

LAND USE ASSUMPTIONS REPORT

PREPARED FOR

WHITEMARSH TOWNSHIP
MONTGOMERY COUNTY, PA

OVERSIGHT PROVIDED BY

WHITEMARSH TOWNSHIP TRAFFIC
IMPACT FEE ADVISORY COMMITTEE

June 21, 2005

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INTRODUCTION

The information presented in this report is the first step in a multi-step process required for Whitemarsh Township to implement a Traffic Impact Fee Ordinance under Act 209. The first step includes the preparation of a Land Use Assumptions Report based upon the development potential for the Township. For the LUAR, a build-out analysis was prepared for Whitemarsh Township by analyzing the existing land uses and the lands with future development potential. Those lands with pending or proposed development plans were excluded from the build-out calculation, but included as part of the existing conditions section for a perspective on the types of development occurring in Whitemarsh.

As required by Pennsylvania State Statute, the Land Use Assumptions Report shall:

- (i) Describe the existing land uses within the designated area or areas and the highways, roads or streets incorporated therein.
- (ii) To the extent possible, reflect projected changes in land uses, densities of residential development, intensities of nonresidential development and population growth rates which may affect the level of traffic within the designated area or areas over a period of at least the next five years. These projections shall be based on an analysis of population growth rates during the prior five year period, current zoning regulations, approved subdivision and land developments, and the future land use plan contained in the adopted municipal comprehensive plan. It may also refer to all professionally produced studies and report pertaining to the municipality regarding such items a demographics, parks and recreation, economic development and any other study deemed appropriate by the municipality.

As a major component of this process, the Whitemarsh Traffic Impact Fee Advisory Board provided oversight and assistance in the preparation of the Land Use Assumptions Report. Following the Board's review and comment, the findings of the Land Use Assumptions Report will be presented to the governing body at a public hearing for their approval by resolution. Upon adoption of the Land Use Assumptions Report, the next step in the Traffic Impact Fee Ordinance development is the preparation of a roadway sufficiency analysis to establish the existing level of infrastructure compared to the preferred levels of service within the municipality. The roadway sufficiency analysis will be prepared for any highway, road or street within the Township whereby the projected future development may generate the need for roadway improvements.

BUILD-OUT METHODOLOGY

A build-out study is a series of calculations performed to determine the full development potential or build-out of an area. Under Act 209, the development projected in the build-out is envisioned to occur over the next five years.

Our scope of services included the following work tasks:

- Task 1: Confirm existing land uses using the 2003 Whitemarsh Comprehensive Plan existing land use map as a baseline.
- Task 2: Identify and confirm vacant, underdeveloped, agricultural lands and private open space (with development potential) with acreage from the Montgomery County tax assessment database.
- Task 3: Identify past development activity through outreach to the municipality, and review of the Township's planning documents, including the Act 537 Sewage Treatment facilities Plan Update and Chapter 94 plan.
- Task 4: Subtract environmentally constrained land, where information is available.
- Task 5: Overlay zoning controls, including the density, lot size, permitted coverage and floor area ratio, where applicable, to developable lands.
- Task 6: Calculate future development potential for residential and non-residential development over the next five years. Identify potential longer-term development projected within the next 10+ years.

In addition to identifying future development potential, projected changes in land use or zoning were identified and included in the findings of this report.

The following data sources were reviewed:

- 2003 Whitemarsh Township Comprehensive Plan, Montgomery County, Pennsylvania.
- Whitemarsh Township Zoning Ordinance, September 15, 2004, Whitemarsh Township.
- 2004 Montgomery County Tax Assessment Office Parcel Data, Montgomery County Planning Commission.
- 2000 Whitemarsh Township Act 537 Sewage Facilities Plan Update, June 29, 2004, CKS Engineers.
- Chapter 94 Municipal Wasteload Management Plan (draft).
- United States Census Data 2000, United States Census Bureau, 2000.
- Population Estimates Program, Population Division, United States Census Bureau, 2000.

COMMUNITY SETTING

Whitemarsh Township is a 14.53 square mile municipality located in southeastern Montgomery County. It is one of Philadelphia's inner ring suburbs and is surrounded by Springfield, Upper Dublin, Whitpain, and Plymouth Townships, and Conshohocken Borough. It is also bordered by the Schuylkill River, which separates it from Lower Merion Township.

As described in the Township's 2003 Comprehensive Plan, access to the Township is provided by numerous major Montgomery County roads, including Ridge, Germantown, Butler, Skippack, and Bethlehem Pikes, Stenton and Pennsylvania Avenues, and Joshua and Morris Roads. Given the amount of development in Whitemarsh Township and its surrounding communities, the roads now carry a great deal of pass-through traffic, especially along Ridge, Butler and Germantown Pikes. The Pennsylvania Turnpike and the Fort Washington Expressway (State Route 309) also traverse the Township, but with no direct access to Whitemarsh. In addition, the Township is served by the SEPTA rail lines, connecting Whitemarsh to Bucks, Chester, and Philadelphia Counties, AMTRAK and Philadelphia International Airport. An additional service line provides a direct connection to Philadelphia's Center City and the Norristown Transportation Center along the Schuylkill River. Whitemarsh Township is also served by bus service which provides links to the regional rail lines and connections to other buses in the region.

EXISTING CONDITIONS

POPULATION

Whitemarsh Township experienced much of its growth between 1950 and 1960. For example, during that decade the total population increased 105%, from 5,977 to 12,286. Between 1960 and 1970, the population increased again to 15,866. During the next two decades, the Township experienced a slight decline. By 2000, the population rose to 16,702, as a result of the housing development which occurred in the Township during the past decade.

