

WHITEHALL ROAD REGIONAL PARKLANDS

MASTER SITE PLAN

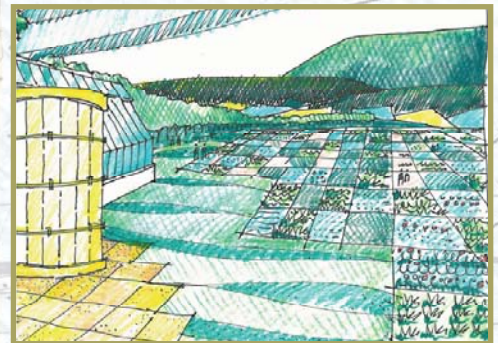
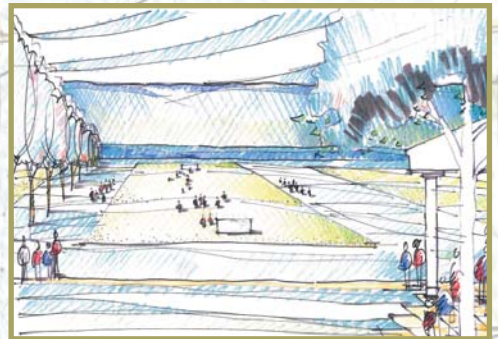
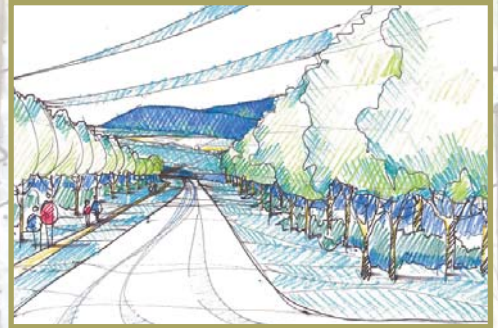
FOR THE CENTRE REGION COUNCIL
OF GOVERNMENTS

BRC-TAG-13.6-589



with Battaglia Jones
Landscape Architects and
Stahl Sheaffer Engineering, Inc.

AUGUST 2010



CENTRE REGION COUNCIL OF GOVERNMENTS
RESOLUTION NO. 2010-5

A RESOLUTION CLOSING OUT
A COMMUNITY CONSERVATION PARTNERSHIPS GRANT PROJECT
(BRC-TAG-13.6-589)

WHEREAS, the CENTRE REGION COUNCIL OF GOVERNMENTS, State College, PA has prepared a MASTER SITE PLAN for the WHITEHALL ROAD REGIONAL PARKLANDS; and,

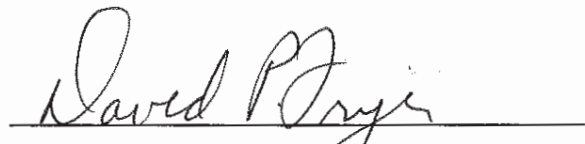
WHEREAS, the purpose of the Plan is to provide a guide for the joint development and operation of the Whitehall Road Regional Parklands (75/100 acres) by the five participating municipalities; and,

WHEREAS, the Plan was financed in part by a Community Conservation Partnerships Program grant under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation, under contract number BRC-TAG-13.6-589.

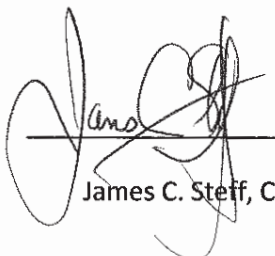
NOW, THEREFORE, BE IT HEREBY RESOLVED by the GENERAL FORUM of the CENTRE REGION COUNCIL OF GOVERNMENTS that:

- a. The project was completed in accordance with the Grant Agreement.
- b. All project expenditures have been made and were in accordance with the Grant Agreement, The Plan and related materials are acceptable to the CENTRE REGION COUNCIL OF GOVERNMENTS,
- c. The Plan and related materials will be used to guide future recreation and conservation decisions.

ADOPTED THIS 23rd DAY OF August, 2010, by the
Centre Region Council of Governments (COG)


David P. Fryer, Chair, COG General Forum

Attest:


James C. Steff, COG Executive Director

Acknowledgements

The contributions of the following groups and individuals were vital to the success of the Whitehall Road Regional Parklands Master Site Plan. They are commended for their interest in the project, their perseverance, and the input they provided throughout the planning process.

The Study Committee was formed from members of the COG Parks Capital Committee and the Centre Regional Recreation Authority/CRPR Board.

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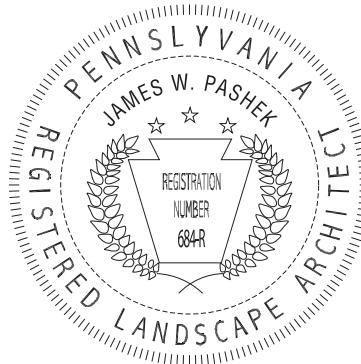
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Chapter 1: Background

Chapter 1: Background

PROJECT INTRODUCTION

In 2001, five municipalities officially embarked on an expansion of their long-established cooperation to jointly fund the acquisition, development, and operation of at least two new “regional” parks. The purpose is to:

- Provide for active recreation activities, including but not limited to softball, baseball, soccer, basketball, tennis, football, lacrosse, and
- Enhance public access to and enjoyment of the environment with provisions for passive recreation.

This Master Plan presents recommendations for the 100-acre Whitehall Road Regional Parklands (75 acres acquired, 25 acres under option to purchase), the second of the two regional parks proposed by the Centre Region Council of Governments (COG). Master Planning for the first regional park, the 68-acre Oak Hall Regional Parklands, was completed in May of 2009. The planning process for Oak Hall Regional Parklands included preliminary planning for the facilities at Whitehall Road Regional Parklands so that the proposed programming for both regional parks would best meet the current and future recreation needs of the five municipalities. Overall, the COG wishes to explore some levels of tournament-class facilities for both regional parks.



Whitehall Road Regional Parklands is located at the southern border of State College, within Ferguson Township. Oak Hall Regional Parklands is located off Route 322 in College and Harris Township.

In addition, the COG recently began to explore ways to preserve the operation of a 4-field, 21-acre softball complex (Hess Softball Field Complex), in Harris Township on PA Rt. 45, between Boalsburg and Pine Grove Mills. It has been operated (on leased land) by a volunteer group for many years, and it hosts upwards of 1,500 games per year, including many statewide tournaments.

COG REQUIREMENTS FOR REGIONAL PARK MASTER SITE PLANS

The agreement that authorizes the voluntary participation by each municipality (5 total) specifies the following:

1. So as to develop the regional parklands to best serve the needs of the Participating Municipalities and to fulfill the purpose of the regional parklands (Section 2), the COG will coordinate the preparation of a Master Site Plan for each regional park. That planning process will engage representatives of the Participating Municipalities and others as may be determined by the Participating Municipalities.
2. Each Master Site Plan for a regional park must be approved by the unanimous action of the Participating Municipalities at the COG General Forum prior to any park development (construction) activities on the respective site.

3. The approved Master Site Plan for each park must identify the recommended phasing, if any, of the construction of the various facilities and features, the cost estimates for constructing those facilities, and any temporary (interim) facilities that may be developed on the site.
4. Revisions to the Master Site Plan must be approved by a unanimous vote of the Participating Municipalities. There will be no development of park facilities, whether temporary or permanent, that is not shown on the approved Master Site Plan unless the plan is revised to include that facility or feature.
5. The Master Site Planning process may incorporate, as approved by a majority of the Participating Municipalities, the requirements of the grants or other financial contributions that may be obtained for their preparation. In all cases, the approved plans must meet the applicable deed requirements as previously established by DCNR, PSU, and where appropriate, the National Park Service.



BENEFITS OF PARKS AND RECREATION

Parks and recreation play a critical role in providing a high quality of life to communities.

- Environmental benefits include:
 - Preserving habitat and wildlife,
 - Protecting ecosystems, and
 - Reducing pollutants.
- Community benefits include:
 - Providing places to relax and engage in community gatherings and events and
 - Providing opportunities to enjoy the natural environment.
- Economic benefits include:
 - Attracting businesses and their employees to the area,
 - Increasing property values, and
 - Boosting tourism.



STUDY FORMAT

This Master Plan process involves a number of steps, including the following:

- Chapter 1 – Community Background Information
 - The community setting and regional location.
 - Socio-economic data including demographics.
 - Existing planning efforts related to this Study.
- Chapter 2 - Site Inventory and Analysis
 - A base map of the site and immediate surroundings.
 - A map of existing natural and cultural conditions within the study area in order to identify opportunities and constraints for park development.



- Chapter 3 – Activities and Facilities Analysis and Design Considerations
 - Activities identified by the community.
 - The uses, type, sizes, and standards of recommended facilities.
 - The maximum number of vehicle trips anticipated for the park.
 - Design considerations and standards.
- Chapter 4 – Sustainability
 - Sustainable park design and practices.
- Chapter 5 - Public Participation and Design Process
 - Public participation process.
 - Design process, including concept plans, draft master plan, and the final master plan.
- Chapter 6 – Cost Estimates and Financing
 - Construction costs for park development.
 - A phased capital improvements plan identifying short- and long-term strategies for development.
 - Funding strategies needed to support the capital improvement plan.
 - Operating costs and potential revenue for the park.
- Appendices

It is important to note that the Master Plans are a general land use plan identifying types and concentrations of facilities. Specific details of the design and the final locations of facilities may be adjusted through subsequent design without violating the concepts represented by these master plans.

COMMUNITY SETTING AND REGIONAL LOCATION

The Centre Region is located in the Nittany Valley in Centre County. Agricultural, iron ore mining, and timbering opportunities first drew settlers to the valley, which was previously inhabited by four separate tribes of Native Americans. Central Pennsylvania's iron ore industry was the most prosperous in the nation between 1800 and 1850. This success spurred transportation improvements that led to further population growth. In the twentieth century, agriculture and education became the catalysts for further growth in the county. Farmers sought an education program that closely related to their agricultural needs, and founded a farmers' college that eventually became Pennsylvania State University (Penn State). Today, agriculture and coal mining thrive in the region, whose main attraction is Penn State University. Residents and visitors enjoy the university, pastoral countryside, and rich natural beauty of the valley, its streams, and its surrounding forested ridges.

The Centre Region is located in the southern portion of Centre County. The region is located near the geographic center of Pennsylvania, approximately 90 miles from the State Capital at Harrisburg, 140 miles from Pittsburgh, and 195 miles from Philadelphia. Main vehicular arteries to the Centre Region include I-99, State Routes 26, 45, 144, 150, and 550, along with U.S. Routes 220 and 322. Several minor state routes and local roads also offer vehicular access to the region.

Six municipalities comprise the Centre Region: State College Borough; and College, Ferguson, Halfmoon, Harris, and Patton Townships. These six municipalities form the Centre Region Council of Governments (COG). Halfmoon Township has declined to participate in the development of the regional parks.



KEY ISSUES FOR WHITEHALL ROAD REGIONAL PARKLANDS

Early in the process, the following Key Issues were identified as needing to be considered:

PROCESS:

- Whitehall Road Regional Parklands and Oak Hall Regional Parklands are the first true regional parks in Central Pennsylvania, with collaboration of five municipalities and the COG. The model for collaboration in the design process established during the design for Oak Hall Regional Parklands has been extended for the planning of the Whitehall Road Regional Parklands site.
- High expectations have been set, based on the quality, collaborative public process included as part of the Oak Hall Regional Parklands Master Site Plan.

PROGRAM:

- A comprehensive review of recreational needs and existing capacity was undertaken to guide the decision making for the Master Plans, revealing exceptional need for quality athletic fields.

The Whitehall Road Regional Parklands site will play a crucial role in fulfilling these needs.

- A logical program of activities and the capacity to accommodate them on the Whitehall Road Regional Parklands site was preliminarily defined during the Oak Hall Regional Parklands planning process. This study also predicted the resulting expanded flexibility and capacity of existing parks after implementation of the Oak Hall Regional Parklands program, which will influence the choices for the Whitehall Road Regional Parklands site. Refinement of these findings with staff, stakeholders, and municipal representatives was a primary challenge for this master plan.
- While the Whitehall Road Regional Parklands site exhibits excellent capacity for sports fields, planning for a logical diversity of complementary activities will be important to creation of a great park.

