored means other than traffic lights by a wide margin (69% - 26%). Several respondents wrote in favoring ‘4-way stops,’ though there are other possible measures, notably including traffic circles or roundabouts. Perhaps these two primary alternatives can be further explored during the Comprehensive Plan “Visioning” and public input processes. This exploration could include investigating

7. If 80 houses could be built on 100 acres, which of the following development patterns would you prefer? (Please check one box.)

- | | |
|-----|---|
| 156 | Houses spread fairly evenly over the entire tract on 1-acre+ lots. |
| 140 | Houses built on 1/4-1/2 acre lots on one part of the tract (as in many 'cluster options', for example) leaving a large amount of permanent open space on the remainder of the tract. |
| 87 | Attached houses and/or houses on very small lots (including less than 1/4 acre lots, as in a traditional village pattern), with the great majority of the tract left as permanent open space and/or farmland. |
| 23 | Doesn't really matter |

Comments – Taking the responses individually indicates a slight favoring (38%) of conventional subdivision design (the so-called “cookie-cutter” approach) over a perhaps less familiar cluster approach that supports preservation of more open space (34%). This may be somewhat at odds with responses on several other questions and especially # 15 below, in which “conventional subdivisions were not preferred over other development approaches. That may indicate a need for further education of the citizenry what the township can and cannot do to protect natural resources, and in planning techniques in general. However, another way of interpreting these results is, if responses two and three are combined, the cluster/ open space proponents have the majority (56%). Some respondents may not have liked the cluster developments they have seen, as opposed to what is possible, and others may not like development at all.

8. Where commercial development is permitted, which of the following development patterns would you prefer? (Please check one box.)

- | | |
|-----|--|
| 69 | Strip centers with linear strips of stores fronting on parking areas, such as exist along the Baltimore Pike in Jennersville. |
| 72 | Commercial development limited to smaller individual buildings, either free-standing or in groups that are broken-up to avoid the impression of long strips of buildings and parking lots, such as along Route 41 between Avondale and the State Line. |
| 219 | Traditional village-style development with relatively small individual buildings fronting directly on the street, with parking generally to the rear, and possibly with mixed residential/non-residential uses (see diagram for example). |
| 34 | Doesn't really matter |

Comments – By far the largest response favored traditional village-style commercial development (56%). A low percentage of respondents (18% each) prefer either conventional strip centers or “commercial clusters.” This could indicate strong support for efforts to blend new commercial development into the township's only traditional village of Kemblesville.

9. How satisfied are you with the current level of land use regulation in Franklin Township? (Please check one box.)

- | | |
|-----|---|
| 136 | Unfamiliar with the current regulations |
| 30 | Satisfied with current regulation level |
| 226 | Current regulations not strict enough |
| 9 | Current regulations are too strict |

Comments – A small majority of respondents feel that current township land use regulations are not strict enough (56%), while only 2% feel they are too strict. About 7%

9. How satisfied are you with the current level of land use regulation in Franklin Township? (Please check one box.)
- 136 Unfamiliar with the current regulations
 - 30 Satisfied with current regulation level
 - 226 Current regulations not strict enough
 - 9 Current regulations are too strict

Comments – A small majority of respondents feel that current township land use regulations are not strict enough (56%), while only 2% feel they are too strict. About 7% feel they are “just right.” But again indicating a need for further education of the citizenry is the result that 34% are unfamiliar with the current regulations. This may indicate an important role for the Comprehensive Planning process. But of those who feel they are familiar with regulations, 85% feel they are not strict enough.

10. Should a tract which includes sensitive natural features like wetlands, woodlands, and steeply sloping areas, be permitted less development than one which does not? (Please check one box.)

22
9

Comments – A full 93% of respondents feel that a tract with sensitive natural resources should be allowed less development than one without. Respondents to this question cut across all ‘lines,’ or in other words, they cut across any other categorizations that might be made about the respondents. For example, many respondents who want no new taxes want natural resources protected (see question 16 below). This response should also be related to the responses to questions #7 and #9 above.

Comments – A full 93% of respondents feel that a tract with sensitive natural resources should be allowed less development than one without. Respondents to this question cut across all 'lines,' or in other words, they cut across any other categorizations that might be made about the respondents. For example, many respondents who want no new taxes want natural resources protected (see question 16 below). This response should also be related to the responses to questions #7 and #9 above.

11. In light of the new Open Space Funding that was approved by Township voters in 2002, please rank the following types of open space in terms of which you would most (1) and which least (7) prefer to see preserved: (Please rank 1-7.)

Farmland
 White Clay Creek corridors
 Elk Creek corridor
 Woodlands
 Wetlands
 New active recreational lands (e.g. ballfields)
 Other (please describe):

Responses -

Open Space Type/ Rank	1	2	3	4	5	6	7
Farmland	162	45	46	26	76	19	4
White Clay Creek corridor	104	74	70	61	28	4	1
Elk Creek corridor	17	76	65	77	84	17	0
Woodlands	77	94	78	68	22	4	1
Wetlands	39	56	67	54	76	29	2
New active rec. lands	15	8	15	11	37	231	21
Other	1	1	-	-	2	4	9

Comments – Farmland clearly received the highest number one votes. Yet if the top three ranks are summed, farmland (253 votes) is virtually tied with the White Clay Corridor (248 votes) and woodlands (249 votes). Thus, those three types of open space comprise the top tier. In fact, a White Clay Creek corridors (there are two branches in Franklin Township) preservation effort would include all three of these preferences. Meanwhile, the Elk Creek Corridor and wetlands comprise a second tier. Notably, new active recreational lands (e.g. ballfields) received by far the fewest high-ranked votes and the most 6th and 7th placed votes.

12. A few Chester County townships like West Fallowfield and West Marlborough (and most in Lancaster County) have strong agricultural zoning ordinances allowing only one house lot per 20 - 30 acres. Others, such as London Grove, use 10-acre per lot zoning to encourage farming and discourage dense subdivisions. However, this agricultural zoning can be written to allow farmers to sell off a small lot or two to support the farm. In Franklin Township today, the largest zoning district allows one house lot per two acres. Should Franklin use this agricultural zoning approach to protect some of its farmland and best soils? (Please check one box.)

181 Yes, use the 10-acre per lot zoning approach
 153 Yes, use the 20-acre per lot zoning approach
 49 No, keep it the way it is now
 19 No opinion

survey own less than ten acres of land, and so would not themselves be affected by such a change. But, this does not mean larger land owners do not also support it. Further investigation would be necessary to determine to what degree and under what circumstances this may be supported by a majority of larger land owners. For now there is clearly a large amount of support for farmland preservation, and more research is warranted into a rezoning effort as one tool to achieve that.

13. Another way to protect farmland and open space is through a voluntary transfer of development rights program or "TDR." In TDR "sending areas," such as farmland where we don't want development, landowners have the option to sell their development rights to some other party - a developer. The developer then uses these additional development rights to add to whatever he or she would normally be allowed to build in a "receiving area." Should this approach be seriously considered to help preserve Franklin's historic agricultural character and natural resources? (Please check one box.)

145	Yes
95	No
27	No opinion
132	Do not understand question

Comments – While more respondents supported the use of TDRs (36%) than any other choice, nearly as many people and one third of all respondents (33%) did not understand the question. The use of a TDR program holds significant potential for a township like Franklin. Citizen 'buy-in' can be very important to a successful program, so it may be worth the effort to better educate the citizenry on how it works.

14. Recognizing that residential development will occur, what type(s) of new dwelling units would you like to see in the Township? (Please check as many as apply.)

384	Single-family houses
85	Semi-detached (twins)
22	Garden apartments
62	Townhouses
3	High rises
5	Mobile homes
0	Other (please describe):

Comments – A large majority of respondents chose single family homes only as the preferred residential housing stock type, although slightly less than half (42%) support alternate forms of housing. It is interesting that anybody supported high rises.

15. If new residential development must occur in Franklin Township, what overall form would you prefer it takes? (Please check as many as apply.)

81	Conventional subdivisions
182	Scattered farm clusters
187	Villages/ hamlets surrounded by open spaces
38	A small town

Comments – Approximately the same number of respondents prefer village-style residences as scattered farm clusters (46% and 45% respectively). Both would presumably include large amounts of open space, whether farmland, natural areas, or some combination of types. What is perhaps more noteworthy is that the distant third

16. Would you support special purpose taxation of real estate for any of the following specific purposes? (Please check yes or no for each category.)

Yes	No	
125	256	Improved Township road maintenance <i>(Please refer to inside back cover for map of Township roads).</i>
94	287	Expanded police protection
36	333	Municipal recycling program
59	317	Public water supply
30	338	Improvements to municipal administration and police building facilities
97	274	Expanded Ambulance service
55	320	Public sewers
2	0	Other

Comments – No new taxes are supported for any of the listed purposes by a wide margin. The closest margin, Township road maintenance, “lost” by a 67-33% margin. This despite the fact that the “maintenance of Township roads” is cited as inadequate in the response to Question #4 above. This makes the victory of the open space taxation referendum in 2002 by a 70-30% margin all the more impressive.

17. For each of the following recreational activities, please indicate those activities in which you and members of your household currently participate, those activities in which you would like to participate if facilities were more available, and those activities for which you would support Township action to facilitate. (Check as many as apply.)

Recreation Activity	Currently participate	Would like to participate	Would support Twp. action to facilitate
Sight-seeing or pleasure driving	189	6	10
Walking/hiking/jogging	289	28	51
Nature enjoyment/study	208	32	41
Hunting	54	10	13
Fishing	95	29	25
Swimming	92	18	14
Soccer/Football/Lacrosse/field hockey	85	18	25
Baseball/softball	68	14	20
Tennis	54	19	12
Basketball	45	11	11
Volleyball	19	15	9
Bicycling	126	33	37
Skateboarding	20	4	4
Organized exercise/fitness activities	60	31	13
Winter sports (e.g., ice skating, cross-country skiing)	39	51	32
Off road vehicle use (including snowmobiling)	23	11	9
Camping	57	17	9
Picnicking	82	20	15
Golf	91	10	6
Archery or target practice	33	18	17
Horseback riding	61	39	34

Comments – The top three responses are the first three: walking, nature enjoyment, and pleasure driving; bicycling is fourth most popular. These are all common activities that require little to no special infrastructure, though, with the exception of pleasure driving, they would be enhanced with special off-road trails. This could be interpreted as support for development of more facilities for these kinds of activities, for example a township-wide trail network. Fishing and swimming are the next most popular activities, followed by golf in sixth place.

18. Where do you generally participate in recreational activities? (Please check all that apply.)

298	At home
145	At local sites within Franklin, including parks
94	At local parks outside Franklin Township (e.g., Elk, London Britain, London Grove, etc.).
151	White Clay Creek State Park (PA)
118	Parks in Delaware
149	Fair Hill NRMA, MD
62	Other State Parks (PA)
158	Alongside local roads (walking, jogging, bicycling)
63	At school
33	At work
180	At private recreational sites (e.g., at YMCA, spas, athletic clubs).
15	Other

Comments – By far the greatest number of people (73%) participate in recreational activities at home (primarily their back yards, presumably), followed by participation at private facilities (44%). This is followed by “along local roads,” and a similar scoring between White Clay Creek State Park, Fair Hill Natural Resource Management Area in Maryland, and “At local sites within Franklin, including parks.” Clearly, formal recreational sites are in the second tier of choices, although they are still significant. The popularity of “around the home” choices may indicate the value in and the support for more local open spaces, including those associated with residential developments, as is realized through cluster development and partial TDR options, and possibly local trails.

19. Should the Township promote cooperation with neighboring townships and Maryland regarding regional issues and services, and, if so, in regard to which of the following would you support regional cooperation, involving one or more of Franklin's neighbors: (Please check as many as apply.)

260	Trails
215	Parks and Recreational Facilities
139	Library
158	Police
193	Fire/ Emergency Services
256	Watershed Planning
29	No, the Township should not enter into regional cooperative efforts.
21	No opinion

Comments – Trails and watershed planning emerge as the two items with the most support for regional planning. Both issues are in fact being worked on in neighboring townships, perhaps especially in the White Clay watershed. Both are also aspects of

20. Please indicate approximately where you live (circle the number in the appropriate area on the map below).

Area A	Area B	Area C	Area D
78	82	110	82

Comments – The respondents live fairly evenly distributed across the township, though of the 352 responses to this question, more respondents live in the Elk Creek watershed portion of the township than anywhere else. This includes some of the more rural parts of the township, and notably not the Village of Kemblesville area. Still, it is difficult to draw any connection between the responses and where people live based on this information alone.

21. Approximately how large is your property?

33	Less than 1 acre
200	Between 1 and 2 acres
128	Between 2 and 10 acres
33	Between 10 and 50 acres
6	More than 50 acres

Comments – Most respondents (90%) own less than ten acres of land; almost half own between one and two acres. Over half (57%) own two acres or less.

22. How long have you lived in Franklin Township?

3	Less than 1 year
111	1 to 5 years
98	5 to 10 years
125	10 to 25 years
70	over 25 years

Comments – Almost half (48%) of the respondents have lived in Franklin Township over ten years, and almost half less; another 24% between five and ten years.

23. What are the current principal uses of your property? (Check as many as apply.)

397	Residence
34	Farm
24	Home business
3	Commercial
7	Investment (including residence(s) rented to another)
-	Industrial/Manufacturing
-	None (vacant)
-	Other

24. Please describe your immediate neighborhood

0	Mobile home park
4	Village or hamlet
96	Scattered farms/ open setting
184	Residential subdivision

136 | Scattered residences with varied lot sizes
0 | Other:

Comments – Compared with the response to Question #15 about the preferred form of new residential developments, many respondents would prefer to see a form they themselves do not live in, the village or hamlet. Why that is and what it might mean for the new Comprehensive Plan are issues that may be worth exploring.

25. Please tally the number of persons in your household in each age group.

Males	Females	Age groups
59	36	0-5 years
82	74	6-11 years
79	96	12-18 years
203	217	19-45 years
179	170	45-65 years
28	34	over 65 years

26. Please indicate the approximate range of your total combined household income.
(This information to verify Census data only.)

3	Less than \$10,000 per year
8	\$10,000-\$29,999 per year
50	\$30,000-\$59,999 per year
120	\$60,000-\$99,999 per year
170	Over \$100,000 per year

Comments – These responses indicate a higher percentage came from those with a household income of over \$100,000 (48%) than occurs in general in Franklin Township (38%, according to the 2000 Census).

27. Where is the principal place of work for employed members of your household?
(Please indicate the general location of employment for each working adult.)

42	Work at home/farm
45	Kennett Square area
35	West Grove/ Avondale
43	Other area in Chester County
28	Delaware County
5	Lancaster County
14	Work elsewhere in Franklin Township
106	Newark, DE area
131	Elsewhere in Delaware (state)
39	Maryland
33	Other (not specifically listed):

Comments – A large number of respondents (237) work in Delaware, as many as indicated they work in Pennsylvania (depending on where the "others" work).

28. How would you describe the current primary occupation of your household members? (Please check one occupation for each adult household member.)

13	Farm related
----	--------------

55	Manufacturing
61	Sales
48	Retired
48	Homemaker or Housekeeper
12	Government Administration
23	Transportation or utilities
11	Student
4	Unemployed
312	Services (including all professional services like banking, insurance, medicine, law, and education, as well as personal types of service including entertainment, social services)
5	Other

29. Please offer other comments on issues which you believe should be addressed by the Township either now or in the future.

See separate photocopied pages ...

Appendix D

Resolution for Comprehensive Plan Adoption

FRANKLIN TOWNSHIP, CHESTER COUNTY, PENNSYLVANIA

RESOLUTION NO. 2006-04

WHEREAS, the Township of Franklin is authorized by Article III, Section 302 of the Pennsylvania Municipalities Planning Code (Act 247 of 1968, as amended) to "adopt and amend the Comprehensive Plan as a whole or in parts"; and

WHEREAS, the Franklin Township Board of Supervisors, in conjunction with the Franklin Township Planning Commission, Comprehensive Plan Task Force and the Consultants, Thomas Comitta Associates, Inc., the Brandywine Conservancy, and RETTEW have prepared the Franklin Township Comprehensive Plan in accordance with the Pennsylvania Municipalities Planning Code (Act 247 of 1968, as amended); and

WHEREAS, the Chester County Planning Commission and the Franklin Township Planning Commission have favorably reviewed the Plan and have recommended the Plan's adoption; and

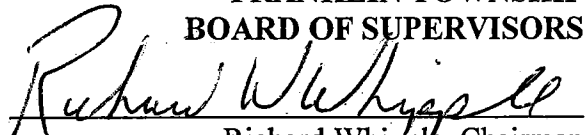
WHEREAS, the Franklin Township Board of Supervisors has conducted a Public Hearing on the Plan on February 15, 2006; and

WHEREAS, it is the intention of the Franklin Township Board of Supervisors that this Resolution adopting the Franklin Township Comprehensive Plan accomplish the foregoing purposes.