Table 1 Whitemarsh Township Historic and Current Population		
Year	Persons	% Change
1950	5,977	-
1960	12,286	105%
1970	15,886	29%
1980	15,101	-5%
1990	14,876	0%
2000	16,702	12%

Source: U.S. Census Bureau, 2000.

As indicated in the Township's 2003 Comprehensive Plan, the Township is expected to continue growing at a relatively modest rate to a population of 18,120 by 2025.

LAND USE

As shown on Table 2 and Map 1, residential development accounts for the largest single land use in Whitemarsh. In fact, over one-third (37.5%) of the land is classified residential- of which, three-quarters is comprised of single-family dwelling units. The 2003 Comprehensive Plan places the residential land uses into five sub categories:

- Country Residences on 5 to 20 acre lots
- Single-Family Detached Dwellings
- Twins or Single-Family Semi-Detached Dwellings
- Single-Family Attached
- Multi-Family

Table 2 Existing Land Uses		
Land Use	Acres	Percentage
<i>Residential</i>		
Country Residence	747.0	8.00
Single Family Detached	2606.1	27.90
Twin	33.9	0.36
Single-Family Attached	37.5	0.40
Multifamily	92.1	0.90
SUBTOTAL	3516.6	37.50
<i>Commercial</i>		
Retail	175.2	1.80
Office	325.7	3.40
Mixed Use	63.0	0.60
SUBTOTAL	563.9	6.00
Industrial	375.7	4.00
Institutional	719.2	8.00
Utilities	456.1	5.00
Open Space		
Public	923.1	9.80
Private	1,092.9	11.70
Vacant Land	962.8	10.3
Agriculture	655.4	7.00
Miscellaneous	61.7	0.70
TOTAL	9,327.4	100.00
Source: Whitemarsh Township 2003 Comprehensive Plan		

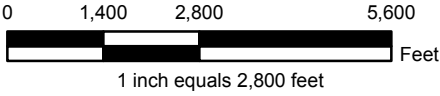
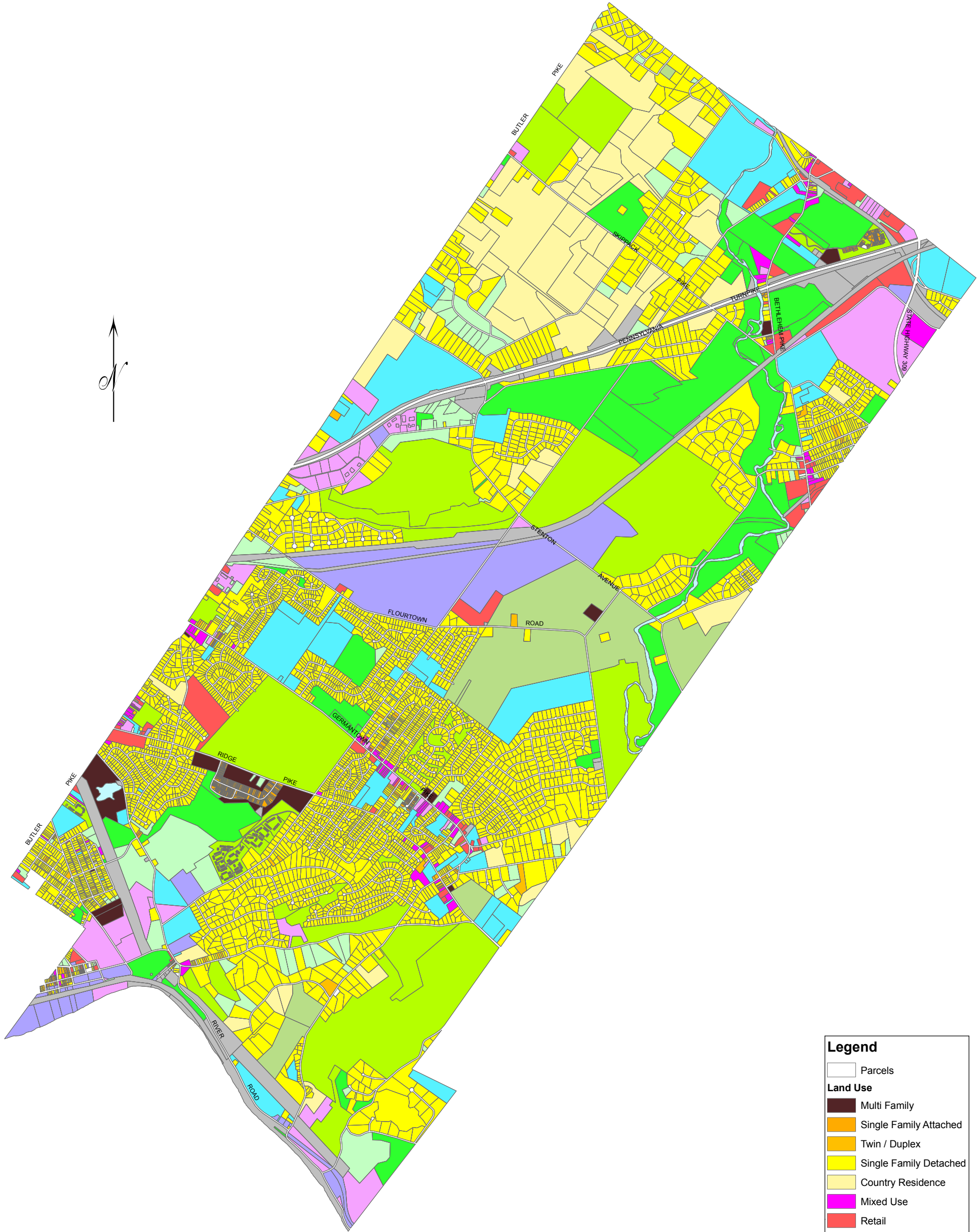
The next largest land use category in Whitemarsh is open space. In fact, twenty-one percent (21.5%) is classified as open space which includes the Township's parkland, the 483-acre Fort Washington State Park, and two County parks: Wissahickon Valley Park and Spring Mill Park. This category also includes private open space, land owned by homeowners associations, five private golf courses (Sunnybrook Country Club, Philadelphia Cricket Club, Whitemarsh Valley Country Club, Eagle Lodge/ACE Country Club, and Green Valley Country Club) and land owned by the Wissahickon Valley Watershed Association. The majority of the open space land is subject to the Township's Recreational Overlay, which limits future development potential.