SITES:

- The Whitehall Road Regional Parklands site is spectacular in terms of regional position, size, field capacity, scenic values, and potential for expansion.
- Vehicular, water and sewer access to the park will pass through a future residential development. The potential timing, arrangement, and character of this neighborhood will influence the park master plan.
- A future regional bike path connecting the newly acquired Musser Gap conservation area with Blue Course Drive, currently under study, will be adjacent to the park site. Coordination with this planning will benefit both projects.
- Excellent capacity for athletic fields due to gentle topography, and the required parking to support them, will require extensive capacity to deal with stormwater. Creative stormwater design may allow for less site area to be devoted to conventional structures, allowing more use of the site for athletic purposes.
- The Whitehall Road Regional Parklands site is exceptional in its scenic position with outstanding valley views, although internally it is primarily open and flat. Thoughtful organization will be required to create a beautiful park that maximizes athletic potentials, such that generations of users will find enjoyment here.
- This master plan must set the stage for implementation. Thought must be given to sewage, traffic flow, and water, and electrical service requirements.

DEMOGRAPHICS

Because the Centre Region COG serves residents of several municipalities, demographic studies for this Master Plan were conducted for the five municipalities participating in this study. These municipalities are the basis for the demographic information found in this chapter.

POPULATION TRENDS

According to the U.S. Bureau of Census, the Centre Region's population grew during the 1990s. During the same period, Centre County's total population grew nearly twice as quickly (see table below).

The U.S. Census Bureau provides 2009 population projections (see table) based on 2000 Census information. These estimates project continued but slightly slower growth in the Centre Region between 2000 and 2009.

Centre Region Population and Projections (per U.S. Census Data)					
<i>Municipality</i>	<i>1990 Population</i>	<i>2000 Population</i>	<i>2009 Population Projection</i>	<i>Population Change (percent change) 1990-2000</i>	<i>Projected Population Change (percent change) 2000-2009</i>
State College Borough	38,923	38,420	39,898	-503 (-1.3%)	1,478 (3.7%)
College Township	6,709	8,489	9,400	1,780 (26.5%)	911 (9.7%)
Ferguson Township	9,368	14,063	16,616	4,695 (50.1%)	2,553 (15.4%)
Harris Township	4,167	4,657	4,816	490 (11.8%)	159 (3.3%)
Patton Township	9,971	11,420	13,286	1,449 (14.5%)	1,866 (14.0%)
CENTRE REGION TOTAL	69,138	77,049	84,016	7,911 (11.4%)	6,967 (8.3%)
Centre County	112,760	135,758	146,212	22,998 (20.4%)	10,454 (7.1%)

POPULATION DENSITY

The Centre Region's total area is 127.6 square miles. The population density (per 2000 Census data) is 603.8 persons per square mile. This number is heavily influenced by high population density in State College Borough (8,537.8 persons per square mile). The municipalities studied are either characteristically urban or suburban, and are all at least somewhat densely populated. The lowest population density among the Centre Region's municipalities is Harris Township (146.0 persons per square mile). Harris Township's lower population density is due, in a large part, to the inclusion of 9,700 acres of Rothrock State Forest.

Centre County's overall population density (122.1 persons per square mile) is much lower than that of the Centre Region because the County includes large areas of sparsely populated rural and forested land.

HOUSEHOLD SIZE AND FAMILY STRUCTURE

According to U.S. Census Bureau information, the number of family households as a percentage of total Centre Region households increased by 10.7% between 1990 and 2000, while the number of married couple families as a percentage of total households increased by 8.6%. This is attributed to a decrease in the number of single person and non-family households.

Statistics from the 2000 Census indicate that in the Centre Region two-parent families (46.5% of total households) are a lower percentage than Centre County (57.8%). In 2000, the Centre Region averaged 2.39 persons per household (County 2.45); families with children under the age of 18 represented 21.0% of all Centre Region households (County 25.5%); married couples with children under the age of 18 represented 17.3% of Centre Region households (County 20.7%); and lastly, female heads of households with children under the age of 18 represent 2.8% of Centre Region households while representing 3.4% of County households.

AGE DISTRIBUTION

According to the 2000 Census, the Centre Region's population contains a larger proportion of young adults (not surprising given Penn State University's impact on the demographics).

Centre Region vs. Centre County Age Distribution of Population 2000 U.S. Census				
Population Segment	Centre Region		Centre County	
	# Persons	%	# Persons	%
Total Population	77,049	100.0	135,758	100.0
Under 5 years	2,778	3.6	6,273	4.6
5-19 years	16,059	20.8	27,761	20.4
20-24 years	23,813	30.9	26,924	19.8
25-44 years	17,465	22.7	35,876	26.4
45-64 years	11,063	14.4	24,947	18.4
65 years & Older	6,181	8.0	14,077	10.4
Median Age	27.2 years		28.7 years	

INCOME

According to the 2000 Census, average household income in the Centre Region was \$35,929. The Centre Region median is slightly lower than the Centre County-wide median of \$36,165.

HOUSING CHARACTERISTICS

In 1990, there were 24,090 total housing units in the Centre Region. By comparison, in 2000, the number of housing units was 28,229, an increase of 17.2%. The average value of owner-occupied housing units in the Centre Region, per the 2000 Census, is \$145,132. This is considerably more than the median value of 2000 Centre County (\$114,900) occupied housing units. Of the 10,699 owner-occupied housing units in the Centre Region in 2000, values were as follows:

<u>Housing Unit Value</u>	<u>Percentage of Total Units</u>
<\$50,000	0.8%
\$50,000-\$99,999	18.1%
\$100,000-\$149,000	34.3%
\$150,000-\$199,999	25.5%
>\$200,000	21.3%

The number of vacant housing units in the Centre Region in 2000 was 1,082. The number of renter-occupied units was 14,804, with a median monthly rental of \$603. By comparison, the Centre County median monthly cash rental rate, as of the 2000 census, was \$565 per month.

CONCLUSIONS FROM DEMOGRAPHIC DATA

- **Penn State Students Skew Statistics:** The Centre Region's population density is significantly higher than Centre County as a whole. While the Centre Region's municipalities are urban or suburban, the population density of the region is very high due to the existence of high-rise apartment buildings primarily rented by Penn State University students. In addition, the proportion of the region's population in the 5-19 and 20-24 age groups is larger due to the presence of Penn State Students (typically ages 18-22). Further, family households represent just less than half of total households. In most communities, this percentage is much higher. The disparity is due to large numbers of apartment-dwelling, single college students.

Per the 2000 U.S. Census, Penn State's University Park Campus housed 14,447 students, while 19,987 students lived off-campus. The vast majority (13,997) of off-campus students lived in State College Borough (36.4% of total Borough population), while a smaller number (412) lived in College Township (4.9% of total Township population), Ferguson Township (2,938 -- 20.9%), and Patton Township (2,640 -- 23.1%). A small number of students also lived in Harris Township.

- **Growing Population Needs More Recreation Opportunities:** The Centre Region's population grew significantly (11.4%) between 1990 and 2000, and projections estimated continued growth (8.1%) through 2007. Growing numbers of residents will require growing numbers of recreation opportunities.

EXISTING PARK SYSTEM

During 2001, the COG Parks Capital Committee (originally the COG Ad Hoc Regional Parks Committee) was formed to study and recommend options to the COG General Forum with regard to working together to provide larger-size parks that address the shortage of outdoor sportfields in the region. The committee consists on one elected official from each of the five participating municipalities: The Borough of State College and the Townships of College, Ferguson, Harris and Patton.



To date, the municipal parks have been acquired and built by the host municipality; the annual costs to program, operate and maintain the parks are then shared by the five municipalities. However, a new approach was needed to address the shortage of public sportfields across the region. Given the land area required for a group of sportfields combined with the high cost of construction, Regional Parks offer an efficient option for the region to provide those facilities to all residents. Discussion and action regarding this option is only possible thanks to the long history of municipal cooperation in the Centre Region.

Recommendations set forth in this study are intended to provide the optimal level of recreation facility services to Centre Region residents, given the opportunities and constraints of the Whitehall Road Regional Parklands site. To determine the appropriate level of service, one must understand what recreation opportunities are available in the Centre Region today and compare it to projected demand based on the Centre Region's current population. Recreational opportunities in the immediate surrounding region must also be taken into account.

One way of understanding how the new Regional Parklands fit into the exiting park system is to look at parks according to a hierarchy. The National Recreation and Park Association has developed five classifications of parks including: Regional Reserves, Regional/Metropolitan Parks, Community Parks, Neighborhood Parks,

and Special Use Facilities. For the Centre Region, we have decided to modify that hierarchy to include the following types of parks: Regional Facilities, Community Parks, Neighborhood Parks, and Special Use Facilities.

1) REGIONAL FACILITIES

The regional facility is a park designed for either the conservation of natural resources or a destination recreational development. This type of park typically accommodates activities, such as nature study, trail uses, camping, boating, hunting, fishing, or sports facilities with a regional draw. Regional facilities are considerably larger than most park categories and have a 40- to 50-mile service area. Regional facilities in the immediate region surrounding Whitehall Road Regional Parklands include the following (distance from Whitehall Road Regional Parklands site in parentheses):

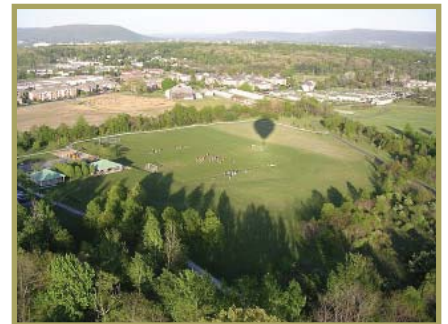


STATE-OWNED FACILITIES

Bald Eagle State Park (29 miles)
Black Moshannon State Park (20 miles)
Greenwood Furnace State Park (17 miles)
McCalls Dam State Park (56 miles)
Penn-Roosevelt State Park (17 miles)
Poe Valley State Park (25 miles)
Poe Paddy State Park (28 miles)
Prince Gallitzin State Park (57 miles)
R.B. Winter State Park (42 miles)
Reeds Gap State Park (31 miles)
State Game Lands #33,92,100,103,176
Whipple Dam State Park (10 miles)

MUNICIPAL AND UNIVERSITY FACILITIES OF A REGIONAL SERVICE AREA

Spring Creek Park (College Township)
Thompson Woods Preserve (State College Borough / College Township)
Penn State University Recreation Facilities (serves students and staff)
Tudek Park
Hess Field
Oak Hall Regional Parkland
Whitehall Road Regional Parkland
Haugh Tract (Circleville Park)



In addition to the state parks mentioned above, the Bald Eagle and Rothrock State Forests are in proximity to the Whitehall Road Regional Parklands Site. These forests offer opportunities for hiking; wildlife observation and study; and hunting and trapping.

2) COMMUNITY PARKS AND FACILITIES

This facility type serves a large percentage of the local population. Although some people may be able to walk to a community park or facility, most users would arrive by automobile or bicycle. Because of the travel time for most people to reach the facility, it becomes a special destination, and its features and facilities generally reflect this. A community park accommodates several types of activities, and park acreage is usually adequate to provide ample room for large facilities (such as ball fields or swimming pools), group activities, and solitary pursuits (such as hiking or bird watching). A community park's or facility's focus is accommodating recreational needs of that particular community.