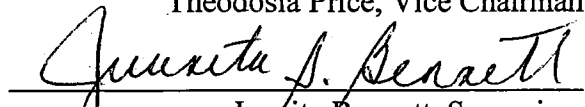
NOW THEREFORE, that the Franklin Township Board of Supervisors formally adopts the attached Comprehensive Plan dated, December 29, 2005, with edits dated February 2, 2006, February 14, 2006 and February 15, 2006 including as a part thereof the textual matter, maps (including without limitation figures 3.1 through 3.7, 4.1 and 4.2, 5-1 and 5.2, 6.1 through 6.4.3, and 9.1), tables, charts, appendices, and other matters prepared by Thomas Comitta Associates, Inc., the Brandywine Conservancy, and RETTEW, which is appended hereto, and incorporated herein.

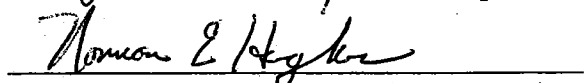
ADOPTED this 15th day of February, 2006.

**FRANKLIN TOWNSHIP
BOARD OF SUPERVISORS**


Richard Whipple, Chairman



Theodosia Price, Vice Chairman


Juanita Bennett, Supervisor


Norman Hughes, Supervisor


Roger Wilson, Supervisor

ATTEST:


Stephen J. Ross, Secretary

**FRANKLIN TOWNSHIP
CHESTER COUNTY, PENNSYLVANIA**

RESOLUTION NO. 2009-26

**A RESOLUTION OF THE FRANKLIN TOWNSHIP BOARD OF
SUPERVISORS ADOPTING THE FRANKLIN TOWNSHIP TRAIL
FEASIBILITY STUDY AND MASTER PLAN AS AN AMENDMENT TO
THE FRANKLIN TOWNSHIP COMPREHENSIVE PLAN**

WHEREAS, on February 15, 2006, Franklin Township adopted the Franklin Township Comprehensive Plan prepared by Thomas Comitta Associates, Inc., by and through Resolution No. 2006-04 pursuant to the procedure and authority set forth in Article III, Section 302 of the Pennsylvania Municipalities Planning Code, Act 247 of 1968, as amended, 53 P.S. §10302;

WHEREAS, Franklin Township intends to amend its Comprehensive Plan by adopting the attached Franklin Township Trail Feasibility Study and Master Plan dated May 29, 2009, prepared by Ray Ott & Associates, Inc. as Section 14 of the Comprehensive Plan;

WHEREAS, the Franklin Township Trail Feasibility Study and Master Plan was forwarded to the Chester County Planning Commission, Franklin Township Planning Commission, and to the contiguous Townships to Franklin Township and the Avon Grove School District for their review and comments;

WHEREAS, the Chester County Planning Commission and the Franklin Township Planning Commission have reviewed and have recommended the adoption of the Trail Feasibility Study and Master Plan as an amendment to the Comprehensive Plan;

WHEREAS, The Trail Feasibility Study and Master Plan contains Tables concerning costs of priority trails, roads with trail opportunities, recommended trail segments, trailhead facilities, project phasing, and construction cost estimates for the East, West and Middle Branch White Clay Creek, Appleton Road, Foote Farm, Guernsey Road, Park Links, Pennock Bridge Road and West Trails along with annual trail maintenance costs estimates;

WHEREAS, The Trail Feasibility Study and Master Plan also contains maps concerning land and roads with trail opportunities, trail recommendations, and maps of the East, West and Middle Branch White Clay Creek, Appleton Road, Foote Farm, Guernsey Road, Park Links, Pennock Bridge Road and West Trails;

NOW, THEREFORE, BE IT RESOLVED, that the Franklin Township Board of Supervisors formally adopts the attached Trail Feasibility Study and Master Plan dated May 29, 2009, prepared by Ray Ott & Associates, Inc., including as part thereof the textual matter, maps, tables, charts, appendices and other matters, which is appended hereto, and incorporated herein, as Section 14 of the Franklin Township Comprehensive Plan.

Adopted by a unanimous vote of the Franklin Township Board of Supervisors in public session duly convened this 17 day of June, 2009.

**BOARD OF SUPERVISORS
FRANKLIN TOWNSHIP**


Richard W. Whipple, Chairman

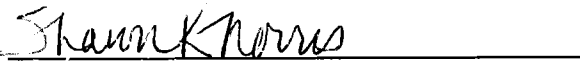

Nancy A. Latimer, Vice Chairman


Norman Hughes, Member


Eric Brindle, Member

Paul Overton, Member

ATTEST:


Secretary

FRANKLIN TOWNSHIP TRAIL FEASIBILITY STUDY AND MASTER PLAN

Board of Supervisors

Eric Brindle
Paul Overton

Norman Hughes

Nan Latimer
Richard Whipple

Prepared by:

Trail Committee

Phil Geoghegan
(Chairman)
Dolores Hughes

Bob Brechter
Nan Latimer

Connie Chiasson
Paul Overton

Jeff Eastburn
Teddy Price

With the assistance of:

RAY OTT & ASSOCIATES

Planning and Landscape Architecture
17 South Church Street
West Chester, PA 19382

and

Campbell Thomas & Co.
Architects and Planners
1504 South Street
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Brandywine Conservancy
U.S. Route 1 and Creek Road
Chadds Ford, PA 19317

May 29, 2009

Adopted June 17, 2009

This project was financed in part by a grant from the Community Conservation Partnership Program, under the administration of the Department of Conservation and Natural Resources, Bureau of Recreation and Conservation and by a generous grant from PECO Energy's Green Region Open Space Grant Program.

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APPENDIX C. POPULATION CHARACTERISTICS AND RECREATION NEEDS

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1. EXECUTIVE SUMMARY

In 2007, Franklin Township initiated a Trail Feasibility Study and Master Plan to determine the best alignment for a community wide recreational trail system. The trail system's objective is to improve pedestrian, equestrian and bicycle circulation and connectivity so that vehicle trips are reduced and recreational opportunities are increased.

In 2006, Franklin Township adopted a Comprehensive Plan that includes recommendations for a township-wide conceptual trail system. This Feasibility Study determines the potential for physical development of the Comprehensive Plan's conceptual trail alignment and examines other areas for potential trail development. This Study also selects and prepares master plans for three (3) priority trail segments that show alignment, width, surface type and similar design characteristics. This study analyses the following aspects of trail development:

- *impact on existing natural, historic and scenic resources*
- *connectivity to neighborhoods, parks, open space areas and existing recreation facilities*
- *location of engineered structures, including bridges and specifications for trail surfaces*
- *location and capacity of public services and utilities*
- *existing transportation characteristics, including roadways and existing trails and sidewalks*

A phased construction cost estimate prepared for the Feasibility Study is included in a later section (pgs. 21-29) of this report. From the nine recommended trail projects, three priority trail projects were selected through public input and are described below.

Table 1: Priority Trails Cost Summary

Construction Phases	Miles	Total	Available Funds	Net Cost
1. Middle Branch White Clay Creek (Assuming Alternative 2a and 3a)	3.29	\$169,786	\$0	\$169,786
2. West Branch White Clay Trail	2.61	\$54,737	\$0	\$54,737
3. Appleton Road Trail	5.23	\$110,686	\$0	\$110,686
Total, with Alternative 2a and 3a	11.14	\$335,208	\$0	\$335,208

The three priority trails total just over ten miles and have an estimated construction cost of \$335,208 and estimated annual maintenance costs of \$52,366. It is estimated that completion of the entire 24 mile trail network will cost \$557,095, with an average annual maintenance cost of \$119,588. The Franklin Township Open Space Committee and Trail Committee are proposed to be combined and will be responsible for overseeing all aspects of this Trail Master Plan, including maintenance tasks. The Assistant Township Manager will manage day-to-day trail operation and maintenance. Work will be contracted to private firms, and paid for by the Township. Where possible, developer contributions for trail construction will be secured.

2. POTENTIAL DEMAND ANALYSIS

A. POTENTIAL BENEFITS OF THE FRANKLIN TOWNSHIP TRAIL SYSTEM

The benefits of trail and greenway development throughout the commonwealth has been documented in *Benefits of Greenways: A Pennsylvania Study*, published by the Pennsylvania Greenways Partnership in 2002 and by the American Hiking Society, *A Step in the Right Direction*. The various benefits of trail and greenway development are described below.

1. Pennsylvania Greenways Partnership

Health Benefits

According to DCNR's Recreation Plan survey, over 66.8% of Pennsylvanians reported that they participated in walking, and 23.4% participated in bicycling in the last 12 months. As more off-road trails are developed in PA, these numbers will likely increase. Greenways and trails facilitate exercise opportunities by providing off-road areas for walking, bicycling, jogging, and horse back riding in a setting separate from vehicular traffic.

In 2003, Franklin Township completed a community survey. The survey determined that 71% of respondents participated in walking, hiking, jogging; 31% participated in bicycling; and, 15% participated in horseback riding.

Transportation Benefits

The Township trail system will provide non-vehicular travel options for area residents and employees. Alternative travel choices serve a community by:

- *Providing safe alternatives to residents wishing to bike or walk to nearby destinations.¹*
- *Helping to reduce vehicular trips*
- *Improving air quality*

An example of the transportation benefits of trail development is seen in Pittsburgh's Eliza Furnace Trail. This trail connects the neighborhood of Greenfield to the city's downtown, and has become a popular alternative to motor vehicles as a means of reaching downtown Pittsburgh,² helping to alleviate congestion and the environmental impacts of motor vehicles. In combination with other local trails, the Township trail system will promote walking and bicycling to nearby destinations, which will help reduce traffic volumes, noise pollution and carbon monoxide emissions.

Educational Benefits

Greenways provide educational benefits through the conservation and enhancement of natural resources and interpretation of historic resources. This trail project includes trail development adjacent to portions of the White Clay and Big Elk Creeks. These water resources will provide educational opportunities with regard to conservation, riparian habitats and wildlife.

¹ *Benefits of Greenways: A Pennsylvania Study*, Pennsylvania Greenways Partnership, June 2002, p. 18.

² *Benefits of Greenways: A Pennsylvania Study*, Pennsylvania Greenways Partnership, June 2002, p. 18.

The Franklin Township Community Values Survey, part of the Township's Comprehensive Plan (adopted 2/06) determined that 51% of respondents participated in "nature enjoyment/study" and 23% in "fishing."

Environmental Benefits

Development of the Township trail system will positively impact the surrounding environment. Trails enhance adjacent open space areas and provide a contiguous greenway that promotes plant and animal species diversity, and provides habitat areas for native wildlife.

The Township trail system also offers an alternative mode of travel to local residents and employees, which reduces vehicular traffic within the study area. This positively affects noise levels and reduces carbon monoxide emissions produced by motor vehicles.

Social and Cultural Benefits

The Township trail links several existing and proposed neighborhoods. This gives residents the option to walk or bike to local destinations. Increased pedestrian connectivity and improved circulation enhances community character and sense of place.

Economic Benefits

Tourism and local recreational use contribute to economic growth in areas near greenways and trails. A DCNR survey revealed that nearly one-fifth of Pennsylvania's tourists travel primarily for outdoor recreation activities. In 2000, tourism supported 450,000 jobs in the state, and is now PA's second largest industry.³ Most of the income generated from tourism results from hotels/lodging, food/restaurant sales, and equipment rental and sales.

The Township trail system has a tourism-use component associated with outdoor recreation due to the Township's proximity to the Fair Hill Natural Resource Management Area (MD), the Mason Dixon Trail, and the White Clay Creek Preserve.

2. American Hiking Society

Health Benefits

The American Hiking Society's (AHS) fact sheet, "*A Step in the Right Direction: The Health Benefits of Hiking and Trails*" provides an overview of several health benefits associated with hiking, including weight loss, decreased cholesterol levels, decreased high blood pressure, increased bone density, diabetes prevention, improved arthritis and relief from back pain.

B. USER DEMAND ANALYSIS

The potential for trail use by Township residents and visitors can be estimated by determining key destination points that are likely to draw trail users and by analyzing the use of similar trails in the area. User demand analysis is discussed below.

³ *Benefits of Greenways: A Pennsylvania Study*, Pennsylvania Greenways Partnership, June 2002, p. 7.

1. Key Destinations

Several areas within and outside the Township are likely to draw residents and visitors and increase trail use.

Crossan Park

Crossan Park provides a place for active and passive recreational opportunities for area residents. The expansion of Crossan Park will provide increased recreation opportunities. Crossan Park will serve as a primary trailhead within the Township trail system by providing parking and restrooms for trail users, so the park is likely to be an important destination on the trail system.



Figure 1: Springlawn Trailhead

White Clay Creek Preserve and White Clay Creek State Park

White Clay Creek Preserve is over 1,300 acres in size and is located to the east in adjacent London Britain Township. The White Clay Creek runs through the preserve. The preserve shares a boundary with the 3,300-acre White Clay Creek State Park in adjacent Delaware. A three-mile trail links the Preserve to the State Park's trails.

Springlawn Trail

The 2.1 mile long Springlawn Road Trail in Elk Township runs along the vacated Township Road T-354 (Springlawn Road) between Chesterville Road (Rt. 841) and Strickersville road.

Southwestern Franklin Township

Land conservation groups are trying to preserve several parcels of land in the southwestern portion of the Township. These parcels have important natural areas that will likely become future trail destinations.

Fair Hill Natural Resource Management Area

Franklin Township shares its entire southern border with Maryland's 5,316-acre Fair Hill Natural Resource Management Area. Fair Hill has 80 miles of natural trails suitable for hiking, mountain biking and equestrian use. Although located across the state border in Maryland, due to its size and recreation opportunities, Fair Hill is considered a key destination of the Township trail system.

3. TRAIL OPPORTUNITIES AND FEASIBILITY DETERMINATION

This chapter describes the trail opportunities analysis process and the recommended alignment for Franklin Township's trail network. Trail recommendations are based upon field survey, existing trail alignments, existing and proposed open space and recreation areas, the locations of existing and proposed residential neighborhoods, and the Township road network. All existing horse farms in the township were also inventoried. A primary objective was to develop a trail network that linked the residential neighborhoods and horse farms and provide access to significant township and regional open space and recreation resources. Linkages with existing and proposed regional trails was also an important objective.

A. LAND WITH TRAIL OPPORTUNITIES

Many land parcels with Franklin Township provide excellent trail development opportunities. These include township sponsored Open Space Projects, open space lands within existing developments, and open space within proposed or approved land development projects.

These lands are discussed below and shown on Map 1: Lands with Trail Opportunities.

Open Space Projects

These open space projects are summarized in Table 2, Franklin Township Open Space Projects and included on Map 1. Much of this land is owned or is proposed to be owned publicly, by a conservation organization or by a land trust. In addition to the 130 acre Crossan Park, Franklin Township and area conservation organizations, such as the Brandywine Conservancy and the Natural Lands Trust, have worked to preserve over 270 additional acres within the Township. The Township is also working with area conservancies to preserve a number of other properties in the Township. Since much of the existing and proposed conservation land will be available for trail development, these projects were mapped to evaluate how they could be incorporated into the trail network.

Land with Possible Trail Access Opportunities

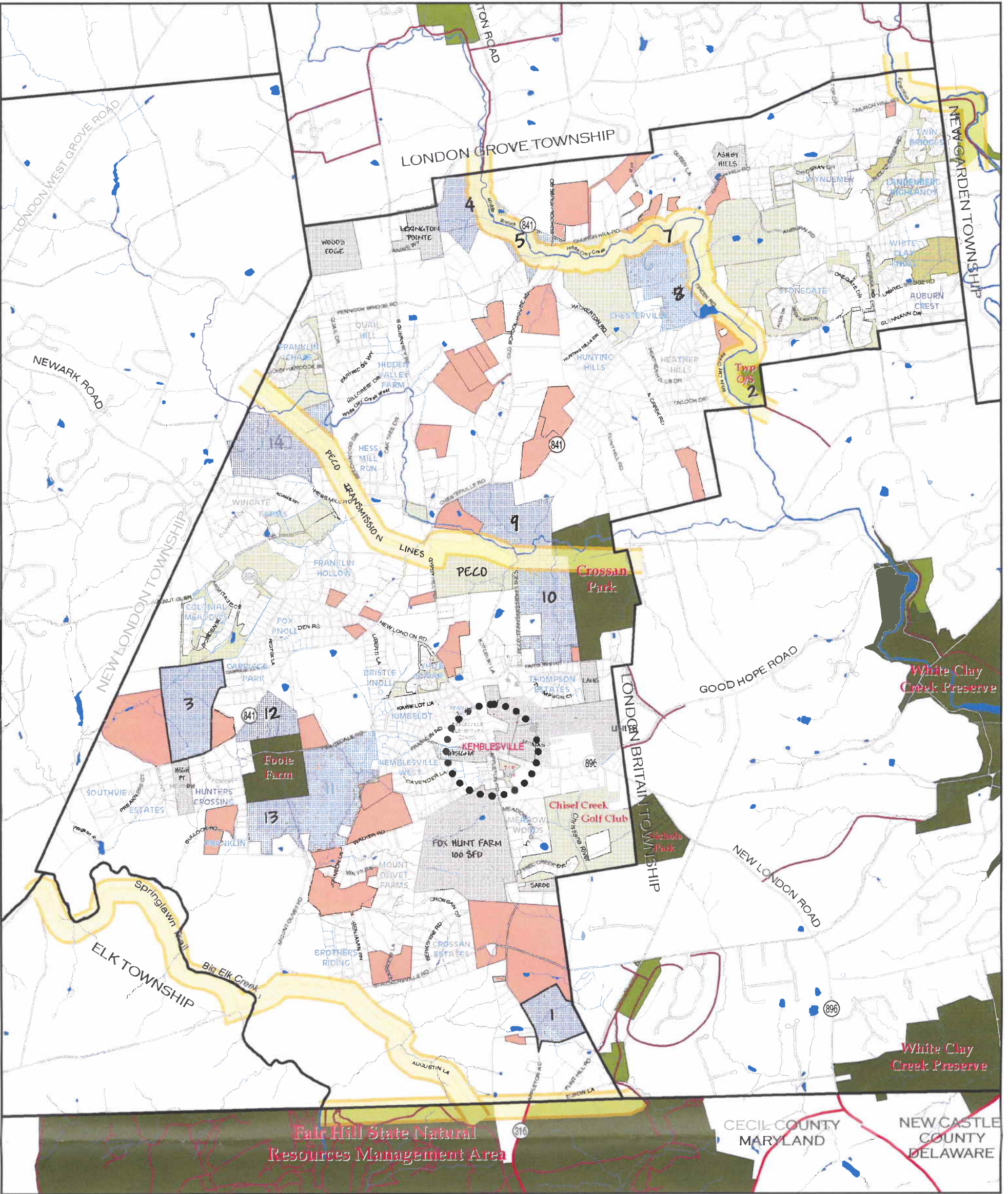
These lands consist of existing residential development with considerable areas of private open space.