Land Use Map

Whitemarsh Township

Montgomery County, Pennsylvania

June 21, 2005



Legend

Parcels

Land Use

Multi Family

Single Family Attached

Twin / Duplex

Single Family Detached

Country Residence

Mixed Use

Retail

Office

Industrial

Institutional

Utilities

Undeveloped

Public Open Space

Private Open Space

Agriculture

Water

Roughly ten percent (10.3%) of the Township is classified as vacant, meaning that it is either privately owned and presently unused, or it is owned by the Township and has development potential.

The next largest land use category is institutional. One in every twelve acres, or eight percent (8%) of land in Whitemarsh contains an institutional use. The institutional uses range from religious facilities to private hospitals. Some of the regionally recognizable institutions include the Germantown Academy, the Shriner's LuLu Temple, the Progressions Institute, and the Masonic Home.

The Township has eleven properties which contain an agricultural use. While this land use has diminished over the years, there are large clusters of agricultural land located in the center of the Township, off Flourtown Road, Thomas Road and Stenton Avenue. Five agricultural parcels are located in southeastern Whitemarsh, off Paddock Lane and Harts Road. One parcel is located off Ridge Pike Road, and an additional parcel is located off Willow Road.

The remaining twenty percent (20%) of land within the Township is classified as containing commercial, industrial, or utility uses. Commercial uses include retail, office and mixed use development. The retail, neighborhood commercial areas include the Whitemarsh Shopping Center and properties along Germantown Pike between Joshua Road and Church Street. Office uses are found throughout the Township with the highest concentration in the Whitemarsh Business Campus and in Lee Park. Mixed use properties are typically found in the older villages or converted older homes. While the number of industrial uses has been historically decreasing, the Township has several large remaining sites, including the Highway Materials Quarry, and McNeil Consumers. It should be noted that two of the three quarry sites are operational and the third has undergone reclamation. Of particular note, significant land throughout the Township is devoted to the PECO high tension power lines, and the Conrail and SEPTA tracks.

As part of the Township's 2003 Comprehensive Plan, several areas were discussed for land use/zoning changes as part of a strategic plan to address land use conflicts, open space preservation, or to implement the Township's goals and objectives. Some of the proposed changes include:

- Rezone a commercial zone on Morris Road to residential to become consistent with the surrounding land uses and eliminate the potential for strip commercial development along the heavily traveled road.
- Rezone a commercial zone on Hollywood Drive to residential to accommodate the existing land uses.
- Modify zoning along Pennsylvania Avenue between Bethlehem Pike and State Route 309 to permit commercial and office uses but exclude auto-oriented commercial development, such as drive-thru restaurants and gas stations.
- Create a new commercial zone along Bethlehem Pike between Pennsylvania and Skippack Pike to preserve the existing corridor and historic character.

Since the development of the 2003 Comprehensive Plan, there have been zone changes which could affect the level of development and traffic in the Township. These include the following:

- Rezoning a 10 acre parcel from Agriculture and Commercial Retail (CR-H) to Attached Dwelling (AD) to allow for 44 townhouses (Cold Point Manor).
- Rezoning a 50 acre parcel from Industrial (LIM) to permit 290 Age Restricted Units on North Cedar Grove Road (The Reserve at Whitemarsh)
- Rezoning of Quarry Hole #1 to permit single-family dwellings at a density of 1 dwelling unit per acre.

RECENT SUBDIVISION/LAND DEVELOPMENT ACTIVITY

Where available, recent subdivision and land development applications were identified to indicate past development activity. These developments were recognized in the Township's 2000 Act 537 plan, the Chapter 94 Municipal Wasteload Management Plan, and were documented in the December 2004 and January 2005 Engineering Reports.

Properties listed in Table 3 have been included as a reference only, to provide a perspective on the types of development occurring in the study area, and have not been included as part of the build-out analysis.

Table 3 Whitemarsh Township Recent Subdivision and Land Development Applications			
Residential Development	# of Residential Units	Unit Description	Source
Andorra Woods	14	Multi-family	Act 537
Columbus Square	2	Multi-family	Act 537
Helm Subdivision	2	Single-family	Act 537
Andorra Springs	5	Single-family	Act 537
Whitemarsh Mews	10	Multi-family	Act 537/Chapter 94
Andorra Glen Apartments/ Townhouses	110+10	Multi-family	Act 537
Czop Tract	6	Single-family	Act 537
Corson Tract	26	Single-family	Act 537
Barren Hill Estates	8	Single-family	Act 537
150 Barren Hill Road	1	Single-family	Act 537
720 Germantown Pike	4	Single-family	Act 537
Realen Militia Hill Subdivision	86	Single-family	Act 537
800 Hector Street	2	Single-family	Act 537
Whitemarsh Chase Subdivision	22	Single-family	Act 537/Chapter 94
Fort Hill Townhouses	90	Multi-family	Act 537
Butler Commons	N/A	Office	Act 537
Whitemarsh Commons	N/A	Office	Act 537
Fifteenth Avenue	1	Single-family	Engineer's Report
2067 Harts Lane	1	Single-family	Engineer's Report
4125 Presidential Drive	1	Single-family	Engineer's Report
333 Barren Hill Road	1	Single-family	Engineer's Report
Reserve at Whitemarsh	290	Age-restricted condos	Engineer's Report

Non-Residential Development	Non-Residential Sq. Ft.	Unit Description	Source
Miquon School	Unknown	Addition to existing building	Engineer's Report
Whitemarsh Corporate Center	Unknown	Concept plan for addition to existing building	Engineer's Report

PROPOSED SUBDIVISION / LAND DEVELOPMENT

Properties listed in the following Table 4 Proposed Development Applications are those properties that the Township has received conceptual planning proposals, a formal plan has yet to be submitted. The table below indicates that the most intensive use and density allowed by zoning.