Whitehall Road Regional Parklands will fit into this category, serving residents of the surrounding communities. Other community parks and facilities in the surrounding areas are listed in the table on the following page:

CENTRE REGION PARK AND RECREATION FACILITIES

Community Parks and Facilities		
<i>State College Borough</i>		
Park Name	Acres	Facilities
High Point Park	6.2	playground, basketball, tennis court, youth ballfield with seasonal soccerfield, picnic tables
Holmes Foster Park	11.0	2 picnic pavilions, 2 playgrounds, basketball court, horseshoes, 2 bocci courts, seasonal restroom
Lederer Park	21.8	walking paths, arboretum, 2 picnic pavilions
Orchard Park	19.4	playgrounds, picnic pavilion, lawn volleyball, 2 tennis courts, adult softball field with seasonal soccer field, youth ballfield, basketball court, bike path, walking path, amphitheater, restroom
Sunset Park	20.0	playground, 2 picnic pavilions, basketball court, exercise trail, horseshoes, youth ballfield, hiking trail, seasonal restroom
Tusseyview Park	4.5	playground, basketball, 2 tennis courts, picnic pavilion
Walnut Springs Park	19.4	hiking trails, nature study
<i>College Township</i>		
Park Name	Acres	Facilities
Dalevue Park	14.8	playground, picnic pavilion, bike path, basketball, 1 tennis court, volleyball, youth baseball
Fogleman Field Complex	15.0	3 soccer fields, walking path, 2 picnic pavilions, restroom/storage building
Nittany Orchard Park	6.3	playground, tennis court, basketball, youth ballfield, gazebo
Penn Hills Park (not operated by CRPR)	10.1	youth ballfield, play equipment
Slab Cabin Park	14.0	picnic pavilion, playground, sledding, covered bridge

<i>Ferguson Township</i>		
Park Name	Acres	Facilities
Autumnwood Park	9.5	playground, soccer field, walking path
Fairbrook Park	29.0	playground, pavilion, 2 basketball courts, youth ballfield with seasonal soccer field
Haymarket Park	12.0	playground, pavilion, 2 basketball courts, youth ballfield with seasonal football-soccer field
Homestead Park	10.0	playground, pavilion, basketball, youth ballfield with seasonal football-soccer field
Park Hills Park	4.0	playground, youth ballfield
Suburban Park	10.0	playground, youth ballfield, 2 tennis courts, basketball, pavilion, bike path
<i>Harris Township</i>		
Park Name	Acres	Facilities
Blue Spring Park	8.0	basketball, 2 youth ballfield with seasonal football-soccer field, playground, pavilion, ice rink
Eugene Fasick Park	18.3	playground, bocci court, horseshoes, youth ballfield, pavilion, basketball court, nature trails
Kaywood Park	10.0	playground, pavilion, basketball court, youth ballfield
Nittany View Park	9.0	pavilion, playground, walking path, youth ballfield, seasonal soccer field
Stan Yoder Memorial Preserve	15.0	walking paths, nature study
<i>Patton Township</i>		
Park Name	Acres	Facilities
Bernel Road Park	74.4	future park but master plan proposes: baseball field, softball field, multi-purpose field, amphitheatre/concessions, 2 tennis courts, basketball courts, youth playground, tot lot, airport themed play area, 3 pavilions, disc golf, fitness stations, and trails
Graysdale Park	14.1	playground, soccer field, youth ballfield, pavilion, basketball court, walking path
Green Hollow Park	15.7	playground, pavilion, 2 tennis courts, basketball court, youth ballfield
Oakwood Park	4.3	playground, pavilions, youth ballfield, walking path
Patton Woods Natural Recreation Area	n/a	hiking, dog area, hunting permitted
Woodycrest Park	6.0	playground, basketball, youth ballfield with seasonal soccerfield, pavilion

SCHOOL FACILITIES

Middle School sportsfields (Mt. Nittany & Park Forest)

Elementary School Sportsfields (Houserville, Ferguson Township, Radio Park, Easterly SCAHS North Building (the Community Field facilities)

SCAHS South Building (sportsfields, track, tennis courts)

3) NEIGHBORHOOD PARKS AND FACILITIES

This type of facility serves a very specific purpose. Users can generally be expected to walk or bike to a neighborhood park or facility. Because they are quickly and easily reached, their use tends to be more casual and spontaneous. These parks are only large enough to accommodate a few activities and possibly a small amount of open space, which may especially benefit densely populated neighborhoods. Equipment and facilities may be specifically geared towards children, especially young children. These parks serve as the focus for small, individual areas, generally 1/2 to 1 mile in diameter.

Neighborhood parks located in the region are listed in the chart below:

Neighborhood Parks and Facilities		
<i>State College Borough</i>		
Park Name	Acres	Facilities
Central Parklet	0.5	playground, picnic tables, bikeway corridor
East Fairmont Park	1.5	playground, picnic tables, bikeway corridor
Nittany Village Park	0.5	playground, picnic tables, bikeway corridor
Smithfield Park	1.7	playground, picnic pavilion, half court basketball court
South Hills Park	1.5	playground, picnic tables, basketball court
<i>College Township</i>		
Park Name	Acres	Facilities
Fogleman Overlook Park	n/a	future
Harris Acres Parklet	2.0	-
Mountainside Park	7.2	-
Mt. Nittany Terrace Parklet	2.7	-

Oak Grove Parklet	2.9	-
Shamrock Avenue Park	n/a	future
Thompson Woods Playlot	1.8	future
<i>Ferguson Township</i>		
Park Name	Acres	Facilities
Greenbriar-Saybrook Park	8.0	playground, horseshoe, basketball court, 2 pavilions, walking path
Meadows Park	2.0	playground, basketball court, picnic pavilion
Overlook Heights Totlot	1.0	playground
Westfield Hillside Farm Estate Park	5.5	future
<i>Harris Township</i>		
Park Name	Acres	Facilities
Country Place Park	4.1	playground, half court basketball
<i>Patton Township</i>		
Park Name	Acres	Facilities
Ambleside Park	7.1	playground, pavilion, waling trail, open field play area
Carnegie Drive Totlot	0.4	playground
Cedar Cliff Park	2.5	open space
Ghaner Drive Parklet	2.2	playground
Graycairn Park	1.5	open space
Marjorie Mae Park	4.7	playground, pavilion
Park Forest Totlot	0.9	pavilion, playground
Ridgemont Parklet	0.5	basketball, swing set

In addition to the facilities listed on the previous page, the Centre Region Recreation Authority identifies several potential neighborhood parks slated for future development in College, Ferguson, Harris, and Patton Townships.

4) SPECIAL USE FACILITIES

Individual sports fields, sport complexes, or facilities geared toward activity, such as a racquetball club or fairgrounds, exemplify special use facilities. This type of facility is not typically located within a park. Whether publicly or privately owned, this type of facility serves as a unique destination.

Boalsburg Military Museum
Centre Region Senior Center
Former Ferguson Township Municipal Authority Preserve
Hess Softball Field Complex
Millbrook Marsh Nature Center
Park Forest Community Swimming Pool
Stoney Batter Natural Area
State College Area Family YMCA
Tussey Mt. Family Fun Center / Ski Area
Welch Community Swimming Pool
Shingletown Gap Hiking Trail
Shaner Baseball Complex (Patton Township)
Mt. Nittany Conservancy Lands
PSU Facilities and Events
State College Little League Complex
Babe Ruth Baseball Fields

THE ROLE OF OAK HALL REGIONAL PARKLANDS AND WHITEHALL ROAD REGIONAL PARKLANDS IN THE EXISTING PARKS SYSTEM

We look at the existing parks to gain an understanding of the number and type of facilities that are currently available to residents of the area. This provides some guidance as to the types of facilities we might need in the new parks. With each category of park, physical planning guidelines have been suggested over the years based on that park's type of use.

For example, **Neighborhood Parks** are intended to serve nearby homes and would require minimal (usually for handicap accessibility) or no parking and minimal buffering between the park and adjacent residential properties. If a field is developed, it might include a simple backstop and be used for unscheduled pick-up games by kids from nearby neighborhoods. If a shelter is built, it should be fairly small to again serve the needs of nearby neighbors. Access can be through a pathway or neighboring street given most users walk or bike to the park. When developed in this manner, neighborhood parks are rarely in conflict with nearby homes and are an asset to the neighborhood.

Community Parks, on the other hand, are usually much larger and are intended to provide the kinds of activities that cannot fit into a smaller setting of a neighborhood park. Sports fields are developed in these parks to be scheduled and heavily used by sports organizations. These



parks have a much larger service area, usually the Centre Region in this case, and will require significant parking. Shelters are built larger to accommodate larger family reunions and group picnics because parking is available. Destination playgrounds are developed here, and special events are planned for these larger parks. Roads to the park are ideally collector streets to minimize traffic congestion that might occur if this larger park was located on a residential street where kids might be learning how to ride bikes or chasing after a loose ball. If residential property borders the park, there is sufficient room to buffer the active areas of the parks from the nearby homes. If there is good road access, adequate parking, and buffers to nearby residential properties, there is usually little conflict with the active park uses found at these parks, even if those sports fields have lighted fields.



Regional and Special Use Parks have special characteristics unique to their users. All will draw from a much larger service area. While a nature area for hiking will require a very small parking lot, a swimming pool will require significant parking.

Whitehall Road Regional Parklands is a community park that will function as a regional park. Sports organizations have been advocating for clusters of fields to allow them to sponsor tournaments. These tournaments draw people from the entire state. A community day or special festival might draw people from several counties away if well advertised. These occasional events make these parks regional in nature. However, their day-to-day use will be more like a large community park. Based on the study of parks like this one, the regional parklands will respond to people and the environment. That response will take the form of creative and beautiful spaces that will get better over time. The regional parks, if planned well, will become aesthetic, environmental, economic, and cultural assets to the area. In this context, these regional parks will have:

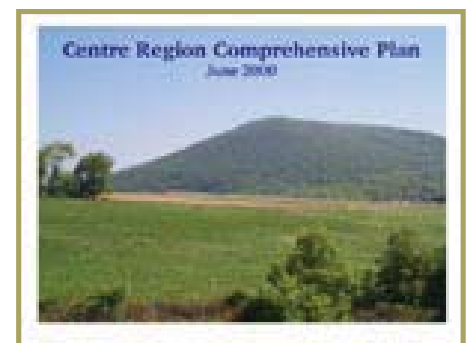
- Good access to the park
- Adequate parking
- Larger facilities (fields, shelters, playgrounds)
- Clustered sports facilities to accommodate tournaments
- Opportunities for activities not found in smaller parks (dog parks, areas for ice skating and sledding, community gardens, remote control airplane areas)
- Buffers to neighbors, if required
- Trails
- On-site maintenance facilities

As the regional parklands are developed, it is hoped that the scheduled field use in the smaller neighborhood parks will be eliminated and those smaller parks will revert back to their neighborhood character. At that point, we believe there will be fewer conflicts between park neighbors and park users as parks function as their size, location and capacity dictate and not by the demand for level field space that currently drives the park uses.

EXISTING PLANNING EFFORTS

CENTRE COUNTY COMPREHENSIVE PLAN (2003)

The 2003 Centre County Comprehensive Plan included references to recreation opportunities on a county-wide scale. The Recreation Section of the Comprehensive Plan set forth several recommendations supporting the goal of providing opportunities for recreation, cultural activity, and social interaction with existing and proposed park facilities. Recommendations related to recreation in the Centre Region are listed below:

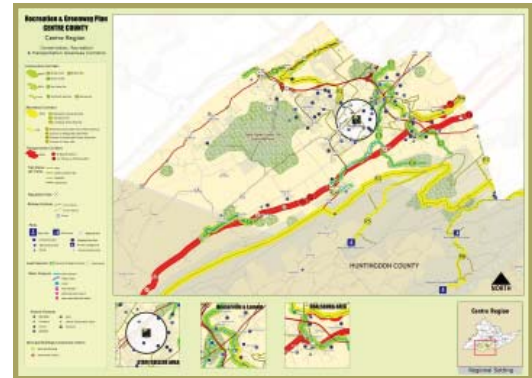


- Acquisition of community or municipal parks or open space areas should be encouraged to be consistent with local and multi-municipal comprehensive plans;
- Cooperation and coordination of indoor and outdoor recreation programming, facility use, and transportation planning for recreation purposes should be carried out on a county or regional basis between the appropriate agencies or municipalities; and
- Programming of special indoor and outdoor recreation activities must be provided for persons with special needs.

CENTRE COUNTY GREENWAY AND RECREATION PLAN (ONGOING)

Centre County, with funding from the DCNR and the Centre County Board of Commissioners, is currently developing its first County-wide Greenway & Recreation Plan. The Centre County Planning and Community Development Office, serving as the lead agency on this document, intends for this plan to provide the County's municipalities with guidance on implementation of their own greenway and recreational facilities.

A Draft Recreation and Greenways Map for the Centre Region was made available online via the Centre County Office of Planning and Community Development. This Draft map identified a proposed trail along Whitehall Road Regional Parkland.



CENTRE REGION COMPREHENSIVE PLAN (2000)

Among the goals set forth in the 2000 Centre Region Comprehensive Plan are the following, which relate to parks, open space, or general recreation:

- Balance community growth while protecting and enhancing the Centre Region's environmental, historic, and cultural resources; and
- Obtain additional parkland and open space areas and provide a broad range of recreation opportunities.

