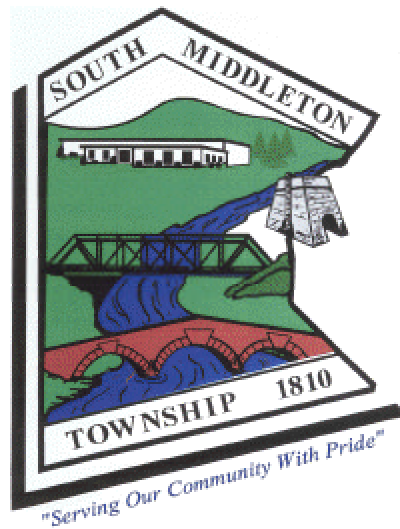


COMPREHENSIVE PLAN



SOUTH MIDDLETON TOWNSHIP

Cumberland County, Pennsylvania

June 28, 2007

SOUTH MIDDLETON TOWNSHIP

BOARD OF SUPERVISORS

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Phyllis Givler

**RESOLUTION NO. 07-15
COMPREHENSIVE PLAN**

WHEREAS, the South Middleton Township Planning Department has prepared, received and forwarded to the Supervisors a proposed comprehensive plan dated _____ June 28th _____, 2007, and

WHEREAS, after due notice, a public hearing has been held thereon as required by law, and

WHEREAS, after due consideration, the Supervisors believe that it is in the best interest of the public to adopt said proposed plan,

UPON motion duly made and seconded, it is unanimously;

RESOLVED, that the proposed comprehensive plan for South Middleton Township, as prepared by the Planning Department, consisting of a proposed zoning district and boundary map, together with related charts and text, be and hereby is adopted as the Official Comprehensive Plan of South Middleton Township, dated _____ June 28th _____, 2007; provided however, that the Board of Supervisors reserves the right to amend or modify said plan or the standards set forth therein by the enactment of appropriate amendments or zoning ordinances hereafter.

BOARD OF SUPERVISORS
SOUTH MIDDLETON TOWNSHIP

ATTEST:

THOMAS E. FALEY, CHAIRMAN

SANDRA A. QUICKEL, SECRETARY

RONALD L. REEDER, VICE CHAIRMAN

JAMES N. BAKER

BRYAN A. GEMBUSIA

WALTER G. REIGHARD

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PHASE I

Background Studies

INTRODUCTION

The purpose of a Comprehensive Plan is to establish an orderly format for guiding and managing the future development within a municipality. The Comprehensive Plan involves a rather methodical process of analyzing the existing features of a community, assessing future trends and patterns and formulating plans for the long-term physical development based upon defined goals and objectives. A completed Comprehensive Plan typically becomes the framework for the municipality's zoning ordinance as well as other local codes aimed at implementing or achieving identified policies.

A Comprehensive Plan is not a static document, but more of a dynamic process. Review, analysis, projection, and program development are ongoing municipal tasks to directing future growth and resources.

South Middleton Township's last Comprehensive Plan update was completed in 1999. Over the last twelve years substantial and significant changes have occurred not only within the Township but on a more regional basis. These changes, as they relate to development throughout the Township, will be highlighted as part of the Phase I – Background Studies. From this background information combined with the input received from workshop meetings, updated plan elements will be developed for goals and objectives, future land use, municipal utilities, roadway and circulation and regional relationships.

The updated plan elements which comprise the Comprehensive Plan become, where possible, the basis for guiding and managing development through the implementation of zoning and subdivision and land developments. Additionally,

the updated plan may become the catalyst for other special studies and programs which are part of the ongoing process of identifying and attaining adopted goals and objectives.

NATURAL FEATURES

The purpose of this background study element is to assemble the generalized physical characteristics of South Middleton Township and relate each to its implication upon growth and development. Although physical features are discussed separately, they do not function independently. For example, geology determines mineral deposits and groundwater supplies. Soil is the end product of vegetative, geologic bedrock and climatic characteristics. Topography and soil character influence drainage and land use suitability.

Guiding and managing future growth within a community should be based, in part, upon the ability of the natural environment to sustain development without irretrievable negative impact. In this manner the Township is better equipped to balance the frequently opposing issues of environmental preservation (no-growth) and development (growth).

In this section the Township's natural and cultural resources are classified and described. This serves as a basis for wise land use planning and enables land development policies to be formulated that will protect the natural environment.

SOILS

The soils information included in this plan is based on the Soil Survey of Cumberland and Perry Counties, issued April, 1986. The Major Soil Associations map illustrates the location of the six soil associations found in South Middleton Township. A description of the soils found in the Township is vital to understanding the appropriate land use applications.

The **Hagerstown-Duffield** association, which encompasses 38% of the land area in the Township, is the predominate association, and is confined to the northern third of the Township. This association is shown on the Agricultural Soils map as an area of prime agricultural soil. It consists of about 60% Hagerstown soils, 20% Duffield soils and 20% minor soils. Both the Hagerstown and Duffield soils are deep and well drained. The Hagerstown soils are level to moderately steep and the Duffield soils are mostly level to sloping. Minor soils included in this association are Huntington, Edom, Penlaw, Murrill and Neshaminy soils on the uplands and Lindside and Melvin soils on the floodplains. The soils in this association are among the best agricultural soils in the County. Limitations for agricultural uses are slope, erosion, rock outcrops and sinkholes. Limitations for non-agrarian use also include possible groundwater contamination due to seepage along fracture lines.

The next largest soils association in the Township is the **Hazelton-Clymer** association. This association comprises 23% of the land area and is composed of 40% Hazelton soils, 15% Clymer Soils and 45% minor soils. It is located in the southeastern section of the Township as well as south, east and west of the Borough of Mount Holly in areas of slope greater than 15%. This soils series is deep and well drained. The Hazelton soils are mainly sloping to very steep, while the Clymer soils are nearly level to moderately steep. Although woodland is the predominant land use in this association some areas are used for home sites. Steep slopes and stones in the surface are the major limitations for use.

The **Highfield-Glenville** association encompasses 17% of the Township. It consists of nearly level to very steep soils located on the tops and sides of mountains and ridges found in the southwestern portion of the Township. Highfield soils, which comprise 63% of this association, are deep, well drained and are nearly level to moderately steep. Glenville soils comprise 25% of the association and minor soils are included in the remaining 10%. Glenville soils, which are deep and moderately well drained to somewhat poorly drained, are nearly level to gently sloping. The soils in this association are suitable for most agricultural uses. The major limitations are slope, seasonal high water table, moderate available moisture capacity and stoniness for both agricultural and non-agricultural uses.

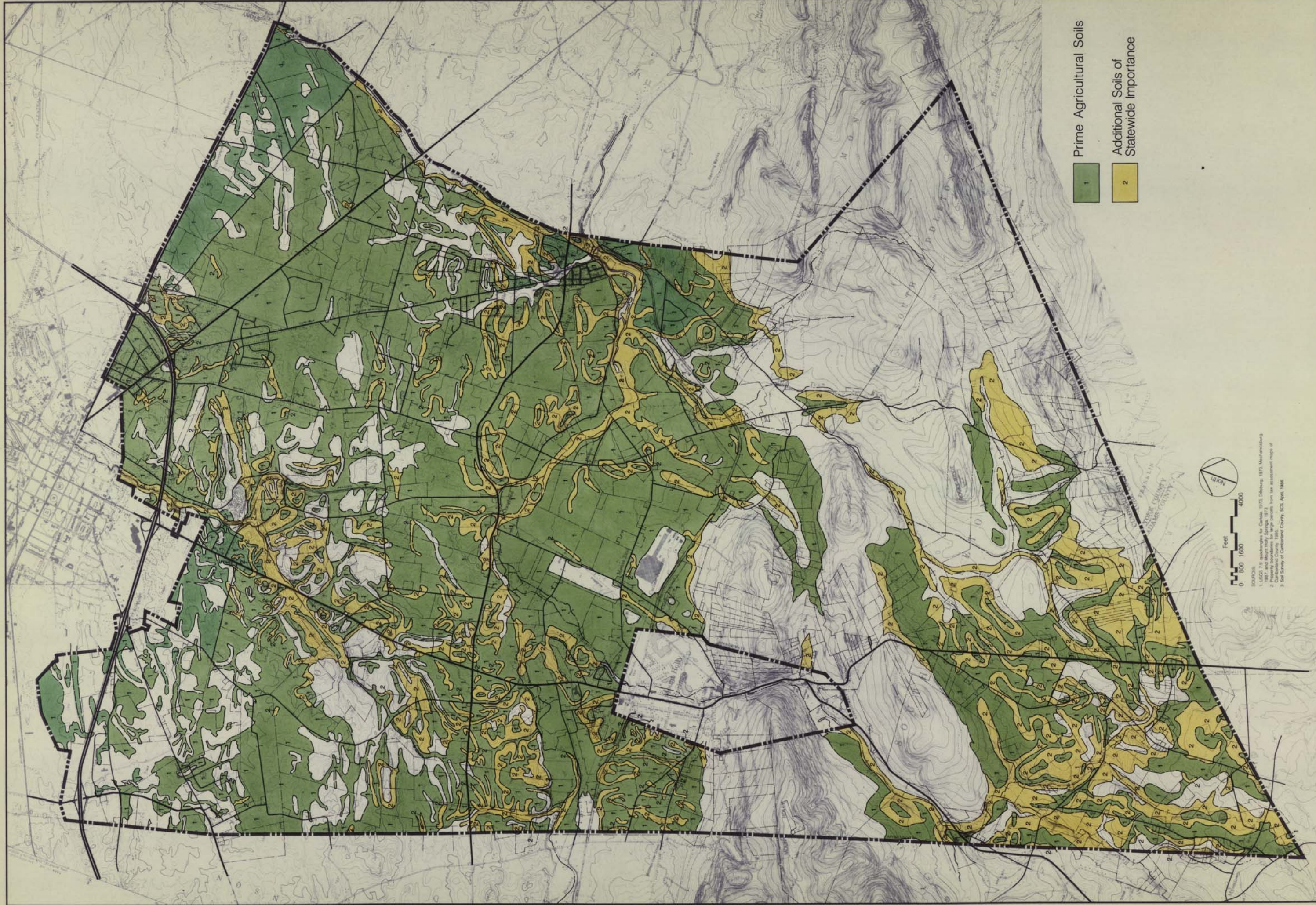
The **Murrill-Laidig-Buchanan** association comprises 11 % of the Township area. It consists of 35% Murrill soils, 20% Laidig soils, 15% Buchanan soils and 30% minor soils. This association is located in an east-west strip south of Rt. 174. Murrill soils are deep, well drained and nearly level to moderately steep. Laidig soils are deep, well drained and gently sloping to moderately steep. A fragipan exists in the subsoil. Buchanan soils are similar to the Laidig series except they are moderately to somewhat poorly drained. Soils in this association are mainly used for cropland, pasture and woodland. Primary limitations include slope, stoniness, reduced permeability and a seasonal high water table.

The **Monongahela-Atkins-Middlebury** association is located along the Yellow Breeches Creek and makes up 7% of the soils in the Township. It is comprised of about 35% Monongahela soils, 25% Atkins soils, 10% Middlebury

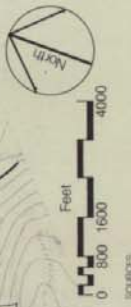
soils and 30% minor soils. These deep, nearly level and gently sloping soils are moderately well drained to poorly drained. They are formed in alluvium. The Monongahela soils are deep and moderately well drained. They are nearly level and gently sloping and occur on the stream terraces. Atkins and Middlebury soils are located on the floodplains and are nearly level. Both the soil series are deep but the Atkins soils are poorly drained whereas the Middlebury soils are moderately well drained to somewhat poorly drained. Pasture and woodland is the primary land use of this association; however, the soils are generally suitable for most agricultural uses. Flooding and a seasonal high water table are the major limitations for use for both agricultural and non-agricultural uses.

The **Athol-Neshaminy** association represents about 4% of the soils in the Township and is located in a narrow band in the northeast quadrant. This association, which occurs on gently sloping and sloping terrain in upland valley areas, is comprised of about 45% Athol soils, 40% Neshaminy soils and 15% minor soils. Both of the major soil series in this association are deep and well drained. The soils in this association are suitable for both agricultural and most non-agricultural uses. The major limitations for use are slope, high content of coarse fragments, low strength, large stones on the surface and hazard of erosion.

The Agricultural Soils map shows areas of prime agricultural soils, i.e., those with the least slope and most fertility (these are indicated by the number 1). Additional soils of statewide importance, indicated on the map by the number 2, are steeper, thinner, but still productive. The source of these classifications is the



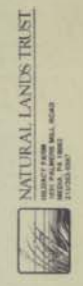
Prime Agricultural Soils
 Additional Soils of Statewide Importance



SOURCES:
 1. USGS 7.5 quadrangles for Getzler 1973, Dillsburg 1973, Mechanicsburg 1967, and Mount Joy, Spring 1973
 2. USGS 1:250,000 map of York County, Pennsylvania
 3. Soil Survey of Cumberland County, SC, April, 1966

SOUTH MIDDLETON
TOWNSHIP
CUMBERLAND COUNTY, PENNSYLVANIA

AGRICULTURAL SOILS



NATURAL LANDS TRUST
 1000 N. MARKET STREET
 SUITE 200
 YORK, PA 17403

Soil Conservation Service (now known as the Natural Resources Conservation Service) soil survey. As shown on this map, the prime agricultural soils are mainly located in the northern two-thirds of the Township, while the other soils are scattered throughout the Township, with a concentration in the Township's southwestern sector. The lack of slope of these prime soils, as well as their depth and good drainage, makes this area attractive to development.

Summary of Soils Characteristics

The soils in South Middleton Township are quite variable due to distinct differences in both parent material and topographic features. For example, the Hagerstown-Duffield Association is formed in material weathered from limestone, while the Hazelton-Laidig-Buchanan Association is formed from gray and brown quartzite, sandstone, siltstone and shale. The relationship of soils to development is most strikingly manifest in the ability of the soil to renovate on-lot sewage disposal. Depth to bedrock, permeability and groundwater level are primary criteria. Outside of sewer service areas, it is important to control density to avoid malfunctioning septic systems and ground and surface water contamination. Generally, the soils in the Township have moderate limitations for most land uses associated with the area. Limitations for building and recreational uses have been tabulated and are included in this section. It is important to realize that actual site investigation is necessary prior to actual development. Inasmuch as the limitations, as well as the actual soil mapping are generalized, specific site conditions may affect actual development limitations.

The following tables summarize the potential limitations for use of the various soil associations.

LIMITATIONS FOR USE - BUILDING SITES

Soil Association	On-site Septic	Bidgs w/ Basement	Bidgs w/o Basement	Small Commercial	Local Roads
Hagerstown/Duffield	80% Mod	80% Mod	80% Mod	80% Mod	80% Mod
Hazelton/Clymer	55% Sev	55% Mod to Sev	55% Mod to Sev	55% Mod to Sev	55% Mod to Sev
Highfield/Glennville	65% Mod 25% Sev	65% Mod 25% Sev	65% Mod 25% Sev	65% Mod 25% Sev	65% Mod 25% Sev
Murrill/Laidig/Buchanan	35% Mod 35% Sev	55% Mod 15% Sev	55% Mod 15% Sev	55% Mod 15% Sev	55% Mod 15% Sev
Monongahela/Atkins/Middlebury	70% Sev	70% Sev	35% Mod 35% Sev	35% Mod 35% Sev	35% Mod 35% Sev
Athol/Neshaminy	40% Mod 40% Sev	40% Slt 40% Mod	80% Sev	80% Mod	80% Mod

Source: Soil Survey of Cumberland and Perry Counties, Pennsylvania

Note: 1. 1% indicates the percentage of that soil association exhibiting the particular limitation.

2. 100% evaluation is not available due to inclusions of minor soils in the major associations.

3. SLT = Slight; MOD= Moderate; SEV = Severe

4. Steep slopes are considered to severely limit all uses.

LIMITATIONS FOR USE - RECREATIONAL DEVELOPMENT

Soil Association	Camp Areas	Picnic Areas	Playgrounds	Paths/Trails	Golf Fairways
Hagerstown/Duffield	80% Slt	80% Slt	80% Slt	80% Slt	20% Slt 60% Mod
Hazelton/Clymer	55% Mod to Sev	55% Mod to Sev	55% Mod to Sev	55% Mod	55% Mod to Sev
Highfield/	65% Mod	65% Mod	90% Sev	65% Slt	65% Mod

Glennville	25% Sev	25% Sev		25% Sev	25% Sev
Murrill/Laidig/ Buchanan	55% Mod 15% Sev	55% Mod 15% Sev	70% Sev	55% Slt 15% Sev	55% Mod 15% Sev
Monongahela/ Atkins/ Middlebury	35% Mod 35% Sev	35% Mod 35% Sev	35% Mod 35% Sev	70% Sev	35% Slt 35% Sev
Athol/ Neshaminy	80% Mod	80% Mod	40% Mod 40% Sev	80% Slt	80% Mod

Source: Soil Survey of Cumberland and Perry Counties, Pennsylvania

Note:1. % indicates the percentage of that soil association exhibiting the particular limitation.

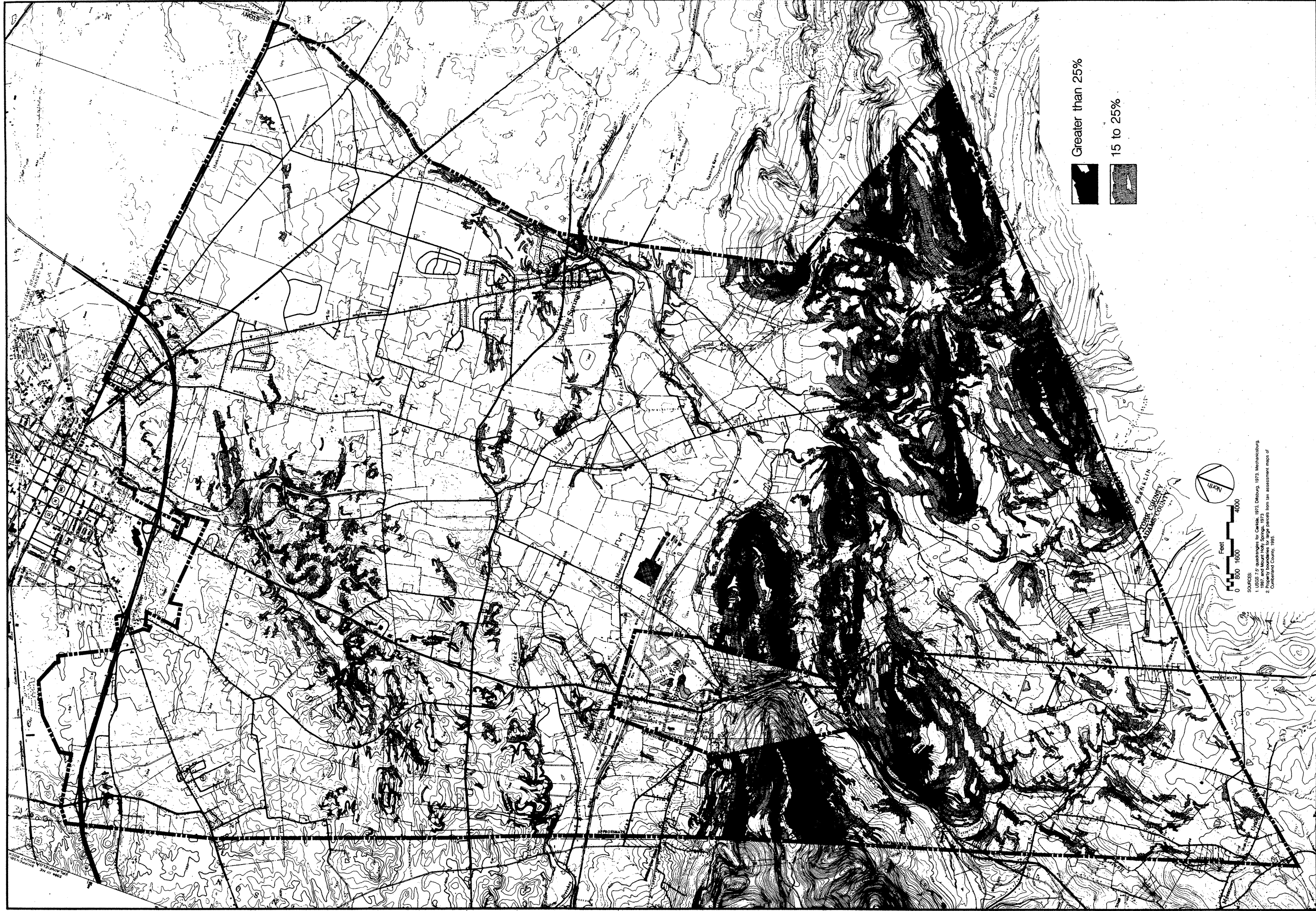
2. 100% evaluation is not available due to inclusions of minor soils in the major associations.