Approved/Proposed and Existing Residential Subdivisions and Land Development Projects

While there are a number of proposed land development projects, the following two projects include large areas of open space with trail development opportunities.

Fox Hunt Farm

The Fox Hunt Farm land development project is located south of Kemblesville at the southwest corner of the intersection of Walker and Appleton Roads. Franklin Township has approved the project that consists of 100 single-family dwellings. A trail is planned for the perimeter of the tract.



1 inch equals 0.5 miles
0 2,000 4,000 6,000 8,000 Feet

FRANKLIN TOWNSHIP TRAIL FEASIBILITY STUDY

LEGEND

- ADJACENT EXISTING & PROPOSED TRAILS
- CHESTER COUNTY REG. REC. CORRIDORS
- LANDS WITH TRAIL OPPORTUNITIES
 - OPEN SPACE PROJECTS*
 - POSSIBLE TRAIL ACCESS OPPORTUNITIES
 - APPROVED/PROPOSED SUBDIVISIONS
- EXISTING LAND USE
 - PUBLIC RECREATION
 - MUNICIPAL OPEN SPACE
 - HOUSING DEVELOPMENTS
 - ACTIVE HORSE FARMS
 - EASED PROPERTIES (PROTECTED)

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In Association with:
CAMPBELL THOMAS & CO.
Architects & Engineers
BRANDYWINE CONSERVANCY
Environmental Management Center

* Number references Township project file.
MAP #1
LANDS WITH TRAIL OPPORTUNITIES

Kemblesville Traditional Neighborhood Development

A 180-dwelling unit traditional neighborhood development (TND) is proposed for development just west of Kemblesville. TNDs typically promote pedestrian and non-vehicular circulation, and this project includes trail and sidewalk development.

Table 2: Franklin Township Open Space Projects

TWP. PROJECT NO.	PROJECT #1	WHITE CLAY CRESCENT PROJECT #2	PROJECT #3
PARCEL SIZE	42 Acres	29 Acres	83 Acres
LOCATION	Southern Franklin Township	NE Franklin Township	West Franklin Township
TYPE OF EASEMENT/ PROJECT	Donated Conservation Easement	Fee Acquisition by Franklin Township	Donated Conservation Easement
EASEMENT HOLDER	Brandywine Conservancy	Owned by Franklin Township	North American Land Trust (NALT)
EASEMENT/ PURCHASE YEAR	2006	2007	2007
IMPROVEMENTS	Residence and Barn	None	None
FEATURES	Scenic Resources Vista Point	Old Growth Forest, located on the Middle Branch of the White Clay Creek	Wooded and Open Fields
USE	Horse Farm	Bird Sanctuary	Plan to subdivide into 4 house sites for family members

TWP. PROJECT NO.	PROJECT #4	GOODWIN PRESERVE PROJECT #5	BANFFSHIRE PRESERVE PROJECT #6
PARCEL SIZE	43 Acres	17 Acres	59 Acres
LOCATION	NW Franklin Township	NW Franklin Township	Northern Franklin Township
TYPE OF EASEMENT/ PROJECT	Purchased Conservation Easement	Fee Acquisition by Franklin Township	Fee Simple Acquisition by Franklin Township
EASEMENT HOLDER	Natural Lands Trust (NLT)	Owned by Franklin Township	Owned by Franklin Township
EASEMENT/ PURCHASE YEAR	2008	2008	2008
IMPROVEMENTS	None	None	None
FEATURES	Along Middle Branch of the White Clay Creek	It is located along the Middle Branch of the White Clay Creek. Potential parking area/trail access point.	Located along the Middle Branch of the White Clay Creek. Approved as a 9- house subdivision (conditional)
USE	Limited building sites and a Public access trail. The trail will connect to a trail leading north to the proposed London Grove Municipal Park.	Passive recreation and trails. It continues the trail from London Grove's Municipal Park.	Passive recreation and trails

B. ROADS WITH TRAIL OPPORTUNITIES

Certain roads in the Township provide trail development opportunities within the road right-of-way. Traditionally, road right-of-way widths in Pennsylvania were 33 feet, or two rods (a 'rod' is 16.5 feet). The state, through PennDOT, along with most municipalities, now require that an "ultimate" right-of-way be dedicated as part of the subdivision and land development approval process. This ultimate right-of-way is 50 feet, or 25 feet on each side of the road center line.

Since the paved road "cartway" is typically 18 to 22 feet wide, a traditional 33-foot road right-of-way would only leave 11 to 15 feet of unused width, or 5.5 feet to 7.5 feet on each side of the cartway – which is not enough width for a 3 to 8-foot wide trail with a 5-foot wide buffer strip. The 50-foot ultimate right-of-way, however, typically leaves 14 to 16 feet of unused right-of-way, which is more than enough to accommodate a road-side path.

In order to determine where this additional width is available, all existing road right-of-way widths were inventoried to reveal where road side trail/path opportunities exist. This inventory is shown on Map 2, Roads with Trail Opportunities, road sections where the "ultimate" right-of-way has been acquired on one or both sides of the road. Roads that include sections with ultimate right-way-widths are also listed in Table 3.

Table 3: Roads with Trail Opportunities

Road Name	Ownership
Church Hill Road	Township
Pennock Bridge Road	State
Guernsey Road	Township
Hess Mill Road	Township
Creek Road	Township
Pennbrook Drive	Township
Peacedale Road	Township
Bullock Road	Township
Franklin Road	Township

Source: ROA June 2008.

C. POTENTIAL TRAILHEAD LOCATIONS

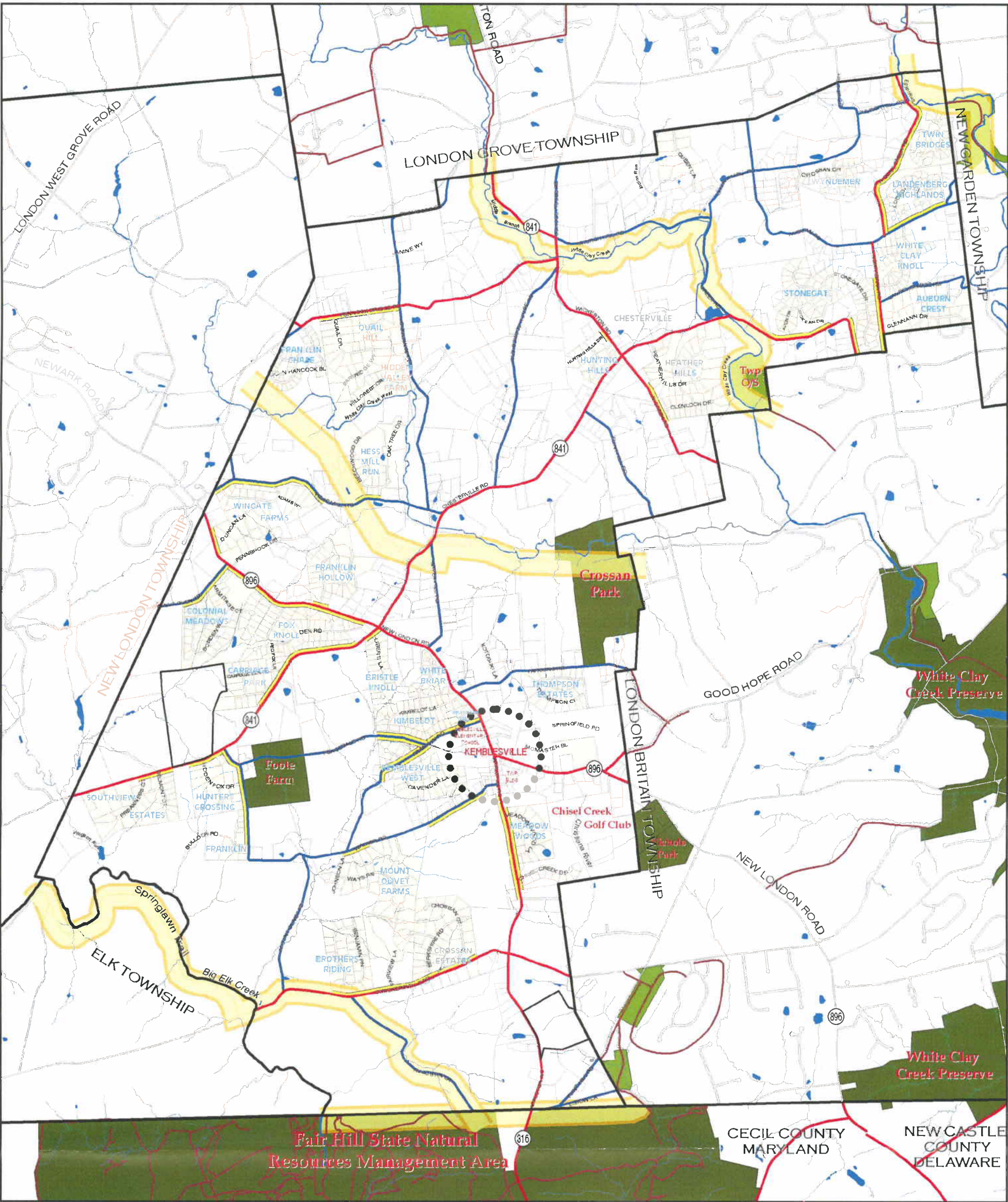
Trailheads provide access for trail users and contain a variety of support facilities, such as formal parking areas, information kiosks, restrooms, bike racks and seating/picnic areas. Some trailheads merely provide an informal parking area and trail access. Sites within the Township that may provide suitable trailhead locations are discussed below.

1. Crossan Park

Crossan Park is a significant trail destination point and will serve as an excellent trailhead location. Crossan Park contains formal parking areas, restrooms and existing trails.

2. Township Open Space Areas

Township-owned open space areas may provide future trailhead locations. Open space used for passive recreation will offer only minimal trailhead facilities, such as information parking



FRANKLIN TOWNSHIP TRAIL FEASIBILITY STUDY

1 inch equals 0.5 miles
0 2,000 4,000 6,000 8,000 Feet

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LEGEND

- ADJACENT EXISTING & PROPOSED TRAILS
- CHESTER COUNTY REG. REC. CORRIDORS
- ROAD OWNERSHIP/MAINTENANCE
 - STATE ROADS
 - LOCAL ROADS
 - ULTIMATE ROW ESTABLISHED*

- EXISTING LAND USE
 - PUBLIC RECREATION
 - MUNICIPAL OPEN SPACE
 - HOUSING DEVELOPMENTS
 - EASED PROPERTIES (PROTECTED)

* Local Roads - 50' (25' from road centerline)
State Roads - 60' (30' from road centerline)

MAP #2 ROADS WITH TRAIL OPPORTUNITIES

areas and trail access. Open space used for active recreation such as playing fields, are more likely to provide formal, paved parking areas, restrooms, bike racks, water fountains and similar amenities.

3. Fair Hill Natural Resource Management Area

Just south of Franklin Township across the PA-MD state border is an existing trailhead serving Fair Hill that can be accessed by Township residents.

D. RECOMMENDATIONS FOR TRAIL ALIGNMENT

Specific trail alignment recommendations are described in Table 4 below, and are based on the potential trail opportunities provided in the previous section. Trail segments have been prioritized as to need, timing of development, availability/ownership, availability of right-of-way, and physical feasibility. Trail recommendations are shown on Map 3. Unless otherwise specified, all trails are proposed as hiking/equestrian trails with a natural earthen surface, which may also be suitable for biking in many areas. Below is an overview of the Recommended Trail Alignment and their respective lengths. Trails denoted with an asterisks (*) are the three priority trails.

1. Middle Branch White Clay Creek Trail* - Map #4

The Middle Branch White Clay Creek Trail is proposed primarily as an off-road natural surface trail that travels from the northern Township boundary along the Middle Branch of the White Clay Creek to the eastern Township boundary with London Britain Township, within Township open space.

2. West Branch White Clay Creek Trail* - Map #5

The West Branch White Clay Creek Trail connects the Franklin Chase open space to Township Open Space Project #15 and the PECO easement. The trail crosses Hess Mill, Chesterville, and Gypsy Hill Roads. From Gypsy Hill road, the trail runs along the northern side of the PECO parcel and connects to the Guernsey Road Trail and to Township Open Space Project #10. The trail then connects to Crossan Park and runs to the eastern Township boundary.

3. Appleton Road Trail* (Proposed) - Map #6

The Appleton Road Trail connects the proposed Fox Hunt Farm subdivision with Fair Hill to the south, and to the Foote Farm Trail to the west.

4. East Branch White Clay Creek Trail - Map #7

The East Branch White Clay Creek Trail travels from Creek Road to the East Branch of the White Clay Creek at the northern Township boundary with London Grove Township.

5. Foote Farm Trail - Map #8

The Foote Farm Trail runs from Route 841 south to Big Elk Creek.

6. Guernsey Road Trail - Map #9

Guernsey Road Trail begins at the northern Township boundary, follows the length of Guernsey Road, turns east into proposed Township open space, and intersects with the PECO trail to the southeast.

7. Park Link Trail - Map #10

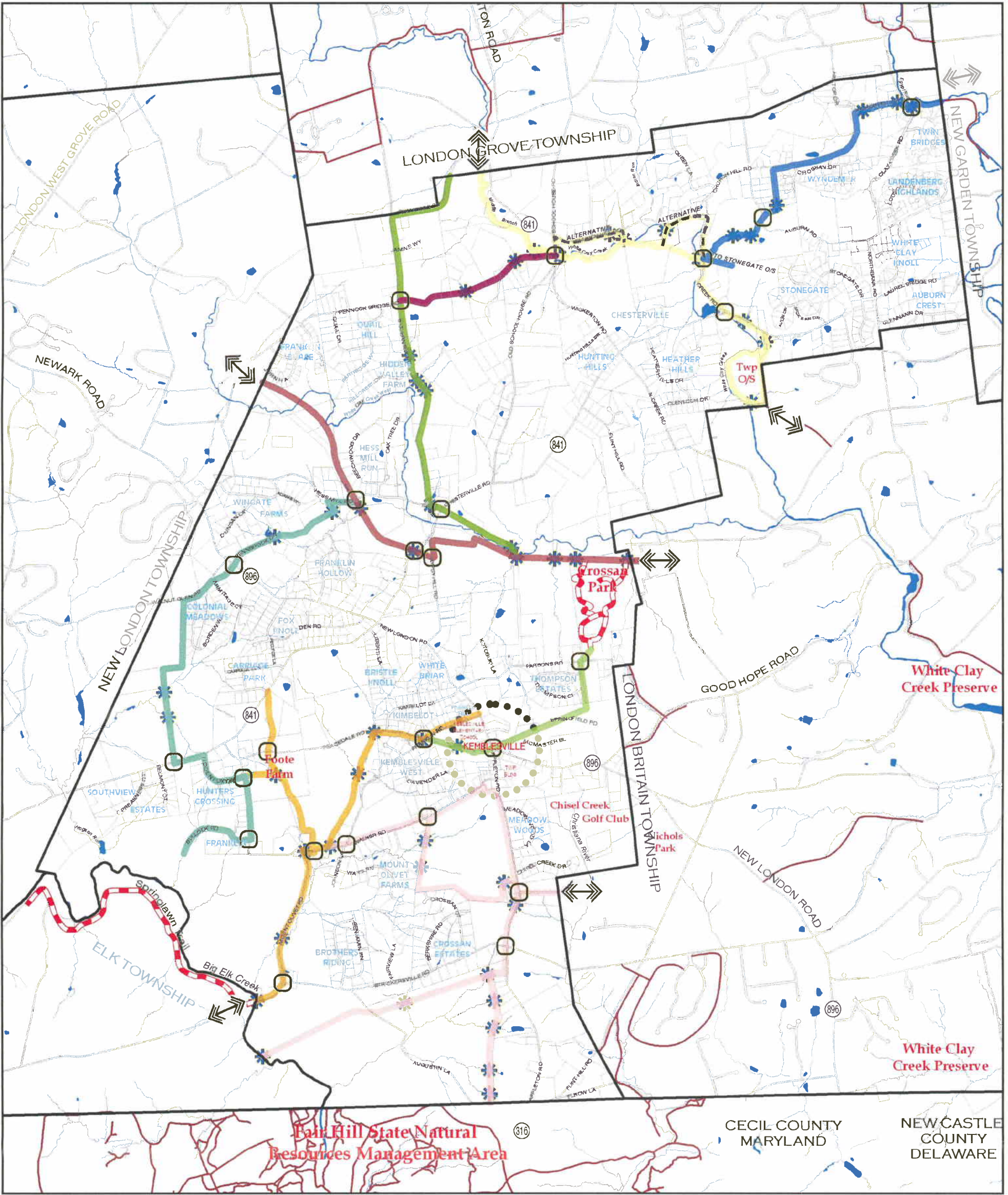
The Park Link Trail links Crossan Park to the village of Kemblesville and the Foote Farm Trail.