The Comprehensive Plan recommends several policies to support this goal. These include the following:

ENVIRONMENT AND NATURAL RESOURCES POLICIES

- Preserve steep slopes and topographic features of the region during the planning and development process;
- Protect floodplains, wetlands, and stream corridors within the Spring Creek and Spruce Creek watersheds;
- Protect the quality of the region's ground-water resources through efficient and effective land use management; and
- Promote effective and environmentally-sound stormwater management practices.

OPEN SPACE PRESERVATION AND CONSERVATION POLICIES

- Develop cooperative strategies between municipalities and private recreation and sports organizations to acquire land for use as regional sports facilities; and
- Develop, with the support of the Centre Region municipalities, municipal park plans.

COMMUNITY FACILITIES POLICIES

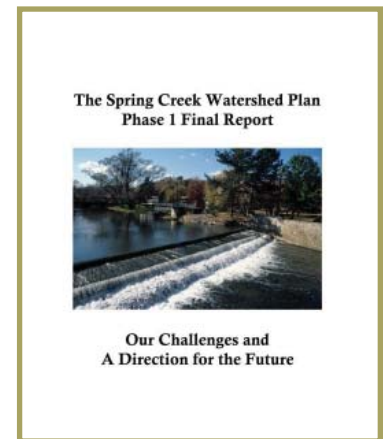
- Maintain the use of individual on-lot or community on-lot sewage disposal systems outside the Regional Growth Boundary; and

- Meet the recreational needs of the Centre Region's growing population by identifying the types and location of parks required to serve residents.

SPRING CREEK WATERSHED PLAN - PHASE 1

The Whitehall Road Regional Parklands site lies within the Spring Creek watershed. The Spring Creek Watershed Plan distills numerous existing plans, research, and data into a clear and concise statement of the challenges facing the watershed and recommends ways that its citizens can meet the challenges in its future. The recommendations set forth by the watershed plan that most closely relate to the Whitehall Road Regional Parklands Master Plan include those addressing land use and water resources. Such recommendations are listed below:

- Encourage stormwater best management practices (BMP's);
- Implement stormwater BMP retrofits; and
- Educate the development community (in this case, the Centre Region COG).



These recommendations are solutions for the challenge of unnecessary increases in impervious surfaces that result in increased runoff into streams in the Spring Creek watershed. The Whitehall Road Regional Parklands is an example of a new development that will include some impervious surfaces. Recommendations, such as those above, are especially important in park development because a park can serve as a high-profile example of environmentally-sensitive design.

CENTRE REGION COMPREHENSIVE RECREATION, PARK, AND OPEN SPACE STUDY (1986)

The Centre Region Parks and Recreation Agency completed a Comprehensive Recreation, Park, and Open Space Study (Recreation Study) to determine the recreational needs of the Centre Region and to offer recommendations which the Region should follow in expanding and improving park and recreation programs and facilities to meet future needs. The Recreation Study set forth an Action Plan that included short-term and long-term recommendations. Those recommendations relevant to this study are summarized below:

SHORT-TERM PLANNING RECOMMENDATIONS

- Submit Agency goals and objectives for official adoption into [regional] comprehensive planning documents;
- Research and discuss provision of recreation facility development using a regional approach;
- Municipalities should establish guidelines and terms concerning desirable land dedicated for recreation purposes;
- Become familiar with the Bureau of Recreation and Conservation's publication "Adding Parkland to Your Community through Mandatory Dedication";
- Increase the Centre Region Parks and Recreation Department's visibility via advertisement; and
- Implement more programs for senior citizens as well as handicapped and special needs groups.

LONG-TERM PLANNING RECOMMENDATIONS

- Conduct a feasibility study for an indoor community recreation center;
- Establish the COG/CRPR as the "clearinghouse" for all park proposals and development that might occur in any of the region's municipalities;
- Expand playfield facilities at large community parks (i.e. Spring Creek Park and Graysdale Park);

- Assess recreational need and demands of citizens at minimum every 4 years; and
- Prepare a feasibility study for the expansion of existing bikeways to link existing parks as well as link with a future community center.

OAK HALL REGIONAL PARKLAND (2009)

The goals of this Master Plan include to:

1. Accommodate a program of active recreation.
2. Provide a program of complementary recreation activities.
3. Respect the opportunities and limitations of the site.
4. Respect the adjacent community.
5. Create a beautiful and dignified park space that will improve over the years, find acceptance in the community, and become a valued asset to the region.

A primary decision of the Master Plan was the conclusion that soccer fields could be better accommodated at the Whitehall Road Regional Parklands, with Oak Hall Regional Parkland best serving as a setting for softball fields.

Proposed recreation facilities at this site include:

- Three adult softball fields
- Practice field
- Restrooms and concessions
- Storage
- Picnic shelters
- Trails
- Playground
- Sand volleyball court
- Dog park
- Sledding hill



During this study, a capacity diagram was developed for Whitehall Road Regional Parklands in order to determine which needed recreation facilities fit best at each site.



This capacity diagram provided the basis for development of the Master Plan for Whitehall Road Regional Parklands.

Hess Softball Field Complex Feasibility Study (2009)

The goal of this report is to provide the COG Forum with sufficient information to make several policy decisions regarding Hess Softball Field Complex. The Complex is a 21-acre site located at 1707 Shingletown Road in Harris Township and includes:

- four softball fields
- restrooms
- concession building with press box
- an umpires building
- spectator and picnic areas
- over four acres of grass parking

The report recommended that the COG purchase the Complex and either the COG maintains and the SCSA operates the facilities or the COG maintains and operates the facilities. Several facility upgrades were also recommended and are included on the following map.



Improvements were identified as:

- Improvements of Immediate Concern, issues related to safety that need to be addressed before opening as a CRPR facility
- Short-term improvements related to safety and playability that impact use
- Mid-term needs that can be deferred, and
- Long term needs that would enhance the facility

The discussion regarding acquisition of Hess Field continued through the development of this master plan, culminating in the acquisition of the property in the fall of 2010. When the program was developed for Oak Hall Regional Parklands and Whitehall Road Regional Parklands, the assumption was that Hess Field would provide four softball fields to meet demand from those users. Therefore, the acquisition had little impact on programming for the two Regional Parklands.

However, there were other aspects of the Whitehall Road Regional Parkland Master Plan that were impacted by acquisition of Hess Field. The most obvious was the financial impact. With limited total funds for capital improvements for regional park development, investment in improvements to Hess Field resulted in less money for the other two parks. There has been much discussion about the actual cost of Hess Field development and the ultimate impact on capital budgeting. This will become clearer as the Master Plan for Hess Field is completed and addresses costs and phasing recommendations.

BENEFICIAL RE-USE PROJECT

The University Area Joint Authority (UAJA) is developing a water distribution system that provides water that has been run through a reverse osmosis process and made usable. Although the water is ultra pure, it is warmer than trout stream temperatures, preventing the water from being discharged into the local streams. The plan is to pipe the water up the Slab Cabin Run valley to land near the Whitehall Road Regional Parkland and use it to indirectly recharge the aquifer above a municipal well site. The waterline would be constructed very close to the park site.

This water is currently being used to irrigate the Centre Hills Country Club and would be an excellent source of water for irrigating the 15 sportfields at the Whitehall Road Regional Parkland.

MUSSER GAP TRAIL PLANNING

The Musser Gap trail project involves the construction of a new trail that will eventually connect the ‘urbanized portion’ of the State College Area with Rothrock State Forest. The current alignment begins at the parking lot of the recently acquired Bureau of Forestry property and continues west along the edge of the SR 45 right of way for approximately 1000 ft to a road crossing of SR 45. After crossing SR 45 the trail continues on PSU property and crosses Slab Cabin Run prior to climbing to the terminus of an existing gravel farm lane. This lane will eventually become the extension of the trail system that connects to the future Whitehall Road Parklands. The project is currently awaiting final clearance of archeological studies prior to beginning final design.

PENNDOT PLANNING FOR ROAD IMPROVEMENTS TO WHITEHALL ROAD AT BLUE COURSE DRIVE

PennDot recently unveiled preliminary plans to widen Whitehall Road to three lanes from South Atherton Street to West College Avenue. The ROW will be widened in some locations. The Plans also call for improvements at the Blue Course Drive intersection to include traffic signal improvements and setting aside additional space for trail use. As we were developing the Master Plan there were conversations with PennDot about the impact of the park development on the Whitehall Road improvements. Once there is a better understanding of the timing and magnitude of phase one development for the park, more conversations with PennDot and municipal representatives will occur.

Chapter 2: Site Inventory & Analysis

Chapter 2: Site Inventory & Analysis

WHITEHALL ROAD REGIONAL PARKLANDS

Context provided by the community's history, demographics, and existing park system help to identify community-wide recreational needs. Public input further defines these needs. The site inventory and analysis discussed in this chapter identifies the extent to which the park site meets, or potentially could meet, those recreational needs.

This Master Plan studies built and natural features of the Whitehall Road Regional Parklands property, such as zoning, utilities, topography, soils, vegetation, and hydrology. Knowledge of such features aided in identifying feasibility of potential recreation facilities on the property.

BASE MAPPING

Pashek Associates compiled the project base map, shown on the following page, using information from the following sources:

- A field survey of site topography and features for Lot 6, compiled by Sweetland Engineering & Associates, Inc. dated June 25, 2007
- Soil Survey of Centre County, Pennsylvania. U.S. Department of Agriculture, Soil Conservation Service, in cooperation with Penn State University College of Agriculture and Experiment Station, Issues August 1981

The consultants gathered additional information on site features through direct field observation in the summer of 2008 and fall of 2009. Pashek Associates makes no claims to the accuracy of utility locations or other facilities.



BUILT FEATURES AND SITE INFORMATION

LOCATION, SIZE, AND LEGAL STATUS

The park is 75.00 acres and is jointly owned by the Centre Region Council of Governments and Ferguson Township. The Whitehall Road Regional Parklands property is located southeast of Whitehall Road. The property is in Ferguson Township. The property will be accessible to vehicles from Whitehall Road via an access easement through an adjacent lot north of the park, land proposed for residential development. In addition to the 75-acre park, this master plan also assessed and planned for land west of the park, comprised of 25.04 acres. About 59.00 acres of land between the above mentioned 100-acre park parcel and Whitehall Road is land placed in a permanent conservation easement.

RIGHTS-OF-WAY AND EASEMENTS

There are two easements shown on the survey. The first, a 50-foot access easement along the northwestern boundary, is to provide future access to Lot 7 to the southwest. The second easement is a 20-foot temporary access easement running through the property on the northeastern side, to accommodate an existing gravel farm lane.



ACCESS

Whitehall Road Regional Parkland is not adjacent to Whitehall Road but relies on its access through an undeveloped parcel of land between the park and the road. This undeveloped property is owned by Penn State and will be developed as a multi-family development consistent with the R-4 Zoning classification. The PSU subdivision plan dated July 9, 2007 lists a series of notes that indicate that the developer of that property must provide access to the park with a road that is built to Township standards and will be responsible for improvements at the intersection of Blue Course Drive and Whitehall Road for both the development and park.

The challenge for this park development as noted in a memo from Township Manager, Mark Kunkle, on February 26, 2010, is what happens if the park development proceeds the development of the R-4 parcel between the park and Whitehall Road? As the planning for this park continues, PSU's developer may be identified and arrangements made before construction of the park. However, it is becoming increasingly possible with the current economic slow-down, that the first phase of development of the park may take place before the housing development. How costs are incurred for temporary roads, utility connections and improvements to the intersection of Blue Course Drive and Whitehall Road must be addressed as part of the development schedule.

A Memorandum of Understanding should be prepared between the COG and the Penn State University to further clarify the parties' understanding of the financial responsibility of the parties relative to infrastructure, namely construction of Blue Course Drive Extension, the proposed sewage pump station and traffic signal upgrades at Whitehall Road and Blue Course Drive Extension. This Memorandum of Understanding should be consistent with the subdivision plan notes and discussions the parties have had about these matters.

ZONING AND ADJACENT LAND USE

The Whitehall Road Regional Parklands property is zoned Rural Agricultural (RA) in Ferguson Township. Adjacent properties to the south, east, and west are also zoned Rural Agricultural, while a parcel to the north

is zoned Multi-Family Residential (R-4). The park and adjacent parcels are actively farmed. Land forming the northwest boundary to the park, has been designated as a Conservation Parcel.

“Public park and recreational areas” is a permitted use in the Rural Agricultural (RA) zoning district. The required setbacks are 50 feet for the northwest, southwest, and southeast boundaries; a 100-foot setback has been established in the northern corner of the property, while the rear yard setback is 75 feet.