3. Slt = Slight; Mod = Moderate; Sev = Severe

4. Steep slopes are considered to severely limit all uses.

Planning Implications

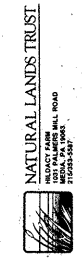
Prime soils for agriculture are also prime soils for urban development. There will continue to be strong competition for use of these soil areas. Expansion into these areas will bring about the need to extend services such as water and sewer. Extending these services into areas of low population density will require central sewage collection systems, which will be very expensive. Percolation rates of prime soils are excellent, and this represents great potential to contaminate the groundwater. Soil conditions do not represent a deterrent to urban development; therefore, the Township will need a strong strategy if it wants to realize its goal to retain prime soils for agricultural uses.



SOURCES:
 1. USGS 7.5' quadrangle for Caledonia, 1973; Delmar, 1973; Mechanicsburg, 1967; and Mount Holly Springs, 1973.
 2. Generalized slope map of the township for the 1980s.
 3. Generalized slope map of the township for the 1990s.
 4. Generalized slope map of the township for the 2000s.
 5. Generalized slope map of the township for the 2010s.

**SOUTH MIDDLETON
 TOWNSHIP
 CUMBERLAND COUNTY, PENNSYLVANIA**

STEEP SLOPES



NATURAL LANDS TRUST
 10000 W. MARKET ST., SUITE 100
 HARRISBURG, PA 17110

TOPOGRAPHY

Located in the Cumberland Valley, South Middleton Township has a wide range of topographic conditions; stream valleys to sharp mountain ridges. The area of greatest height and slope lies south of the old Reading Railroad line in the South Mountain ridges.

A wide band of gently rolling terrain stretches east-west across the central region of the Township along both sides of the Yellow Breeches Creek and extending north to the LeTort Spring Run watershed area. Along the edges of the LeTort watershed are some hillsides with slopes exceeding 15 percent.

On the top of South Mountain, the topography is generally a rolling level area with sloping land of less than 10 percent. The slope of land influences the location of development and use of land. Graded as a percent of slope, the Township has been delineated into 3 categories: areas with slope of less than 15 percent, areas with slope of 15-25 percent and areas with slopes exceeding 25 percent. The map entitled "Steep Slopes", shows the general areas placed into the three categories of slope.

In general, slopes of less than 15% present few problems for most types of land uses; the flatter slopes sometime create problems in developing adequate stormwater management in intense development situations. As the slope of the land increases, urban type of development becomes less desirable and more expensive to build and maintain. Water runoff is greater in these areas. This increases erosion with resulting increased silting of stream channels causing increased flooding. Generally, areas of less than 15 percent are more

appropriate for urban development. These areas of South Middleton Township are located north of the old Reading Railroad line extending northward to Carlisle.

The map shows that the areas with slope greater than 25% are located south and southeast of the Borough of Mount Holly Springs, where the South Mountain ridge transverses the Township in an east-west direction. This area does not lend itself well to development due to sparse vegetative cover and the potential for erosion and runoff. Intensive development is not practical in this area of the Township.

Planning Implications:

Areas of lower slope are more appropriate for urban/suburban development. These areas of the Township are generally well suited and used for farming. The competition for farmland by development will increase in the future and make the continuation of farming in the Township very difficult. Areas of slope greater than 25 percent are prohibitive for urban development, and are best left in forest. It will be essential to control the timbering and resource extraction along these steep slope areas of South Mountain. South Mountain with its extensive forest cover serves as a very desirable scenic backdrop for the Township. Ridgeline and tree cover will need to be protected if these scenic qualities are to be sustained into the future.

Areas having slope of 15 to 25 percent will require special attention and conditions for development to take place with a minimum of problems. These

areas could serve as the buffer between lower lying areas more compatible for building and the steeper areas of the mountain nearer to the ridgeline.

GEOLOGY

The Geology map, delineating carbonate and non-carbonate formations in the Township follows this section. Approximately the northern three-fourths of the Township are composed of carbonate formations. Fault lines, as well as caves are indicated on this map.

Identification of where fault lines lie is important in order to protect the groundwater resources in the Township. Wells in the carbonate rock reach aquifers which are capable of yielding very large quantities of water. These aquifers transmit large quantities of water by means of the rock fracturing which has occurred over geologic time, and has created open areas in the subsurface fractures (solution channeling). This solution channeling and subsequent dissolution of the limestone can lead to surface conditions such as sinkholes (sinkholes are indicated on the Hydrology map), closed depressions and others features collectively known as "karst topography." These features create potential pathways for contamination of the aquifers through the introduction of surface water into the subsurface. Infiltrating surface water may also cause unconsolidated material overlaying bedrock to migrate downward. These features indicate potential areas of structural weakness that may affect the integrity of building foundations, pipelines, roadways and other structures.

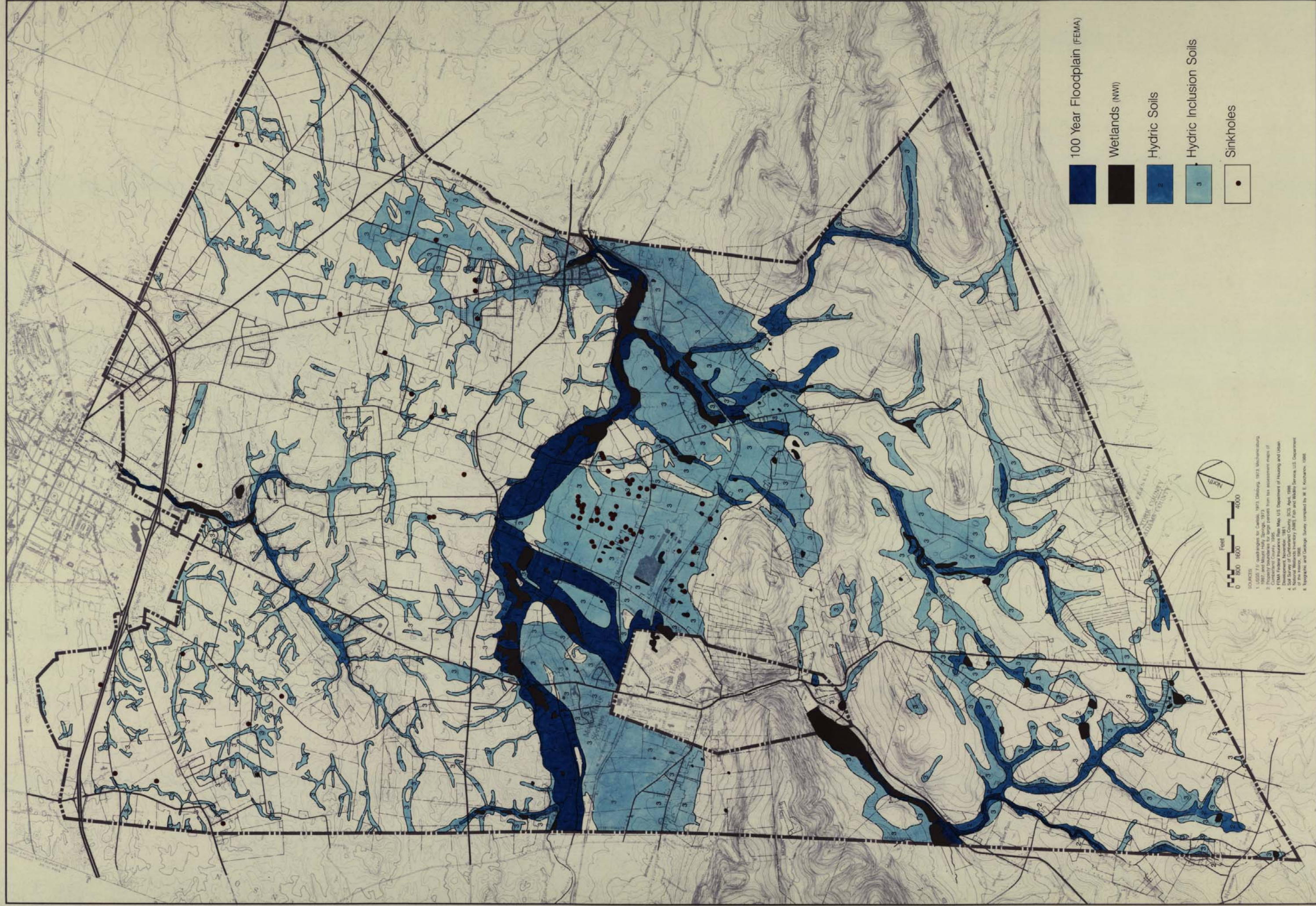


Planning Implications

By identifying fracture line locations in the Township, future development in these areas can be guided in order to protect groundwater resources. On-lot septic systems can contaminate subsurface water supplies by seepage along these fracture lines. Urban development in these areas can exacerbate or accelerate the formation of sinkholes due to dissolution of the underlying limestone subsurface. Structural problems may also result due to weakening of the subsurface environment. The Township should continue to monitor development in areas located within fracture line zones in order to minimize future problems.

HYDROLOGY

The "Hydrology" map shows the streams and flood prone areas of the Township. These include the 100 year floodplain, wetland areas, hydric soils (indicated by the number 2), hydric inclusion soils (indicated by the number 3) and sinkholes. Flood damage potential suggests these areas should be left undeveloped, in a natural state with few or no structural improvements. As development increases throughout the Township, flood prone areas are likely to increase as well as the severity of the flooding. The floodplain delineated on the map is based on the Federal Emergency Management Agency (FEMA) Federal Insurance Rate Map and shows the base flood elevation of the Yellow Breeches Creek in the Township. The Yellow Breeches Creek represents the major flood hazard area in the Township. Other streams included with a flood hazard area are the LeTort Spring Run, Mountain Creek, Hunters Run, Old Town Run,



SOURCES:
 1. Contour maps for Conowingo, 1973; Delays, 1973. Maps from along
 1987 and Mount Holy Springs, 1973.
 2. Property boundaries for large tracts from tax assessment maps of
 Cumberland County, 1986.
 3. FEMA Flood Insurance Study, 1986. Map, U.S. Department of Housing and Urban
 Development, November, 1985.
 4. Soil Survey of Cumberland County, SC2, April, 1986.
 5. Soil Survey of Cumberland County, SC2, February 1985. Fish and Wildlife Service, U.S. Department
 of the Interior, 1985.
 6. Hydrologic and Damage Survey compiled by W. E. Kochanov, 1988.

**SOUTH MIDDLETON
 TOWNSHIP**
 CUMBERLAND COUNTY, PENNSYLVANIA

HYDROLOGY



Whiskey Run and Little Dogwood Run. A large portion of the hydric soils as well as wetlands are associated with the Creek itself, but there are wetlands and hydric soils associated with LeTort Spring Run in the northcentral section of the Township, as well as with Mountain Creek in the southwestern portion of the Township.

Sinkholes, mentioned in the Geology section, are shown and are associated with the hydric inclusion soils. These soils which exhibit a natural tendency to flood, pose major problems to urban development activities.

Planning Implications:

Flooding of these areas suggests the best use is for non-structural development. Farming and recreational activities are the most logical uses and could serve as greenways. These greenways serve as buffers between sections of the urban development, and between the urban area and the farming area.

SCENIC RIVERS

As mentioned previously in the Hydrology Section, South Middleton Township has two Pennsylvania-Designated Scenic Rivers: LeTort Spring Run and the Yellow Breeches Creek. According to DCNR classification criteria, "Scenic rivers shall be free-flowing and capable of, or under restoration, to support water-based recreation, fish and aquatic life. The view from the river or its banks shall be predominantly wild, but may reveal some pastoral countryside. The segment may be intermittently accessible by roads." LeTort Spring Run received Scenic

River designation in March 1988, and the Yellow Breeches Creek in December 1992.

POPULATION

INTRODUCTION

The population of South Middleton Township is expected to continue to change both in numbers and in characteristics. Many factors, including national, state, and local compositions, can affect existing characteristics as well as future trends. Projections of population are, at best, an educated guess. The farther into the future projections are made, the less accurate they are likely to be.

Population projections are used to anticipate needs for future land uses and development, as well as the delivery and provision of public services. Changing population will require additional housing. This will require more land for development.

Compiling population projections helps to establish how much land this new population will need. South Middleton Township has a goal is to accommodate population change while retaining its rural-like character and the quality of life styles. Thus, the population projections contained herein are being used to demonstrate the needs of the Township should it continue to develop at its historical pace. Obviously, if there is an overabundance of available land for housing, and this is all developed at one time, then the population will increase at a much higher rate. So, although these projections may prove to be inaccurate at the future dates because of higher than expected development, they are being presented for planning purposes to be used to help determine the amount of land that would be needed, based upon historical trends of population increase, which should be available for residential development.

POPULATION CHARACTERISTICS

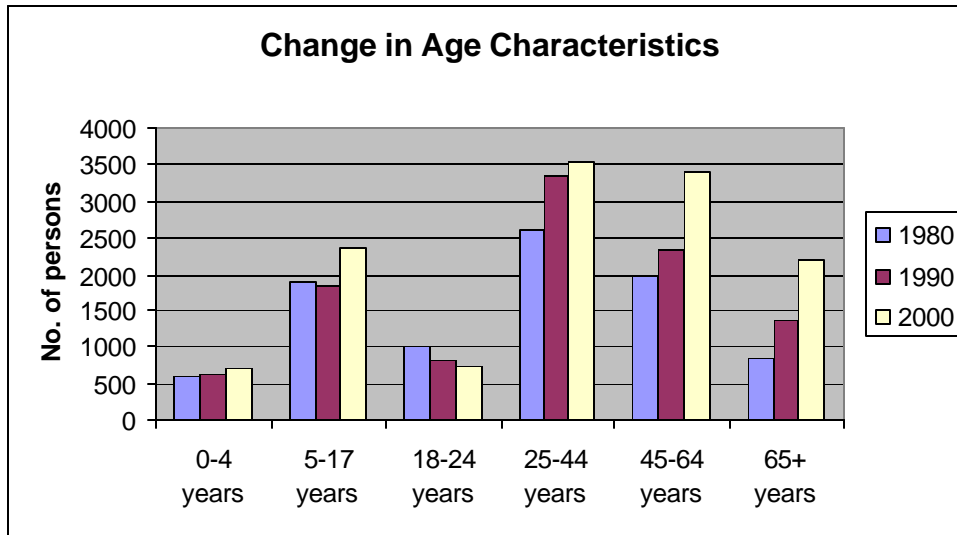
A comparison of population characteristics from 1980 to 2000 indicates some changes have and are occurring. Age composition data has long been recognized as supplying important information for school planning and recreational needs. Projection of age composition is of special concern in determining long-range facility needs and land requirements for schools and recreational sites. Changing population can influence the need to change the provision of municipal services. Younger populations tend to require more active recreational facilities. Older populations need more passive recreational and health care facilities, and are often less demanding for municipal services.

For example, the numbers of children between the ages of 0 and 4 helps to foresee the future elementary school classroom space needs and recreational programs geared to preschool-aged children. The age group 5 to 17 years represents the school aged population attending school. Those aged 18-24 are the young adults who are just entering the work force, and who may rely heavily on the supply of rental housing. The age groups 25-44 consists of the young labor force and those who have the most children. The mature labor force, those in the age group 45-64, is more apt to be more settled and at the peak of its earning power. They are more able to purchase larger dwellings on larger lots. Those 65 and older represent the senior segment of the population. The U.S. Census data for South Middleton Township, broken down by these age groups is as follows:

FIGURE 1

Change in South Middleton Township Age Characteristics – U.S. Census						
Age Group	SMT 1980	% Pop.	SMT 1990	% Pop.	SMT 2000	% Pop.
0-4	600	6.7	635	6.1	703	5.4
5-17	1899	21.2	1848	17.9	2377	18.4
18-24	1006	11.3	822	7.9	724	5.6
25-44	2613	29.2	3338	32.3	3543	27.4
45-64	1993	22.3	2341	22.6	3392	26.2
65+	830	9.3	1356	13.1	3200	17.0

FIGURE 2



The above table and graph reflect the changes to the age composition between 1980 and 2000. Although the number of preschool age and children age 5-17 has increased in this twenty year period, their proportion of total population decreased. Those persons age 18-24 decreased both in number and proportion of the total population throughout the time period. The group 45 years and over showed the largest increase and were 44 percent of the total population. These numbers for 1980, 1990, and 2000 indicate a decrease in the younger population

(under Age 24), and a shift to older population. The median age in 1980 was 31.6 years, 36.1 years in 1990 and 41.0 years in 2000.

This over-65 segment in South Middleton Township is the group having the greatest percent increase between 1980 and 2000. A comparison to the national level shows that this age group is increasing at a rate greater in South Middleton Township than at the national level. The number of people over 65 nationally actually decreased during the same time period.

FIGURE 3

Change in National Age Characteristics – U.S. Census				
Age Groups	U.S. 1990	% Pop.	U.S. 2000	% Pop.
0-4	18,354,443	7.4	10,746,798	3.8
5-17	45,249,989	18.2	53,118,014	18.9
18-24	26,737,766	10.8	27,143,454	9.6
25-44	80,754,835	32.5	85,040,251	30.2
45-64	46,371,009	18.6	61,952,636	22.0
65+	31,241,831	12.6	34,991,753	12.4

This population segment nationally often has limited income, and requires increased medical and health facilities. However, the median household income in South Middleton Township continues to rise even as the over-65 population increases.

Other socio-economic data is important for planning purposes because they better describe the composition of the population of the Township. Data on household size and income are particularly useful. The information is shown in the following tables. Population: Male and Female, Household Statistics and Income. The male-female ratio shows little change from 1980 to 2000. Family households represented 80 percent in 1990 but decreased to 75 percent in 2000.

Total households increased 40 percent with a significant increase in the number of single person households. Per capita income increased significantly from 1990 to 1999, showing an increase of more than 39% over the 1990 median family income.