8. Pennock Bridge Road Trail - Map #11

The Pennock Bridge Road Trail begins at the intersection of Pennock Bridge Road and Guernsey Road, ending at School House Road.

9. West Trail - Map #12

The West Trail is proposed to run from Hess Mill Road south to Big Elk Creek.



FRANKLIN TOWNSHIP TRAIL FEASIBILITY STUDY

LEGEND

- ADJACENT EXISTING & PROPOSED TRAILS
- ROAD CROSSINGS
- STREAM CROSSINGS
- PROPOSED TRAIL SEGMENTS
 - APPLETON ROAD TRAIL
 - EAST BRANCH - WHITE CLAY CREEK TRAIL
 - FOOTE FARM TRAIL
 - GUERNSEY ROAD TRAIL
 - MIDDLE BRANCH - WHITE CLAY CREEK TRAIL
 - PARK LINKS TRAIL
 - PENNOCK BRIDGE RD TRAIL
 - WEST BRANCH - WHITE CLAY CREEK TRAIL
 - WEST TRAIL

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MAP #3 TRAIL RECOMMENDATIONS

Table 4: Recommended Trail Segments

Trail Segment	Crossings			ROW Acquisition		Grading Cost Factor	Notes
	Linear Feet	Roads	Streams	Linear Feet	Square Feet		
MIDDLE BRANCH - WHITE CLAY CREEK TRAIL							
1. The trail will follow the north side of the creek from the northern Township boundary to School House Road	3,760	1	2			2	Twp. Open Space Project #4&5
2. At School House Road, the trail crosses over the creek to the south side and follows the south side of the creek through the Hollman Tract.	2,218			2,218	44,360	2	Possible Trail Access Opportunity
At School House Road, the trail turns north (left) and follows School House Road to Church Hill Road. At Church Hill Road, the trail turns east (right) and follows Church Hill Road. The trail then turns south (right) crosses over the creek to the south side.	2,731		2	2,731	54,620	2	Alternative Roadside (temp.) trail
3. The trail goes through two potential open space tracts (Chester County Agncultural Easement and Township fee simple acquisition) to Creek Road.	2,302	1	1			2.5	Twp. Open Space Project #6&8
3A. The trail loops north to Church Hill Road, proceeding east across Creek Road and runs south (roadside) joining with Segment #1 of East Branch - White Clay Creek Trail.	2,882	1	1	1,395	27,900	2	Twp. Open Space Project #6
4. The trail will alongside Creek Road (Village Walking Street) to the intersection of Chesterville Road (Rte. 841)	1,818	1				1	On road trail, Village Walking Street
5. The trail runs south along the west side of Chesterville Road up a shared private driveway entrance entering into Township owned open space.	2,033	1				2	Very difficult, but a Horse Farm, and private driveway
6. A loop trail in Township owned open space along the penmeter of the tract, including a trail along the east bank of White Clay Creek Middle Branch.	4,161		3			2.5	Tough Terrain Twp Owned
Total Linear Feet Miles	21,905 4.15	5	9	6,344	126,880		
WEST BRANCH - WHITE CLAY CREEK TRAIL							
1. From the western Township boundary, the trail will head southeast through Franklin Chase subdivision Private Open Space and Twp. Open Space Project #15 into the PECO easement, crossing over Hess Mill Road, Chesterville Road, and Gypsy Hill Road.	7,168	2	2			2.5	Very Steep
2. From Gypsy Hill Road, the trail will run along the northern perimeter of a PECO owned parcel (generating station) connecting with Guernsey Road Trail and enters into Twp. Open Space Project #10	3,074	1				1	North perimeter route
3. The trail head eastward through Twp. Open Space Project #10 into Crossan Park, connecting at two points of the existing trails within the park and continues east to the eastern boundary of Franklin Township.	3,565		4			2	Actual location will vary
Total Linear Feet Miles	13,807 2.61	3	6				
Proposed APPLETON ROAD TRAIL							
1. At the proposed Fox Hunt Farm subdivision, the trail will loop around the whole perimeter of the neighborhood and run in heading south to approximately Chisel Creek Drive entrance.	9,955		3			1	Developer Responsibility
The trail will cross over Walker Road near the northwest corner of the proposed Fox Hunt Farm subdivision heading west along the north side of Walker Road, crossing over Franklin Road, and terminating into Segment #2 of the Foote Farm Trail.	3,065	2	1	3,065	61,300	1	ROW 16.5'
3. The trail continues from Segment #1 heading south on Appleton Road towards Strawbridge lands (Twp. Open Space Project #14). Additionally, this segment will cross over Appleton Road through a proposed/approved subdivision (Sardo) to the eastern Township boundary.	3,791	2	1	2,614	52,280	1	Developer Responsibility
4. South of Strickersville Road, the trail will head south to the MD border.	4,036	1	4			1	
5. South of Strickersville Road, the trail will split to the west into Sprnglawn Corridor, crossing Augustin Lane and heading southwest to the MD border.	6,772		3			1	
Total Linear Feet Miles	27,619 5.23	5	12	5,679	113,580		
EAST BRANCH - WHITE CLAY CREEK TRAIL							
1. From Creek Road, the trail heads northeast on the south side of the White Clay Creek crossing over Auburn Road and north to Wyndemer subdivision	3,557	1	2	3,557	71,140	2	Possible Trail Access Opportunity
2. Entering into Wyndemer subdivision the trail runs north to Church Hill Rd. along the subdivision's road frontage	3,653		1			1	Possible Trail Access Opportunity
3. At Church Hill Road, the trail turns east and follows the south side of Church Hill Road, turning east into Twin Bridges subdivision at N. Clay Creek Rd.	2,324	1	2	2,324	23,243	2.5	ROW 16.5'
4. In Twin Bridges subdivision, the trail crosses over Egypt Run and following the south side of the creek into New Garden Township.	938		1			2	Possible Trail Access Opportunity
Total Linear Feet Miles	10,472 1.98	2	6	5,881	94,383		

Table 4: Recommended Trail Segments - Con't.

Table 4: Recommended Trail Segments - Con't.				Crossings		ROW Acquisition		Grading Cost Factor	Notes
Trail Segment	Linear Feet	Roads	Streams	Linear Feet	Square Feet				
FOOTE FARM TRAIL									
1. From the south side of Route 841, the trail will head south through future lands of NLT to Peacedale Road.	1,689					2	Twp Open Space Project #2		
2. Crossing Peacedale Road, the trail will run south through the Foote Farm potential future land of NLT south to Walker Road and head north up to northeast corner of NLT lands at Peacedale Road.	7,996	1	1			2	Foote Farm - NLT lands		
3. The trail runs eastward along Peacedale Road, turning north/northeast onto Franklin Road terminating at Kemblesville Elementary School.	3,037	1	1			2	50' Ultimate ROW		
4. The final section of Foote Farm trail crosses over Walker Road (from the southern end of NLT lands, Segment #2) and will run south along Mount Olivet Road and will intersect with the Springlawn Trail in the far southern end of the Township.	5,247	2	3	1,000	20,000	1	Mostly on dirt Mt Olivet Rd /Open Space Project #14		
Total Linear Feet	17,968	4	5	1,000	20,000				
Miles	3.40								
GUERNSEY ROAD TRAIL									
1. From the Township boundary, the trail will head west along the south side of Chambers Road and turn south at the intersection of Guernsey Road, running south to Pennock Bridge Road along eastern side of Guernsey Road.	4,653			4,653	93,060	2.5	Very difficult 16.5' ROW		
2. From Pennock Bridge Road intersection, the trail will continue south along the east side of Guernsey Road, to the intersection of Hess Mill Road. Running along the north side of Hess Mill Road to Chesterville Road intersection.	6,171	1	4	6,171	123,420	2.5	Very difficult 16.5' ROW		
3. The trail crosses Chesterville Road and will turn southeast through a privately owned horse farm and to land to be acquired by the Township. The trail intersects with the PECO trail from the west as well as the Park Links Trail from the east.	2,513	1	1			2	1/2 Horse Farm & 1/2 Open Space Project #9		
Total Linear Feet	13,337	2	5	10,824	216,480				
Miles	2.53								
PARK LINKS TRAIL									
1. From the southern end of Crossan Park, the trail will head south, cross Parsons Road and travel through land proposed for a 180-unit Traditional Neighborhood Development (TND). Within this development, the trail will turn west and connect to Kemblesville.	4,607	1				1	On-road Village Walking Street & Developer Responsibility		
2. On the west side of Kemblesville, the trail will pass through lands owned by Insigna (proposed for development) connecting with Section 3 of Foote Hill Farm trail at Franklin Road.	1,924	1				1	Developer Responsibility		
Total Linear Feet	6,531	2	0	0	0				
Miles	1.24								
PENNOCK BRIDGE RD TRAIL									
1. Guernsey Road, the trail will head east along the north side of Pennock Bridge Road terminating at School House Road.	4,677	2		4,677	93,540	2.5	Very difficult - 16.5' ROW		
Total Linear Feet	4,677	0	2	4,677	93,540				
Miles	0.89								
WEST BRANCH - WHITE CLAY CREEK TRAIL									
1. From the western Township boundary, the trail will head southeast through Franklin Chase subdivision Private Open Space and Twp. Open Space Project #15 into the PECO easement, crossing over Hess Mill Road, Chesterville Road, and Gypsy Hill Road.	7,168	2	2			2.5	Very Steep		
2. From Gypsy Hill Road, the trail will run along the northern perimeter of a PECO owned parcel (generating station), connecting with Guernsey Road Trail and enters into Twp. Open Space Project #10.	3,074	1				1	North perimeter route		
3. The trail head eastward through Twp. Open Space Project #10 into Crossan Park, connecting at two points of the existing trails within the park and continues east to the eastern boundary of Franklin Township.	3,565		4			2	Actual location will vary		
Total Linear Feet	13,807	3	6						
Miles	2.61								
WEST TRAIL									
1. From the south side of Hess Mill Road, the trail will head southwest within HOA open space of Wingate Farms, and then along Pennbrook Drive (within the cartway) to New London Road (Route 896).	4,433		1	425	8,500	2	ROW Acquisition may be larger/through Possible Trail Access Opportunity		
2. Crossing over New London Road, the trail follows Walnut Glen Road southwest, turning south through Colonial Meadows subdivision open space and subsequently jogging through land with a conservation easement held by NLT to Chesterville Road (Route 841).	6,743	1	1			2	HOA Lands & Twp. Open Space Project #3		
3. Crossing over Chesterville Road, the trail runs eastward along the south of Chesterville Road and will be accommodated along Hidden Fox Drive through to Walker Road.	2,554	1	1			1	Hight Point Meadow Frontage & On-Road Village Walking Street		
4. The trail crosses over Walker Road and into the Foote Farm running south along the western boundary of the Foote Farm.	1,798	1				1	NLT Lands Foote Farm		
5. The trail crosses over Walker Road turning west onto Bullock Road, and into the Springlawn Corridor.	2,292	1				1	On-Road Village Walking Street		
Total Linear Feet	17,820	4	3	425	8,500				
Miles	3.38								
Grand Total, Linear Feet: 134,137 27 48 34,830 673,363									
Miles: 25.40									

E. RECOMMENDATIONS FOR TRAIL CONSTRUCTION

All trails constructed in the Township are proposed to be natural surface hiking trails. Trails are to be constructed in accordance with the design standards described in the International Mountain Bicycling Association's (IMBA) 2004 publication Trail Solutions.

1. Hiking Trails

Figure 2 shows a natural surface trail with a trail tread width of no more than three feet (3'). The trail tread is wide enough to accommodate a single-file walking pattern, and provides minimal disturbance to the surrounding environment. It is recommended that these trails be mowed and cleared of debris to establish the trail, however these trails should not be mulched or wood chipped. Mulch and wood chip material is primarily expensive and requires extensive maintenance, particularly in wet areas.⁴



Figure 2: Hiking Trail Cross Section

2. Road Crossings

The proposed trails cross several roads throughout the Township. Figure 3 provides a plan view of a road crossing for the trail system.

The road crossing includes painted crosswalk markings, bollards to slow bicyclists and stop signs for trail users. Drivers will be warned of the upcoming trail crossing through painted pavement markings and pedestrian and bicycle warning signage.

3. Trailhead Construction

The Crossan Park trailhead should be considered the Township's major trailhead.

Chester County Planning Commission.

The Chester County Planning Commission provides the following recommendations for trail construction:

Trailheads will vary in complexity and in overall cost based on their location and potential level of use and function. Therefore, trailheads are separated into two categories: Major and

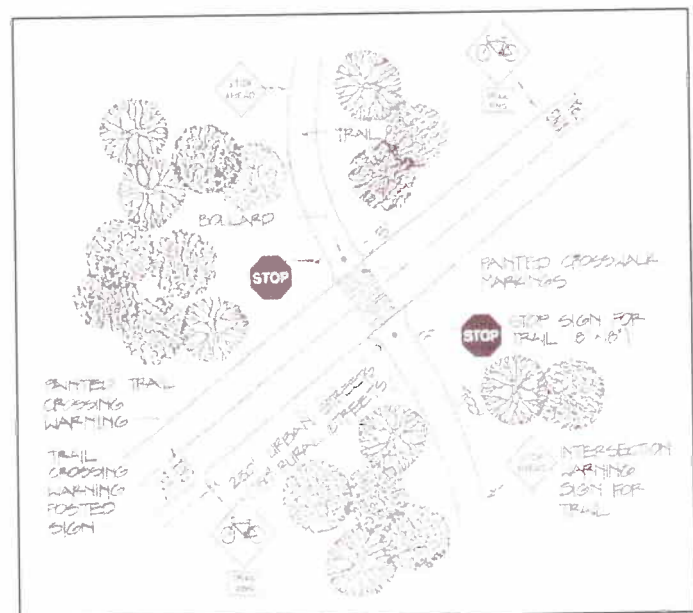


Figure 3: Road Crossing (typical)

Source: Trails for the Twenty-First Century, 2001, p. 85

⁴ *Trails for the 21st Century*, Rails to Trails Conservancy, 2001, p. 73

Minor. A minor trailhead simply provides access to the trail with a minimum amount of amenities and serves a maximum of two trails. A major trailhead generally serves a minimum of two trails and is considered a focal point of primary feature. At a minimum, a trailhead should be equipped with the following facilities:

- Trash receptacles;
- Signage to direct potential trail users to and through the trail system;
- Connector trails or transition areas to the main trail to ensure safe merging by trail users;
- Gated vehicular barriers to prevent unauthorized access by motor vehicles, while still allowing access to trail maintenance vehicles or emergency vehicles; and,
- Handicapped access to the trail system including a gate with an appropriate width to accommodate a wheelchair and appropriate surface treatment and parking facilities within 100 feet.

The following facilities should be considered for implementation where a trailhead is designed as a major trailhead or primary feature:

- Maneuvering room for vehicles, pedestrians, bicyclists, and associated recreational equipment;
- Parking stalls for automobiles and medium security bicycle racks;
- Information booths or kiosks;
- Drinking fountains (where infrastructure is available);
- Landscape plants;
- Security fencing and lighting; and,
- Restrooms.

Figure 4 provides CCPC's typical trailhead design concept. The drawing shows the typical features including a bike rack, bench, trash receptacle, bollards, gate, signage and landscaping.

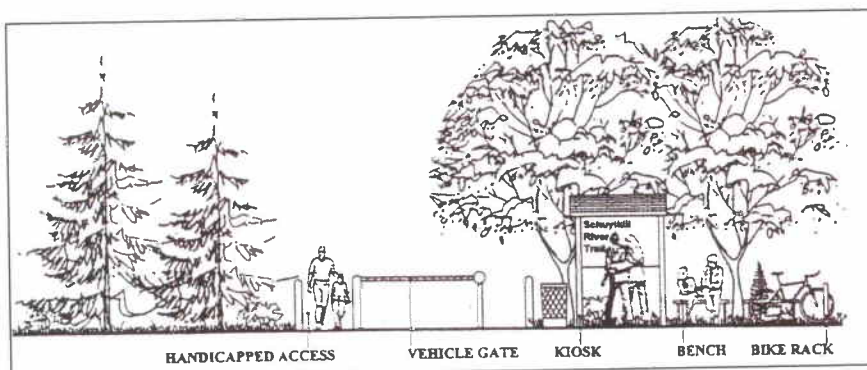


Figure 4: CCPC Trailhead Design

Source: Chester County Planning Commission, 1999.