EXISTING STRUCTURES AND ROADS

There are no structures located on the property. The parcel is bisected by two gravel farm lanes, used to access farm properties surrounding the park. There is a temporary access easement on the more northern lane. No easement exists for the lane that is more centrally-located.

EXISTING RECREATIONAL FACILITIES

The property currently contains no recreational facilities. However, a new regional bike path that will connect Musser Gap with the Borough of State College will pass adjacent to the park site, with excellent opportunity for integration.

SITE HISTORY AND CONTEXT

The site sits within the broad ridge-and-valley settlement pattern of rectangular road system, agricultural fields, and linear towns. The site was once part of a large estate farm that occupied a favorable position with water and excellent soils.

ABANDONED MINE LANDS

A review of the Pennsylvania Department of Environmental Protection’s EMap database (<http://www.emappa.dep.state.pa.us/emappa/viewer.htm>) indicates that no past mining activity has been recorded on the property.

UTILITIES

Identifying existing utilities on the property helps distinguish opportunities for proposed recreation activities that may require electricity, sewer, etc. In addition, the following Acts require anyone who engages in any type of excavation or demolition to provide advance notice:

- Underground Line / Facilities Damage Prevention Act of 1996 (the “Act”);
- OSHA Standard 1926.651 (revised 1990);
- Federal Pipeline Safety Act of 1968, as amended protecting underground liquid (CFR 49, Part 195) and natural gas (CFR 49 Part 192.614) pipelines; and
- National Electric Safety Code, ANSI C-2 (revised 1997).

In Pennsylvania, PA Act 287 as amended by Act 187 of 1996, 73P.S. § 176 et. seq. requires “notice in the design or planning phase of every work operation that involves the movement of earth with powered equipment.” The PA One Call System, Inc. has been established as a non-profit organization to facilitate

requests for utility information. Therefore, PA One Call System, Inc. (1-800-242-1776) was contacted during the inventory and analysis phase to determine if and which utilities are in the vicinity of the park.

PA One Call System, Inc. responded via their automated response service, Serial Number 20090771353 (Ferguson Township). Utility companies then responded directly as is shown in the following chart:

PA One-Call Responses – Whitehall Road Regional Parklands Property (Serial # 20090771353)			
<i>Utility Company</i>	<i>Address</i>	<i>Response</i>	<i>Contact</i>
Allegheny Power Company	2800 E. College Avenue State College, PA 16801	Clear - No Facilities	Office Personnel
Columbia Gas of PA, Inc.	Southpointe Industrial Park 501 Technology Drive Canonsburg, PA 15317	Conflict - Lines Nearby	Timothy M. Petrina
Comcast Cable Communications		Clear - No Facilities	1-800-COMCAST
Ferguson Township	3147 Research Drive State College, PA 16801	Clear - No Facilities	Mark Kunkle mkunkle@twp.ferguson.pa.us
Penn State University	Wastewater Treatment Plant University Drive University Park, PA 16802	Clear - No Facilities	Kevin Hahn kxh22@psu.edu
Borough of State College	243 South Allen Street State College, PA 16801	Clear - No Facilities	Thomas J. Fountaine, II boro@statecollegepa.us
State College Borough Water Authority	1201 West Branch Road State College, PA 16801-7697	Marked	Steve Albright steve@scbwa.org
University Area Joint Authority	1576 Spring Valley Road State College, PA 16801	Clear - No Facilities	Richard Lahr
Verizon Pennsylvania, Inc.	201 Stanwix Street, 4th Floor Pittsburgh, PA 15222	Conflict - Lines Nearby	Office Personnel
Windstream Pennsylvania, Inc.		Clear - No Facilities	www.windstream.com 1-877-807-WIND

A University Area Joint Authority sanitary sewer line exists northwest of the site across Whitehall Road Regional Parklands. When Parcel 4 is developed for multi-unit residential living, sewer and water will be extended to the border of the park parcel.

NATURAL FEATURES

WATER FEATURES AND WETLANDS

The site slopes largely to the northwest, toward Parcel 5, designated as a conservation parcel. A small portion of the northeastern part of the park flows to the same drainageway in a northeasterly direction. There do not appear to be any wetlands on the site.

SOILS

Soils help determine appropriate land use and development for any property. For the Master Plan, Pashek Associates reviewed the Soil Survey and lists of hydric soils for Centre County. Hydric soils are one of three criteria used to identify jurisdictional wetlands in the Commonwealth of Pennsylvania. The following chart describes the properties of soils found on the park property according to the soil survey and identifies any hydric qualities in those soils.

Soils with a classifications of A and / or B are generally suitable for infiltration, and soil classifications of C and / or D are generally unsuitable for infiltration.

Soils Inventory - Whitehall Road Regional Parklands Property				
<i>Soil Type (Map Symbol)</i>	<i>Drainage</i>	<i>Hydric Soil?</i>	<i>Hydrologic Classification</i>	<i>Limitations to Site Development</i>
Hagerstown Silt Loam, 3-8% slopes (HaB)	Well Drained	none	C	Moderate erosion hazard, clayey subsoil, potential for sinkholes
Lindside Soils (Lx)	Moderate	Hydric component (Atkins)	C	Slight erosion hazard, flooding, seasonal high water table
Hagerstown Silt Clan Loam, 3-8% slope (ItcB)	Well Drained	None	C	
Opequon-Hagerstown Complex, 3-8% slopes (OhB)	Well Drained	none	C	Moderate erosion hazard, shallow depth to bedrock, clayey subsoil, potential for sinkholes

The standard classifications for these types of soils at the Whitehall Road Regional Parklands suggest that

on-site waste disposal may be a challenge without looking into sand mounds or other mitigating strategies. However, the CMT Soils Investigation described in the Soil Investigation Section suggests that the soils may be suitably well drained for on-lot septic fields.

SOIL INVESTIGATION

On December 16, CMT Labs of State College observed the excavation of 13 test pits on the park site. Ferguson Township provided the equipment and operator. The following is a summary of the findings. The complete assessment, including test pit logs, are in the Appendix of this report.

The test pit observations confirm the presence of residual soils and carbonate bedrock consistent with the mapping. With the exception of a few suspected limiting soil layers, the majority of the soils at the site appear well-drained and exhibit moderate to good soil structure and macropore (i.e., root channels, earthworm burrows, etc.) Frequency. In general, the upper 30 inches of the soil profile appeared more permeable than the deeper soils at the site. We believe that where adequate soil thickness exists, further investigation for stormwater/septic disposal purposes may be warranted.

For stormwater disposal purposes, we recommend that an investigation in general accordance with Appendix C of the December 2006 PADEP Stormwater BMP Manual, be conducted. In addition, the design professional may consider reviewing section 7.4 of the BMP Manual prior to the investigation. This section discusses stormwater management in “Karst Areas.” Septic disposal investigations are typically conducted by a licensed Sewage Enforcement Officer (SEO).

The bedrock observed appeared weathered, fractured and capable of being excavated with heavy equipment to depths several feet deeper than the excavation termination depths. From a permeability perspective, the bedrock at the site did not appear restrictive to water movement compared to the residual soils. Excluding the topsoil, the majority of the subsurface materials at the site may be suitable for use as fill materials. However, some of the excavated pieces of rock were relatively large, and may require sorting and/or crushing prior to use as fill. In addition, some of the clay at the site could be “fat clay,” which may limit its suitability as a fill material for some applications. We recommend that fill materials be evaluated for suitability on a case-by-case basis, depending on their intended use.

There is a conflict between the County Soil Survey and this more detailed field investigation. Further testing needs to be done to determine if an on-site sewage disposal system would function in the soils in the park.

TOPOGRAPHY

Most of the property consists of slopes less than 10%. Much of this area is composed of open field and offers opportunities for recreation development.

VEGETATION

Active croplands dominate the property. A forested area of about 4 acres is located in the northern corner of the parcel.

WILDLIFE



Limited vegetative habitats, primarily agricultural fields with a single block of forest, and lack of connections to mountain and riparian habitats, presently accommodate low wildlife populations. There is potential for more diverse populations of large and small animals and birds with introduction of vegetative diversity.



Pennsylvania Natural Diversity Index Search

The Pennsylvania Department of Forestry maintains the Pennsylvania Natural Diversity Inventory (PNDI) Index. This is a database of known locations of Pennsylvania's rare, threatened, and endangered plant and animal species. The database and searches are now accessible online at the Pennsylvania Natural Heritage Program. (www.naturalheritage.state.pa.us).

A search of the PNDI Database (Search # 20090902208489) indicated that recreation facility development will not impact any federally listed, proposed, or candidate endangered species or species of concern in Pennsylvania. A copy of the PNDI Environmental Review receipt is included in the appendix of this report.

NATURAL HERITAGE AREAS

A review of the Centre County Natural Heritage Inventory (NHI) indicated that no natural heritage areas are located on or immediately adjacent to the Whitehall Road Regional Parklands property.

OTHER SITE FACTORS

Other factors that may affect placement of recreation facilities on the site include: climate; orientation; views; and noise.

CLIMATE

The site is situated along the Tussey Mountain Valley. This position exposes the site to gentle summer breezes, but also to cold northwesterly winds in the fall, winter, and spring.

ORIENTATION

The property's predominantly north/northwestern orientation will result in cooler slopes, resulting in longer persistence of snow in winter months.

VIEWS

The site's upland location within the valley affords spectacular views of Tussey Mountain to the east.

NOISE

Traffic from Whitehall Road Regional Parklands should not impact recreation uses.

CONCLUSIONS

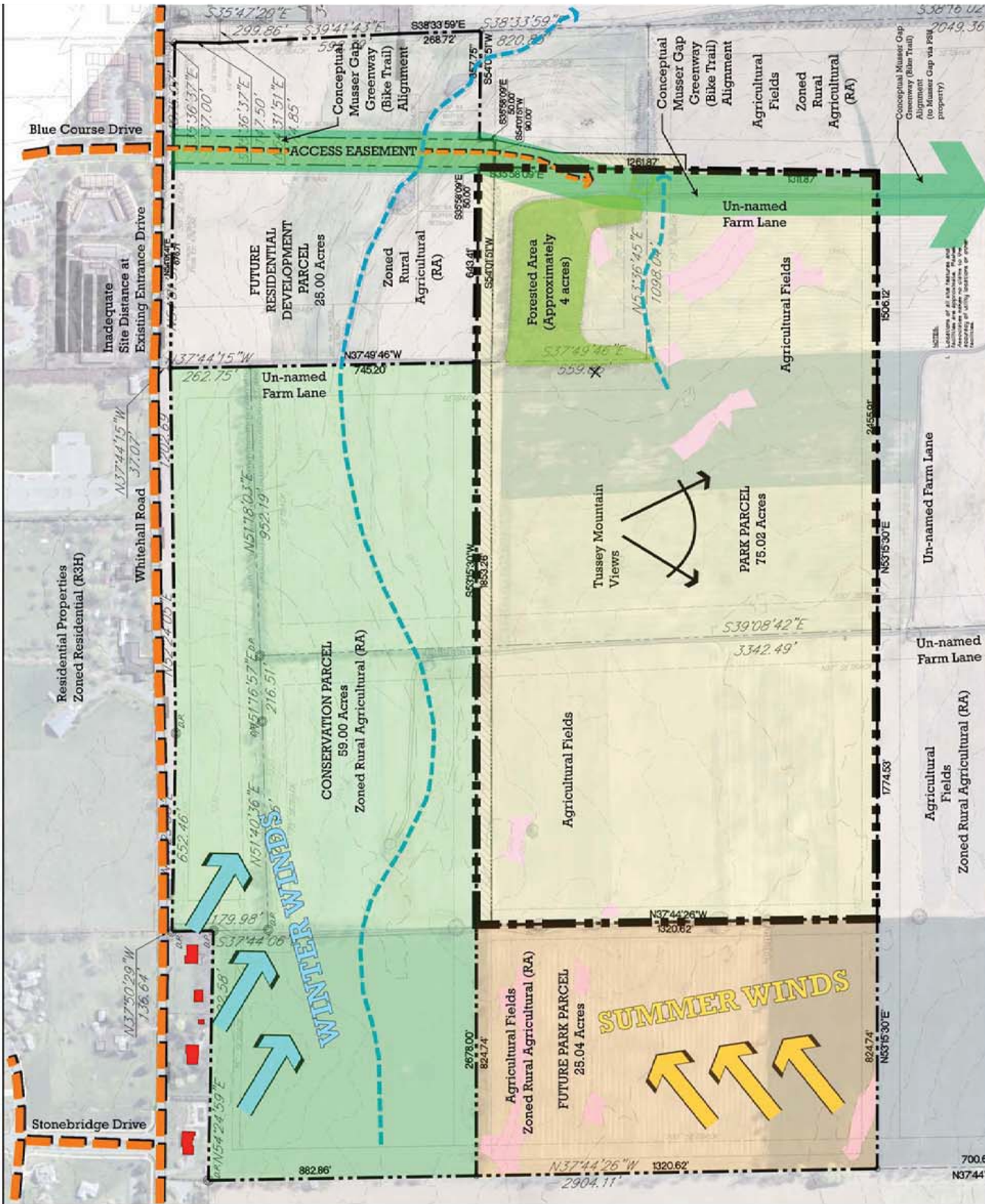
After analysis of the various features of the Whitehall Road Regional Parklands site, we have concluded that the site presents the following opportunities and limitations with regards to recreational park development:

OPPORTUNITIES

1. An outstanding regional setting exists at the Whitehall Road Regional Parklands site, resulting from access and views that create particular opportunity for identity and sense of place.
2. 100 total acres of open fields with gentle slopes offer opportunity to create a significant complex of athletic facilities.
3. The forested land area on the perimeter offers potential for complementary park use. Adjacent future conservation land offers opportunity for connections.
4. Favorable soils, good drainage, and access offer advantages to recreational development.