POPULATION: MALE-FEMALE					
Year	Total Persons	Total Females	(%)	Total Males	(%)
1980	8,941	4,513	50.5	4,428	49.5
1990	10,340	5,269	51.0	5,071	49.0
2000	12,939	6,645	51.4	6,294	48.6

HOUSEHOLD STATISTICS							
		Family Households			Non-family Households		
	Total Households	Total	Married Couple	Female Head	Total	Householder Living Alone 65 and Over	
					Total	Total	Female
1980	3105	2559	2316	202	546	175	122
1990	3811	3036	2673	284	775	259	206
2000	5081	3806	3288	394	1275	418	325

INCOME			
Year	Per Capita	Median Household	Median Family
1980	\$7,144	\$18,108	\$19,525
1990	\$14,888	\$37,174	\$41,233
1999	\$24,370	\$50,503	\$60,511

Pennsylvania Economy League Study

In 2004, the South Middleton Township School District commissioned the Pennsylvania Economy League to conduct a study of future growth patterns for the purpose of projecting public school enrollments in South Middleton Township. Their conclusions were that “public school enrollments over the next ten years will be dependent more on recent and future births, migration patterns, the age composition of the child population, and the role of nonpublic education than on the overall population pattern. If recent experience serves as a valid guide, the

trends in public school enrollments will not necessarily directly mirror the pace of population growth.”

A summary of some of their findings indicates the following:

Births per 1,000 Population

Births averaged 14.1 during the 1970s, decreasing, in the 1980s to 12.2, and in the 1990s, to 10.9 per 1,000 Population. During the years 2000-2002, the number of births continued to decrease to 9.3. The highest number of births (17.0), occurred in 1971, with the lowest number (8.6), occurring in 2001.

Births per 1,000 Housing Units

In the 1970s, births per 1,000 housing units averaged 42.7, decreasing to 33.2 in the 1980s, and to 27.6 in the 1990s. In the first three years of the present decade, births averaged 22.2. The highest number (53.6) occurred in 1971, and the lowest (20.1) in 2001.

Number of Public School Children per 1,000 Housing Units

In 1970-71, there were 0.857 public school children per 1,000 housing units. Between 1980-81 (0.527) and 1990-91(0.435), the number decreased to slightly more than half of the 1970-71 figure. For 2000-01 the number continued to decrease to 0.403, and in 2003-2004 the decrease continued to 0.366.

Both births per 1,000 population and births per 1,000 housing units declined in the 30+ year analysis period. The number of housing units permitted increased

from 35.4% in the decade 1970-1980, while the number of public school children decreased by 16.8%. By 1990-91, there was a 24.3% increase in the number of housing units, and an increase in the enrollments of 2.6%, resulting in a decreased ratio of children/housing unit of slightly more than one-half of the 1970-71 figure. Children per housing unit for the 2003-04 school year decreased to 0.366. These decreases were reflected in all 4 grade groupings – K-3, 4-5, 6-8 and 9-12. Although the number of housing units continues to increase, the ratio of public school children per housing unit has decreased from 1970 through 2003-04.

Planning Implications

Interpretations of the foregoing information suggests or implies a variety of planning activities to be considered in providing amply for the changing population in the years ahead in South Middleton Township. As the population changes, there will be increased need for public services such as water supply, sewage treatment, road improvements and schools. Different family structures will require housing of different types. A shift from traditional family structure will suggest housing of a different type than the single family detached house. As the elderly portion of the population increases, smaller lot size, and low maintenance housing types will be required. The proximity to Carlisle and the Harrisburg Region will attract more persons to the lower land costs of the rural area. The high quality of lifestyle will attract more retired persons. Older persons will need more life care communities and health services. A decrease in the need for additional school facilities and active recreation will result from the declining

school enrollments, and the reduced number of younger persons. The reduction of the population segment from 18-44 may suggest a lack of affordable housing for this age group.

Population Projections

To plan for the future and for those persons who will come to South Middleton Township, it is essential to determine how many new persons will move into the Township. Population projections are calculated for this purpose. A number of agencies have compiled projections for the Township and Cumberland County. Projections are made using a variety of mathematical methods. For the purposes of the South Middleton Township planning, the mathematical methods used to compile projections are: arithmetic, exponential, and shared ratio. The results of these calculations are compared to other sources of population projections such as State Data Center, Tri-County Planning Commission, State Agencies, school census and projections, and building permit information.

Arithmetic Projection

The arithmetic technique uses a constant numerical change based on the average change in population over the period 1960 to 2000. This average change is added to the population in the base year and for each 10 year period for which projections are desired. Projections for the Township are made for the year 2010 and 2020.

EXAMPLE:	Population 1960	5425
	Population 2000	12,939
	Difference	+ 7514 persons over 40 years
	Average annual increase is	187.9 persons
	Year 2005 projection	12,939 plus 940 = 13,879 persons
	Year 2010 projection	12,939 plus 1879 = 14,818 persons
	Year 2020 projection	13,127 plus 1879 = 16,697 persons

Exponential Projection:

This technique assumes an exponential growth to determine the increase in population. This will project a higher population than the linear growth and assumes an exponential growth. The technique is demonstrated below:

$$\text{Population}_{\text{PROJECTED}} = \text{Population}_{\text{NOW}} (1 + \text{RATE})^{(\# \text{ of years})}$$

$$\text{where: } (1 + \text{RATE}) = (\text{Population}_{\text{NOW}} / \text{Population}_{\text{BEGINNING}})^{(1/\# \text{ of years})}$$

So, based upon the population increase from 1960 to 2000 in South Middleton Township, the projected (1 + RATE) would be:

$$(1 + \text{RATE}) = (12,939/5,424)^{(1/40)} = 1.022$$

And the projected population for 2010 and 2020, projected from the Census data for the year 2000, would be:

$$\text{Population}_{2005} = 12,939 (1.022)^{(5)} = 14,426$$

$$\text{Population}_{2010} = 12,939 (1.022)^{(10)} = 16,085$$

$$\text{Population}_{2020} = 12,939 (1.022)^{(20)} = 19,995$$

Shared Ratio Projection:

The shared ratio projection technique compares the population of the smaller unit to a larger unit. For this projection, South Middleton Township is compared to Cumberland County.

The following chart shows the U.S. Census population for the County and Township since 1960.

	1960	1970	1980	1990	2000
Cumberland County	124,816	158,675	179,625	195,251	213,674
South Middleton Twp.	5,424	7,521	8,941	10,340	12,939
Percent of county	4.34	4.74	4.77	5.29	6.06

The ratio of South Middleton Township's population to the County for the year 2000 is 6.06 percent. (12,939 divided by 213,674). The Township population shows an increasing proportion of the County population. The increase from 1960 to 2000 was 1.72%. Based upon an arithmetic increase in the percentage (1.72%/40years = .043 % increase/year), we can estimate that the percentage of Cumberland County's population in South Middleton will be 6.49% in 2010 and 6.92% in 2020.

The State Data Center has projected the county population to be 249,813 in 2010 and 269,375 in 2020. Thus, the shared ratio population projections for 2010 and 2020 are:

	2010	2020
Cumberland County	249,813	269,375
Percent of county	6.49	6.92
South Middleton Twp.	16,213	18,641

Other Sources:

Various other agencies are used as a source for population information. The U.S. Census taken each decade is used as the official count. Projections made from other sources show a wide range of population. This demonstrates that projections are only a guide or indication of what the pending population may be. Population Projections from other sources:

	2000	2010
Cumberland County (State Data Center)	209,992	221,325
South Middleton Township (TCRPC)	11,722	12,704
Township Comprehensive Plan 1988	13,000	14,500
Township Open Space Plan 1994	13,000	14,500
Township Sewerage Plan DER 1991	10,890	10,957
Township Act 537 Sewerage Plan 1991	13,870	15,173
State Water Plan	10,890	11,652

The age and methodology of these various projections influences the accuracy and appropriateness of the results. The DER projections are outdated and conservative. The Act 537 Plan relies on the sewage hookup of past years. These tend to be more accurate provided the rate of sewer extensions and hookup does not change. The planning documents of the Township utilize the same populations. The range of population from these sources is 10,890 to 13,870 for the year 2000, and 10,957 to 15,173 for the year 2010.

Final Projections

Population projections shown in the following chart are those established as the official populations for the Township to be used in its planning and development decisions.

**SOUTH MIDDLETON TOWNSHIP
POPULATION PROJECTIONS**

Source	2004	2005	2010	2020
Tri-County Regional Planning Commission*	-	14,871	15,769	17,300
U.S. Census	13,721	-	-	-
SMT Arithmetic	-	13,879	14,818	16,697
SMT Exponential	-	14,426	16,085	19,995
SMT Shared Ratio	-	14,956	15,139	16,324

*TCRPG municipal populations projected based upon County projections produced by State Data Center

To facilitate decisions related to the development of the Township and the provision of adequate services and land to support the pending development, the projected populations are set forth in a range. For the year 2010 the range is 15,000-16,000, and for 2020 the range is 17,000-18,000.

EXISTING LAND USE

INTRODUCTION

The two most important components of a community are its people and the land they occupy. South Middleton Township is a large area approximately 50.8 square miles. How the people of the Township use and will use the land is a key planning issue. As the characteristics of the population change, so will the use of the land change. The regional setting will produce changing economic conditions that may be reflected in the changes in development that takes place.

Description of Land Use Categories

The categories used are general groupings for the most predominant uses of land found in the Township. Uses are grouped by those uses having similar characteristics. The categories used to determine existing land use and the existing land use map listed below are referenced from the Cumberland County Comprehensive Plan of 2003.

- Agriculture
- Commercial Open Space/Recreation
- Commercial Service
- Industrial
- Public/Semi-Public
- Residential
- Large Lot Residential
- Vacant

Existing Uses of the Land

South Middleton Township is predominantly a rural farming and forested area. Approximately 75 percent or more of the land is used for farming, forest or woodland. These are the areas experiencing new development. As development occurs in the scattered pattern, the farmland and woodland are slowly being converted to suburban development.

Suburban development occupies about 15-20 percent of the land area in the Township. Considerable development of single residences exists in the woodland and agricultural areas. This development is an early indicator of the conversion from rural to suburban setting. This development influences the use and activity of a significant amount of land adjacent and around this land development. The scattered residential development in the rural area represents suburban fringe.

Commercial and retail uses represent less than three percent of the land area. Retail uses are scattered throughout several areas of the Township. A major segment is within a strip along Holly Pike extending almost to the Yellow Breeches Creek from Interstate 81. Some commercial uses are located along Walnut Bottom Road. A few are situated in the Boiling Springs urban area.

Industrial/manufacturing and office uses are limited within the Township. A major complex located on Park Drive accounts for the major part of this category. The Walnut Bottom Road area has some office uses. There are a number of small facilities scattered throughout the Township.

Roads and transportation occupy about 3-5 percent of the land area. This system affects all parts of the Township. The major roads serving the Township include Interstate 81 with several interchanges. Holly Pike, Forge Road, Walnut Bottom Road and York Road are the main north-south roads, with Park Drive serving as the main east-west road in the southern portion of the Township.

Other uses within the Township occupy a very small percentage of the total land area. This includes school sites, public parks and Township facilities. The amount of land developed for the various uses reflect the traditional components of a rural area that is experiencing suburban development. While the actual amounts of land developed are important, it is essential to realize that a given parcel of developed land influences a much greater area of the surrounding land. This influence often sets the trend and type of development most likely to take place on adjoining land.

Patterns of Existing Development

Existing developments of South Middleton Township has three general areas of distinctly different characteristics. The northern section is predominantly suburban development that adjoins Carlisle Borough. The existing system of major state roads has caused the suburban pattern to extend south into the Township along several corridors. Walnut Bottom Road extending west out of Carlisle has developed commercially with some residential complexes. The Holly Pike is stripped with commercial uses and some scattered residential development. The development in this corridor extends south almost to the Yellow Breeches Creek. The Forge Road-York Road corridor is predominantly

residential development, with two concentrations; one adjoining Carlisle and the other an extension north from Boiling Springs.

The second area, the central portion of the Township, is predominantly agriculture and farming activities. In many places the road frontage is stripped with large-lot residential uses. Throughout this area, random residential development is setting the pattern of early stages of suburban development.

The third area, the southern portion of the Township, is dominated by forested mountainsides and hills. The mountaintop area is developed with farming and orchard activities. In numerous places in this section, road frontage is stripped with large-lot residential development. Within the forested area there are some seasonal dwellings, and some year-round residences. The major part of the forested area is located generally east of Baltimore Pike extending to the Monroe Township line.

The commercial, retail and industrial development is scattered throughout the north section of the Township. Commercial development is generally along Walnut Bottom Road and Holly Pike. Most of the industrial development is located on Park Drive, and in areas along the Interstate 81 corridor. Some office complexes are situated along Walnut Bottom Road.

Planning Implications

The scattered pattern of large residential lots affects considerably more land area than that actually developed. This sets the trend for future development. Where residential lots occur in the agricultural area, the incompatibilities hasten the conversion of farmland. This development is counter

to the goals of the Township to preserve and retain prime soils and agricultural activities in the rural setting.

This scattered pattern of development increases the cost of services by the Township, which are extended over a larger area than would normally be required. More miles of roads to maintain at a higher level of maintenance; extension of sewer lines and a wider area for police protection represent increased cost for services. The advancement of services into the farm area increases the likelihood of the land being converted to suburban development.

The stripping of the road frontage with development creates the potential for unsafe conditions, and along major roads causes traffic congestion, which slows the movement of traffic. This tends to cause traffic to seek alternate routes, many of which are through the farming areas and residential development. This results in increased traffic on local streets, and the resulting reduction in the quality of life in the farming and residential areas.

The pattern of suburban development and the emerging suburban development do not make the most economical use of the sewerage system. The extension of sewer lines into the farming area increases the potential to convert farmland to development. This hastens the loss of farmland. Where the lines pass by farm fields, the reduced density reduces the cost-effectiveness of the sewer line. The result is the advancement of suburban development into the agricultural area and the misuse of prime soils.

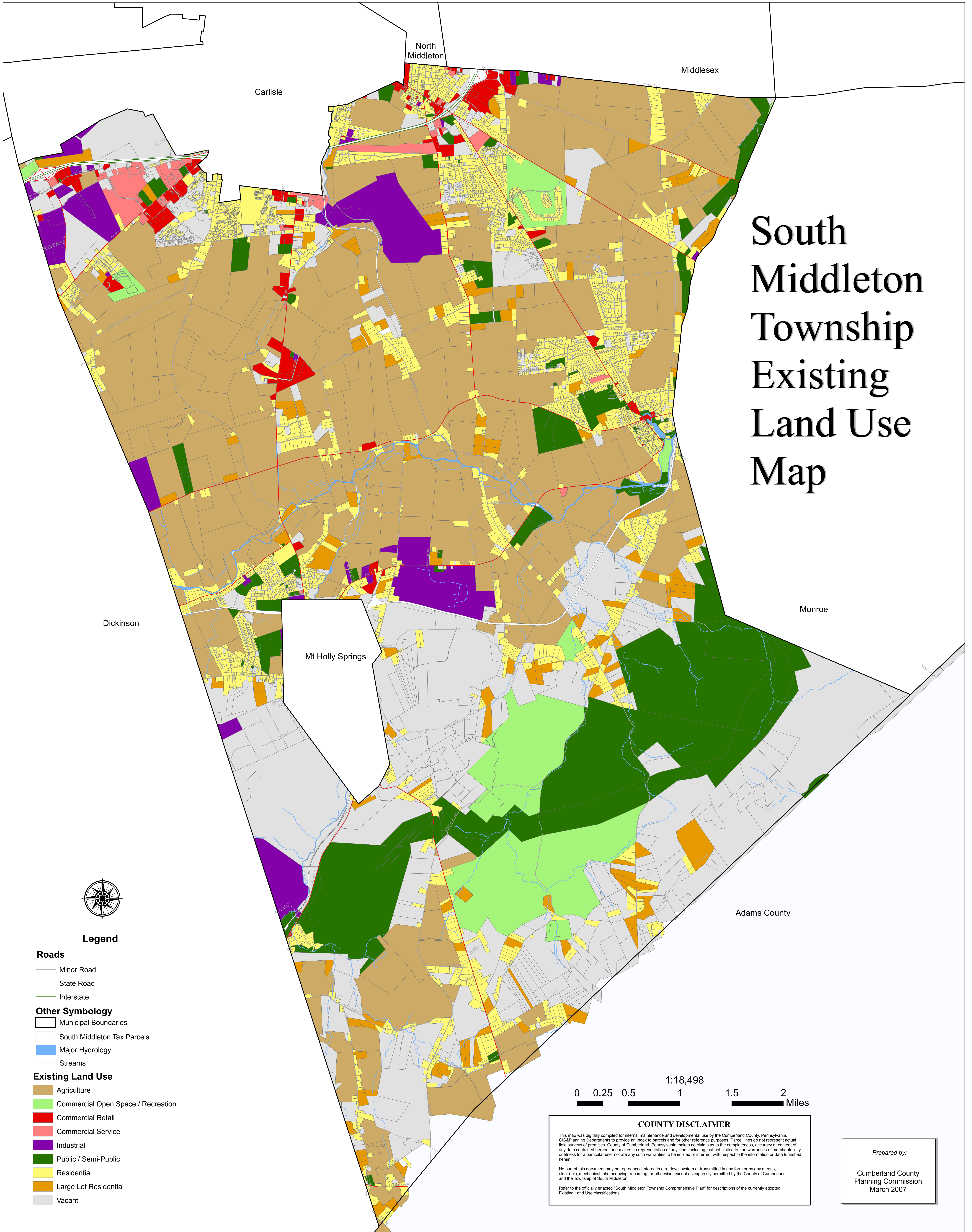
The scattered pattern of residential development utilizes, in most places, on-lot supplies and wells. Combined with on-lot sewerage disposal systems, the

potential for groundwater contamination increases the need for special treatment of water supplies, or hastens the need to extend the central water system and the sewer system.

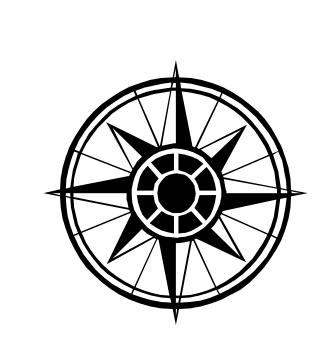
The existing pattern of development is a direct product of the existing Township zoning ordinance. There is no purely agricultural district. Commercial zoning strips the frontage of major roads. The planning implication here is the need to revisit the zoning ordinance to make changes that will produce the land development pattern as expressed by the planning goals of the Township.

Summary

The land use pattern of the Township has three distinct areas with different characteristics. The northern section is predominantly urban and suburban development of Carlisle and its adjacent development. The central portion is predominantly agriculture and farming with scattered large-lot residential uses. The southern half of the Township is forested hillsides, with agricultural uses on the upper plateau area. These are scattered residential lots in this southern portion of the Township; most of these are strips along road frontages. The suburban pattern is generally located in the north and northeastern section adjoining the Carlisle area, with an extension southward along Forge Road to Boiling Springs. Some suburban development extends out from Mt. Holly Springs. Commercial and industrial development is concentrated in the north section of the Township, although there is a major area along Park Drive. Retail uses occur in the village and in strips along several major roads.