Table 4 Whitemarsh Township Proposed Development Applications				
Development	# of Residential Units or Non-Residential Sq. Ft.	Unit Description	Zone	Status
Hannigan Tract	20	Single-family	AA	
Gambone Tract	181,319 square feet	Unknown	AR	
Silt Basin Tract	110,400 square feet	Office?	Unknown	
SEPTA Tract	111,470 square feet	Mixed Use/Office	CLI	
Butcher Property	95,266 square feet	Office	CLI	
Militia Hill Park	50,000 square feet	Unknown	CLI	

The following other projects, identified in the Chapter 94 Plan, have been approved but not yet completed:

- 716 Ridge Pike
- Greenes at Whitemarsh
- P.Q. Corporation
- ACE/INA
- PSWCO Bubbling Springs
- Cold Point Manor (44 Townhouses)

TRANSPORTATION NETWORK

The Township's transportation network services both local and regional traffic. The classification system classified by PADOT/Montgomery County includes expressways, principal arterials, minor arterials, collectors and local roads. The following are a description how roads in the township are currently classified and their respective jurisdiction.

Expressways

- PA Turnpike- US Interstate 276
- Fort Washington Expressway- SR 309

Principal Arterials

- Germantown Pike- SR 3053
- Ridge Pike
- Skippack Pike- SR 73
- Church Road- SR 73
- Bethlehem Pike- SR 2018
- Pennsylvania Avenue- SR 2027 (between Bethlehem Pike and SR 309)
- Butler Pike (between Germantown Pike and Upper Dublin Township)

Minor Arterials

- Flourtown Road- SR 3007
- Morris Road- SR 2001
- Joshua Road
- Hector Street- SR 3014
- Barren Hill Road- SR 3011
- Pennsylvania Avenue- SR 2027 (between SR 309 and Springfield Township)
- Stenton Avenue- SR 3003 (between Joshua Road and Springfield Township)

Collectors

- Thomas Road
- North Lane- SR 3015
- Cedar Grove Road- SR 3011
- Spring Mill Avenue
- Lee Street
- Church Road
- Mill Road
- Cricket Road
- Valley Green Road
- Camp Hill Road- SR 2028
- Harts Lane (between Ridge Pike and Barren Hill Road)
- West Valley Road (between Cricket Road and Bethlehem Pike)

Local Roads

- All other Township roads are classified as Local Roads.

At the time of the 2003 Comprehensive Plan, there were three planned road improvement projects:

- Fort Washington- administered through PADOT, the project involved closing Lafayette Avenue between Morris Road and Bethlehem Pike, building a new bridge on Bethlehem Pike over the SEPTA line, and creating a separate travel lane for Pennsylvania Avenue along State Route 309.
- Ridge Pike- Roadway resurfacing and potential widening of Ridge Pike to two lanes from Harts Lane to Philadelphia. The Township has expressed concerns for this corridor including the need for additional turn signals and improved efficiency at intersections, and a need for bike lanes and sidewalks.

- Cold Point Village- In an effort to improve traffic flow, the County has recommended the relocation of Butler Pike. The plans also include eliminating a jog at intersection of Plymouth Road, Butler Pike and Flourtown Road.

POTENTIAL DEVELOPMENT AREAS

Properties with development potential within the next 10 years were identified, and future development assumptions were made regarding the type and density of development to occur based on the current zoning.

Developable land in the township includes land classified as agricultural and vacant properties, and those public and private recreation sites with future development potential.