Rails-to-Trails Conservancy

In 2001, the Rails to Trails Conservancy published Trails for the Twenty-First Century, (TTFC) a guide for trail master planning. TTFC recommends categorizing trailheads as Major or Minor access points. Table 4 provides recommended trailhead facilities for both trail types.

Table 5: Trailhead Facilities

Suggested Facilities- Major Trailheads	Suggested Facilities- Minor Trailheads
Sitting areas	Restrooms
Shade shelters	Drinking fountain
Picnic Areas	Phone
Informational Signage	Recycling receptacle
Interpretive Signage	Bike tire air pump
	Vending machines

[1] *Trails for the Twenty-First Century, Rails-to-Trails Conservancy, 2001, p. 94.*

TTFC recommends the following with regard to trailhead facilities:

- Locate major trailheads at heavily used access points (Township parks)
- Link the trailhead to as many transportation systems as possible;
- Parking areas should be simple, designed in harmony with the surroundings and should contain one ADA-accessible space for every twenty-five (25) spaces;
- Water fountain spigot heights: 42" for adults, 36" for ADA access with 27" below the basin for wheelchair pull-up, 30" for children;
- Locate water fountains four feet (4') off the pathway;
- Locate benches according to views or protection from sun or wind;
- Ensure that benches are installed so that rain and snow drains from the seat;
- Locate bike racks as close as possible to destinations without interfering with traffic flow; and,
- Locate picnic areas away from hazardous areas and so that they do not interfere with trail activities.

4. TRAIL DEVELOPMENT COST ESTIMATES AND POTENTIAL FUNDING

Phased cost estimates for development of the Franklin Township trail system as well as potential sources of construction funding are discussed in this chapter.

A. PROJECT PHASING

Trail system construction has been divided into nine trail projects, which can be developed individually, or grouped according to need and available construction funding. Each trail segment is shown individually on a map, along with its corresponding cost estimate. Conceptual sketches with photographs have been prepared for the three priority trails, Middle Branch White Clay Creek, West Branch White Clay Creek and the Appleton Road Trail, which were selected as priority trails by the project Study Committee. Additionally, recommended design parameters, required rights-of-way, and maintenance plans have been prepared for the priority trails.

1. Cost Summary

Table 5 provides a summary of the total project costs for trail system development.

Table 6: Project Phasing and Cost Summary

Construction Phases	Miles	Total	Available Funds	Net Cost
1. Middle Branch White Clay Creek (Assuming Alternatives 2a & 3a)	3.29	\$169,786	\$0	\$169,786
2. West Branch White Clay Trail	2.61	\$54,737	\$0	\$54,737
3. Appleton Road Trail	5.23	\$110,686	\$0	\$110,686
4. East Branch White Clay Creek Trail	1.98	\$45,533	\$0	\$45,533
5. Foote Farm Trail	3.40	\$57,526	\$0	\$57,526
6. Guersey Road Trail	2.53	\$49,409	\$0	\$49,409
7. Park Link Trail	1.24	\$18,074	\$0	\$18,074
8. Pennock Bridge Road Trail	0.89	\$17,225	\$0	\$17,225
9. West Trail	3.38	\$56,568	\$0	\$56,568
Total	24.55	\$579,542	\$0	\$579,542

The highest priority trail is the Middle Branch White Clay Creek Trail at 3.29 miles in length and costing \$169,786. The second priority trail is the West Branch White Clay Creek Trail, at 2.61 miles in length and costing \$54,737. The Appleton Road Trail, located in the southeast section of the Township, is the third priority trail of the nine recommended trail projects. It is the longest trail segment (5.23 miles) and costs an estimated \$110,686 to construct, which is roughly \$4.00 per linear foot of trail. The shortest and least expensive trail is the Pennock Bridge Road Trail at 0.89 miles and \$17,225. The order of trail segment construction may be revised according to changes in priority, need or available construction funding.

2. Detailed Cost Estimates

On the following pages, individual costs estimate are provided for the nine (9) trail projects described above in Table 5. Maps for each trail segment project precede each cost estimate. Conceptual drawings for the three priority trails are also provided.

B. PROJECT FUNDING

A variety of federal, state and local governmental agencies provide grant and reimbursement programs that support the development of trails. These programs are summarized below.

1. Private Sources

The Township Zoning Ordinance currently requires the dedication of open space and the construction of trails as part of new land development projects within the Township.

2. County Funding

The primary source of park development funding from Chester County is provided through the Landscapes 21st Century Fund, described below.

Chester County Landscapes 21st Century Fund

This program supports park and recreation facility acquisition and development for Chester County municipalities. The maximum per-project amount of funding that can be awarded through this program ranges between \$250,000-\$350,000 annually, depending on project types. Additional funding can be awarded in increments of up to \$50,000 if certain additional project criteria are met. A maximum of three (3) grants can be open and active with the County in any one year.

3. State Funding

Franklin Township can apply for funding to several DCNR grant programs to support the costs of trail development. These programs are described below. Grant applications are typically due in the fall of each year.

DCNR's Grant Program - Types of Projects and Funding Sources⁵

DCNR provides cabinet-level status for conservation and recreation programs dealing with local recreation, heritage parks, rivers conservation, greenways, trails, and open spaces. A key priority of this agency is to bring its programs into towns and cities across Pennsylvania and to provide leadership linking agency resources with local conservation efforts.

DCNR's Bureau of Recreation and Conservation's (BRC) Community Conservation Partnerships Program (C2P2) can provide communities, land conservancies and nonprofit organizations with the technical assistance or grant funding to undertake recreation and conservation projects. The C2P2 grant program is a tool for DCNR to partner with communities,

⁵ Source: <http://www.dcnr.state.pa.us/brc/Keystone/factsheet.pdf>

nonprofit groups and the private sector to conserve Pennsylvania's valuable natural and cultural heritage and support community recreation and park initiatives. DCNR partnerships involve greenways, open spaces, community parks, rail trails, river corridors, natural areas, indoor and outdoor recreation, heritage areas and environmental education. Agency programs are linked with other State agency efforts to conserve historic resources, protect water quality, enhance tourism, and foster community development.

BRC provides a single point of contact for communities and nonprofit conservation agencies seeking state assistance through its C2P2 program in support of local recreation and conservation initiatives. This assistance can take the form of grants, technical assistance, information exchange and training. All of DCNR's funding sources are combined into one annual application cycle and there is a single application format and process with one grant manual (except for the Heritage Parks program). Some C2P2 applications are selected for federal Land and Water Conservation Funds, which require some supplemental information to enable submission of the application to the National Park Service (NPS). Generally, all components require a match, usually 50% of cash contributions. To obtain this assistance contact one of DCNR's BRC six regional offices at www.dcnr.state.pa.us/brc/Regional_Map.pdf. Over the past five years, DCNR has been able to fund on average 40% or less of the applications received.

Types of Projects Eligible for Funding

Community Projects are awarded to municipalities and non-profit organizations for recreation, park and conservation projects, including rehabilitation and development of parks and recreation facilities (development projects); acquisition of land for active or passive park and conservation purposes (acquisition projects); and technical assistance for feasibility studies, trails studies, conservation plans, site development planning, and comprehensive recreation, greenway and open space planning (planning projects). The majority of funding sources used for community projects require a 50 percent match except for some technical assistance grants and development projects eligible as small community projects whose total project cost is \$60,000 or less.

Land Trust Projects are awarded funding to acquire open space and natural areas. Eligible applicants for land trust projects include pre-qualified nonprofit land trusts and conservancies. The majorities of funding sources used for funding land trust projects require a 50% cash match and or land donation value. Priority is given to protecting the Commonwealth's critical habitat areas.

Pennsylvania Recreational Trails Projects develop and maintain recreational trails and trail related facilities for motorized and non-motorized recreational trail use. Eligible applicants include federal and state agencies, local governments and private organizations. Match requirements for Pennsylvania Recreational Trails Program Grants are 80% grant money, up to a maximum of \$100,000, and 20% project applicant money. However, acquisition projects will require a 50/50 match. "Soft match" (credit for donations of funds, materials, services, or new right-of-way) is permitted from any project sponsor, whether a private organization or public agency. Eligible project categories include: maintenance and restoration of existing recreational trails; development and rehabilitation of trailside and trailhead facilities and trail linkages;

purchase and lease of recreational trail construction and maintenance equipment; construction of new recreational trails (with restrictions on new trails on Federal land); and, acquisition of easements or property for recreational trails or recreational trail corridors.

Rails-to-Trails Projects entail the planning, acquisition or development of rail-trail corridors. Eligible applicants include municipalities and nonprofit organizations established to preserve and protect available abandoned railroad corridors for use as trails. Funding used for rails-to-trails projects require a 50% cash or in-kind match.

River Conservation Projects include developing river conservation plans, as well as implementation projects involving acquiring land, and developing facilities such as trails, pavilions, and fishing access areas along river corridors. Eligible applicants include municipalities, counties, municipal and inter-municipal authorities, and river support groups. River support groups must be non-profits, which are designated to act on behalf of interested municipalities. Implementation grants are available to carry out projects or activities defined in an approved river conservation plan. Grants require a 50% match.

Sources of Funding

The C2P2 program funds various types of grants with several different funding sources:

- The Keystone Recreation, Park and Conservation Fund (Key 93)
- The Environmental Stewardship Fund (Growing Greener 1)
- Growing Greener Bond Fund (Growing Greener 2)
- Act 68 Snowmobile and ATV Trails Fund.
- The Federal Land and Water Conservation Fund (LWCF)
- The Federal Recreational Trails component of the Transportation Equity Act for the 21st Century (TEA-21).

DCNR determines which source is used to fund a project based on a number of factors including matching requirements, amount of request and the type of applicant. Before submitting a grant application, applicants should discuss this and other issues relating to their proposed project with their DCNR's Bureau of Recreation and Conservation Regional Recreation and Parks Advisor. To contact your Regional Recreation and Park Advisors please refer to our regional office map found at www.dcnr.state.pa.us/brc/Regional_Map.pdf.

Keystone Recreation, Park and Conservation Fund (Key 93)

The Keystone Fund is DCNR's primary source of funding to support grants for recreation and land conservation (approximately 60% of all funding sources). Grants are awarded to project types including planning, development, acquisition; Rivers Conservation Projects; Land Trust Projects; and Rails-to-Trails Projects. DCNR's 65% allocation is divided (by law) for the following uses: 30% for State Park and Forestry facility rehabilitation and construction (up to 10% of this amount can be used for rails to-trails projects and up to 10% can be used for rivers conservation projects); 25% for grants for Community Recreation; and 10% for grants to Land Trusts.

Environmental Stewardship Fund (Growing Greener 1)

In 2000, the Legislature approved the establishment of a new fund – the *Environmental Stewardship Fund* – that provided funding to several state agencies and authorities for the purpose of clean water and sound land use, land reclamation, natural resource conservation and community recreation. DCNR's portion of the Fund is invested in State park and forestry facilities as well as grants for greenways, trails, open space, natural areas, river corridors and watersheds, community parks and recreation and other projects to conserve the biological diversity of the Commonwealth. Funding for Growing Greener 1 is from additional tipping fees placed on disposal of municipal waste.

Growing Greener Bond Fund (Growing Greener 2)

In a 2005 public referendum, a majority of PA voters approved a \$625 million Growing Greener bond recognizing that the demands for open space conservation, environmental protection and agricultural farm preservation were of such urgency that more funding was needed to protect and invest in Pennsylvania's environmental well-being. DCNR's portion of bond proceeds is being invested in State park and forest improvements, open space preservation and municipal parks and recreation facilities. DCNR's bond funds are anticipated to be fully spent by 2010.

Pennsylvania Recreational Trails Program---In PA, the Recreational Trails Program (RTP) is administered by DCNR BRC, in consultation with the PA Recreational Trails Advisory Board (PARTAB), which is composed of both motorized and non motorized recreational trail users. Eligible applicants include federal and state agencies, local governments and private organizations. Grants are provided to develop and maintain recreational trails and trail related facilities for motorized and non-motorized recreational trail use. DCNR provides grant funding not to exceed 80 percent of eligible costs except for acquisition projects, which is not to exceed 50 percent of eligible costs. Funding for the RTP is provided to PA by the Federal Highway Administration (FHWA) and the Transportation Equity Act for the 21st Century (TEA 21). This funding must be distributed among motorized, non-motorized, and diverse trail use, as follows:

- 40% minimum for diverse trail use
- 30% minimum for motorized recreation
- 30% minimum for non-motorized recreation

Snowmobile/ATV funding - Funds municipalities, appropriate/authorized organizations, educational institutions and for-profit organizations for the planning, development and acquisition, and maintenance of snowmobile and all terrain vehicle trails and areas. The department is actively seeking opportunities to expand motorized recreation throughout the Commonwealth by fostering public and private partners in strategic locations across the state.

Land and Water Conservation Fund Program - Only municipalities, municipal agencies and school districts are eligible to receive LWCF funding. Annual appropriations of federal funds are made to the states to provide 50% matching grants for general public outdoor park, recreation and conservation projects.

DCED Single Application for Assistance

Pennsylvania's Department of Community and Economic Development (DCED) administers the Single Application for Assistance Program, a one-step online form that allow municipalities to apply simultaneously for one or more of PA's community and economic development financial assistance programs. More information is available at www.inventpa.com.⁶

4. Federal Funding

National Park Service Land and Water Conservation Fund

Since the program's inception in 1965, almost 30,000 grants to states and localities have been approved for acquisition, development and planning of outdoor recreation opportunities in the United States. Grants have supported purchase and protection of 2,300,000 acres of recreation lands and development of nearly 27,000 basic recreation facilities in every state and territory of the nation (Land and Water Conservation Fund website, 2001). This program is administered at the state level by DCNR.

Safe Routes to School Program

The Pennsylvania Department of Transportation (PennDOT) administers the Safe Routes to School reimbursement program of the FHA. This program reimburses municipalities for costs related to streetscapes, trails and sidewalks projects within downtown areas and along school routes. Eligible program activities include: sidewalks, crosswalks, bike lanes, trails, traffic diversion improvements, curb extensions, traffic circles and raised median islands

This is a reimbursement program, rather than a grant program; accordingly, the municipality must support project costs until reimbursements are made after submission of invoices. Individual project costs may total up to \$1 million. Twenty percent (20%) matching funds are required, and may be split over the total project costs, or the Township may opt to pay for all pre-construction activities, which generally equal about 20% of project costs.

Community Development Block Grant

Another grant program which may provide options for park and recreation funding is the Community Development Block Grant (CDBG), which may be used for certain types of capital projects for qualifying municipalities.

⁶ *"Financing Municipal Recreation and Parks," PA DCNR, 2005, p. 56.*

C. PRIORITY TRAILS MASTER PLAN RECOMMENDATIONS

Priority trails were selected at the Public Workshop as indicated by workshop participants as being the most desired trail projects.