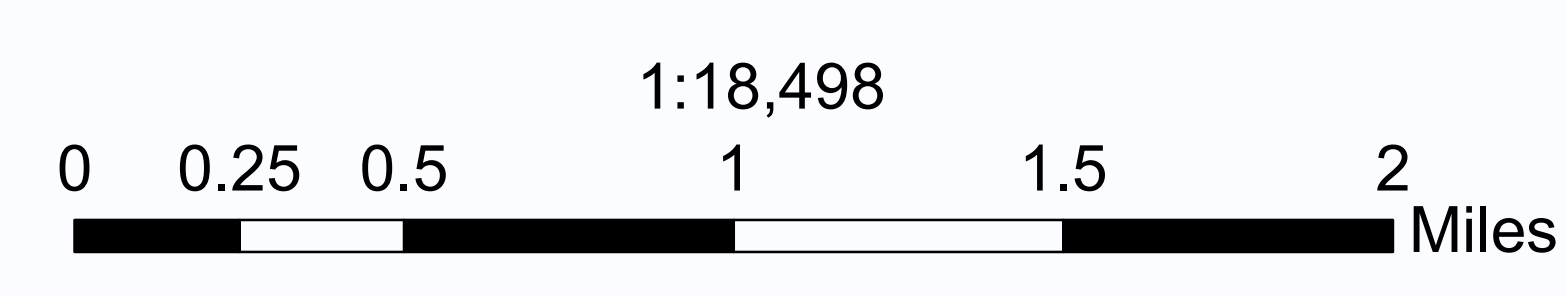


South Middleton Township Existing Land Use Map



Legend

- Roads**
- Minor Road
- State Road
- Interstate
- Other Symbology**
- ▭ Municipal Boundaries
- ▭ South Middleton Tax Parcels
- ▭ Major Hydrology
- ▭ Streams
- Existing Land Use**
- ▭ Agriculture
- ▭ Commercial Open Space / Recreation
- ▭ Commercial Retail
- ▭ Commercial Service
- ▭ Industrial
- ▭ Public / Semi-Public
- ▭ Residential
- ▭ Large Lot Residential
- ▭ Vacant



COUNTY DISCLAIMER

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Refer to the officially enacted "South Middleton Township Comprehensive Plan" for descriptions of the currently adopted Existing Land Use classifications.

Prepared by:
Cumberland County
Planning Commission
March 2007

Dickinson

Mt Holly Springs

Monroe

Adams County

North Middleton

Middlesex

Carlisle

MUNICIPAL UTILITIES

The background studies in support of the Comprehensive Plan indicate that South Middleton Township possesses a well-equipped water and sewerage system which is generally adequate to accommodate the foreseeable growth in the municipality. The Future Land Use Plan places a high priority on inter-relating the higher densities with sewer and water services, and conversely to discourage any concentrations of development which cannot be serviced by the municipal authority.

From a planning perspective, a major sewer and water policy still needs to be established regarding the extension of sewer and water service into adjoining municipalities. Inter-municipal agreements exist between the township and the Boroughs of Carlisle and Mt. Holly Springs; however, it appears that service would soon be available to Dickinson Township. Although it will be necessary to establish appropriate administrative and management entities, servicing areas in adjoining municipalities seems to be consistent with cooperative regional relationships. Additionally, the future policy on sewer availability may be dramatically affected by the Department of Environmental Protection's proposed requirements on nitrate and phosphorus limitations imposed as a result of the Chesapeake Bay Tributary strategy. Nevertheless, an important consideration is to assure as best as practical sufficient capacity for South Middleton's users, since the ultimate financial responsibility is secured by the taxing powers of the South Middleton Board of Supervisors.

Regarding water supply sources in accordance with section 301(b) of the Pennsylvania Municipalities Planning Code it is recognized that:

- (1.) Lawful activities such as extraction of minerals impact water supply sources and such activities are governed by statutes regulating mineral extraction that specify replacement and restoration of water supplies affected by such activities.
- (2.) Commercial agriculture production impact water sources.

Stormwater management as a municipal utility function has been largely shifted to the developer as a site design requirement. An aspect of stormwater management that cannot be shifted to new developments relates to existing problems in the older, built-up areas where stormwater management was never really required of the developer. For these areas, it is recommended that the township implement any recommendations contained in County-wide Act 167, currently being developed by the Cumberland County Planning Commission, so that there is a continuing program to upgrade and improve existing drainage problems.

Recreation as a municipal utility or facility is largely addressed by the Comprehensive Recreation, Park and Open Space Plan (1995) of the Township. This Plan provides for adequate park and open space facilities for the future.

PHASE II

Comprehensive Plan

PHASE II
COMPREHENSIVE PLAN

INTRODUCTION

For several years prior to revisions to the Township's planning documents, the Township studied past trends and characteristics, existing features and anticipated future conditions in order to shape the basic planning policies for managing growth and development within the Township. This study was precipitated by the realization of the need for more sophisticated and unconventional planning strategies than had been practiced previously in South Middleton Township. The study group was comprised of members of the Planning Commission and Board of Supervisors, interested citizens and Township staff. In the initial stages of the study, a survey was mailed to Township residents to gauge the current character of the Township as well as solicit input on what future characteristics are desired. Topics such as traffic and highways, natural resources, cultural resources, land use, agricultural preservation, sewer and water, Township government, human resources, conserving community character and wellhead protection were researched and discussed. The data acquisition and analysis process provided the structure to develop planning strategies, which in turn, provided recommendations used to develop a revised Comprehensive Plan, Zoning and Subdivision and Land Development Ordinances, as well as a wellhead protection ordinance and Official Map, based upon established goals and objectives.

The Up-dated Comprehensive Plan sets forth in narrative and graphic form, the Regional Relationship, Roadway and Circulation Plan, Municipal Utilities Plan, and Land Use Plan. The policy statements in each of these planning elements are to reinforce, as best as practical, the Township's Goals

and Objectives. Actual implementation of the policies will be accomplished primarily through amendments to the South Middleton Township's Zoning Ordinance and the Subdivision and Land Development Ordinance.

The adoption of the Comprehensive Plan and the ensuing amendments to the ordinances must involve statutory public hearings and may involve additional public meetings to present proposals and solicit input. From this process, land use and related policies ideally become a reality through the implementation of actual programs. South Middleton Township is cognizant of the fact that the planning function is an ongoing, dynamic process to monitor, evaluate, and adjust as a municipality grows and changes.

GOALS AND OBJECTIVES

The Background Studies, as a prelude to the Comprehensive Plan, focused not only on technical evaluations in terms of physical features, land use changes and demographic data but also looked at more subjective indicators in terms of values and opinions of Township residents. This data analysis function, combined with formal and informal meetings, established the format for updating the Goals and Objectives for the Township.

As previously discussed, the Goals and Objectives that are presented herein intend to give direction to the policies and programs that the Township adopts to guide and manage growth and development. The Goals and Objectives, to the extent practical, will be manifested in the Comprehensive Plan elements and form the basis for specific regulations to be contained in the Township's zoning and subdivision ordinances. The proposed Goals and Objectives are planned to be implemented within the first two (2) years after adoption of the Comprehensive Plan.

(PROPOSED) GOALS AND OBJECTIVES

The Goals of the South Middleton Township Board of Supervisors are:

- To preserve agriculture and conserve open rural spaces.
- To protect land and land values within the natural limits of the land and the ability of the Township to guide development.
- To prevent urban sprawl by establishing a pattern of growth and development aimed at sustaining our character of life.
- To assure that all development is managed in such a way as to minimize infrastructure costs to the taxpayers of the Township.

- The overall land use plan for the Township should place a high priority on creating and maintaining a balance of commercial/ industrial and residential development.
- Flexibility should exist in the distinction of alternative housing to meet the varied needs of the population of the Township. Such flexibility should include provisions for commercial, institutional, and recreational activities to compliment the complexes.
- In older, built-up areas within the Township and particularly in the historic Village of Boiling Springs, diverse neighborhood retail, office accommodations, and varied housing styles should be permitted to promote the in filling of land and village identity.
- Agricultural and related activities should be permitted in designated areas as a favored land use without excessive regulation.
- The wooded, steeply sloping areas of the Township should be limited to very low-density development with any large-scale development subject to well-defined ecological, environmental and related criteria.
- Commercial - Industrial activities, major distribution facilities and regional commercial centers should be located along or near major regional traffic routes to limit their intrusion upon other land uses. Designated areas should be preserved for such activities.
- Traffic circulation should be coordinated with land use designations to promote safety and maximize the local, collector, and arterial roadway functions.
- Sprawling development strips along existing roadways should be discouraged and incentives established to promote clustered land uses.

- Ongoing efforts should be expended to coordinate land use with adjoining municipalities within the framework of the Comprehensive Plan of the Township.
- Preserve open space along watercourses and other natural areas unsuited for normal development.
- Promote open space and recreational amenities within growth areas by developer improvements or contributions in lieu thereof.
- Promote an aesthetic quality within the Township through clearly defined standards for building size and location, landscaping, parking, signage and related site improvement.
- Develop basin wide stormwater management plans to achieve areawide stormwater management objectives as the Township develops.
- Continue the long-range development of an Official Map to coordinate future roadway and circulation development throughout the Township and with adjoining municipalities as well as designation of areas desired for preservation such as historic places, park lands and sensitive environmental features.
- Maintain building, fire and sanitation codes consistent with public safety objectives and the administrative capacity of the Township.
- Pursue a cooperative, streamlining approach to the processing of land development applications consistent with the Township's health, safety and welfare responsibilities.
- Maintain up-to-date land development regulations consistent with the technical state-of-the-art and overall Township Plan.

REGIONAL RELATIONSHIPS

In order for the planning process to be effectively comprehensive, a municipality must look not only at its internal features and characteristics, but also to the broader relationship with its region. For example, the background studies highlighted particularly South Middleton's strategic location in terms of the expanding West Shore/Carlisle area and as a result a significant population growth is projected. Additionally, from a regional perspective, South Middleton possesses a substantial infrastructure to support continued development. Its roadway network and especially its water and sewerage facilities are key ingredients to accommodate growth near the urban centers of Carlisle, Mount Holly Springs, and Boiling Springs while still conserving open space, agricultural areas and woodlands outside these growth areas.

Adjoining the Township to the South are the municipalities within York and Adams County. This wide area has lower order of development which is also characteristic of South Middleton generally south of the Reading Railroad. Similar physical features exist for the southern halves of both Dickinson Township and Monroe Township. However, additional growth in those areas outside of the Township should be expected in the future.

The northern halves of Dickinson Township and Monroe Township are geographically consistent with the profile through South Middleton. However, South Middleton maintains extensive water and sewerage networks in this sub-region while no such facilities exist in Dickinson, and Monroe has only a limited service under an inter-municipal agreement with the South Middleton Township Authority. Consequently, South Middleton in this sub-region should witness the bulk of developmental activity.

Middlesex Township at the northeastern boundary with South Middleton along the Trindle Road, manifests a low-density suburban, agricultural sub-region

with only moderate development anticipated, because of limitations for centralized utilities due to density/cost factors.

The Township's common boundary with the Borough of Carlisle evidences the most pronounced diversity. Because of Interstate 81 interchanges, inter-municipal sewer and water agreements, and ample land for development, significant commercial-industrial and residential growth has taken place. Furthermore, it is expected that commercial development will continue primarily in this area due to Harrisburg MSA's (Metropolitan Statistical Area) ongoing vitality.

South Middleton's relationship to its region particularly as represented by the immediately adjoining municipalities should in part consist of a coordinated effort among the respective governing bodies and planning commissions. Determining land use policies at common corporate boundaries should include a review and analysis of existing land use features and future land use and utility plans. Since the planning function is a continuing process, efforts should be extended to advise municipal neighbors on proposed projects and policy formulation that may impact across shared borders.

Organizations to promote a level of regional communication range from loosely structured, periodic meetings among participating municipalities to joint strategic task forces among neighboring municipalities, such as the Central Cumberland County Task Force, working together to achieve a common goal, to formally established joint planning commissions as set forth by the Pennsylvania Municipalities Planning Code. Whatever forum is used, it is important for South Middleton to appreciate its role in the larger region and to work towards relationships that respect the individuality of each unit of local government as well as the importance of inter-municipal planning efforts.

GOVERNMENTAL RELATIONSHIPS

Although the above description places the Township within the context of its physical location adjacent local governments, territorial boundaries are losing the ability to define, contain, or exclude those problems affecting local governments. Typically, many questions and solutions are larger than an individual municipality's ability to adequately handle. Intergovernmental cooperation is a reality and must be the cornerstone of the effort(s) to meet challenges. Governments in general interact in two basic ways: "Vertical Relationships", or those which link a local government unit to a broader governmental unit; and "Horizontal Relationships", which describe a government's relationship to its neighboring communities on the same level of government, as previously discussed.

For example, the Township is vertically linked to the County, Commonwealth, and Federal Government. However, this linkage is becoming increasingly more complex as the role of all governmental units continues to expand. The Township's relationship with County government particularly in terms of such planning functions as subdivisions and zoning review is largely advisory. However, the County's role as an Area-wide Review Agency serves the Township more as an initial clearinghouse for Township projects involving many Federal Funding Programs. A good example of the complex vertical relationship involving all levels of government is the wastewater collection and treatment systems. Planning for this system required Local, County, State, and Federal cooperation for efficient project implementation.

To summarize, the Township as well as any other unit of local government, is impacted by varied regional relationships that may extend far beyond corporate boundaries. How far the extension depends upon whether the perspective is economic, governmental, geographical, sociological, etc. Nevertheless, the

Township should practically and realistically attempt to consider the complex interplay of regional relationships when developing its comprehensive planning program.

FUTURE LAND USE PLAN

INTRODUCTION

The plan for future use of lands in South Middleton Township is presented in this chapter. The land use plan is based on the developmental goals and policies expressed as part of the Township Comprehensive Plan. The map at the end of this chapter is an illustration of what pattern of development the citizens of South Middleton Township want to take place in the foreseeable future, to the year 2015.

The Future Land Use Plan serves as a guide for future development, and land use decisions that reflect:

- ❖ Existing development and investment in the Township,
- ❖ Natural limitations of the land and conservation of the natural resources,
- ❖ The role of South Middleton Township in the Carlisle area,
- ❖ The availability and reasonable extension of facilities and services.

The comprehensive plan, in particular, the future land use plan, serves as a basis for land use regulations and a guide for establishing the various zoning districts used to implement the plan. The general goals are to retain the rural-like character, protect the natural and historic resources, accommodate future population, and maintain a sound economic base for the administration of the Township. The desire is to cause new development to locate in the areas studied and determined to be most appropriate for the intended uses to be made of the land.

ACCOMMODATING THE FUTURE POPULATION

In keeping with the goal to provide adequately for future changes to population in the Township, an analysis is made of population changes and the housing needed to accommodate the change. The timing of this comprehensive plan is unique, in that, with a few exceptions, there are formal proposals for subdivision plans for a majority of the land zoned residentially. Thus, an analysis was completed to determine from these plans whether or not the Township is in a position to accommodate that population increase.

From the data provided in the previous "Population" section, for the year 2010 the range is 15,000-16,000, and for 2020 the range is 17,000-18,000. The 2005 population of South Middleton Township ranges from under 14,000 to almost 15,000.

Using the U.S. Census for 2000, the average family size in the Township is 2.51 persons per dwelling. Thus, if we determine the number of housing units and multiply that by 2.51, we can determine the population that can be accommodated by plans already proposed.

A summary of the plans proposed is presented below:

PROPOSED PLANS IN SOUTH MIDDLETON TOWNSHIP – SEPTEMBER 2006

<u>Plan Name</u>	<u># of Dwelling Units</u>	<u># of Building Permits Already Issued</u>	<u># of Lots still to be developed</u>
The Villas Sections 1 & 2	93	54	39
Indian Hills Sections 3 & 4	80	45	35
Misty Meadows	50	47	3
Jefferson Court	36	23	13
Summerfield	167	88	79
Stonehedge PRD II	73	27	46
Netherby	113	13	100
Merlina	3	1	2
Westgate Phases 5, 6, & 7	72	0	72
Boore	3	1	2
Forgedale Crossing	188	17	171
Wheatstone	180	0	180
Limestone Creek	186	0	186
Walnut Bottom Grove	245	0	245
Leaman	4	0	4
Penner	1	0	1
Old Town Run Mountain Lodge	1	0	1
Pederson	2	1	1
Schoolcraft	3	1	2
Swarner	5	1	4
Marhevka	2	0	2
Mountain View Terrace	4	0	4
Church of God	531	0	531
Spring Court	11	0	11
Sable Chase	59	0	59
Carlisle Forge	550	0	550
Faith Evans	1	0	1
Traditions of America (Diehl)	250	0	250
Georgetowne	214	0	214
Morgan's Crossing	240	0	240
Parkview at Boiling Springs	129	0	129
Traditions of America (Anderson)	<u>53</u>	<u>0</u>	<u>53</u>
TOTAL	3,549	319	3,230

Based upon these numbers, and using the 2.51 persons per dwelling unit, the number of people that the proposed plans can accommodate will be:

$$3,230 \text{ dwelling units} \times 2.51 \text{ people/unit} = 8,107 \text{ people}$$

If we use are most conservative (i.e. – lowest) estimate of population in 2005 of 13,879 people, and the 8,107 people that the homes can accommodate,

that means that the existing plans, already proposed, can accommodate a population of:

$$13,897 + 8,107 = 22,004$$

Note that the population of 13,897 is projected population for 2005, whereas the number of lots to be built was taken from 2006. Thus, the number of dwelling units, and increase in population as a result, from 2005 to 2006 was not included within the final number. Thus, the population that can be accommodated is conservative, once again, by that amount.

Examining the phasing schedule for the plans that have filed a preliminary plan, there is not one plan that has a phasing schedule that extends beyond 2020. In fact, most of the phasing schedules are 10 years or less for full build out. It can safely be assumed that those plans in the planning process, but have not submitted a phasing schedule, will be expecting a full build out by the year 2020.

Thus, the projected population of 22,004 that could result from the build out of these plans is far in excess of the 2020 population projections in the range of 17,000-18,000.

It should also be noted that there were several undeveloped parcels within the Township that were not included within the number of building lots that have the potential to be developed. Those parcels include the Edris Property on West Pine Street (80 acres zoned RL), the Philips/Frey property south of Walnut Bottom Road at Allen Road (20 acres zoned RM), the lands of Dean Otto between West Pine Street and Sandbank Road (86 acres zoned RL), the Myers

Farm on the west side of Forge Road (101 acres zoned RM), and the Robert Frey tract west of Adams Road (15 acres zoned RL).

The “planning implication” is that the future land use plan does not need to provide new areas for residential development beyond what exists under the current zoning ordinance. New areas for the suburban community will serve to infill, rectify land use incompatibilities, and include existing development.

Designation of Land Patterns

The future land use plan shows the general pattern of land development that is desired in the future for South Middleton Township. The land use pattern contains the following general designated areas: Forest Reserve, Agriculture Reserve, Urban Community, Village Community, Suburban Community, Industrial Centers, and Commercial Centers. These areas are determined by the character of the existing development, and the land use goal to enhance the areas with similar compatible development that is not detrimental to the natural resources of the Township. By guiding individual land use decisions and activities into these areas the land values can be expected to be retained and natural resources conserved. The intent and description of the land use pattern follows:

Suburban Community:

The Suburban Community designation includes the entire area intended for development in the Township where a full range of public services is to be provided. The density of development ranges from urban to low density large-lot residential uses. The suburban community area is intended primarily for the

residential development, with concentrations or centers of industrial and commercial uses.

The Suburban Community areas encompass those areas already developed with residential, commercial and industrial uses. These areas adjoin the Carlisle area, extending southward into South Middleton Township. The major portion is concentrated in a corridor between Trindle Road, York Road, Forge Road and Petersburg Road extending south to include Boiling Springs. Other areas of the Suburban Community designation are adjacent to Mt. Holly Springs on the northwest side, and along Park Drive to include the large industrial complexes on the northeast side of Mt. Holly Springs.

Industrial and Commercial Centers:

Within the area considered for suburban-like development there are several areas for specific land uses: industrial and commercial. These uses require unique locations where access and support facilities are provided; and require special designation to insure land is reserved for them in the future.