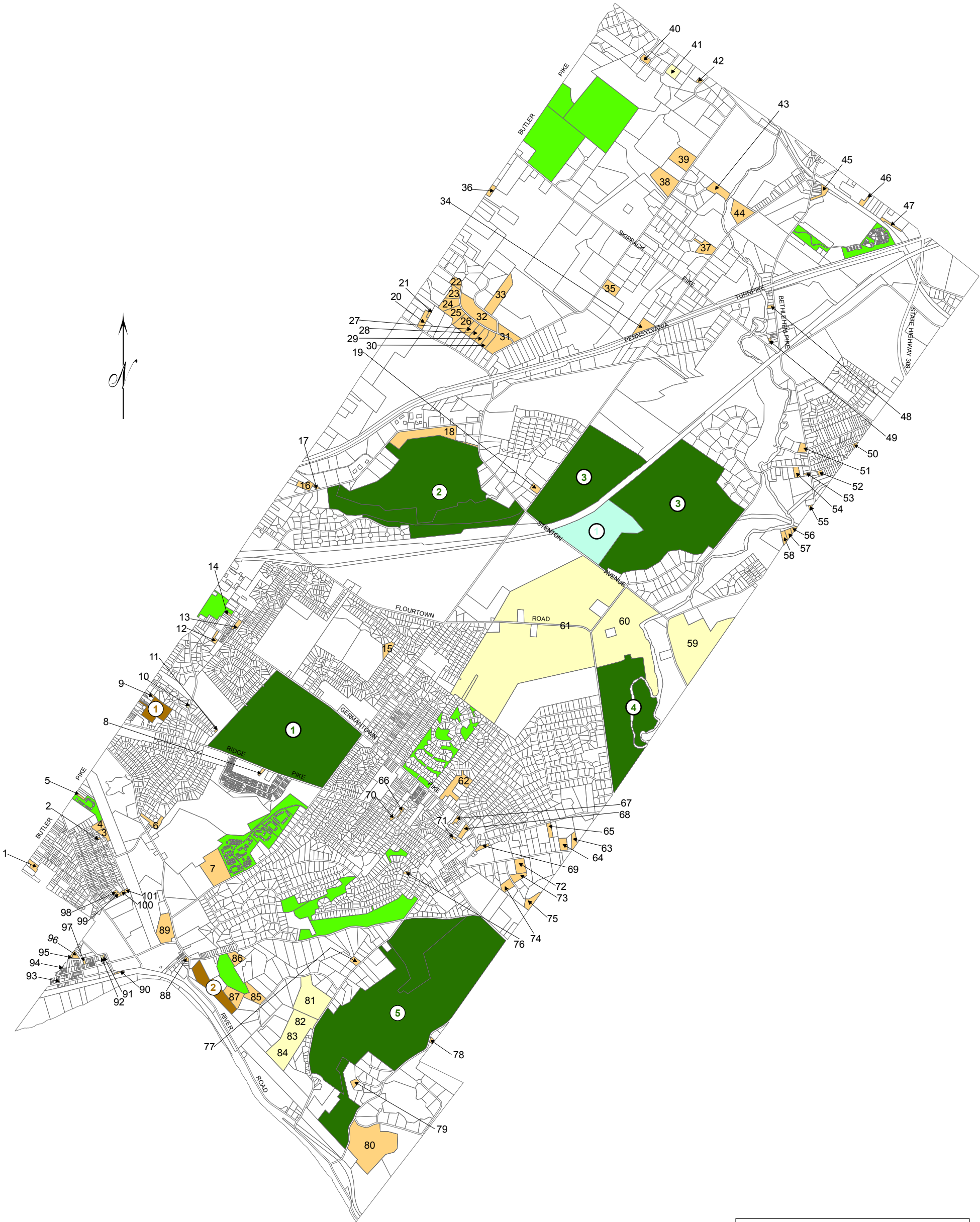
The build-out analysis is based on several basic assumptions:

- (1) That each parcel will be developed as zoned;
- (2) That the geometric and topographic characteristics of the site will accommodate the maximum allowable zoning capacity;
- (3) Development is based on the net density for each zone district, which includes a 20% allowance for roads and infrastructure;
- (4) Lands with environmental constraints, (flood plain, steep slopes -8% slope or greater, and wetlands) have been estimated and deducted from the developable lands and build-out analysis;
- (5) Properties that were smaller than the minimum lot size permitted in their district were deducted from the build-out projection (for example, a parcel that contains 14,000 square feet in the HVY District, which has a minimum lot size of 2 acres would be excluded from the build-out); and
- (6) For many of the residential districts, cluster development is permitted at a higher density, however, for the purpose of this analysis, conventional build-out methods were applied.

Map 2 (Undeveloped Lands) illustrates the undeveloped or vacant land, Hole #1, the five golf courses and the developable open space. The map corresponds to Appendix A and B which indicates these parcels by identification number, zoning district, parcel number, lot size, buildable and constrained acres and current land use.

As shown on Map 2, there are several areas which will receive a disproportionate share of the Township's development. This is especially apparent where large tracts of undeveloped land exist, such as the undeveloped properties off Hagy's Mill Road/Manor Road, and along Tamarack Road. In addition, there are several areas with contiguous tracts of developable agricultural land along Stenton Road and Norristown-Flourtown Road, and Harts Lane. The developable golf course land and the Quarry Hole#1 site represent additional significant development potential.

Undeveloped Lands Map
Whitemarsh Township
Montgomery County, Pennsylvania
June 21, 2005



Legend

Parcels

Land Use

Hole #1

1

Agriculture

1

Golf Courses

2

Undeveloped or Vacant

1

Developable Open Space

Permanently Preserved Private Open Space

As Table 5 illustrates, 818 acres are identified as developable in the township. The Township's zoning districts were then applied to the developable lands. Residentially zoned land (A, AA, AAA, AAAA, B, and C combined) comprised eighty-five (85%) of the total developable land in the township. Seven percent (7%) of the developable land is comprised of land zoned Extraction (EX), also known as the Quarry Hole #1. This site has also been included within the developable land category based upon its reclamation and future development potential. The remaining lands are comprised of lands zoned Apartment House (APT-HR), Administration and Research (AR), Commercial Retail (CR-L and CR-H), Heavy Industrial (HVY) and Limited Industrial (LIM).

Table 5 Developable Land by Zoning District (acres)		
Zone District	Acres	Percentage of Total
A- Residential	11	1%
AA- Residential	90	11%
AAA- Residential	407	50%
AAAA- Residential	158	20%
B- Residential	25	3%
C-Residential	1	<1%
APT-HR- Apartment House	<1	<1%
AR- Administrative and Research	55	7%
CR-L- Commercial Retail	3	<1%
CR-H- Commercial Retail	3	<1%
HVY- Heavy Industrial	<1	<1%
EX- Extraction	54	7%
LIM- Limited Industrial	11	1%
Total Acres	818	100%

SHORT TERM DEVELOPMENT PROJECTIONS

RESIDENTIAL

For the residentially zoned lands, the following densities were applied.

