

CHAPTER 1: SITE DESIGN CONSIDERATIONS



Contents

Sections	Page #	Sections (cont.)	Page #
1.0 INTRODUCTION	2	REFERENCES	24
Community Checklist	3		
1.1 POLICIES	4		
1.1.1 Comprehensive Plan	4		
1.1.2 Zoning Ordinance	5		
1.1.3 Subdivision/Land Development Ordinance	6		
1.2 INTERCONNECTIONS	7		
1.2.1 Official Map	7		
1.3 CITIZEN ENGAGEMENT	8		
1.3.1 Community Volunteers	9		
1.3.2 Collecting Perceptual Data	9		
1.4 RECREATION	10		
1.4.1 Human Health Benefits	11		
1.5 ENVIRONMENT	11		
1.6 COMMUNITY CHARACTER	12		
1.6.1 Legal Basis	13		
1.7 BUILDING PLACEMENT	14		
1.7.1 Building Design Factors	15		
1.8 HOUSING	17		
1.8.1 Mixing Uses	17		
1.9 FLEXIBILITY	18		
1.9.1 Facilitate Approval Process	19		
1.9.2 Allow Alternatives	19		
1.9.3 Performance-based Approvals	20		
1.9.4 Incentives	20		
1.10 INFRASTRUCTURE AND MAINTENANCE COSTS	20		
1.11 CONCLUSION	23		

List of Graphics

Figures	Page #	Illustrations	Page #
Figure 1.0. Crawford Square	2	Illustration 1-a. Summerset - New Community Park	4
Figure 1.1. Site Development Plan	4	Illustration 1-b. Summerset -Single Family Detached Homes	5
Figure 1.2. Planning Policy Relationships	6	Illustration 1-c. Farmivew - View of Farmland from Street	6
Figure 1.3. Interconnections	7	Illustration 1-d. Farmview -	7
Figure 1.4. Citizen Engagement	9	Illustration 1-e. Lantern Hill - Single Family Homes spaced similar to adjacent Doylestown setting	8
Figure 1.5. Recreation	10	Illustration 1-f. Lantern Hill - Multifamily housing faces small green with gazebo	9
Figure 1.6. Environment	12	Illustration 1-g. Pennswood Village - Plan View of Stormwater Management Facilities	10
Figure 1.7. Community Character	13	Illustration 1-h. Pennswood Village - Meadow	11
Figure 1.8. Buildings	15	Illustration 1-i. Pantops - Depressed Center Island	12
Figure 1.9. Setback	15	Illustration 1-j. Pantops - Bioretention	13
Figure 1.10. Housing	17	Illustration 1-k. Eagleview - Narrow Tree-lined Streets with Sidewalks	14
Figure 1.11. Flexibility	19	Illustration 1-l. Eagleview - Extensive Open Spaces for Recreation and Preservation	15
Figure 1.12. Infrastructure and Maintenance Costs	22	Illustration 1-m. Chesterbrook - Homes at Chesterbrook	16
		Illustration 1-n. Chesterbrook - Open Space and Trail	17
		Illustration 1-o. Open Space Used for Wastewater Treatment	18
		Illustration 1-p. Brighton - Alley-access garage	20
		Illustration 1-q. Brighton - Townhouses face green space	21
		Illustration 1-r. Millcreek - Homes at Millcreek	22
		Illustration 1-s. Millcreek - Millcreek Trails	23

Pennsylvania Case Studies

The purpose of this document is to provide reassurance readers what is discussed can in fact be built. One way to provide that is through profiling case studies of exemplary residential site developments that are built or in the process of being constructed in Pennsylvania. The developments included in these case study profiles are located throughout the state in either rural or more-suburban locations. Each features one or more goals for site development that are highlighted in the various chapters of this publication and help to promote environmentally and economically responsible residential development.

Brighton, Lancaster County
(p. 1-20, 1-21)

Chesterbrook, Chester County
(p. 1-16, 1-17)

Eagleview, Chester County
(p. 1-14, 1-15)

Farmview, Bucks County
(p. 1-6, 1-7)

Lantern Hill, Bucks County
(p. 1-8, 1-9)

Millcreek, Lancaster County
(p. 1-22, 1-23)

Pantops, Centre County
(p. 1-12, 1-13)

Pennswoods Village, Bucks County
(p. 1-10, 1-11)

Summerset at Frick Park, Allegheny County
(p. 1-4, 1-5)

Weatherstone, Chester County
(p. 1-18, 1-19)

Site Design Considerations

1.0 INTRODUCTION

When new developments are proposed, they should be designed to create vibrant, healthy living environments befitting of their unique location. A community's land is one of its key resources and how it is used and developed is a responsibility of the community's elected officials (Ref. 1). Many issues and factors must be considered when determining a vision for a community's future. As the Preamble states, many communities in Pennsylvania fall short in determining an appropriate vision for the future and ensuring that this vision can become reality through sound land use policies.



Figure 1.0. Crawford Square

All over Pennsylvania, communities are beginning to understand the benefits of low impact development. Here townhouses front a community green at Crawford Square in Pittsburgh.

The over-riding objective of this document is the presentation of recommended engineering standards for residential site design that promote responsible, sustainable, and affordable development. These standards are presented as options, with a range of choices to satisfy given objectives. It is anticipated that most municipalities can benefit from these standards, however each must consider their own unique situation to determine how and where the standards should be adopted.

Engineering design standards, however, are only part of what is needed to facilitate the development of a healthy community. In this context "healthy" relates to a community's economic health

as well as the health and well-being of its residents. To enhance a community's future health and well-being, responsible planning and zoning considerations are needed.

This chapter provides a brief overview of the factors and issues that should be considered in thinking about your community's future and how those can be addressed, including a "Top 10 Community Checklist" to assist officials and residents in making necessary changes for their community's future health and well-being. Each checklist item is discussed in more detail throughout Chapter 1. Also included throughout this chapter in the gray side-bar are a series of case study communities. These are actual, built communities in Pennsylvania that have one or more of the characteristics advocated in this document.

Site Design Considerations

Top 10 Community Checklist

1: Policies

When were your community’s Comprehensive Plan and Land Use ordinances last updated? Have you ensured that these ordinances have not been outpaced by changes in your community’s goals, population, technology and/or the economy?

2: Interconnections

Does your community have an official map that delineates where you desire to have future streets, trails, open spaces, and utilities?

3: Citizen Engagement

Have citizens been involved when your community makes changes to its planning policies and ordinances?

4: Recreation

Does your community have a recreation plan that clarifies what areas are to remain in permanent open space and distinguish between various recreational opportunities, such as strolling parks, trails, playgrounds, gardens and/or ballfields?

5: Environment

Does your community have a plan for the open space that respects the area’s ecological functions, clarifying what is to remain in permanent open space, and encompassing environmentally sensitive lands, and natural and/or agricultural features?

6: Community Character

Has your community defined what it feels is special about the places where you live, work and play? Have you worked to protect that elusive, but important thing called “community character”?

7: Building Placement

Do your community’s ordinances for building design and their placement on a site seek to maintain or enhance a neighborhood’s character?

8: Housing

Does your community permit different types of housing, not only as housing for those with a variety of incomes, but housing that produces distinctive places – as opposed to similar subdivisions?

9: Flexibility

Are your ordinances structured to provide flexibility in how developers can achieve your community’s desires?

10: Infrastructure and Maintenance Costs

Do your community’s policies consider resource and energy use in regards to construction, the development process, its products and the costs associated with each?