Commercial Centers provide land for commercial uses with easy access to the regional network of roads to facilitate the supply and movement of goods. The intent is to provide commercial uses that serve the Carlisle Community, including South Middleton Township, with the large commercial uses that are needed by the residents of the Township. The centers are designated to expand the existing commercial development. A major objective is to reduce the stripping of commercial development along major roads, such as Holly Pike, York Road and Forge Road. Stripped commercial development increases the traffic

congestion and unsafe conditions. Strips of commercial uses are not the most economic use of the valuable lands. Commercial development prospers better if developed in centers or blocks of uses. The major locations are:

- ❖ Along the north and south sides of Walnut Bottom Road west of Carlisle,
- ❖ Along Interstate Route 81 near interchanges,
- ❖ Along Holly Pike near Heisers Lane.
- ❖ Along Forge Road – North of Boiling Springs
- ❖ Along Walnut Bottom Road, extending eastward toward Rockledge Drive
- ❖ Along York Road east of Fairview Street and north of York Road

Industrial Centers are located to include existing industrial development and provide additional lands for expansion and new industries in the future. The Industrial Centers will be broken into light and heavy industries. The heavy industries will be located in the northwest corner of the Township near Exit 44 of Route 81 and to the east of Mt. Holly Springs. Light industries will be located to the east of Exit 49 of Route 81 and along Trindle Road. Industrial uses require a full range of support facilities, and good access to regional highways that link to markets and resource supplies. The industrial centers are part of the overall area of the Township intended for suburban-like development. The major centers are situated along Walnut Bottom Road, Interstate Route 81 and east of Mt. Holly Springs along Park Drive to include the existing industrial uses.

Agriculture Reserve Area:

Agriculture Reserve Areas are intended to reserve prime soils and existing farming activities by creating large areas dedicated farming and farm related uses. A major goal of the Township is to retain its rural character, and to conserve its natural resource of prime (rich) soils. Creating large areas of farming helps to preclude the intrusion of suburban development, which increases the demand for municipal services and the costs of land.

Much of the northern half of the Township has prime soils, and is being farmed. This rich limestone soil area is subject to sinkhole conditions, which are not readily suitable for suburban uses and development. The soundest use of land in these areas is to retain agriculture and farming activities. The plan recognizes the need for the farm owner to gain supplemental income by the sale or development of the land into non-agricultural uses. The plan suggests that non-agricultural development be limited to residential uses, but with very restricted conditions, locations, and design.

The agriculture reserve area is located in a wide band across the central portion of the Township extending from Trindle Road on the east, to Dickinson Township on the west. A second area is located in the southern part of the Township up on the south mountain plateau area along Baltimore Pike, south of Mt. Holly Springs.

Forest Reserve Area:

Forest Reserve Area occupies most of the South Mountain portion of the Township. The South Mountain is a prominent feature of the area serving as the

major backdrop to the Township. It is unique, scenic and a significant resource. It is characteristically wooded, steep hillsides. The forest reserve area is intended to retain this existing valuable resource of wooded hillsides. Sound use of land suggests the need to retain the forest cover to prevent excessive erosion and runoff of surface water. Development of the area is planned to be very low density, limited to large-lot residential uses, forest-related, and agricultural activities. Municipal services for water supply and sewage treatment are not planned for this area. The road system will be limited to existing roads, with limited maintenance and improvements.

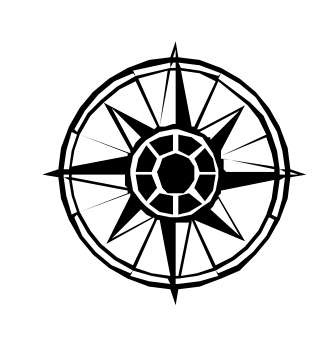
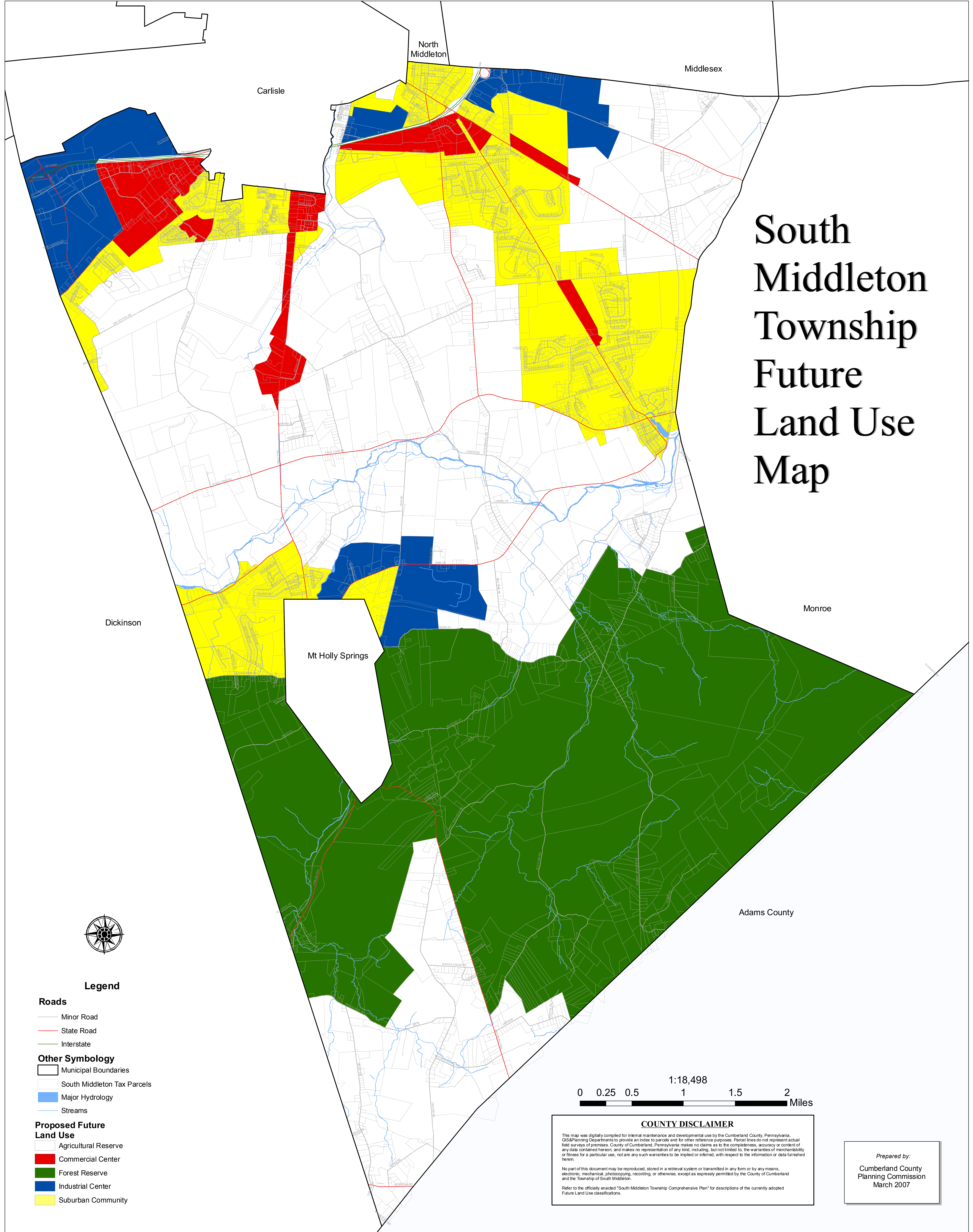
SUMMARY

The Future Land Use Plan sets out the pattern of development that is desired for the future of South Middleton Township. It attempts to respect existing development and natural resources while accommodating and planning for future development and the new population. By organizing development in an array of inter-compatible uses that are in concert with natural resources and land limitations, a higher value for land can be maintained over a longer period of time. Limiting the conflicts among uses of the land reduces the costs for development, making funding available for asset development.

The Future Land Use Plan serves as a blueprint to help guide the private sector in making its decisions about the use and development of their land. At the same time, it aids the Township in planning for the provision of municipal

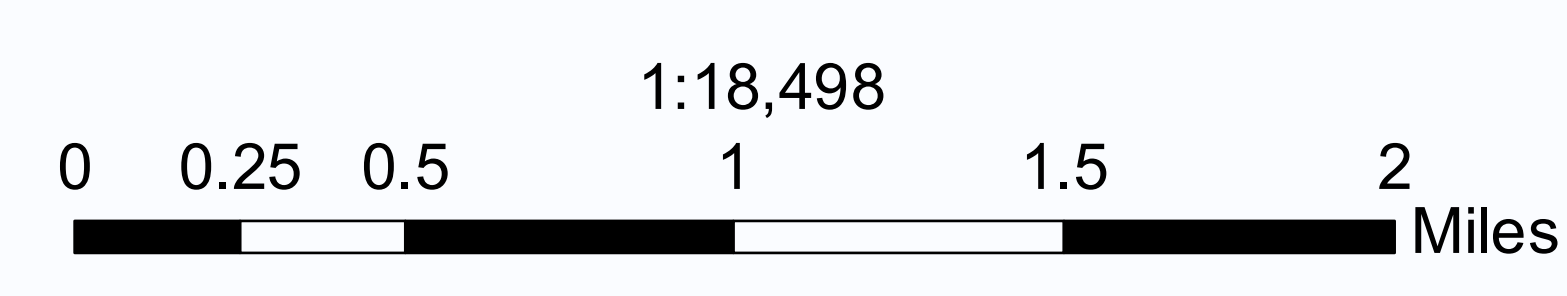
services and facilities that are needed to support the development proposed by the private sector.

South Middleton Township Future Land Use Map



Legend

- Roads**
 - Minor Road
 - State Road
 - Interstate
- Other Symbology**
 - Municipal Boundaries
 - South Middleton Tax Parcels
 - Major Hydrology
 - Streams
- Proposed Future Land Use**
 - Agricultural Reserve
 - Commercial Center
 - Forest Reserve
 - Industrial Center
 - Suburban Community



COUNTY DISCLAIMER

This map was digitally compiled for internal maintenance and developmental use by the Cumberland County, Pennsylvania, GIS/Planning Departments to provide an index to parcels and for other reference purposes. Parcel lines do not represent actual field surveys of premises. Cumberland County, Pennsylvania makes no claim as to the completeness, accuracy or content of any data contained hereon, and makes no representation of any kind, including, but not limited to, the warranties of merchantability or fitness for a particular use, nor are any such warranties to be implied or inferred, with respect to the information or data furnished herein.

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Refer to the officially enacted "South Middleton Township Comprehensive Plan" for descriptions of the currently adopted Future Land Use classifications.

Prepared by:
Cumberland County
Planning Commission
March 2007

TRANSPORTATION, ROADWAY AND CIRCULATION PLAN

Planning for Transportation related to future growth and development in South Middleton Township is based upon the premise that, within the Township, the automobile will remain the predominant mode of transportation. The roadway network of the Township must be designed to allow for the efficient circulation of this traffic. A key to achieving this objective is to designate the functional classification of the municipality's roadway system and to establish development standards consistent with the roadway function. Another key is to designate where new roadways should be located either specifically or generally based upon anticipated local and regional characteristics. These two approaches form the basis from which the roadway and circulation plan is structured.

FUNCTIONAL ROADWAY CLASSIFICATION

Streets or roadways should be classified, designed, and constructed according to their function. The specific purpose of the street or roadway in part helps to determine the right-of-way and pavement width. Therefore, the primary concept behind the functional classification is that of grouping highways and streets into classes according to their service. The Pennsylvania Department of Transportation divides roadway systems into two different types: urban systems and rural systems. Within each of these systems, PADOT' design standards provide for three functional classifications: Arterial, Collector, and Local Roads. The Majority of the Township roads will be either Collector or Local Roads with a great percentage being Local Roads.

1. Arterial

This classification includes highways which provide connections between Cities and larger Boroughs, and provide for inter-county service where the average trip lengths are usually five miles or greater. An Arterial Road is a roadway upon which mobility is essential and local access is minimized. Design features of facilities in this class should permit high operation speeds and minimize access points. This classification includes highways that provide for, develop or may develop substantial volumes of traffic. Only other Arterial Roads, Urban and Rural Collector Roads and Rural Roads should access arterial Roads.

2. Urban Collector Roads

This classification includes highways that provide connections between local and arterial roads. They may serve a traffic corridor connecting villages and small Boroughs, on an intra-county basis. Many trips destined to such points originate in widely diffused locations and a highway in this class functions in its literal sense as a collector. Traffic volumes and trip lengths vary greatly depending upon size of localities served and the distances between them, but operating speeds between 40 and 50 miles per hour are desirable. An Urban Collector Road is a roadway upon which mobility is extremely important and local access is of minor importance. Only other Collector Roads, Local

Roads, Rural Roads and high, medium and low volume commercial driveways should access urban Collectors.

3. Rural Collector Roads

A Rural Collector Road is a roadway upon which mobility and local access are of equal importance. The Rural Collector will provide access from the Local and Rural Road network to the Urban Collector and Arterial Road networks. Access to Rural Collectors should be permitted by other Rural Collectors, Local Roads, Rural Roads and low volume commercial and minimum use driveways. Rural Collectors should be designed to accommodate operating speeds between 30 and 40 miles per hour.

4. Local Roads

Highways in this class provide direct access to adjacent land in urban areas. They connect individual residences and commercial properties to higher classes of road systems. A Local Road is a roadway upon which mobility and through traffic is minimized and access is of primary importance. Trip lengths are short and operating speeds are low. Spacing between roads of these class and traffic volumes varies widely depending upon the intensity of land development and the distance to population centers. Local Roads provide access by commercial businesses and individual residences in urban and suburban areas. Local Roads should be intersected by other Local Roads, Alleys and Service Drives, medium and low volume commercial driveways

and minimum use driveways. Local Roads should be designed to accommodate operating speeds between 20 and 30 miles per hour.

5. Rural Roads

A Rural Road is a public roadway that is normally located in an Agricultural or Conservation Area. Neither mobility nor access is of significant concern. Rural Roads experience low volumes of traffic. Rural Roads can be gravel or paved. Access to Rural Roads should be permitted only by other Rural Roads, minimum use driveways and Rural Residential Lanes. Rural Roads should be designed for safe operating speeds of less than or equal to 35 miles per hour.

The accompanying map illustrates the recommended Functional Roadway Classification for the Township. As development takes place more roadways and driveways generate increased traffic volumes onto existing roads. The result, frequently, is an overloading of the network system to the extent that collector and arterial roads may be reduced to local access or neighborhood feeder streets. Using the Roadway Classification System, zoning, subdivision and land development regulations should focus upon maintaining the functional system and improving it as development occurs. In order to promote an efficient roadway circulation network, the following programs are recommended for implementation.

1. Driveway Limitation – Rather than to permit driveways to enter at virtually any point along the frontage of a lot, the design and placement of a driveway should be subject to clear standards consistent with the function of the fronting roadway. For example, the distance between driveways should generally be greater along arterial streets and proportionately closer along collector and local access streets. Additionally new street installation should be proportionately regulated similar to the driveway policy.
2. Incentive Standards – In order to implement regulations limiting the number of driveways permitted along designated road frontages, a program of incentives is recommended for directing development into the interior of tracts with controlled vehicular access.

In a further effort to achieve an effective roadway network, the Township should be aware of opportunities to direct the location of new roads so that their location enhances circulation. As illustrated on the accompanying map, new roadways can be especially effective in improving movement within the Township.

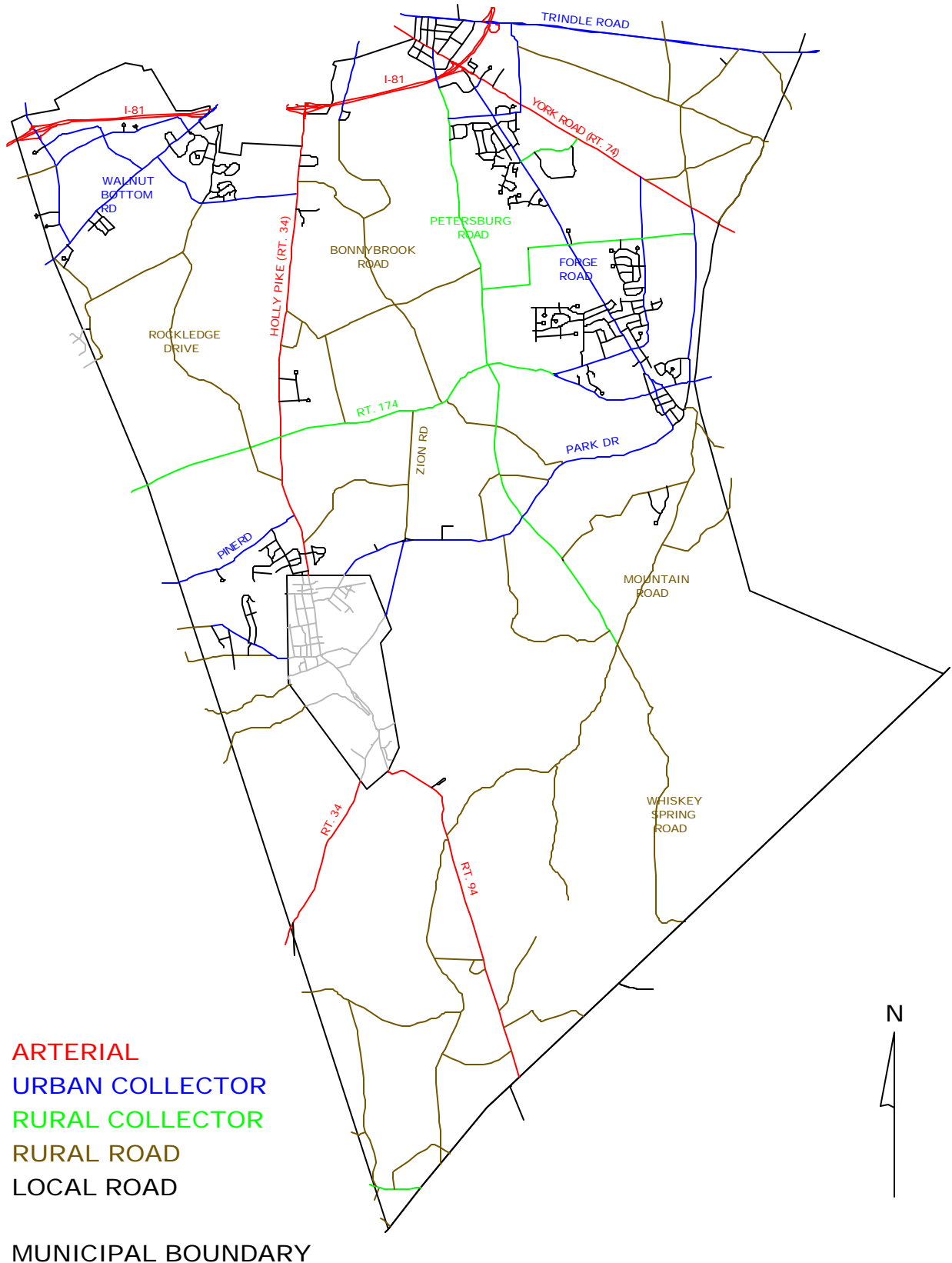
OTHER MODES OF TRANSPORTATION

Additionally, it should be noted that the Business Airport of Carlisle is contained within the boundaries of the Township. The Airport is one of only two (2) airports that exist within Cumberland County. The airport, though limited by its size,

supports a significant number of businesses throughout the County as well as many private citizens. Planning efforts should be implemented which allow for continued viability for the airport.

Other modes of transportation that should be considered include pedestrian trails and bicycling lanes and pathways. The Township already has a significant pedestrian trail network that links larger residential development to community parks and recreational areas. The Township intends to continue its efforts to accommodate other transportation options such as these.