LIMITATIONS

1. The open valley setting is scenic but lacking in features that create internal character. Landscape development to connect uses and spaces both internally and externally will be required.
2. Access will be exclusively from one intersection. Traffic generated by large events could create congestion at this intersection.
3. The position of the park at the edge of the community may require most users to utilize automobiles to access. The access corridor should be designed to allow safe and comfortable use by walkers and bikers.



Legend

Blue Course Drive
Whitehall Road
Stonebridge Drive
Access Easement
Un-named Farm Lane
Agricultural Fields
Zoned Rural Agricultural (RA)
Future Park Parcel
Future Residential Development Parcel
Conservation Parcel
Forested Area (Approximately 4 acres)
Tussey Mountain Views
Conceptual Musser Gap Greenway (Bike Trail) Alignment
Un-named Farm Lane
Agricultural Fields
Zoned Rural Agricultural (RA)
Future Park Parcel
Future Residential Development Parcel
Conservation Parcel
Forested Area (Approximately 4 acres)
Tussey Mountain Views
Conceptual Musser Gap Greenway (Bike Trail) Alignment

Site Information

DATE: 10/15/2010
PROJECT: Oak Hall Regional Parklands Master Plan
CLIENT: Ferguson Township and State College Borough
DESIGNER: Battaglia Jones Landscape Architects
SCALE: 1" = 100'

Chapter 3: Activities & Facilities Analysis & Design Considerations

Chapter 3: Activities & Facilities Analysis & Design Considerations

ACTIVITIES ANALYSIS

Long, unmet demand for sports facilities have driven the acquisition and development of these regional parklands with a focus on athletic fields at both the Oak Hall and Whitehall Road Regional Parklands sites. Thus, programming for both sites involved a needs assessment identifying the number and type of sports fields to be planned. Jones and Pashek Associates interviewed representatives of local / regional sports organizations, analyzed responses, created a summary of sports fields needs, identified priorities based on public input, and applied findings to the Whitehall Road Regional Parklands site. This was based on potential for field development at both sites and considering the proposed field upgrades at Hess Field.

Interviews with sports organizations and analysis of sports field needs was prepared as part of the Oak Hall Regional Parkland Master Plan process and is repeated in this section as it applies for Whitehall Road Regional Parklands. Findings from the sports field needs analysis were applied to the Whitehall Regional Parklands site as shown and described by the Concept Plans detailed later in this chapter.

2002 ACTIVE RECREATION FACILITY RECOMMENDATIONS MEMO

In July 2002, the Centre Region Parks & Recreation (CRPR) Board issued a memo setting forth its recommendations with respect to needed community recreation facilities in the Centre Region. The memo stated that the recommended numbers of sports fields, based on National Recreation & Park Association (NRPA) standards, would serve community needs through 2010. The memo also recognizes 150 acres of acquisition land and its potential for future recreation development. It was this memo that helped substantiate the need for acquiring parkland for the region to meet sports field needs.

To make such recommendations, the CRPR Board reviewed field and court requests from sports councils and organizations, prior field need projections, and regional tournament requests. In the memo, the Board also recognized the need for associated parking, maintenance of fields, irrigation of turf fields, regional cooperation in funding efforts, and acquisition of additional parklands and facilities.

The recommendations of the “2002 Memo” were taken into account during the sports field analysis performed as part of this Master Plan.

SPORTS FIELDS NEEDS ANALYSIS SUMMARY

The Sports Field Needs Analysis considers how many of each type of sport fields will be needed to support present and growing competitive and recreational league play. Diamond shaped fields allow for various levels of baseball and softball teams, while rectangular fields can provide for soccer, football, lacrosse, and field hockey.

The consultant arrived at an estimated number of each type of fields that will need to be developed within the region based on the analysis of the following:

- An inventory of existing fields to establish the “supply”
- A list of all field users
- Discussions with each group to determine, by age group, the “demand”:
 - Hours of practice
 - Number of practices / week
 - Number of teams
 - Information on unmet needs of existing facilities
 - Hours per game
 - Number of games / week
 - Information on participation rate trends

This analysis provided the consultant with statistical and anecdotal information to base field needs for the region. This could then be compared to the 2002 Needs memo from the CRPR, national standards, and requests from the various sports organizations. The practice and game field analysis spreadsheets are included in the Appendix of the Oak Hall Regional Parkland Master Plan. The following summary table tracks the various inputs leading to a recommendation for new fields for rectangular and diamond-shaped fields.

SPORTS FIELD DEMAND AND SUPPLY ANALYSIS (Surplus +, Deficit -)							
Sports Facilities	2002 CRPR Memo ⁽¹⁰⁾	1988 National Standards ⁽¹⁾ (62,600 people) ⁽²⁾			Time Slot Analysis ⁽⁵⁾	Sports Group Requests	Recommendations ⁽³⁾
		Need	Have ⁽⁴⁾	Surplus/ Deficit			
Baseball	-4	25	21	-4	+3 ⁽⁶⁾	3-4	2 larger fields and 1 challenger field ⁽⁷⁾
Softball	-4	25	14	-11	-4	4	4-6 fields ⁽⁸⁾
Soccer	-12	25	18	-7	-5	6-8+ ⁽⁹⁾	5-8 fields
Football/Lacrosse/ other rectangular fields	None identified	13	3	-10	-1	1	1 multi-purpose rectangular field

- (1) The 1988 National Standards for field needs, based on population, suggested 1 baseball field/2500 people and 1 soccer or softball field/5000 people. Lacrosse was not included in the standards. Years ago, Pashek Associates modified the standard by suggesting a demand of 1 soccer or softball field/2500 as more reflective of field use in our area. That is the standard referenced in the table. In 1995, NRPA developed an analysis of demand for sports by using a “level of service” analysis. The time slot analysis reflects that type of assessment. We offer both for comparison purposes.
- (2) The population used for the region was provided by Centre Regional Planning Agency and excludes students living on campus.
- (3) These recommendations are based on today’s needs and do not provide for growth in sports participation, nor do we include enough fields to allow for resting a field (20% of supply).
- (4) It is challenging to establish an accurate number of existing fields available to meet demand given the multi-use nature of many fields. We have attempted to pro-rate the multi-use fields (which is 65% of all fields) to arrive at a full-time equivalent. Our analysis shows 19 municipal fields, 27 private fields, and 20 school fields. The demand and supply calculation assumes all 27 private fields continue to be available and that there will be no school expansion or contraction that impacts those 20 fields. This fact alone establishes the need for more sports fields at the regional parks.

- (5) This analysis was done for both practice times and game times to compare field needs. Factors included for the practice time slots were: hours for each practice, practices per week, # of teams, full-time equivalent fields used resulting in a calculation of time slots needed, weekly time slots available, whether a surplus or deficit of time slots was created, and a calculation as to how that time slot equates to field needs. A similar analysis was conducted for game times. This analysis did not factor in the need for additional time slots resulting from rainouts (more relevant in the game time slots analysis). CRPR staff assisted in providing detailed information for most sports leagues, such as numbers of teams, number of players, fields used, and schedules. They also provided contact information for the sports organizations we interviewed.
- (6) Although our initial analysis shows a surplus of fields, we have found that there is a surplus of under-sized fields and a shortage of larger fields.
- (7) Challenger fields are fields designed to meet the needs of disabled participants. The fields are usually with a synthetic surface. Each participant usually has a “buddy” to help with activity.
- (8) Assume the four fields at Hess Field remain part of the supply.
- (9) Soccer provided a request for two soccer complexes, with one complex containing 6-8 full sized fields and no request for number of fields for the second complex.
- (10) This memo was one of the first widely distributed documents attempting to quantify field needs. See the Appendix for a copy of this memo.

Field use above assumes daylight use only. Need for field lighting to extend field use time was not analyzed. Lighting might extend use, requiring fewer facilities. Lighting also is often required of tournament facilities to get as many games in as is possible over a weekend. However, public opinion, especially of nearby residents, was sharply opposed to creating lighting in this very rural environment in Oak Hall and may be a concern of residents near Whitehall Road Regional Parklands. The CRPR discussed lighting fields, and decided that lighting is an issue that can be dealt with in the future. Installation of empty conduit for future lighting wiring was discussed as a good design practice with electrical service sized to meet lighting needs, should they be added to the fields in the future. The committee met with a lighting representative to review lighting of intramural fields at Penn State and were impressed with the new technology of focusing light down, on the field and minimizing light dispersion toward adjacent property owners.

It should also be noted that all analysis points and calculated numbers of needed fields above assume the continued use of fields at the Hess Complex. During the development of this Master Plan, it was learned that Bernel Road Park in Patton Township will be developed by the Township in the near future. This will add a 375' diamond shaped field, a 275' diamond shaped field and rectangular field to the supply side of this equation in the next few years.

Also, during this master planning process, discussions were held with the athletic director for the school district. There may be an opportunity for partnering on field development. Therefore, two fields were identified as being needed to meet the high school needs, one for high school games and one for the junior variety games.



FACILITIES ANALYSIS

Based on the input from the public process, study group ,and the above Sports Field Demand and Supply Analysis table, the following Proposed Regional Facilities Table was developed. This table shows proposed facilities for Whitehall Road Regional Parklands and compares it to the facilities developed for the other parks sites and total demand.

Proposed Regional Facilities					
Facility	Master Plan at Whitehall Road	Oak Hall Master Plan	Hess Field	Total Regional Park Supply	Demand estimated in 2008
Baseball	4	0	0	4	3
Softball	1	3	4	8	6
Soccer	7	0	0	7	8
Football/Lacrosse/other rectangular field use	2	0	0	2	1
Tennis – indoor	6	0	0	6	Not estimated
outdoor	6	0	0	6	
All purpose practice field	1	1	0	2	Not estimated
Open space for unscheduled activities	0	1	0	1	
Playgrounds	2	1	1	4	Not estimated
Basketball courts	1	0	0	1	Not estimated
Sand volleyball courts	1	1	0	2	Not estimated
Dog parks	1	1	0	2	Not estimated
Picnic pavilions	5	3	1	9	Not estimated
Picnic groves	4	1			
Restrooms	2	1	1	4	Not estimated
Concessions stands	2	1	1	4	Not estimated
Community gardens	1	0	0	1	Not estimated
Maintenance buildings	1	1	1	3	Not estimated
Sledding hill	0	1	0	1	Not estimated
Seasonal ice skating rink	1	1	0	2	Not estimated
Amphitheater	1	0	0	1	Not estimated

SPORTS FACILITY STANDARD SOURCES

Many facilities must comply with specific standards established for their respective activity. Sports facility standards, which must be understood in order to properly locate the facilities being considered in this study, include:

- National Recreation and Park Association's "Facility Development Standards" establishes facility dimensions, orientation, and slope requirements.
- National Federation of State High School Association's "Court and Field Diagram Guide"
- United States Specialty Sports Association, www.ussasports.com, establishes field sizes
- Amateur Athletics Union of the United States, Inc., sss.aausports.com, establishes field sizes
- USA Volleyball, www.volleyball.org - establishes court dimensions and requirements
- U.S. Lacrosse, www.lacrosse.org

FACILITY GUIDELINES

Taking into consideration the aforementioned standards and guidelines, in combination with Pashek Associates' prior experience, the following facility development guidelines were created for Whitehall Road Regional Parklands:

SPORTS FACILITIES

Baseball and Softball Fields

As discussions about the baseball fields took place, the idea of partnering with the High School to provide a Varsity and Junior Varsity field was considered. By including these fields, there may be an opportunity for the School District to assist financially in building the fields. The athletic director suggested that the fields be modeled after baseball fields in White Township near Indiana PA and a field in Hershey, PA.