Table 7: Construction Cost Estimate – Middle Branch White Clay Creek Trail

Table 7. Construction Cost Estimate									
Cost Parameters	Cost / SY		Cost / LF	Per Unit					Total
	LF	Cost / LF			Factor[1]	Sub-total	Road Crossings	Stream Crossings	
- cleaning and grading			\$2.00						
- stream crossings				\$2,500					
- road crossings				\$1,000					
				Cost					
Hiking Trails, Segments 1 - 6.									
1. The trail will follow the north side of the creek from the northern Township boundary to School House Road. At School House Road, the trail turns north (left) and follows School House Road to Church Hill Road. At Church Hill Road, the trail turns east (right) and follows Church Hill Road. The trail then turns south (right) crosses over the creek to the south side.	3,760		\$2.00	5	\$37,600	1	\$1,000	1	\$2,500
2A The trail loops north to Church Hill Road, proceeding east across Creek Road and runs south (roadside) joining with Segment #1 of East Branch - White Clay Creek Trail.	2,731		\$2.00	5	\$27,310	0	\$0	2	\$5,000
3A The trail will run along the west side of Chesterville Road up a shared private driveway entrance entering into Township owned open space.	2,882		\$2.00	1	\$5,764	1	\$1,000	1	\$2,500
4. The trail runs south along the west side of Chesterville Road up a shared private driveway entrance entering into Township owned open space.	1,818		\$2.00	1	\$3,635	1	\$1,000	0	\$0
5. A loop trail in Township owned open space along the perimeter of the tract, including a trail along the east bank of White Clay Creek Middle Branch.	2,033		\$2.00	1	\$4,066	1	\$1,000	0	\$0
6. [1] Cost factor of 5 applied to account for segments requiring boardwalks over wetlands.	4,161		\$2.00	5	\$41,613	0	\$0	3	\$7,500
	17,385 linear feet				\$119,988	4		7	
	3.29 miles								
Design & Engineering									10%
Contingency									10%
TOTAL CONSTRUCTION COSTS, ALTERNATIVE 2a. and 3b.									
									\$141,488
									\$14,149
									\$14,149
									\$169,786

1. Middle Branch White Clay Creek Trail

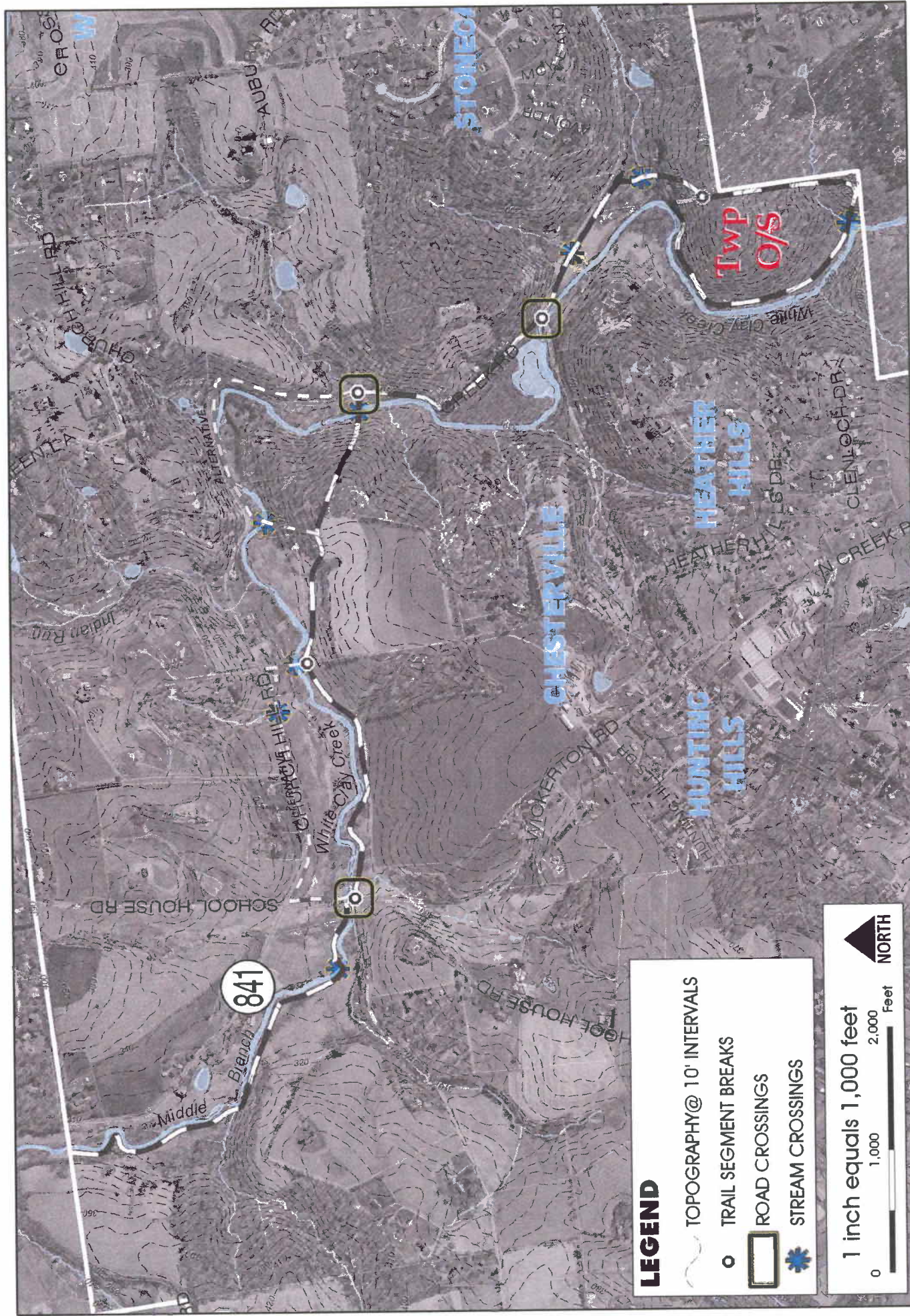
The Middle Branch White Clay Creek Trail is part of the proposed Chester County Regional Trail system, and is part of the designated White Clay Wild and Scenic River area. This trail is located in a relatively undeveloped portion of the Township that contains three Exceptional Natural Areas, and excellent bird habitats. These characteristics helped make this a Township top priority trail segment.

Design

The Middle Branch White Clay Creek Trail is proposed as a natural (earthen) surface hiking, equestrian and mountain biking trail with a recommended trail tread width of 36 in. (3 ft.). The trail is to be developed in accordance with the recommendations included in Trail Solutions of the International Mountain Bicycling Association (IMBA).

Required Rights-of-Way

A total of 6,344 linear feet (126,880 sq. ft.) are required to develop this trail segment. The right-of-way consists of a 20 ft. wide access easement and does not include the costs associated with the fee simple acquisition of an entire parcel of land.



August 8, 2008

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RAY OTT & ASSOCIATES
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 WEST CHESTER, PA 19382
 PLANNING AND LANDSCAPE ARCHITECTURE 610.429.9993

FRANKLIN TOWNSHIP - TRAIL FEASIBILITY STUDY
INDIVIDUAL TRAIL PLANS
MAP #4 - MIDDLE BRANCH - WHITE CLAY CREEK TRAIL

Table 8: Construction Cost Estimate – West Branch White Clay Creek

Cost Parameters	Cost / SY	Cost / LF	Per Unit				
				Road Crossings		Stream Crossings	
- clearing and grading			\$2,500				
- stream crossings			\$1,000				
- road crossings							
Hiking Trails, Segments 1 - 3.							
1. From west Twp. border, through Franklin Chase & PECO, cross Hess Mill, Chesterville & Gypsy Hill Rds.	LF	Cost / LF	Factor[1]	Sub-total	Crossings	Cost	Total
2. From Gypsy Hill Rd., through PECO land to Guernsey Rd Trail to Twp. Open Space Project #10.	7,168	\$2.00	1	\$14,336	2	\$2,000	\$21,336
3. Through Twp. Open Space Project #10 to Crossan Park to east Township boundary.	3,074	\$2.00	1	\$6,148	1	\$1,000	\$7,148
[1] Cost factor of 5 applied to account for segments requiring boardwalks over wetlands.	3,565	\$2.00	1	\$7,130	0	\$0	\$17,130
	13,807 linear feet			\$27,614	3		\$45,614
	2.61 miles						
Total							\$45,614
Design & Engineering						10%	\$4,561
Contingency						10%	\$4,561
TOTAL CONSTRUCTION COSTS							\$54,737

2. West Branch White Clay Creek Trail

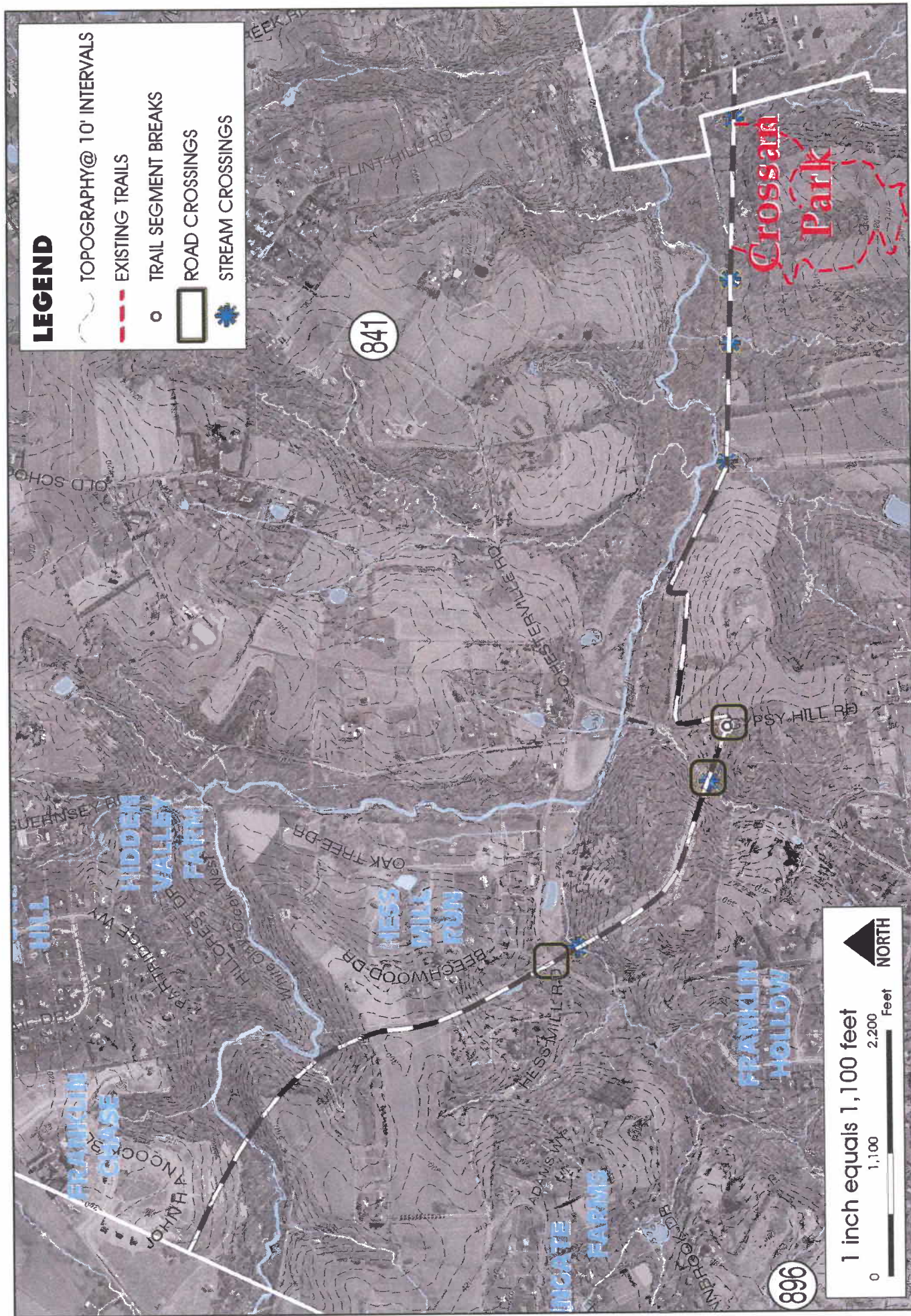
Development of the West Branch White Clay Creek Trail will provide access to Crossan Park. The West Branch White Clay Creek is part of the designated White Clay Creek Wild and Scenic Area, as well as part of a Chester County designated wildlife corridor. The Township's Botanical Survey revealed three (3) exceptional natural areas along the creek. These attributes made this trail segment a Township priority.

Design

The West Branch White Clay Creek Trail is proposed as a natural (earthen) surface hiking, equestrian and mountain biking trail with a recommended trail tread width of 36 in. (3 ft.). The trail is to be developed in accordance with the recommendations included in Trail Solutions of the International Mountain Bicycling Association (IMBA).

Required Rights-of-Way

No rights-of-way are required to develop this trail segment.



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FRANKLIN TOWNSHIP - TRAIL FEASIBILITY STUDY
INDIVIDUAL TRAIL PLANS
MAP #5 - WEST BRANCH - WHITE CLAY CREEK TRAIL

Table 9: Construction Cost Estimate – Appleton Road Trail (Proposed)

Cost Parameters		Cost / SY	Cost / LF	Per Unit						
- clearing and grading			\$2.00							
- stream crossings				\$2,500						
- road crossings				\$1,000						
					Road Crossings		Stream Crossings			
				Cost	Trail					
		LF	Cost / LF	Factor[1]	Sub-total	Crossings	Cost	Crossings	Cost	Total
Hiking Trails, Segments 1. - 5.										
1. Fox Hunt Farm Loop to Chisel Creek entrance		9,955	\$2.00	1	\$19,910	0	\$0	3	\$7,500	\$27,410
2. From Fox Hunt Farm to Foote Farm on Walker Road		3,065	\$2.00	1	\$6,130	2	\$2,000	1	\$2,500	\$10,630
3. From Appleton Road to eastern Township boundary		3,791	\$2.00	1	\$7,582	2	\$2,000	1	\$2,500	\$12,082
4. From Strickersville Road to MD border		4,036	\$2.00	1	\$8,072	2	\$2,000	4	\$10,000	\$20,072
5. From Strickersville Road, cross Augustin Lane to Elk Twp.		6,772	\$2.00	1	\$13,544	1	\$1,000	3	\$7,500	\$22,044
		27,619 linear feet			\$55,238	5		12		\$92,238
		5.23 miles								
Total										\$92,238
Design & Engineering									10%	\$9,224
Contingency									10%	\$9,224
TOTAL CONSTRUCTION COSTS										
										\$110,686

3. Appleton Road Trail (Proposed)

The Appleton Road trail was selected as a priority trail due to its large number of equestrian users and its access to 8,000 acre Fair Hill Preserve in Maryland.

Design

The Appleton Road Trail is proposed as a natural (earthen) surface hiking, equestrian and mountain biking trail with a recommended trail tread width of 36 in. (3 ft.). The trail is to be developed in accordance with the recommendations included in Trail Solutions of the International Mountain Bicycling Association (IMBA).

Required Rights-of-Way

A total of 5,679 linear feet (113,580 sq. ft.) are required to develop this trail segment. The right-of-way consists of a 20 ft. wide access easement and does not include the costs associated with the fee simple acquisition of an entire parcel of land.