SOUTH MIDDLETON TOWNSHIP ROAD HIERARCHY MAP



MUNICIPAL UTILITIES ANALYSIS

WATER AND SEWER

The adequacy and accessibility of water and sewerage utilities are important ingredients to accommodating future growth and development within a municipality. Centralized water and sewer service are necessary to sustain higher density, residential land uses and most commercial and industrial activities. The absence of such utilities relegates development to on-lot wells and septic systems consuming larger land areas for disposal fields, potential replacement locations and isolation distances. Without central facilities, environmental degradation and ensuing community costs to clean up the environment result.

South Middleton Township has the distinct benefit of a well-conceived, well-managed municipal sewerage and water network. The Township, through its Municipal Authority, provides sewer and water service to the major population centers surrounding the Borough of Mt. Holly Springs, throughout the unincorporated Village of Boiling Springs and adjacent to the Borough of Carlisle. Through implementation of the Official Wastewater Facilities Plan (Act 537) and inter-municipal cooperation, the Township has provided for growth in these areas by planning adequate future public sewerage service.

Substantial undeveloped tracts exist within the overall sewer and water service areas. Ample sewerage treatment and water supply capacities are available to accommodate future growth. These future service areas are as follows:

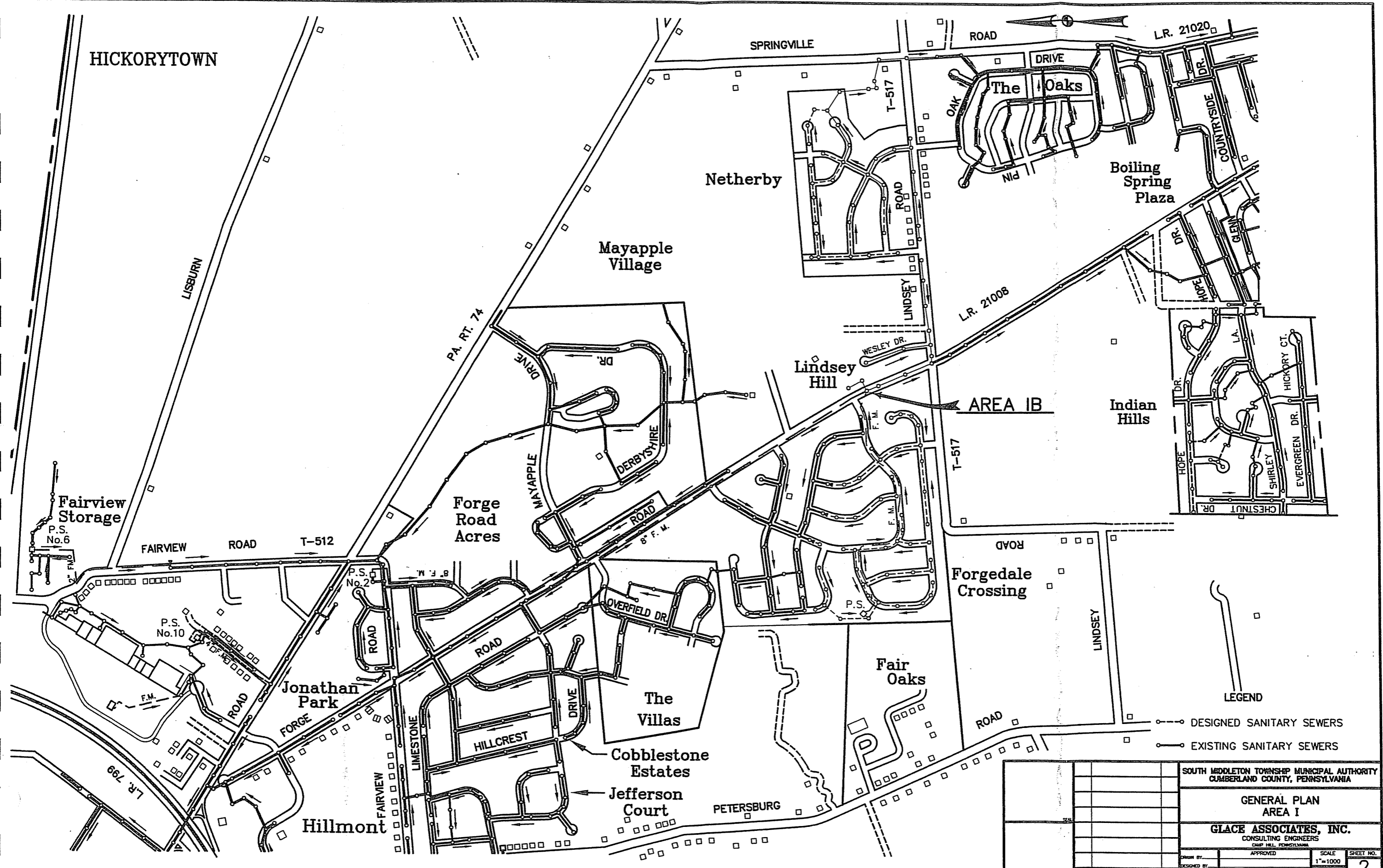
1. Boiling Springs Area (Area I) - A sanitary sewer collection and conveyance network, and a water distribution system are proposed throughout the residential, village and village-commercial districts in and surrounding the unincorporated Village of Boiling Springs. This service area runs generally parallel to Forge Road and extends to Forge Road Acres Area of the Township. With the exception of Cluster Developments, no public water or sewerage services are proposed outside these zoning districts.
2. Carlisle Area (Area II) - This service area surrounds the Borough of Carlisle. Because of private development, public sewer and water service has been extended outward from the Borough into this designated service area. Sewer and water service has been extended by SMTMA to Walnut Terrace and Westmoreland Heights. Private development has also extended water and sewerage service to the Exit 44 of Interstate 81 Allen Road Areas. With municipal services, this Interchange complex will provide opportunities for commercial-industrial type development on a regional scale. A supplemental roadway study envisions comprehensive improvements to the road network servicing the area around the Plainfield Exit of I81 through long term inter-municipal cooperation with the Borough of Carlisle, Dickinson Township, North Middleton Township and West Pennsborough Township. With the exception of Cluster

Developments, no public water or sewerage services are proposed outside residential and commercial zoning districts.

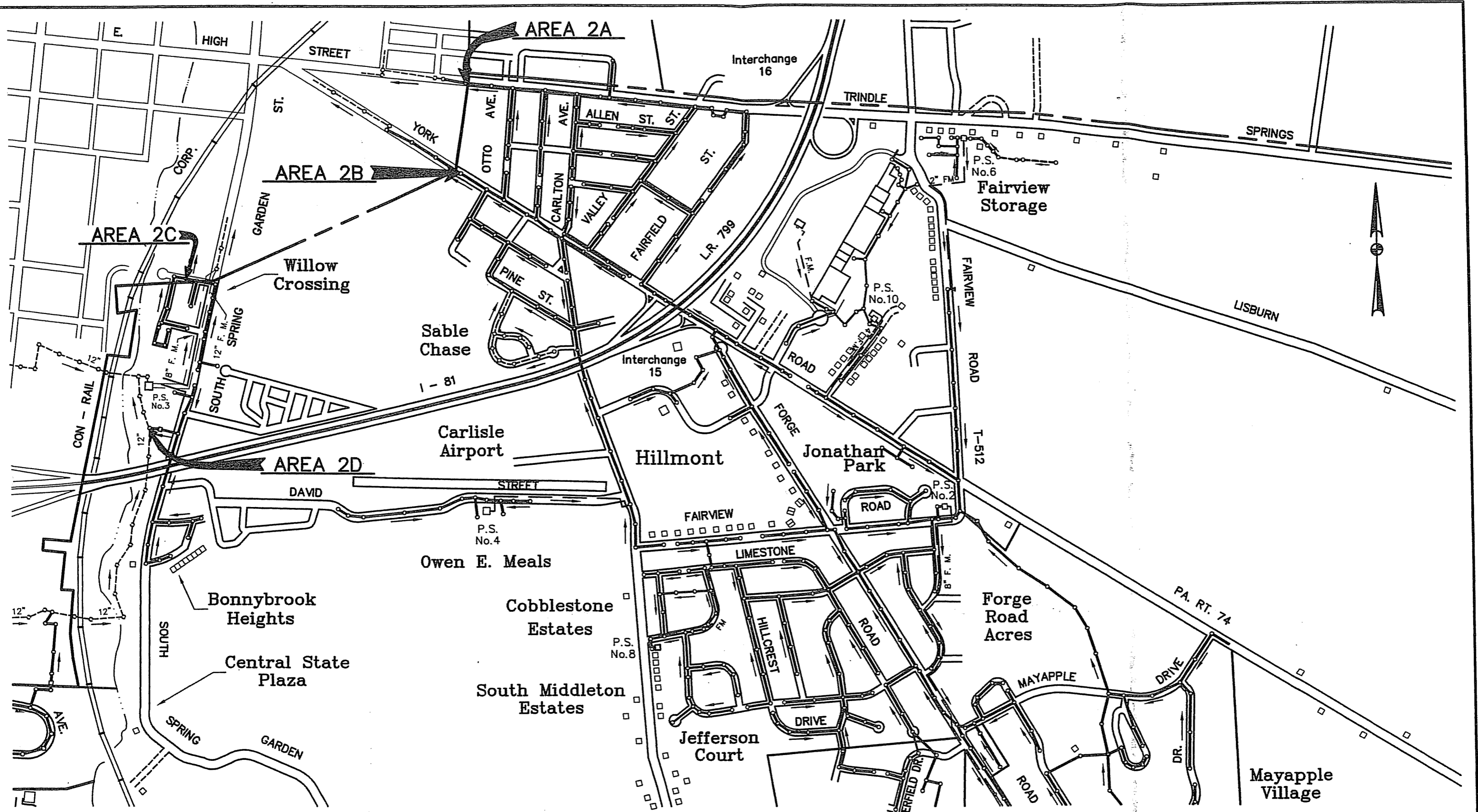
3. Mt. Holly Springs Area (Area III) - This service area surrounds the Borough of Mt. Holly Springs. A sanitary sewer collection and conveyance network, and a water distribution system are proposed throughout the residential, village and industrial zoning surrounding the Borough. Public sewerage service has been extended to the West Pine Street/Sandbank Road Area to eliminate malfunctioning on-lot systems. Sewerage from this area is to be conveyed through South Middleton Township's pumping station, to an expanded wastewater treatment facility owned and operated by the Mount Holly Springs Borough Authority. Although it will be necessary to establish appropriate administrative and management entities, allowing service to areas in adjoining municipalities is consistent with cooperative regional relationships. With the exception of Cluster Developments, no public water or sewerage services are proposed outside the residential, village and commercial zoning districts in this service area.

Water service within the Township generally follows the existing sewer service areas. According to the Authority, ample supplies exist.

The foregoing analysis of existing and programmed water and sewer utilities reveals that South Middleton Township has the capacity to accommodate its foreseeable growth. Utility planning for the future of the Township should be



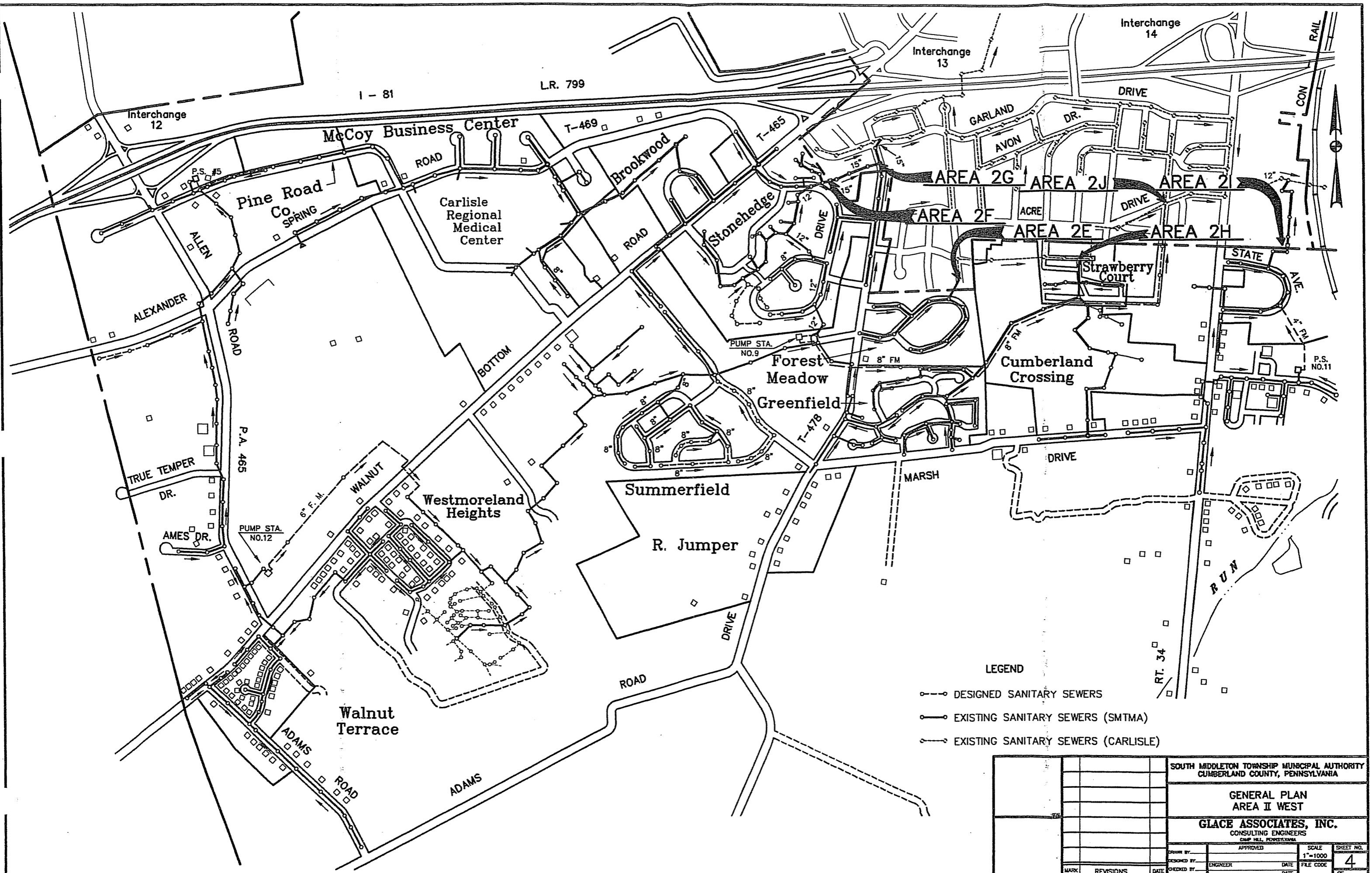
SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY CUMBERLAND COUNTY, PENNSYLVANIA			
GENERAL PLAN AREA I			
GLACE ASSOCIATES, INC. CONSULTING ENGINEERS CAMP HILL, PENNSYLVANIA			
DESIGNED BY:	APPROVED:	SCALE:	SHEET NO.:
ENGINEER	DATE	1"=1000'	2
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MARK	REVISIONS	DATE	



LEGEND

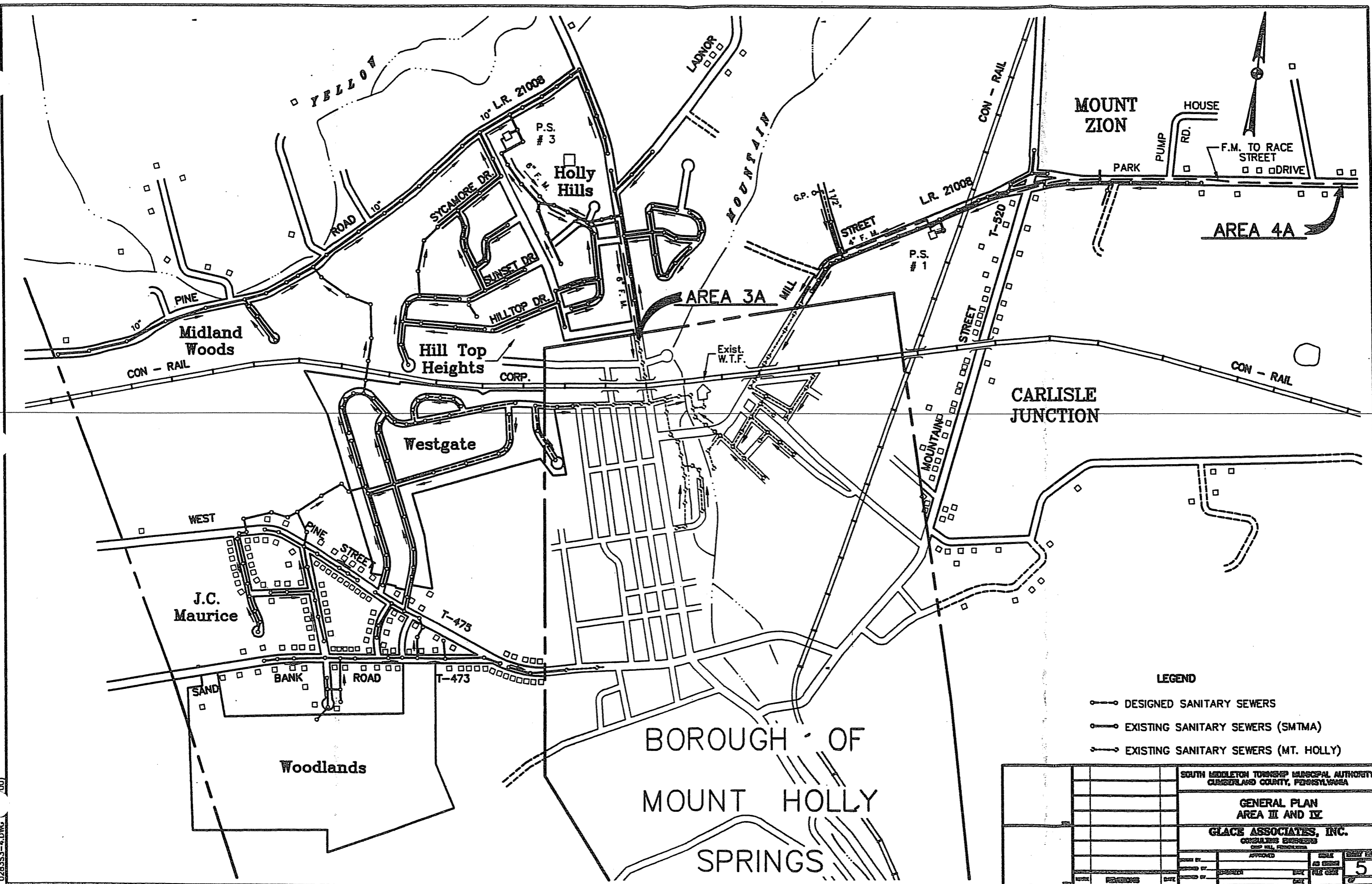
- DESIGNED SANITARY SEWERS
- EXISTING SANITARY SEWERS

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GENERAL PLAN AREA II EAST			
GLACE ASSOCIATES, INC. CONSULTING ENGINEERS CHAMP HILL, PENNSYLVANIA			
APPROVED	SCALE	SHEET NO.	
DESIGNED BY	1"=1000	3	
DATE	FILE CODE		
CHECKED BY	DATE		
MARK	REVISIONS	DATE	OF



- LEGEND**
- DESIGNED SANITARY SEWERS
 - EXISTING SANITARY SEWERS (SMTMA)
 - EXISTING SANITARY SEWERS (CARLISLE)

SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY CUMBERLAND COUNTY, PENNSYLVANIA			
GENERAL PLAN AREA II WEST			
GLACE ASSOCIATES, INC. CONSULTING ENGINEERS CAMP HILL, PENNSYLVANIA			
APPROVED	SCALE 1"=1000	SHEET NO. 4	OF 4
DESIGNED BY	ENGINEER	DATE	FILE CODE
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MARK	REVISIONS	DATE	



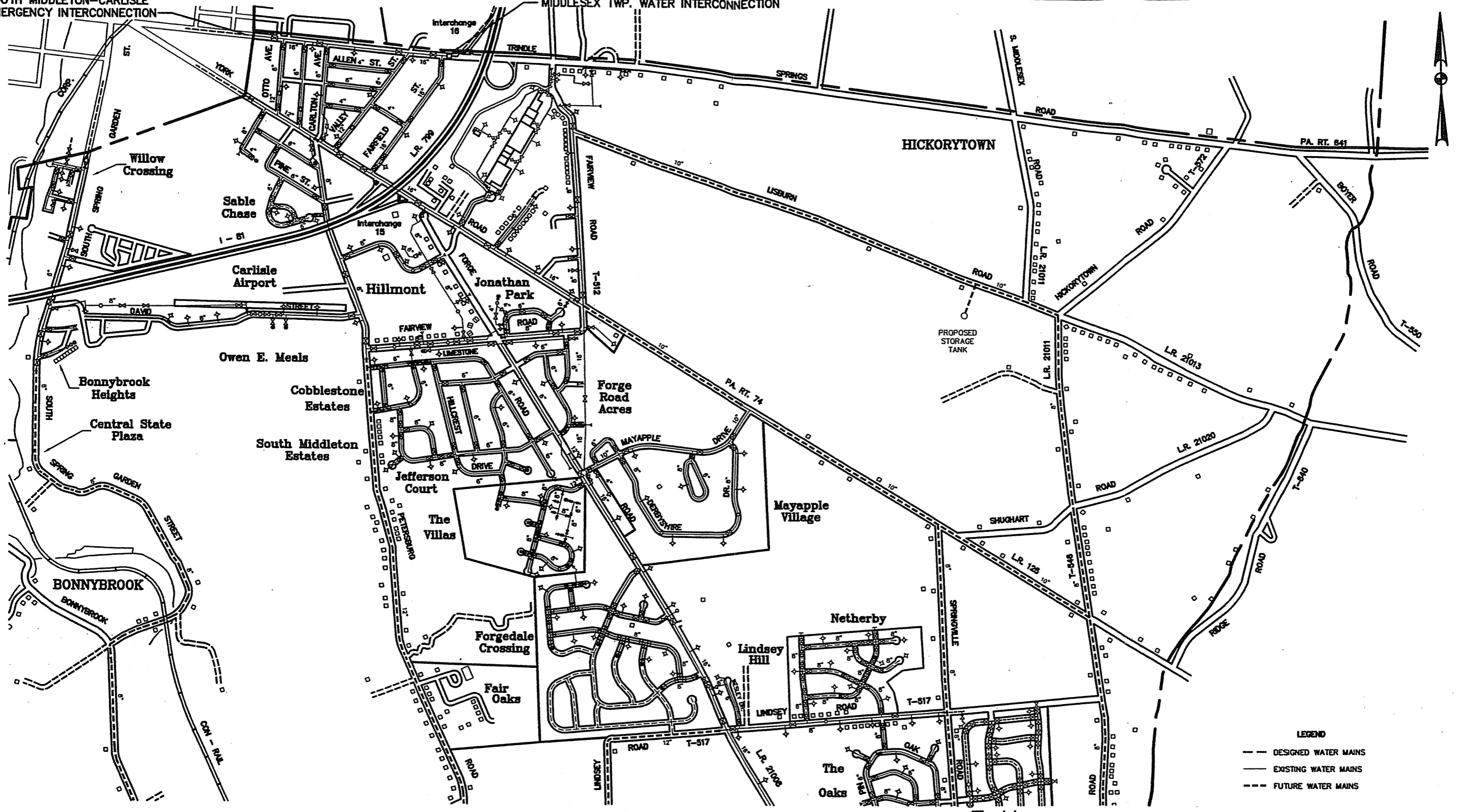
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 - EXISTING SANITARY SEWERS (SMTMA)
 - EXISTING SANITARY SEWERS (MT. HOLLY)

SOUTH LEDLETON TOWNSHIP MUNICIPAL AUTHORITY CURBERLAND COUNTY, PENNSYLVANIA			
GENERAL PLAN AREA III AND IV			
GLACE ASSOCIATES, INC. CONSULTING ENGINEERS 200 MILL ROAD, HARRISBURG, PA.			
DATE	BY	DATE	BY
APPROVED	DATE	DATE	DATE
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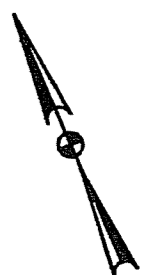
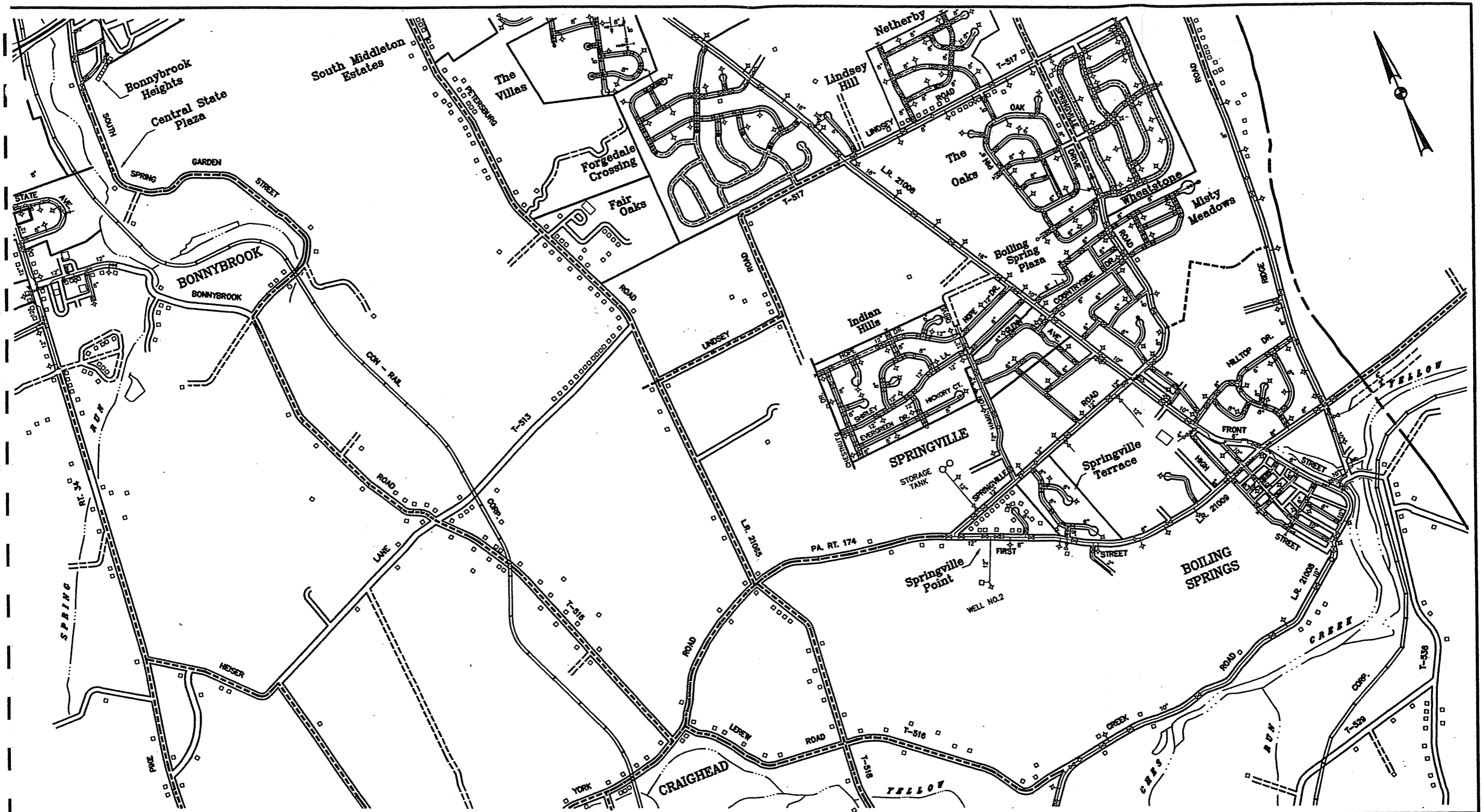
SOUTH MIDDLETON-CARLISLE
EMERGENCY INTERCONNECTION

MIDDLESEX TWP. WATER INTERCONNECTION



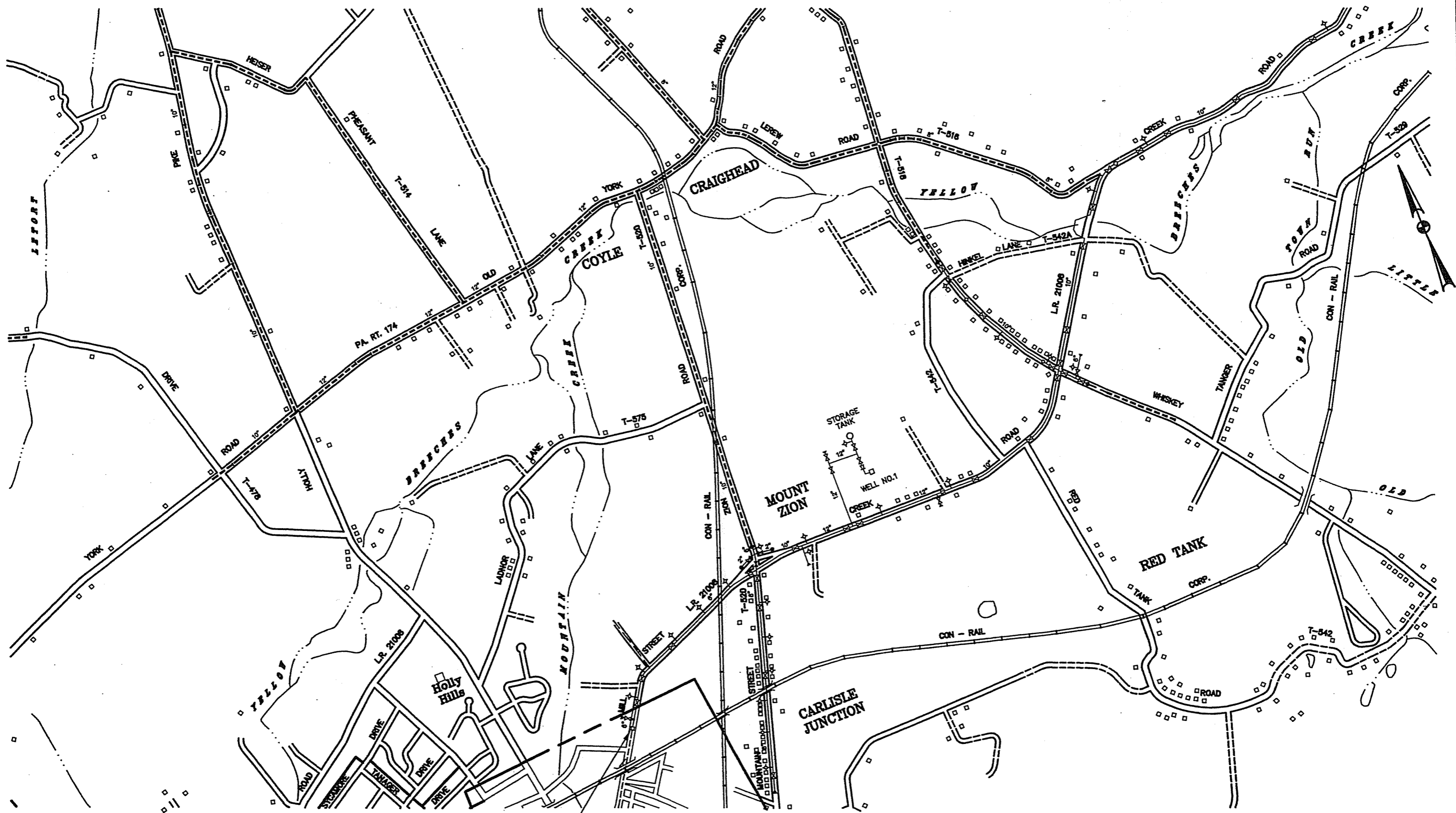
LEGEND
 --- DESIGNED WATER MAINS
 ——— EXISTING WATER MAINS
 - - - FUTURE WATER MAINS

SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY CUMBERLAND COUNTY, PENNSYLVANIA			
WELL NO.1 AND WELL NO. 2 WATER DISTRIBUTION SYSTEM			
GLACE ASSOCIATES, INC. CONSULTING ENGINEERS CAMP HILL, PENNSYLVANIA			
DESIGNED BY:	APPROVED:	SCALE:	SHEET NO.
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MARK:	REVISIONS:	DATE:	OF



- LEGEND**
- DESIGNED WATER MAINS
 - EXISTING WATER MAINS
 - FUTURE WATER MAINS

SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY CLUMBERLAND COUNTY, PENNSYLVANIA			
WELL NO.1 AND WELL NO. 2 WATER DISTRIBUTION SYSTEM			
GLACE ASSOCIATES, INC. CONSULTING ENGINEERS CMP HILL, PENNSYLVANIA			
APPROVED	SCALE 1"=1500'	SHEET NO. 2	
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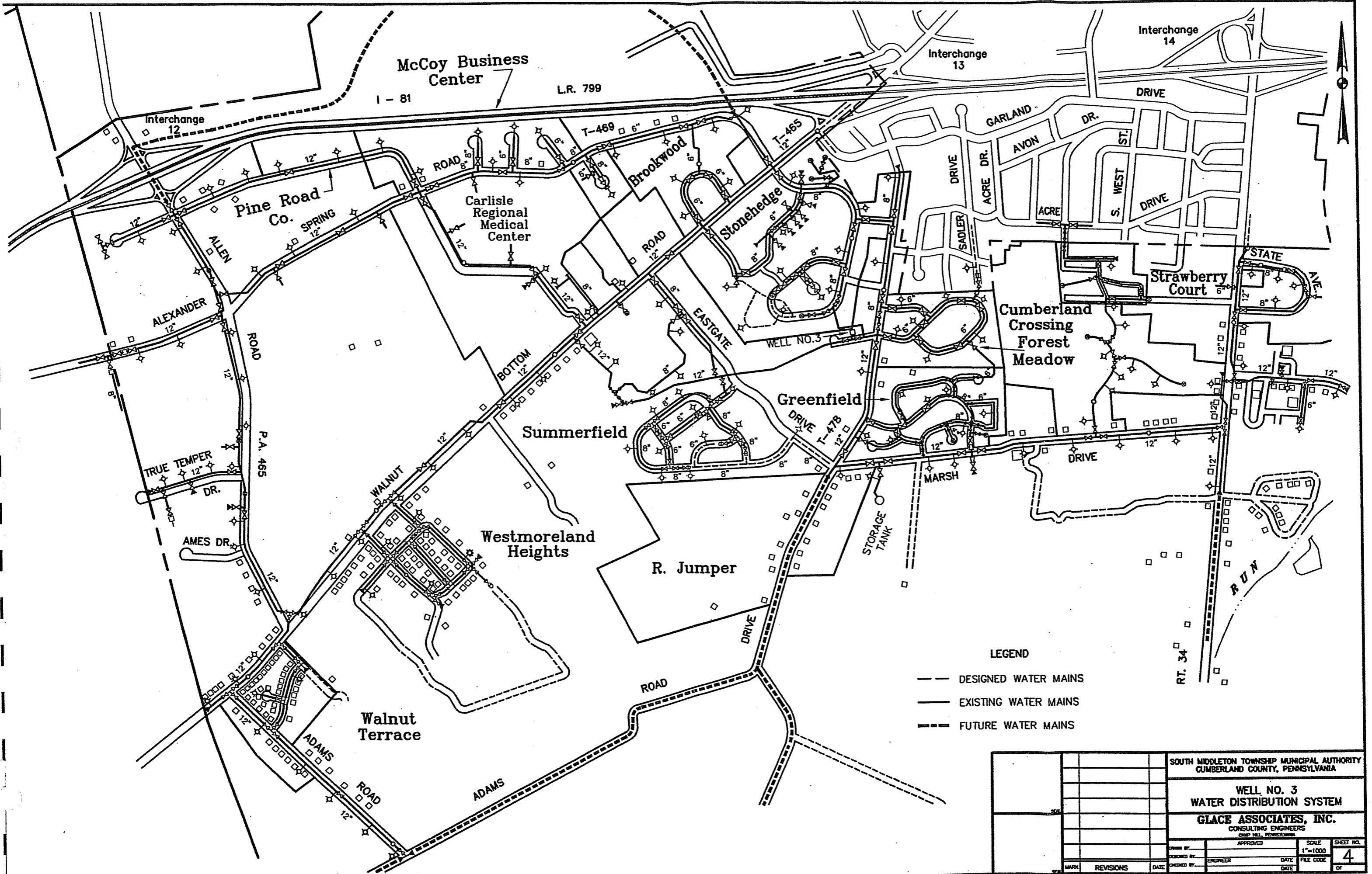


**SOUTH MIDDLETON - MT. HOLLY SPRINGS
EMERGENCY INTERCONNECT**

- LEGEND**
- DESIGNED WATER MAINS
 - EXISTING WATER MAINS
 - FUTURE WATER MAINS

SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY CUMBERLAND COUNTY, PENNSYLVANIA			
WELL NO.1 AND WELL NO. 2 WATER DISTRIBUTION SYSTEM			
GLACE ASSOCIATES, INC. CONSULTING ENGINEERS CAMP HILL, PENNSYLVANIA			
DESIGNED BY	APPROVED	SCALE AS SHOWN	SHEET NO.
DRAWN BY	ENGINEER	DATE	3
CHECKED BY	DATE	FILE CODE	OF
MARK	REVISIONS	DATE	