We are also proposing that one of the smaller baseball fields be developed as a Challenger Field. The Challenger Baseball program is an official Little League program. The children have various special needs, physical handicaps and developmental delays. The ages range from 5 to 21 years of age. The purpose of the program is to allow all these wonderful kids to enjoy the game of baseball in a relaxed setting that is supervised by coaches and parents.

Each Challenger game consists of two innings. All children bat in their respective half of the inning (no score is kept nor are any strikes, walks or outs). Parents, coaches, family members, friends, all help out and are encouraged to assist the children with batting, fielding, running and throwing as necessary. The children are taught good sportsmanship and very basic fundamentals of the game. Every child hits, runs and scores!

- Orient so batter is looking through the pitcher in the northeasterly direction so neither are looking at a rising or setting sun
- Provide backstop, perimeter fencing, dugouts, player benches, foul poles, bleachers
- Drinking fountains and trash receptacles nearby
- Slope field maximum of 2%, minimum of 1.5% unless very well drained site or artificial surface used
- Provide adequate buffer between field and adjacent uses and parking areas
- Size fields according to the following standards:



Baseball Dimensions		Required			Recommended			
Type of Field	Ages	A	B	C	D	E	F	G
		Base Lines	Pitching Distance	Pitching Height	Backstop from Home Plate	Foul Lines	Center Field	Infield Arc from Pitchers Plate
Major League Baseball (MLB)		90'	60.5'	10"	60'	325'	400'	95'
National Collegiate Athletic Association (NCAA)		90'	60.5'	10"	60'	330'	400'	95'
National Federation of State High School Associations (NFSHSA)		90'	60.5'	10"	60'	300' min	350' min	95'
Pony Baseball, Inc.								
<i>Shetland Division</i>	5&6	50'	38'	n/a	25'	125'	200'	
<i>Pinto</i>	7&8	50'	38'	4"	25'	150'	200'	
<i>Mustang</i>	9&10	60'	44'	4"	30'	175'	225'	
<i>Bronco</i>	11&12	70'	48'	6"	30'	225'	275'	
<i>Pony</i>	13&14	80'	54'	8"	40'	275'	315'	80'
<i>Colt</i>	15&16	90'	60.5'	10"	50'	300'	350'	95'
<i>Palomino</i>	17&18	90'	60.5'	10"	50'	300'	350'	95'
Babe Ruth Baseball, Inc.								
<i>Bambino Division</i>	5 to 12	60'	46'	6"	25'	200' min.	200' min	50'
<i>Babe Ruth League</i>	13-15	90'	60.5'	10"	60'	250' min	250' min	95'
<i>16-18 League</i>	16-18	90'	60.5'	10"	60'	300'	350'	95'
American Legion Baseball	18&under	90'	60.5'	10"	45' r	300'	375'	95'
Little League Baseball, Inc.								
<i>Tee Ball</i>	5 to 8	60'	46'		25' min.	200'	200'	50'
<i>Minor League</i>	7 to 8	60'	46'		25' min.	200'	200'	50'
<i>Little League</i>	9 to 12	60'	46'		25' min.	205'	215'	50'
<i>Junior League</i>	13-14	90'	60' -6"		25' min.	300'	300'	95'
<i>Senior League</i>	14-16	90'	60' -6"		25' min.	300'	300'	95'
<i>Big League</i>	16-18	90'	60' -6"		25' min.	300'	300'	95'
T-Ball USA								
<i>Tee Ball</i>	4 to 8	50'	38'		25' min.	125' max.	125' max.	

 = unofficial recommendation

League	Division	Bases	Pitching	Min. Fence	Max. Fence
American Softball Association Fast Pitch	Girls - 10 and under	60'	35'	150'	175'
	Girls - 12 and under	60'	35'	175'	200'
	Girls - 14 and under	60'	40'	175'	200'
	Girls - 16 and under	60'	40'	200'	225'
	Girls - 18 and under	60'	40'	200'	225'
	Boys - 10 and under	55'	35'	150'	175'
	Boys - 12 and under	60'	40'	175'	200'
	Boys - 14 and under	60'	46'	175'	200'
	Boys - 16 and under	60'	46'	200'	225'
	Boys - 18 and under	60'	46'	200'	225'
	Women	60'	40'	200'	250'
	Men	60'	46'	225'	250'
	Jr. Men	60'	46'	225'	250'
American Softball Association Slow Pitch	Girls - 10 and under	55'	35'	150'	175'
	Girls - 12 and under	60'	40'	175'	200'
	Girls - 14 and under	65'	50'	225'	250'
	Girls - 16 and under	65'	50'	225'	250'
	Girls - 18 and under	65'	50'	225'	250'
	Boys - 10 and under	55'	40'	150'	175'
	Boys - 12 and under	60'	40'	175'	200'
	Boys - 14 and under	65'	50'	250'	275'
	Boys - 16 and under	65'	50'	275'	300'
	Boys - 18 and under	65'	50'	275'	300'
	Women	65'	50'	265'	275'
	Men	65'	50'	275'	315'
	Major	70'	50'	275'	315'
	Coed	65'	50'	275'	300'
	Super	70'	50'	325'	

American Softball Association Modified Pitch	Women	60'	40'	200'	200'
	Men	60'	46'	265'	265'
American Softball Association 16 In. Pitch	Women	55'	38'	200'	200'
	Men	55'	38'	250'	250'
American Fastpitch Association	10 & Under	35.ft	60 ft.	150 ft.	175 ft.
	12 & Under	38 ft.	60 ft.	175 ft.	200 ft.
	14 & Under	40 ft.	60 ft.	175 ft.	200 ft.
	16 & Under	40 ft.	60 ft.	200 ft.	200 ft.
	18 & Under	40 ft.	60 ft.	200 ft.	200 ft.

League	Division	Bases	Pitching	Min. Fence	Max. Fence
American Fast Pitch Association Slow Pitch	12" Men		50 ft.	65 ft.	300 ft.
	16" Men		50 ft.	65 ft.	225 ft.
	16" Women's		50 ft.	65 ft.	235 ft.
	Women's Class 'A'		50 ft.	65 ft.	275 - 325 ft.
	Women's Class 'B'		50 ft.	65 ft.	275 - 325 ft.
	Women's Class 'C'		50 ft.	65 ft.	250 - 325 ft.
	Women's Class 'D'		50 ft.	65 ft.	250 - 325 ft.
United States Specialty Sports Fast Pitch	8 & Under	34 ft.	40 ft.	60 ft.	200 ft.
	9 & Under	34 ft.	40 ft.	60 ft.	200 ft.
	10 & Under	34 ft.	40.ft	60 ft.	200 ft.
	11 & Under	37 ft.	40 ft.	60 ft.	200 ft.
	12 & Under	37 ft.	40 ft.	60 ft.	200 ft.
	13 & Under	40 ft.	46 ft.	60 ft.	200 ft.
	14 & Under	40 ft.	46 ft.	60 ft.	200 ft.
	15 & Under	40 ft.	46 ft.	60 ft.	200-225 ft.
	16 & Under	40 ft.	46 ft.	60 ft.	200-225 ft.
	18 & Under	40 ft.	46 ft.	60 ft.	200-225 ft.
United States Specialty Sports Fast Pitch	23 & Under	43 ft.	46 ft.	60 ft.	200-225 ft.
	Women	40 ft.		60 ft.	200-250 ft.
	Men		46 ft.	60 ft.	225-265 ft.

Soccer Fields

- Size varies according to age group: Minimum is 75' x 45' (U6 age group); Maximum is 330' x 195' (High School Standard)
- Long axis of field oriented north to south, never east to West
- Maximum 2% slope, minimum 1.5% slope for drainage
- Provide a minimum 30' buffer between field and adjacent facilities and parking areas
- Provide accessible spectator seating area
- Size fields according to the following standards:

Soccer Field	A	A	B	B	C	D	E	F	G	
Type of Field	Length, min.	Length, max.	Width, min.	Width, max.	Center Circle	Corner Arcs	Goal Area	Goal	Penalty Area	Notes
<i>Federation Internationale de Football Association</i>	110 yards	120 yards	70 yards	80 yards	10 yds.	1 yd.	20 x 6 yds.	8 yds.	18 x 44 yds.	
<i>National Federation of State High School Associations</i>	110 yards	120 yards	55 yards	75 yards	10 yds.	1 yd.	20 x 6 yds.	8 yds.	18 x 44 yds.	
<i>National Collegiate Athletic Association (NCAA)</i>	110 yards	120 yards	65 yards	80 yards	10 yds.	1 yd.	20 x 6 yds.	8 yds.	18 x 44 yds.	
U.S. Youth Soccer										
<i>6 and under</i>		25 yards		20 yards	3 yds.	2 yds.	n/a	4 x 6 ft.	n/a	3 on 3
<i>8 and under</i>		50 yards		30 yards	5 yds.	2 yds.	3 x 3 yds from goal posts	6 x 12 ft.	n/a	4 on 4
<i>10 and under</i>		50 yards		40 yards	8 yds.	2 ft.	6 x 6 yds from goal posts	7 x 21 ft.	n/a	5 on 5
<i>12 and under</i>		50 yards		40 yards	8 yds.	2 ft.	6 x 6 yds from goal posts	7 x 21 ft.	n/a	6 on 6
<i>14 and under</i>		60 yards		40 yards	8 yds.	2 ft.	6 x 6 yds from goal posts	7 x 21 ft.	n/a	7 on 7
<i>16 and under</i>		70 yards		50 yards	8 yds.	2 ft.	6 x 6 yds from goal posts	7 x 21 ft.	n/a	8 on 8
American Youth Soccer Organization										
<i>6 and under</i>		30 yards		15 yards						3 on 3
<i>8 and under</i>		50 yards		25 yards						5 on 5
<i>10 and under</i>		80 yards		40 yards						7 on 7
<i>12 and under</i>		90 yards		45 yards						9 on 9
<i>14 and under</i>	100 yards	120 yards	50 yards	80 yards	10 yds.	1 yd.	20 x 6 yds.	8 yds.	18 x 24 yds.	
<i>16 and under</i>	100 yards	120 yards	50 yards	80 yards	10 yds.	1 yd.	20 x 6 yds.	8 yds.	18 x 24 yds.	
<i>18 and under</i>	100 yards	120 yards	50 yards	80 yards	10 yds.	1 yd.	20 x 6 yds.	8 yds.	18 x 24 yds.	