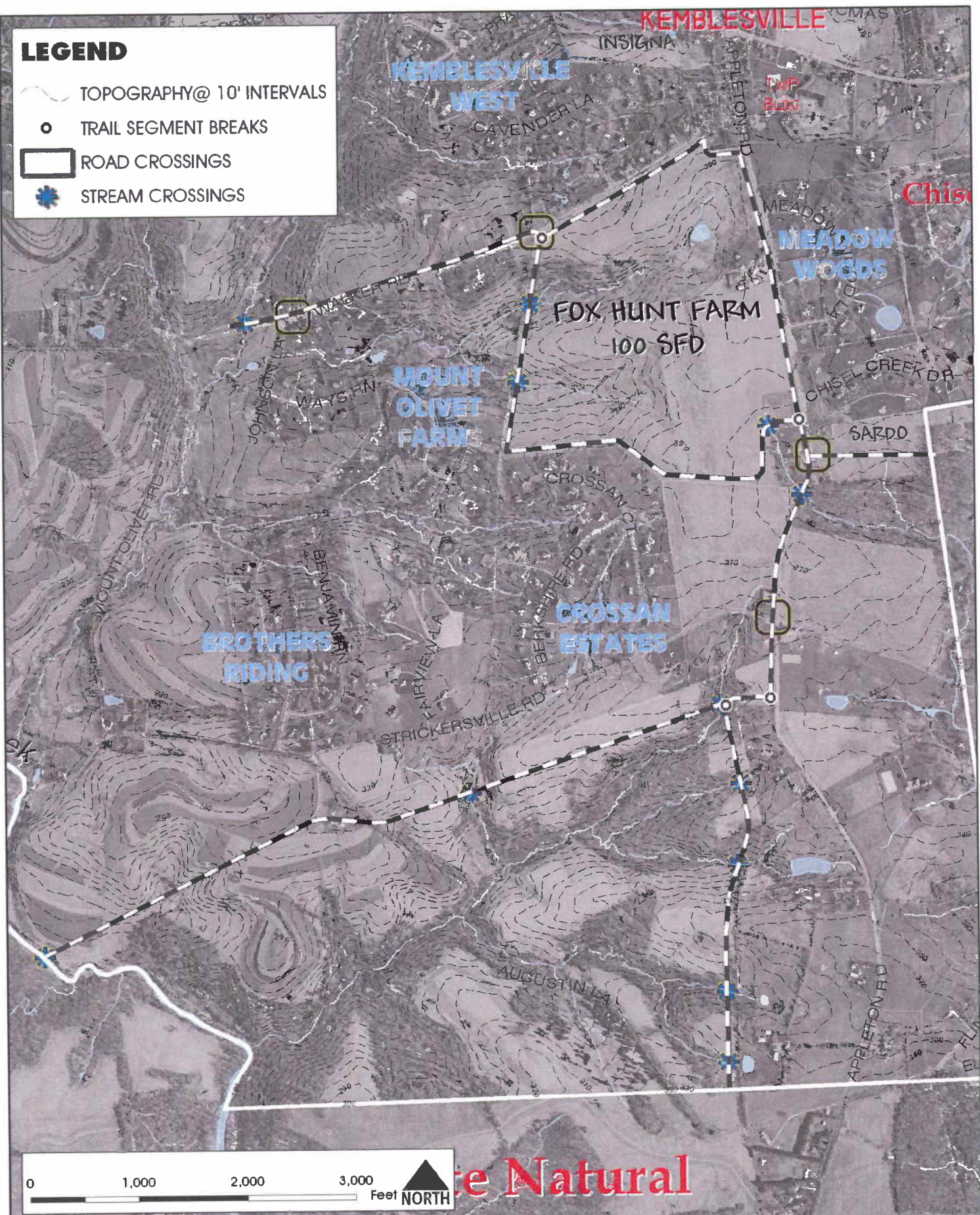
LEGEND

TOPOGRAPHY@ 10' INTERVALS

○ TRAIL SEGMENT BREAKS

□ ROAD CROSSINGS

✱ STREAM CROSSINGS



August 8, 2008

Franklin Township - Trail Feasibility Study

Individual Trail Plans

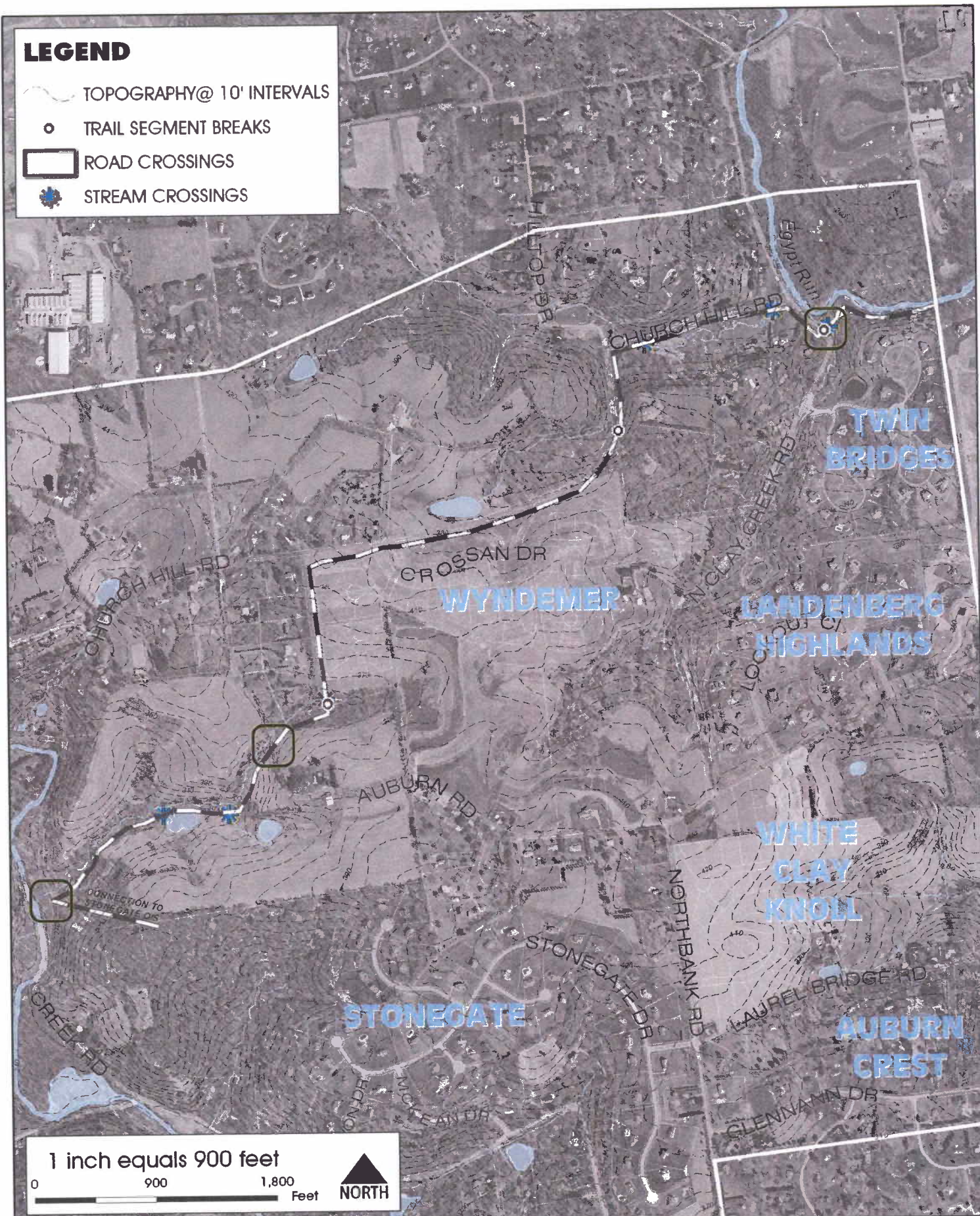
MAP #6 - APPLETON ROAD TRAIL

Prepared by:
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LEGEND

- TOPOGRAPHY@ 10' INTERVALS
- TRAIL SEGMENT BREAKS
- ROAD CROSSINGS
- STREAM CROSSINGS



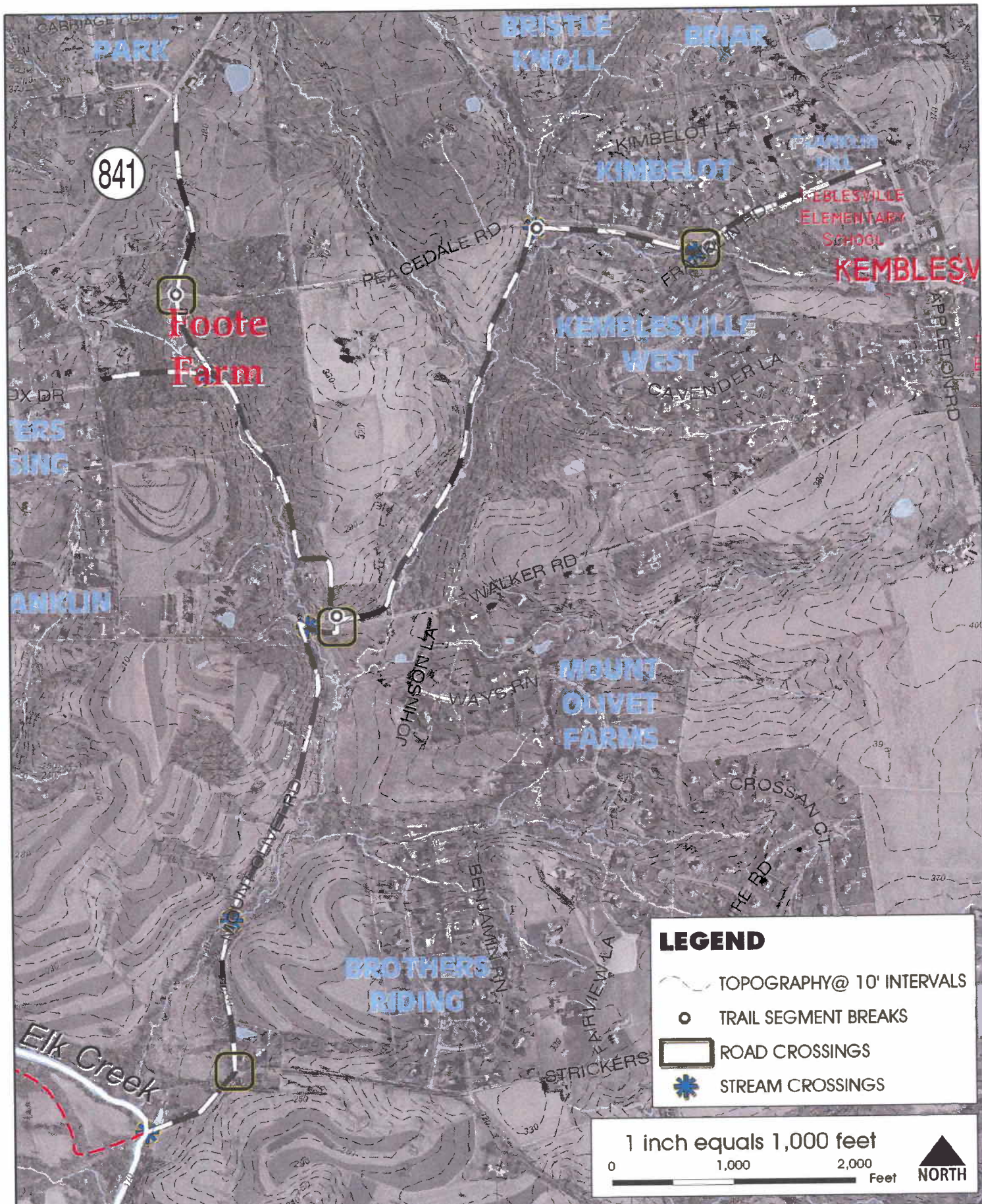
August 8, 2008

FRANKLIN TOWNSHIP - TRAIL FEASIBILITY STUDY INDIVIDUAL TRAIL PLANS MAP #7 - EAST BRANCH - WHITE CLAY CREEK TRAIL

Prepared by:
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510 429 9993

Table 11: Construction Cost Estimate – Foote Farm Trail

Table 11: Construction Cost Estimate – Foote Farm Trail										
Cost Parameters			Cost / SY	Cost / LF	Per Unit					
- clearing and grading				\$2.00						
- stream crossings					\$2,500					
- road crossings					\$1,000					



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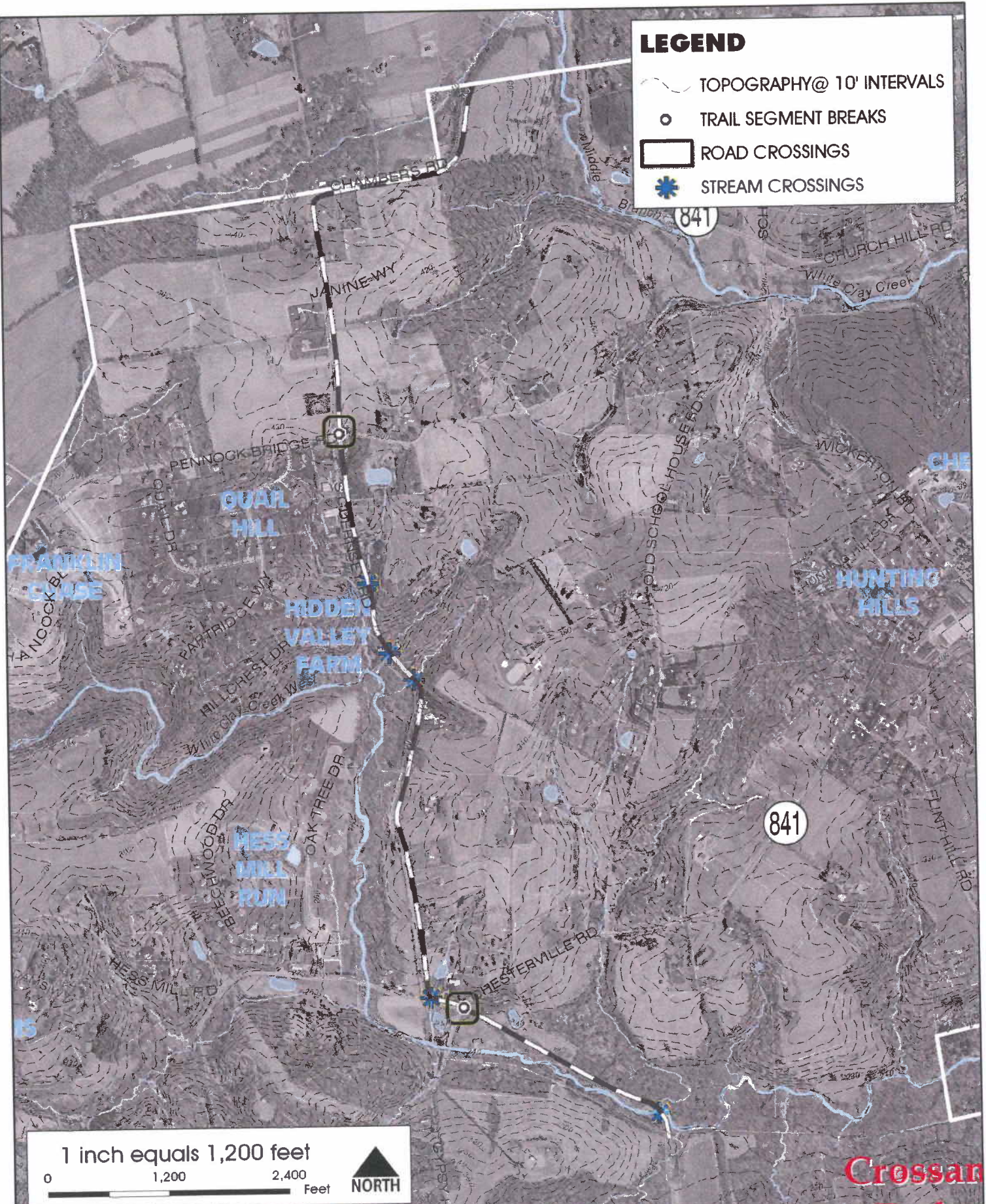
FRANKLIN TOWNSHIP - TRAIL FEASIBILITY STUDY **INDIVIDUAL TRAIL PLANS** **MAP #8 - FOOTE FARM TRAIL**

Table 12: Construction Cost Estimate – Guernsey Road Trail

Table 12: Construction Cost Estimate – Guernsey Road Trail									
Cost Parameters	SY	Cost / LF	Per Unit	Total					
				Road Crossings		Stream Crossings		Trail	
				Crossings	Cost	Crossings	Cost	Sub-total	Cost
- clearing and grading		\$2.00							
- stream crossings			\$2,500						
- road crossings			\$1,000						
Hiking Trails, Segments 1. - 3.									
1. From Twp. border, along Chambers Rd. to Guernsey Rd., south to Pennock Bridge Rd.	4,653	\$2.00	1	\$9,306	0	\$0	0	\$0	\$9,306
2. From Pennock Bridge Rd., south along Guernsey Rd. to Hess Mill Rd. to Chesterville Rd.	6,171	\$2.00	1	\$12,342	1	\$1,000	4	\$10,000	\$23,342
3. Cross Chesterville Rd. through future Twp. Land, intersecting with PECO trail.	2,513	\$2.00	1	\$5,026	1	\$1,000	1	\$2,500	\$8,526
[*] Cost factor of 5 applied to account for segments requiring boardwalks over wetlands.	13,337 linear feet			\$26,674	2		5		\$41,174
	2.53 miles								
Total									
Design & Engineering								10%	\$4,117
Contingency								10%	\$4,117
									\$49,409

LEGEND

-  TOPOGRAPHY@ 10' INTERVALS
-  TRAIL SEGMENT BREAKS
-  ROAD CROSSINGS
-  STREAM CROSSINGS



August 8, 2008

FRANKLIN TOWNSHIP - TRAIL FEASIBILITY STUDY INDIVIDUAL TRAIL PLANS MAP #9 - GUERNSEY ROAD TRAIL

Prepared by:
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Table 13: Construction Cost Estimate – Park Links Trail

Table 13: Construction Cost Estimate – Park Links Trail									
Cost Parameters		Cost / SY		Cost / LF	Per Unit				
				\$2.00					
- clearing and grading					\$2,500				
- stream crossings					\$1,000				
- road crossings							Road Crossings	Stream Crossings	
Hiking Trails, Segments 1. - 3.		LF	Cost / LF	Factor[1]	Cost	Trail	Sub-total	Crossings	Cost
									Total
1. From Crossan Park, cross Parson Rd. through future TND to Kemblesville.		4,607	\$2.00	1	\$9,214	1	\$1,000	0	\$0
2. On west side of Kemblesville, through lands owned by Insignia to Foote Farm Trail.		1,924	\$2.00	1	\$3,848	1	\$1,000	0	\$0
		6,531 linear feet			\$13,062	2		0	\$15,062
[1] Cost factor of 5 applied to account for segments requiring boardwalks over wetlands.		1.24 miles							
Total									\$15,062
Design & Engineering								10%	\$1,506
Contingency								10%	\$1,506
TOTAL CONSTRUCTION COSTS									\$18,074