Zone	Minimum Lot Size	Density
A District	15,000 square foot lot	2.9 dwelling units per acre
AA District	30,000 square foot lot	1.5 dwelling units per acre
AAA District	43,560 square foot l	1 dwelling unit per acre
AAAA District	90,000 square foot lot	0.5 dwelling unit per acre
B District	10,000 square foot lot	4.4 dwelling units per acre
C District	6,000 square foot lot	7.3 dwelling units per acre

While the "EX"- Extraction District applies to all three Quarry Holes, after reclamation, as defined in the Township's Code, the standards of the AAA District apply. Since Quarry Hole #1 is the only quarry site that has undergone rehabilitation, its 54 acres are now subject to the AAA District requirements, which allows for residential development density of 1 unit per acre.

As for the five private golf courses, each golf course was examined individually and carefully. The golf course sites are listed in Appendix C. While the Township's

ordinance has a recreational overlay which allows for added protection from future development, three courses contained some land without this overlay protection.

It should also be noted that both the Whitemarsh Valley Country Club and the Eagle Lodge/ACE Country Club contain lands with significant environmental constraints which have been deducted from their development potential. For the purpose of this analysis, golf courses with development potential are described as follows:

- Sunnybrook Country Club: 47 acres within the AA district
- Whitemarsh Valley Country Club: 10 acres within the AAA district
- Eagle Lodge/ACE Country Club: ~55 acres within the AR district, and ~20 acres within the AAAA district

Full development of 648 acres of residentially zoned land would yield approximately 617 dwelling units. Applying the 2000 Census figure of 2.62 persons per occupied dwelling unit, the potential exists for 1,616 additional residents.

NON-RESIDENTIAL

Non-residential build-out is measured in terms of additional gross floor area and is calculated using a Floor Area Ratio. Since the Township Zoning Schedule does not include a maximum FAR requirement (defined as the total number of building square feet in relation to the total lot size), an FAR of 0.40 is appropriate for a suburban location and was assumed to illustrate a high-end scenario.

For the non-residential development, the following densities were applied.

Zone	Floor Area Ratio
B District (institutional overlay)	0.40
AR District	0.40
CR-H / CR-L District	0.40
LIM District	0.40

The lands with environmental constraints, (flood plain, steep slope -8% slope or greater, and wetlands) were identified using information contained within the 2003 Comprehensive Plan. Of particular note, there are several waterbodies located within the Township, including the Schuylkill River, and the Wissahickon and Spring Mill Creeks, which impact the future development potential. The acreage of environmentally constrained land was estimated and deducted from the acreage of developable lands and build-out analysis.

The analysis indicates the potential for ~1,132,587 square feet of additional non-residential development, of which two-thirds is within the Administrative Research District (or 766,656 square feet). The Limited Industrial District (LIM) yields an additional 158,349 square feet, and the B district, with an institutional overlay yields an additional 115,695 square feet of houses of worship, schools, commercial school, library, museums, park and recreation facility, private club, community center, day nursery,

hospital, clinic, nursing home, cemetery, monastery, conference center, and community residential facility. The Commercial/Retail Districts yields an additional 91,886 million square feet.

Table 6 Land Anticipated to Develop in 10 Years by Zoning District illustrates the land in which zoning district development is anticipated to occur. The table shows the number of units and/or non-residential square footage that could be built on the development sites; based on the permitted zoning densities.

Table 6 Land Anticipated to Develop in 10 Years by Zoning District

Zone	Gross Acres	Net Development Acres ¹	WM LU	Units per Acre or FAR	#of units	Total Square Footage
a	11	8	vacant	2.9	24	
aa	24	19	agriculture	1.5	28	
	19	15	vacant	1.5	21	
	47	38	private recreation	1.5	55	
Subtotal	90	72			104	
aaa	366	293	agriculture	1.0	293	
	31	25	vacant	1.0	25	
	10	4	private recreation	1.0	4	
Subtotal	407	322			322	
aaaa	101	81	vacant	0.5	39	
	36	29	agriculture	0.5	14	
	21	14	private recreation	0.5	7	
Subtotal	158	124			60	
b	17	14	vacant	4.4	59	
	8	7	institutional overlay	40%		115,695
Subtotal	25	20			59	115,695
c	1	1	vacant	7.3	5	
ar	55	44	private recreation	40%		766,656
cr-l	3	3	vacant	40%		45,650
cr-h	3	3	vacant	40%		46,236
ex	54	43	Hole #1	1.0	43	
lim	11	9	vacant	40%		158,349
Total	818	648			617	1,132,587

For AAA District Cluster development is allowed at a maximum density of .9 dwelling units per acre with 40% open space, with a minimum lot area of 20,000 and 22,000 square feet average

For AAAA District Cluster development is allowed at a maximum density of .47 dwelling units per acre with 40% open space, with a minimum lot area of 43,560 and 50,000 square feet average

For C District, the minimum area which may be classified as a CR shall be 5 acres, the minimum area for a single structure is dependent on the land use, parking and other requirements.

A 50% deduction was applied to the AAAA district, private recreation to account for environmentally constrained lands.

¹ For the purpose of this analysis, 20% was deducted from the developable lands to allow for infrastructure and roads. The environmentally constrained lands have already been estimated and deducted as part of the net developable acres.

SUMMARY OF 10 YEAR DEVELOPMENT POTENTIAL

The following summarizes the 10 year development potential:

Residential Dwelling Units: 617 total.

Non-residential Square Feet: 1,132,587 square feet

- Commercial/retail space: 91,886 square feet
- Office, laboratory space: 766,656 square feet
- Limited Industrial space: 158,349 square feet
- Institutional Overlay: 115,695 square feet

SUMMARY OF LONG TERM DEVELOPMENT POTENTIAL

For longer term development potential, the five courses were examined for their additional development potential, within the next 10+ years, if those lands with a recreation overlay or open space designation was removed.

The following table outlines the remaining development potential.