WALDI



McCoy Business Center

Carlisle Regional Medical Center

Greenfield

Summerfield

Westmoreland Heights

R. Jumper

Walnut Terrace

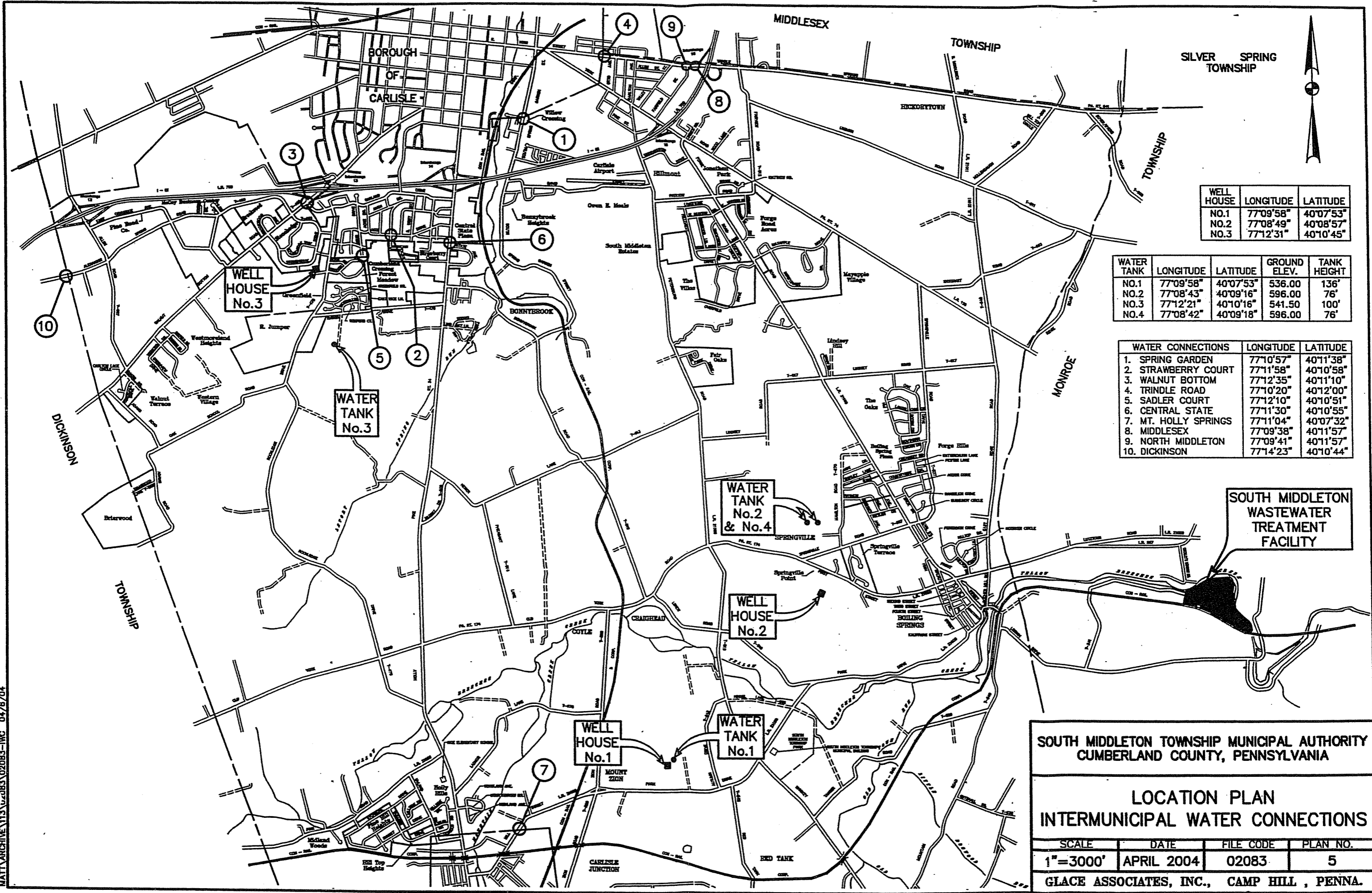
Cumberland Crossing Forest Meadow

Strawberry Court

LEGEND

- DESIGNED WATER MAINS
- EXISTING WATER MAINS
- - - FUTURE WATER MAINS

SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY CUMBERLAND COUNTY, PENNSYLVANIA	
WELL NO. 3 WATER DISTRIBUTION SYSTEM	
GLACE ASSOCIATES, INC. CONSULTING ENGINEERS CAMP HILL, PENNSYLVANIA	
APPROVED	SCALE 1"=1000
DESIGNED BY	DATE
CHECKED BY	DATE
MARK	REVISIONS
DATE	DATE
SHEET NO. 4	OF



SILVER SPRING TOWNSHIP

WELL HOUSE	LONGITUDE	LATITUDE
NO.1	77°09'58"	40°07'53"
NO.2	77°08'49"	40°08'57"
NO.3	77°12'31"	40°10'45"

WATER TANK	LONGITUDE	LATITUDE	GROUND ELEV.	TANK HEIGHT
NO.1	77°09'58"	40°07'53"	536.00	136'
NO.2	77°08'43"	40°09'16"	596.00	76'
NO.3	77°12'21"	40°10'16"	541.50	100'
NO.4	77°08'42"	40°09'18"	596.00	76'

WATER CONNECTIONS	LONGITUDE	LATITUDE
1. SPRING GARDEN	77°10'57"	40°11'38"
2. STRAWBERRY COURT	77°11'58"	40°10'58"
3. WALNUT BOTTOM	77°12'35"	40°11'10"
4. TRINDLE ROAD	77°10'20"	40°12'00"
5. SADLER COURT	77°12'10"	40°10'51"
6. CENTRAL STATE	77°11'30"	40°10'55"
7. MT. HOLLY SPRINGS	77°11'04"	40°07'32"
8. MIDDLESEX	77°09'38"	40°11'57"
9. NORTH MIDDLETON	77°09'41"	40°11'57"
10. DICKINSON	77°14'23"	40°10'44"

SOUTH MIDDLETON WASTEWATER TREATMENT FACILITY

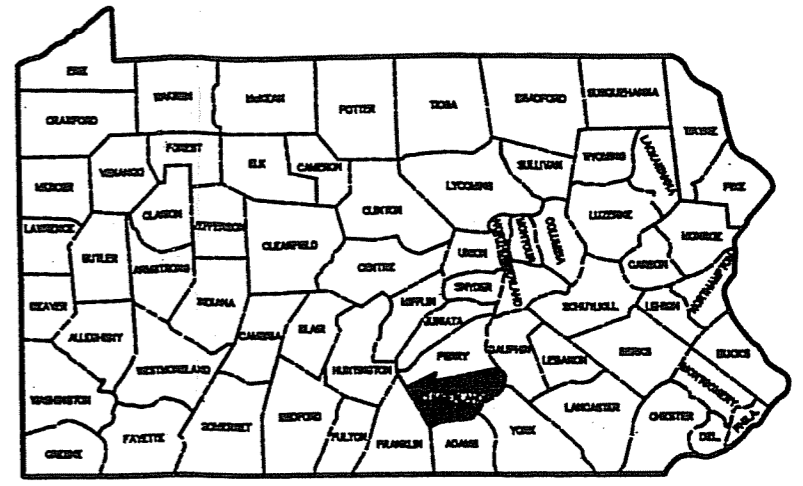
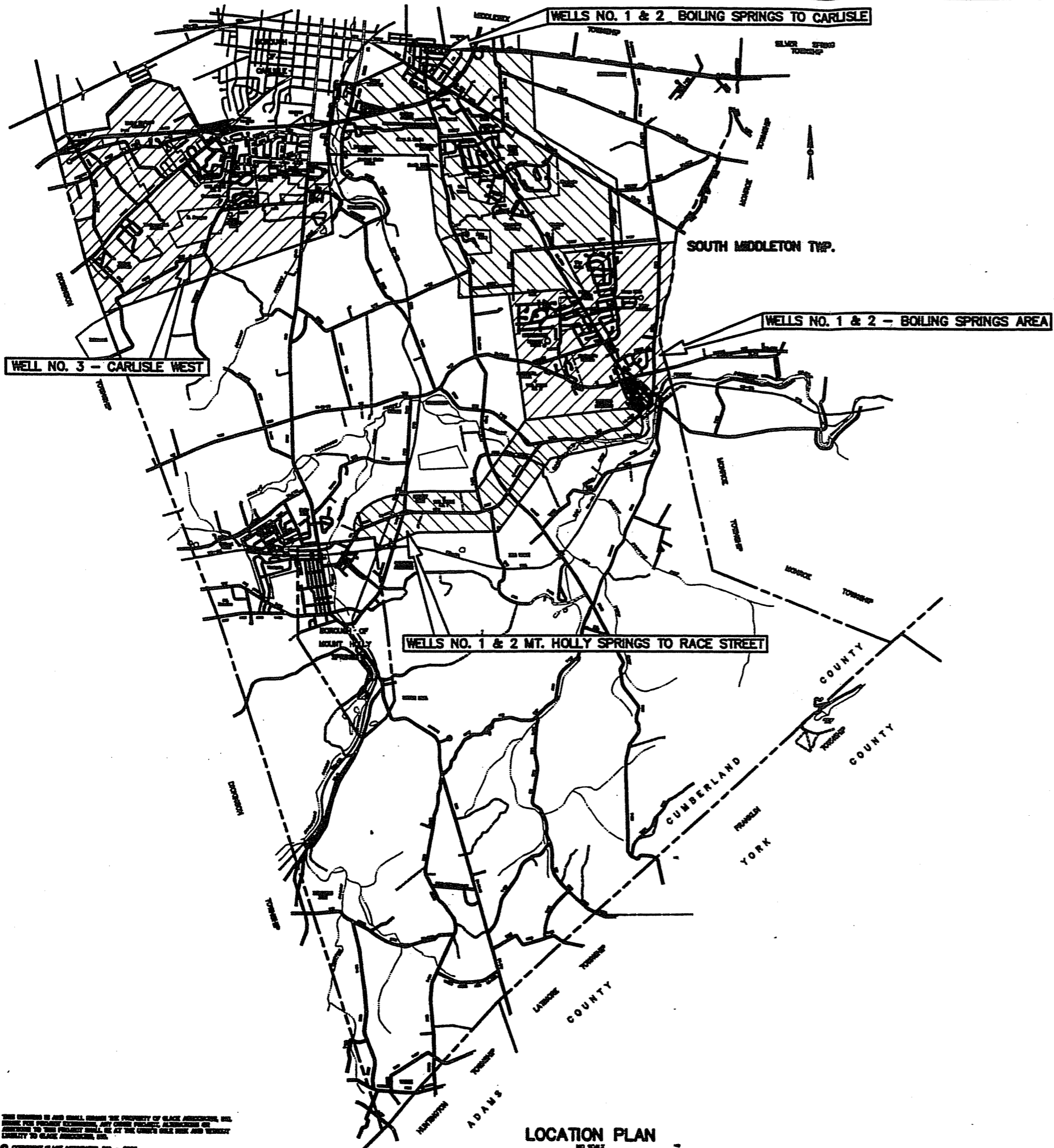
SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY
CUMBERLAND COUNTY, PENNSYLVANIA

LOCATION PLAN
INTERMUNICIPAL WATER CONNECTIONS

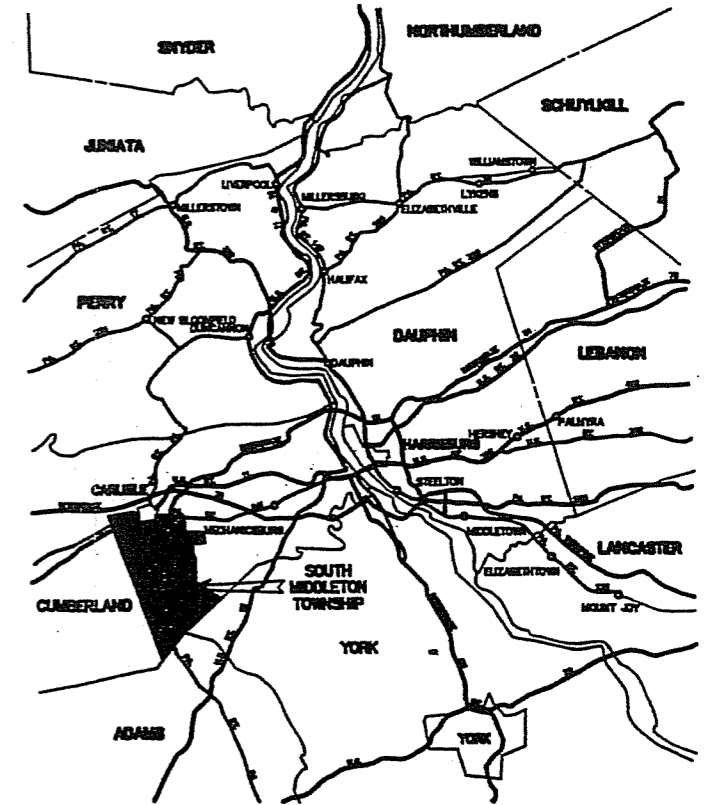
SCALE	DATE	FILE CODE	PLAN NO.
1" = 3000'	APRIL 2004	02083	5

GLACE ASSOCIATES, INC., CAMP HILL, PENNA.

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PENNSYLVANIA
 0 10 20 30
 SCALE IN MILES



VICINITY PLAN
 NO SCALE

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LOCATION PLAN
 NO SCALE

DATE	REVISIONS	DATE	SOUTH MIDDLETON TOWNSHIP MUNICIPAL AUTHORITY CUMBERLAND COUNTY, PENNSYLVANIA
			WATER DISTRIBUTION SYSTEM
			GLACE ASSOCIATES, INC. CONSULTING ENGINEERS CRIP HILL, PENNSYLVANIA
			APPROVED
			SCALE AS SHOWN
			SHEET NO. 6
<small>COMPUTER DRAWING FILE NAME: CWT-WATE (10/19/04) DRAWN BY: [blank] CHECKED BY: [blank]</small>			FILE CODE

structured so that active development occurs within areas targeted for public sewer and water service, and is discouraged in the non-service areas.

STORMWATER MANAGEMENT

Until the early 1980s, stormwater management facilities were considered a major municipal utility. The theory behind stormwater management was simply to convey surface waters off a site as fast as practical and into either a public right-of-way, a receiving stream, an/or a network of inlets and culverts. Management essentially meant getting the water away. Municipalities incurred increasing responsibilities and economic costs to expand and construct new networks in keeping with that management approach. The results were not only constant capital expenditures but also serious flooding conditions as water rushed downslope.

The impact of Hurricane Agnes and Eloise heightened the awareness of the need for a more effective approach to municipal stormwater management. The response in recent years has been to place more responsibility on developers to manage on-site their increased runoff rather than merely to dump the surface waters off the developed site.

By imposing more defined criteria as part of the land development process, municipalities have shifted a significant portion of this traditional public sector utility to the private sector. South Middleton Township, through its 1982 and 1990 amendments to its Subdivision and Land Development Ordinance,

became one of the first Cumberland County municipalities to implement this shifting of stormwater management responsibilities.

Although there may always be room for refinement of the actual design criteria depending upon the state-of-the-art and engineering point-of-view, future planning for stormwater management should continuously focus upon the administrative aspects of overseeing the implementation of private facilities and making certain that the facilities are under proper ownership and ongoing maintenance obligations. Additionally, it should be acknowledged that new development cannot completely, or in some cases even partially, take care of existing storm drainage problems. Many problems today are the result of the traditional stormwater approach and the more modest regulatory and administrative policies of the past. Particularly in the growth areas of the Township - Boiling Springs, adjoining Carlisle Borough and adjoining Mount Holly Springs - new development expands upon and infills with existing development. In many cases, effective stormwater management may need a more comprehensive approach between the new developer and the Township to improve existing conditions and minimize future problems.

RECREATION

South Middleton Township's recreational amenities and programs are rather unique to the area insofar as they are planned, implemented and administered through the joint effort of the Township and the South Middleton Township School District. The result is a more effective utilization of facilities and resources as both taxing jurisdictions coordinate budgets, programs and manpower. Since 1974, the joint recreation program of South Middleton Township has been established. The Township has 231.69 acres of parkland. This includes the 40-acre South Middleton Park on Park Drive located next to the municipal campus; the 90-acre Spring Meadows Park, located on York Road; the 50-acre Wittlinger Nature Preserve, located in Boiling Springs next to the Boiling Springs pool; the 4-acre Woodcrafters Park, located on Woodcrafters Drive to the east of Mount Holly Springs; the 5-acre Iron Works Park, located to the east of Children's Lake in Boiling Springs; the 7-acre Bubble Park, located behind the Boiling Springs Tavern in Boiling Springs; the 8.33-acre acre park in the Indian Hills development; the 17.7-acre Southview Open Space, located in the Southview development north of Mount Holly Springs; and the 9.66 acres of Seven Gables Park, located on the Township's northeastern border with Carlisle. This park is jointly owned and jointly maintained by both municipalities. The parks continue to improve in keeping with the adopted Master Plan. Recreational planning, in tandem with future growth and development within the Township, is planned to occur in selected areas of need rather than in smaller, more fragmented areas across the Township. However, Township zoning does require

townhouse projects and garden apartment complexes, when located in certain districts, to provide open space and active recreational amenities. Nevertheless, the vast majority of new construction is single-family detached dwellings and no recreational amenities are required with these projects with the exception of tot-lots or playgrounds for smaller children. This development plan has been adopted to minimize the demand for maintenance and upkeep services, and maximize the recreation opportunities for the Township's residents.

If it is acknowledged that the provisions for recreational amenities are largely a municipal function either directly or indirectly, then it is important to plan comprehensively for these provisions. Not only should recreational planning consider regional and neighborhood facilities, but also the type of amenities to be provided. For example, recreation and open space for a retirement village would understandably evidence a different form than the amenities for a single-family oriented subdivision. Additionally, large-lot, rural subdivisions would normally have ample land within the confines of the lot to accommodate open space amenities. More and more municipalities are requiring that a fee be paid to the municipality on a lot basis instead of mandating the developing of recreational facilities by the private sector.

In a manner similar to stormwater management, a public-private sector approach to providing recreational facilities seems prudent. Different housing styles generate a need for different types of facilities. Furthermore, where the growth and development occurs in relation to existing land use characteristics may define differing needs. Equally important is distinguishing the entity that is to

develop, own and maintain the recreational facilities. Just as the Township does not have the capability to maintain every stormwater facility constructed in the municipality, it is currently not capable, in terms of manpower and budget, to maintain every tot-lot and park bench in the Township.

Flexibility to accommodate different needs is an important key to establishing comprehensively, a recreational policy as an integral part of the growth management program. The Comprehensive Recreation, Parks and Open Space Plan Update will identify alternatives in keeping with the Township's objectives.

IMPLEMENTATION

The implementation of the policies set forth in this Updated Comprehensive Plan will necessitate revisions to existing township regulations, adoption of new ordinances, and the establishment of various municipal programs. Of particular importance to effective growth management in a rapidly expanding municipality, is proper oversight of building construction in keeping with recognized standards. As staff duties and responsibilities become more clearly defined, it is recommended that the township adopt building and fire code standards. These codes should be structured so that their application can be uniformly and consistently applied. In this manner, all of the township's growth management regulations should work in tandem to support the goals and objectives of the adopted Comprehensive Plan.

The following itemizes the implementation measures consistent with the Plan recommendations:

ZONING ORDINANCE REVISIONS

SUBDIVISION AND LAND DEVELOPMENT ORDINANCE REVISIONS

PREPARE AND ADOPT SUPPLEMENTARY STORMWATER MANAGEMENT
ORDINANCE

ESTABLISH STORM DRAINAGE STUDY AREA PRIORITIES

REVISE OFFICIAL MAP

COORDINATE CAPITAL PROGRAM AND COMPREHENSIVE PLAN

ADOPT THE OPEN SPACE AND RECREATION PLAN AS AN ELEMENT OF
THE COMPREHENSIVE PLAN

COORDINATE WITH THE SCHOOL DISTRICT, MUNICIPAL AUTHORITY, AND

STATE AGENCIES SUCH AS PENNDOT AND DEP
SEEK OUTSIDE GRANT AND FUNDS FOR APPROPRIATE ELEMENTS, I.E.
AGRICULTURAL LAND PRESERVATION, WELLHEAD PROTECTION
ACQUISITION, OPEN SPACE, ETC.
MANDATE REGULAR REVIEW OF THE COMPREHENSIVE PLAN BY THE
PLANNING DEPARTMENT AND PLANNING COMMISSION AS TO
CHANGES AND VALIDITY TO KEEP THE PLAN CURRENT
PARTICIPATE IN AND ENCOURAGE REGIONAL PLANNING OF THE
CARLISLE AREA AND WITH ADJOINING MUNICIPALITIES
REVISE THE ACT 537 OFFICIAL WASTEWATER FACILITIES PLAN