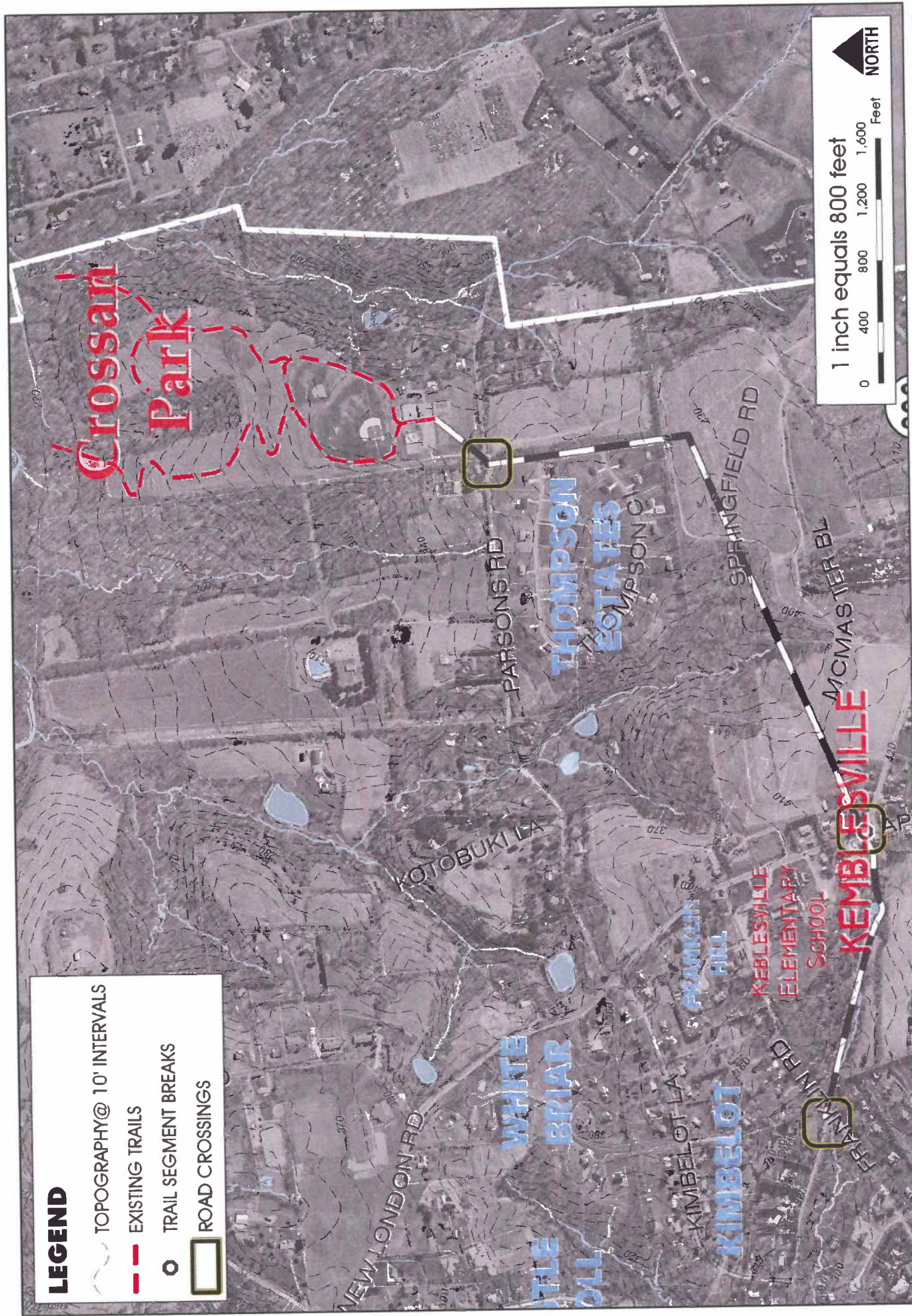
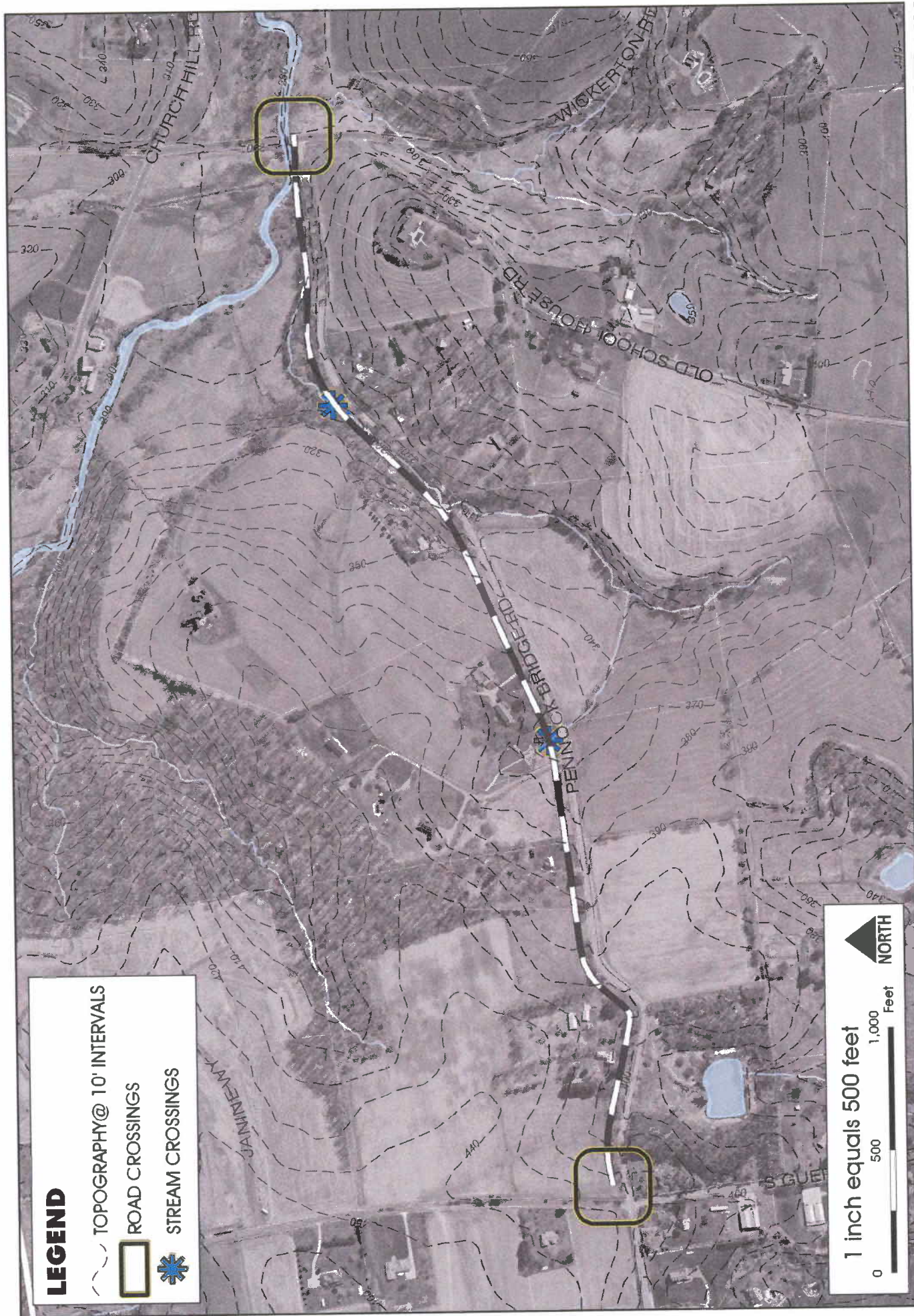


Table 14: Construction Cost Estimate -- Pennock Bridge Road Trail

Cost Parameters							
	Cost / SY	Cost / LF	Per Unit				
- clearing and grading		\$2.00					
- stream crossings			\$2,500				
- road crossings			\$1,000			Road Crossings	Stream Crossings
Hiking Trails, Segment 1.			Cost Factor[1]	Sub-total	Crossings	Cost	Total
1. From Gurnsey Rd., east along north side of Pennock Bridge Rd. to School House Rd.	4,677	\$2.00	1	\$9,354	0	\$0	\$14,354
[1] Cost factor of 5 applied to account for segments requiring boardwalks over wetlands.	4,677 linear feet 0.89 miles		1	\$9,354	0	\$0	\$14,354
Total							\$14,354
Design & Engineering						10%	\$1,435
Contingency						10%	\$1,435
TOTAL CONSTRUCTION COSTS							\$17,225



FRANKLIN TOWNSHIP - TRAIL FEASIBILITY STUDY
INDIVIDUAL TRAIL PLANS
MAP #11 - PENNOCK BRIDGE ROAD TRAIL

August 8, 2008

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Table 15: Construction Cost Estimate – West Trail

Cost Parameters	Cost / SY	Cost / LF	Per Unit				
				Road Crossings		Stream Crossings	
- clearing and grading		\$2.00	\$2,500				
- stream crossings			\$1,000				
- road crossings							
Hiking Trails, Segments 1. - 5.							
	LF	Cost / LF	Cost Factor[1]	Trail		Total	
				Sub-total	Crossings	Cost	Cost
1. From Hess Mill Rd., within Wingate HOA land along Pennbrook Dr. to Rt. 896.	4,433	\$2.00	1	\$8,866	0	\$0	\$2,500
2. Cross Rt. 896, along Walnut Glen Rd., through Colonial Meadows & NLT land to Rt. 841.	6,743	\$2.00	1	\$13,486	1	\$1,000	\$2,500
3. Cross Rt. 841, along Rt. 841 to Hidden Fox Drive and Walker Road.	2,554	\$2.00	1	\$5,108	1	\$1,000	\$2,500
4. Cross Walker Rd., into the Foote Farm to its western boundary.	1,798	\$2.00	1	\$3,596	1	\$1,000	\$0
5. Cross Walker Road, west along Bullock Rd. to the Springlawn Corridor.	2,292	\$2.00	1	\$4,584	1	\$1,000	\$0
[1] Cost factor of 5 applied to account for segments requiring boardwalks over wetlands.	17,820 linear feet 3.38 miles			\$8,866	4		\$47,140
TOTAL CONSTRUCTION COSTS							
Total							\$47,140
Design & Engineering						10%	\$4,714
Contingency						10%	\$4,714
							\$56,568

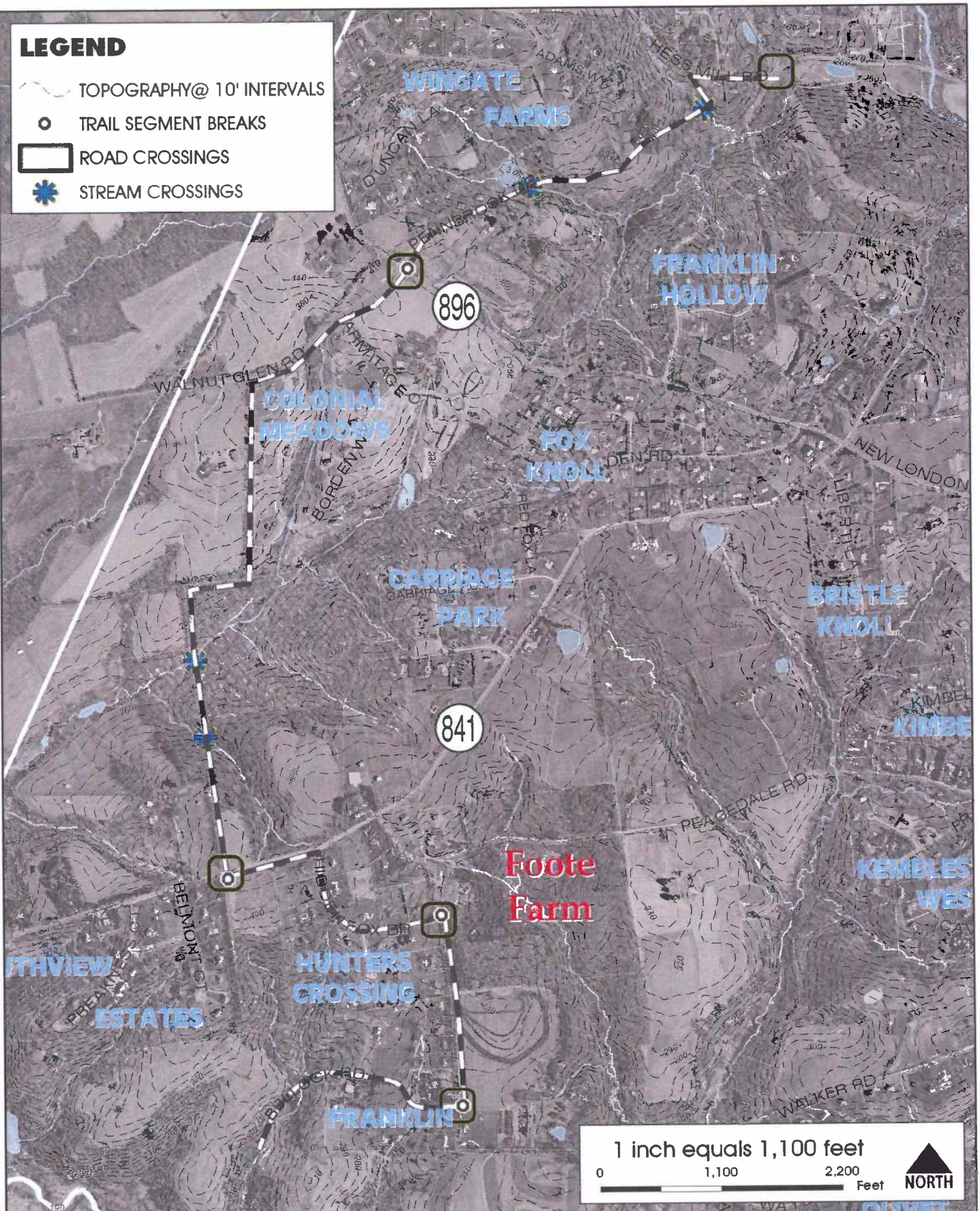
LEGEND

TOPOGRAPHY@ 10' INTERVALS

○ TRAIL SEGMENT BREAKS

□ ROAD CROSSINGS

* STREAM CROSSINGS



August 8, 2008

FRANKLIN TOWNSHIP - TRAIL FEASIBILITY STUDY INDIVIDUAL TRAIL PLANS MAP #12 - WEST TRAIL

Prepared by
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E. TRAIL MAINTENANCE COST ESTIMATES

1. Common Tasks and Management

Maintenance tasks for a natural surface trail mainly include keeping the trail clear of vegetation, trash and downed limbs. Mowing, vegetation removal and the cost of fuel to operate machinery are the major expenses associated with maintenance. The Franklin Township Open Space Committee and Trail Committee are proposed to be combined and will be responsible for overseeing all aspects of this Trail Master Plan, including maintenance tasks. The Assistant Township Manager will manage day-to-day operation and maintenance tasks. Work will be contracted to private firms, and paid for by the Township. Additionally, the Delaware Valley Trail Spinners, an active trail bike organization, has offered to help maintain the trails in Franklin Township.

2. Costs

Maintenance cost estimates for the priority trails and the entire trail system are shown in Table 16. These costs are based on the average maintenance cost of \$5,000 per mile Franklin Township currently spends to maintain trails in Crossan Park.

Table 16: Annual Trail Maintenance Cost Estimates

Construction Phases	Miles	Cost / Mile[1]	Total
Priority Trails			
1. Appleton Road Trail	5.23	\$5,000	\$26,154
2. Middle Branch White Branch Creek Assuming Alternative 2a & 3a	2.63	\$5,000	\$13,137
3. West Branch White Clay Trail	2.61	\$5,000	\$13,075
	10.47		\$52,366
Other Trails			
4. East Branch White Clay Creek Trail	1.98	\$5,000	\$9,917
5. Foote Farm Trail	3.44	\$5,000	\$17,187
6. Guersey Road Trail	2.53	\$5,000	\$12,630
7. Park Link Trail	1.24	\$5,000	\$6,185
8. Pennock Bridge Road Trail	0.89	\$5,000	\$4,429
9. West Trail	3.38	\$5,000	\$16,875
	13.44		\$67,222
Total, Complete Trail Network	23.92		\$119,588

[1] An average maintenance cost of \$5,000 per mile is based on Franklin Township's cost to maintain trails in Crossan Park and maintenance costs observed in other area communities.

APPENDICES

APPENDIX A. PUBLIC PARTICIPATION	A-1
APPENDIX B. BACKGROUND INVENTORY	B-1
APPENDIX C. POPULATION CHARACTERISTICS AND RECREATION NEEDS	C-1
APPENDIX D. PENNSYLVANIA ACT 68	D-1

APPENDIX A. PUBLIC PARTICIPATION

The Feasibility Study project included several public participation exercises to gather public input, opinions and ideas concerning the trail project. The Study Committee that guided the Trail Feasibility Study met at regular intervals to provide input and review project status. The Study Committee was one element of the public participation process, described in this chapter. Workshops and key person interviews were also utilized during the Feasibility Study and are discussed in this chapter.

Several methods to encourage public participation in the trail planning process were employed during this study. These methods are described below.

1. Study Committee

Six (6) Study Committee meetings were held regularly during the project to discuss issues and review progress of the Feasibility Study. Study Committee members included:

- Bob Brechter, Open Space Committee Member
- Teddy Price, Vice Chair, Township Board of Supervisors, Open Space Committee Member
- Jeff Eastburn, Assistant Township Manager and Park Manager
- Phil Geoghegan, Chairman, Open Space Committee
- Connie Chiasson, Zoning Hearing Board Member
- Dolores Hughes, Open Space Committee Member
- Paul Overton, Open Space Committee Member
- Nan Latimer, Open Space Committee Member

2. Public Workshops

The project included one public workshop to engage residents in the trail planning process, described below. The workshop was publicized through a flier that was mailed to each household in the Township. A copy of this flier is shown on the following page. Thirty-eight (38) residents attended the public meeting.

The Trail Feasibility Study's public meeting was held on September 26, 2007. This was a workshop-type meeting in which attendees marked preferred trail types and locations on individual maps. The results of this exercise were compiled then utilized in the feasibility analysis of potential trail alignments.

Residents' preferences for trail types and locations within the Township are shown on the Public Workshop Results Map on the following page, which shows residents preferences for the following bicycle trails, pedestrian and equestrian trails:

Bicycle Routes

- South Guernsey Road
- Church Hill Road from School House Road
- School House Road, Wickerton Road to Route 841/Chesterville Road
- Route 896/New London Road
- Appleton Road
- Creek Road
- Within utility easement to Route 841

YOU ARE INVITED!
HELP MAKE
FRANKLIN TOWNSHIP
A WALKABLE COMMUNITY
Community-Wide Trail Network Feasibility Study



PUBLIC WORKSHOP TO MAP
Bicycle, Pedestrian & Equestrian Paths

September 26, 2007, 6:30 to 8:00 PM
Introduction starts at 6:30 -- Come Anytime / Leave Anytime

Franklin Township Municipal Building
20 Municipal Lane; Kemblesville PA 19347
(610) 255-5212

Share Your Ideas: Trail routes, types and destinations.



The Franklin Township Community Trail Network Study is being prepared
under the direction of the Board of Supervisors and the Township Trail Committee.