Table 6: Long Term Development Potential					
Zone	Gross Area (Acres)	Net Development Area (Acres) ²	Golf Course	Units per Acre	Number of lots
aa	151	121	Green Valley	1.5	175
aa	138	110	Sunny Brook	1.5	160
aa	73	58	Philadelphia Cricket	1.5	85
aa	35	28	Philadelphia Cricket	1.5	41
aa	147	118	Philadelphia Cricket	1.5	171
aa	63	50	Philadelphia Cricket	1.5	73
aaa	79	63	Whitemarsh Valley	1.0	63
aa/aaa/aaaa	248	198	Eagle Lodge	1.0	198
Total	934	747			967
Since the majority of the Eagle Lodge Country Club is within the AAA district, for the purpose of this analysis a density of 1 unit per acre was applied.					

In total, an additional 967 units could be built, given the removal of the recreation overlay district, yielding a population of 2,533.

² For the purpose of this analysis, 20% was deducted from the developable lands to allow for infrastructure and roadways. The environmentally constrained lands have already been deducted as part of the net developable acres.

Appendix A						
id	Zone	Parcel Number	Lot Size	Buildable Acres	Estimated Constrained Acres	WM LU
1	b	65000102400965020 024	59633	1.4		vacant
2	b	65001137500865017 036	6350	0.1		vacant
3	B	65000565900965008 006	67558	1.6		vacant
4	B	65000566000865008 047	69055	1.6		vacant
5	b	65000109900665008 032	11125	0.3		Vacant
6	a	65001080700965002 024	5000	0.1		vacant
7	lim	65000640600965002 043	494842	11.4		vacant
8	apt hr	65000998800965002 003	13000	0.3		vacant
9	b	65000120100365027 012	11123	0.3		Vacant
10	a	65000742300965027 057	15322	0.4		vacant
11	a	65000591400665029B015	6930	0.2		vacant
12	a	65000473500665028 017	33800	0.8		vacant
13	b	65000444410865041 049	29082	0.7		vacant
14	b	65000757000665041 013	10475	0.2		vacant
15	a	65000559516365043G125	103237	2.4		vacant
16	a	65000130050765045 053	87860	2.0		vacant
17	a	65000785300265045 031	20700	0.5		vacant
18	aa	65000800600265044A005	535788	12.3		vacant
19	aa	65000652900365046 019	65775	1.5		vacant
20	aaa	65001113100965047 032	97574	2.2		Vacant
21	aaa	65001113101865047 075	25213	0.6		Vacant
22	aaaa	65001146750165047A011	98881	2.3	1	vacant
23	aaaa	65001146751965047A006	96703	2.2	1	vacant
24	aaaa	65001146752865047A008	140699	3.2	1	vacant
25	aaaa	65001146753765047A009	152460	3.5	1.5	vacant
26	aaaa	65001146754665047A010	176853	4.1	3	vacant
27	aaaa	65001146755565047B007	87991	2.0		vacant
28	aaaa	65001146756465047B006	84070	1.9		vacant
29	aaaa	65001146757365047B005	83199	1.9		vacant
30	aaaa	65001146758265047B004	93218	2.1		vacant
31	aaaa	65001060000965047B002	390297	9.0	4	vacant
32	aaaa	65000100350765047B001	710463	16.3		Vacant
33	aaaa	65000100355265047A004	179032	4.1		vacant
34	aaaa	65000654440265048 064	231303	5.3		vacant
35	aaaa	65001055550465048 065	124146	2.9		vacant
36	a	65000137201265047 004	46000	1.1		vacant
37	aaa	65001291600665049D009	163786	3.8	3.76	vacant
38	aaa	65001061260965049 106	310583	6.6	0.5	Vacant
39	aaa	65001061303265049 109	262231	6.0	3	Vacant
40	aaa	65000053500365049B001	71300	1.6		vacant
41	aaa	65001297300365049 077	159430	3.7		agr
42	aaa	65000818190765049 108	15725	0.4		Vacant
43	aaa	65001295200665049E006	151153	3.5	1.25	vacant
44	aaa	65000692200665049 016	241758	0.0	5.55	Vacant

45	cr-h	65000067920165051 055	53971	1.2	1.24	vacant
46	cr-l	65000876710565051 044	43200	1.0	0.99	vacant
47	cr-l	65000875200365051 052	20000	0.5	0.46	vacant
48	a	65000081400365055 029	20000	0.5	0.46	vacant
49	cr-l	65000760900365054 010	9225	0.2	0.21	vacant
50	b	65000013001265060 020	21780	0.5		vacant
51	a	65000075700665053 011	54400	1.2	1.25	vacant
52	b	65001139500665060 053	199000	4.6		vacant
53	cr-l	65000073600965061 003	12000	0.3	0.28	vacant
54	aa	65001210600665061 028	39600	0.9	0.91	vacant
55	cr-l	65000072200565061 047	29700	0.7	0.68	vacant
56	b	65000807050565061 053		0.0		vacant
57	b	65000807150465061 024	56000	1.3		vacant
58	b	65000807100965061 023	59000	1.4		vacant
59	aa	65001114200765064 010	1502384	24.0	10	agr
60	aaa	65001114400565064 009	4936655	113.3	80	agr
61	aaa	65000392400765064 001	10842520	248.9		agr
62	a	65000433300365022K025	127195	1.5	1.5	vacant
63	aa	65000005200965038 036	68400	1.6		vacant
64	aa	65000005800365038 034	69870	1.6		vacant
65	aa	65000451000665038 025	57861	0.3	1	vacant
66	b	65000968600565034 126	10656	0.2		vacant
67	cr-h	65000456700365034 035	55894	1.3		vacant
68	b	65000455200965035 002	57151	1.3		vacant
69	crh	65000216100665039 009	34623	0.8		vacant
70	b	65000861804765003J033	10004	0.2		vacant
71	b	65000265600665035 007	9836	0.2		vacant
72	aaa	65000003400965038 037	107593	1.7	0.8	vacant
73	aaa	65000008800965038 038	90605	2.1		vacant
74	aaa	038 054	70000	1.6		vacant
75	aaa	65000745600365038 009	109771	1.3	1.2	vacant
76	aa	65000213557265003M036	12298	0.3		vacant
77	aaaa	65000533200365006 004	53100	1.2		vacant
78	aaaa	65000745000965004 029	65000	1.5		vacant
79	aaaa	65000513950265004 047	43587	1.0		vacant
80	aaaa	65001006603965005 002	1393920	32.0	10	vacant
81	aaaa	65000530800965006 032	551470	11.7	1	agr
82	aaaa	65000530250165006 078	0	0.0		agr
83	aaaa	65000530200665006 010		24.6		agr
84	aaaa	65000530100765006 077	0	0.0		agr
85	aaaa	65000537264765006B010	161172	3.7		vacant
86	aaaa	65000048400965006 066	129373	1.0	2	vacant
87	aaaa	65000049910265006 072	130680	0.0	3	vacant
88	a	65000051100965007 007	19575	0.0	0.45	vacant
89	ar	65000179200665008 017	361984	0.0	8.37	vacant
90	hvy	65000545210865008A015		0.0		vacant
91	hvy	65001074100365009 004	7560	0.2		vacant
92	hvy	65001074400965009 007	7200	0.2		vacant

93	c	65000320500665011 053	4000	0.1		vacant
94	c	65001078700265011 081	3600	0.1		vacant
95	c	65001079802765013 016	2220	0.1		vacant
96	c	65001080100665013 015	20000	0.5		vacant
97	c	65001077100965010 031	7200	0.17		vacant
98	b	65001124800965016 054	10800	0.2		vacant
99	b	65001124500365016 026	9700	0.2		vacant
100	b	65001132300665016 068	7525	0.2		vacant
101	b	65000302210865016 073	20136	0.5		vacant

Appendix B					
Developable Private Open Space and Golf Courses, and Quarry Hole #1 Site					
id	Parcel Number	Lot Size	Acres	Notes	Zone
Private open space					
1	65001042000965021 071	361548	8.3	institutional overlay	b
2	65000050200965006 020	489614.4	11.24	open space preservation	aaaa
Golf courses					
2	65000800400465044A007	2047320	47		aa
4	65001168200765064 008	1017126	10		aaa
5	65000515201265005 028	457815.6	10.51		aaaa
5	65001006609365005 029	445618.8	10.23		aaaa
5	65001006607565005 020	435600	10		aaaa
5		2395800	55		ar
Quarry					
1	Hole #1	2352240	54	quarry	ex

Appendix C					
Golf courses properties					
id	Parcel Number	Lot Size	Acres	Notes	Zone
1	65000975400965030 001	6577560	151	recreation overlay	aa
2	65000144273465044B086	1481040	34	open space preservation	aa
2	65000800400465044A007	2047320	47		aa
2	65000802300365044 061	6011280	138	recreation overlay	aa
3	65000637100865053 039	3179880	73	recreation overlay	aa
3	65000637200765053 035	1524600	35	recreation overlay	aa
3	65001214500365053B002	6403320	147	recreation overlay	aa
3	65001214501265053B001	2744280	63	recreation overlay	aa
4	65001168000965023 002	3433399	78.82	recreation overlay	aaa
4	65001168200765064 008	1017126	10		aaa
5	65000747800865004 001	10802880	248	recreation overlay	aa/aaa
5	65000515201265005 028	457815.6	10.51		aaaa
5	65001006609365005 029	445618.8	10.23		aaaa
5	65001006607565005 020	435600	10		aaaa
5		2395800	55		ar

RESOLUTION NO. 2005-14

WHEREAS, the Board of Supervisors of Whitemarsh Township adopted Resolution No. 2004-25 on August 19, 2004 establishing a Traffic Impact Fee Advisory Committee and providing public notice of the intention to adopt a Traffic Impact Fee Ordinance; and

WHEREAS, the Traffic Impact Fee Advisory Committee has developed a Land Use Assumptions Report, dated June 21, 2005, with representatives of Schoor DePalma Engineers and Consultants; and

WHEREAS, the Land Use Assumptions Report has been forwarded to contiguous municipalities, the Colonial School District, the Montgomery County Planning Commission and the Whitemarsh Township Planning Commission for comments; and

WHEREAS, the Land Use Assumptions Report has been advertised in compliance with the public notice provisions of Section 107 of the Pennsylvania Municipalities Planning Code; and

WHEREAS, the Traffic Impact Fee Advisory Committee held a Public Hearing on September 20, 2005 to consider the land use assumption proposals; and

WHEREAS, the Traffic Impact Fee Advisory Committee finds the land use assumption proposals have considered all comments and recommends the Board of Supervisors approve the Land Use Assumptions Report.

NOW THEREFORE, BE IT RESOLVED that the Board of Supervisors of Whitemarsh Township adopts the Land Use Assumptions Report recommended by the Traffic Impact Fee Advisory Committee.

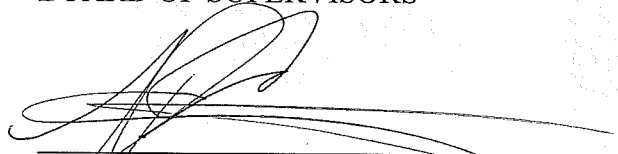
RESOLVED this 22nd day of September, 2005.

ATTEST



Christopher R. van de Velde, Secretary

WHITEMARSH TOWNSHIP
BOARD OF SUPERVISORS



Joseph P. Corcoran III, Chairman