Amateur Athletic Union Soccer Handbook									
8 and under		90 yards		60 yards					
10 and under		90 yards		60 yards					
12 and under		110 yards		60 yards					
14 and under		110 yards		65 yards					
16 and under		120 yards		75 yards					

Football Fields

- Size: 360' x 160'
- Long axis of field oriented north to south, never east to west
- Maximum 2% slope, minimum 1.5% slope for drainage
- Provide minimum 30' buffer between field and adjacent facilities and parking areas
- Provide accessible spectator seating areas
- Size fields according to the following standards:

Football Field Dimensions		A	B	C	D	E
		Required				
Type of Field	Ages	Field Length	Field Width	End Zone Width	Goal Width	Sideline to Hash
Professional (NFL)						
Collegiate (NCAA)		360'	160'	30'	18' 6"	60'
High School (NFHS)		360'	160'	30'	23' 4"	53' 4"
Midget	7-13	240'	120'			

= Recommended Measurements

Lacrosse

- Size: 180' x 330' (preferred) or football field size
- Long axis of field oriented north to south, never east to west
- Maximum 2% slope, minimum 1.5% slope for drainage
- Provide minimum 30' buffer between field and adjacent facilities and parking areas
- Provide accessible spectator seating areas
- Size fields according to the following standards:

Lacrosse Field Dimensions		A	B	C	D	E	F	G	H
		Recommended							
Type of Field	Ages	Field Length	Field Width	Restraining Line	Goal Circles	Distance Behind Goal Lines	12 Meter Fan	8 Meter Fan	Center Field Circle
Women's									
Women's (NCAA & US Lacrosse)		100yds	70yds	30yds	8.5' r	10yds	47' 9"	34' 9"	10yds
Girls (US Lacrosse)									
<i>Under 9</i>	6-8 (level C rules)	50yds	25yds		2m r	10yds		34' 9"	
<i>Under 11</i>	9-10 (level C rules)	50yds	25yds		2m r	10yds		34' 9"	
<i>Under 13</i>	11-12 (level B rules)	90yds	50yds	30yds	8.5' r	10yds	47' 9"	34' 9"	10yds
<i>Under 15</i>	13-14 (level A rules)	100yds	70yds	30yds	8.5' r	10yds	47' 9"	34' 9"	10yds
Men's									
Men's		110yds	60yds	35yds from EL	10yds from SL, 20yds long	20yds from DAL	15yds	9' r	20 yds.
Boys									
<i>Bantam Division</i>	under 9	<i>All Boys' Divisions recommended playing field dimensions same as Men's.</i>							
<i>Lightning Division</i>	under 11								
<i>Junior Division</i>	under 13								
<i>Senior Division</i>	under 15								

EL=End Line

DAL=Defensive Area Line

SL=Sideline



= May be competitive

Tennis Courts

There has been much discussion regarding the provision of tennis courts in the master plan. Some on the committee believe that the parks are for sports like soccer, baseball, lacrosse and softball. In their view, tennis can be provided in a small amount here or in other parks. However, a number of tennis enthusiasts attended several public meetings and expressed concern that a regional park facility should address the regional needs of tennis by providing both indoor and outdoor tennis courts of a quantity to allow for tournaments. The master planning process went back and forth on this issue, finally showing six outdoor courts with room for a future expansion of an indoor complex.

Tennis enthusiasts developed a feasibility study in support of their proposed indoor facility, suggesting that court fees can significantly offset capital and operating costs. Attached to the Appendix is a copy of that report.

- Doubles courts: 36' x 78' with a 60' x 120' total playing area
- 10' to 12' spacing between multiple courts
- 12' high fencing around entire perimeter
- Max. 1 ½% slope, min. ½% slope; should drain so as to not give either side an advantage
- One 8' players bench per court
- Water fountain nearby

All Purpose Field

- Variable size
- Maximum 2% slope, minimum 1.5% slope for drainage

Playground Equipment

- Size varies
- 2-5 age area with age-appropriate equipment and spring rocker area
- 5-12 area with age-appropriate structure; provide min. safety zones between equipment and other structures (benches)
- Min. 2-bay swing with toddler and standard swings
- Manufactured shredded bark mulch safety surface (that meets ADA standards) over well-drained coarse of aggregate
- Picnic shelter nearby for shade

Basketball Courts

- 60' by 90' on size with a min. 15' buffer on all sides
- Orientation north/south goal to goal
- Max. slope of 2%, min. slope of 1 ½%
- Bituminous surfacing with color coating of line and use areas
- Fencing
- Can be combined with other court games
- Water fountain nearby

Volleyball Courts

- 60' by 30' in size with a 10' free zone on all sides
- North/south orientation
- Min. 12" sand or lawn free from holes, puddles or uneven ground
- Water fountain nearby

OTHER FACILITIES

Dog Park

- Fence in larger area for large dogs, smaller area for smaller dogs, preferably 2 acre min. size for entire dog park area
- Provide benches, dog litter bags, receptacles for waste, and water nearby
- Shade
- Shelter
- Slope max 5%

** It is recommended that the dog park be divided into three or four sections so that at least one area can be “resting” from use at any given time.*

Picnic Shelters

- Size varies
- Concrete pad beneath shelter with max 1% slope
- Electrical service
- Charcoal grills
- Picnic tables and trash receptacles
- Shade
- Easy access to drinking fountain
- Level lawn area adjacent shelter for family games

Restrooms, Storage Room and Concessions Stands

- Size varies according to specific needs
- Walks leading to buildings may not exceed 5%; provide plazas around for small groups
- Provide level land for building construction

Community Gardens

- Size varies
- Storage shed / shelter
- Rainwater cistern
- Watering spigot

Maintenance Facility

- Provide 50' x 100' one story structure
- Level, fenced in area for storage of material and equipment; double leaf gates
- Water, sewer, electric
- Screen from public use areas
- Fenced in Tree Farm for liner stock
- Shed structures for cold storage of equipment

Seasonal Ice Skating Rink

- Size varies
- Max. 2% slope

Amphitheater

- Lawn area for seating
- Large picnic shelter doubles as a stage

SUPPORT FACILITIES

Accessible Trails and Walks

- Perimeter multi-use trail 8 feet wide, interior walking trails 5 feet wide
- Max. of 5% slope; located and graded in such a manner as to minimize disturbance and erosion
- Firm and stable surface
- Rest areas with benches approximately every 5-800'
- Adjust alignment to avoid removal of trees

Roadways and Parking

- 20' cartway
- Road: 10% max. slope, min. 1% slope for drainage
- Porous paving (firm and stable area for HC parking spaces)
- Parking spaces 9' by 18' with 24' aisles
- Parking: 5% max. slope
- Avoid curbs, drain to swales and infiltration swales/rain gardens
- Wheel stops
- Landscaping to break up parking rows
- Consider security lighting with cutoffs to preserve dark sky initiative
- Provide HC stalls for both cars and vans

ADJACENCIES AND DENSITY OF FACILITIES

In addition to the preceding requirements, thought must be given to the appropriate adjacency of facilities to one another, and to overall density of facilities in the park. Ideally, it is most desirable to locate facilities adjacent to one another only when they have a minimal impact on each other. For example, a pre-school playground should not be placed adjacent to a basketball court without screening or room separating the facilities. An example of appropriate adjacency is the placement of a basketball court near a tennis court. Each facility serves similar age groups, and both are active use facilities. Proposed facilities were located carefully to avoid overcrowding and prevent excessive earthwork on site slopes.

ADA ACCESSIBILITY

Designing for accessibility means ensuring facilities meet the needs of the physically and mentally challenged, as well as individuals experiencing temporary disabilities. This accommodates not only those with disabilities, but also makes it easier for the general public to use the facilities.

Accessibility, in design terms, is described by the Americans with Disabilities Act (ADA). The Act guarantees equal opportunity for individuals with disabilities to participate in the mainstream of public life. To do so, the ADA sets requirements for facilities to prevent physical barriers that prevent the disabled from using those facilities. When recreational facilities are built or improved with public funding or open to the public, they must comply with ADA standards by providing an accessible route to the area of use and spectator areas.



STANDARDS / GUIDELINES INCLUDE:

- Americans with Disabilities Accessibility Guidelines for Buildings and Facilities, Play Areas, Final Rule, www.access-board.gov - establishes requirements for playground equipment accessibility.
- Universal Trail Assessment Process (UTAP), www.beneficialdesigns.com/trails/utap.html - Based on the promise that trails should be universally designed to serve all users; UTAP encourages land managers to provide users with specific information regarding the trail so users can make an informed decision as to whether they have the ability to use the trail.
- Architectural and Transportation Barriers Compliance Board's "Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Areas", September 1999, www.access-board.gov - sets minimum requirements for accessible trails, access routes, resting opportunities, benches, utility connections, and trash receptacles.
- Americans with Disabilities Act (ADA), Title II Requirement for Public Facilities, www.access-board.gov
- Consumer Product Safety Commission's "Handbook for Public Playground Safety" - establishes equipment, use zone, and protective safety surfacing requirements.
- American Society of Testing Materials "Standard Consumer Safety Performance Specification for Public Playground Safety" (ASTM F 1487) - establishes access route, equipment, use zone, and protective safety surfacing requirements.
- American Society of Testing Materials "Standard Specification for Determination of Accessibility of Surface Systems Under and Around Playground Equipment" (ASTM F 1951) - defines minimum requirements for accessible protective surfacing materials.
- American Society of Testing Materials "Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment" (ASTM F 1292) - defines minimum requirements for impact attenuation of protective surfacing materials.

Chapter 4: Sustainability

Chapter 4: Sustainability

BENEFITS OF SUSTAINABLE PARKS

The Master Plan strives to include sustainable design in creating the vision for the park. A sustainable park is one where the natural resources are protected, where wildlife habitat is improved, and when human recreation uses and maintenance practices do not conflict with the environment, but instead enhance them.

Sustainable design is a DCNR priority, and they are offering incentive to encourage municipalities to “green” their parks. Recently a \$10-million grant program was established to promote sustainable design. Pennsylvania is one of the first states to provide incentives and funding for these practices.

Benefits of sustainable parks include:

- **Economic:** Natural vegetation and plantings with native species provide stormwater and flood control by absorbing and storing stormwater runoff and pollutants. Such a reduction in runoff may prevent flooding, property damage, erosion, and habitat loss.
- **Environmental:** Integrating parks with streamside corridors, wetlands, forested areas, and other open spaces will increase its ecological value over time. According to the U.S. Forest Service, one tree can generate \$31,250 worth of oxygen, provide \$62,000 worth of pollution control, recycle \$37,500 worth of water, and control \$31,250 worth of soil erosion over a fifty year lifespan.
- **Health and Safety:** Researchers from the University of Illinois have discovered that time spent in nature relieves mental fatigue and related feelings of violence and aggression. They have found the more diverse and rich an environment is in natural resources, the higher the learning opportunities are for children.

WAYS OF ACHIEVING SUSTAINABLE PARK DEVELOPMENT

MINIMIZE IMPERVIOUS SURFACE AREA

The Master Plan recommends that impervious surface area be kept to a minimum throughout the park to reduce stormwater runoff. The width of parking aisles and stalls should be minimized. Stabilized turf, used on close to 50% of the parking stalls on site, allows stormwater to infiltrate into the soils below, and therefore, reduces the volume of stormwater that will need to be managed. Constructing shelters, restroom, concessions, stands, and maintenance buildings with a green roof will reduce other impervious surfaces.



IMPLEMENT RAIN GARDENS / BIO-INFILTRATION SWALES

Parking on the park site should include traffic islands containing rain gardens or bio-infiltration swales. Rain gardens are shallow planted swales that help to retain, filter, and infiltrate stormwater runoff into the underlying soil rather than channeling it into piping systems. The Master Plan recommends the use of rain gardens / bio-infiltration swales in park development. Observation of site soil permeability performed during the site inventory and analysis phase of the Master Plan indicated that the site's soils exhibit good drainage / permeability. Thus, infiltration of stormwater may be feasible. Further testing may be necessary for verification.



OTHER SUSTAINABLE PARK FEATURES

To mitigate surfaces that do not easily allow stormwater infiltration, we are proposing a variety of strategies in the park. In addition to the parking being stabilized turf and structures having green roofs, we proposed three of the rectangular fields on either side of the tennis courts be designed as stormwater detention basins. The fields will be constructed with aggregate base and underdrain lines. Three to one grass slopes will surround the fields allowing stormwater to be briefly stored as it soaks into the ground.

We also propose that stormwater be collected from Parking Area A infiltration trenches and piped to a nearby cistern located at the community gardens shelter. A small pump can distribute the remainder to the gardens when irrigation is needed.

We are also proposing rain gardens, not only in the parking areas, but at the toe of slopes along sports fields, where grade changes occur.

Finally, for optimal use, irrigation will be provided throughout the park. In the near future, a new supply of “grey” water will be available for irrigation, preserving potable water for drinking.

We encourage the CRPR explore new “green” technologies like propane powered lawn mowers and vehicles, electric powered construction trucks, wind turbines, solar panels for electrical needs at the shelters, and the planting of native species throughout the park. We recognize with tight budgets that it is difficult to choose more costly “green” technologies when lower cost alternatives are available. However, we believe the CRPR is positioned to be a leader in the parks sustainability movement and can use these technologies to educate other park departments and residents to the benefits of “green” parks.

LEED CERTIFICATION

One of the most known “green” project certifications is achieved through the Leadership in Energy and Environmental Design (LEED) system. The LEED Green Building Rating System for New Construction (LEED-NC), developed by the U.S. Green Building Council (USGBC), helps professionals improve the quality of buildings and their impact on public health and the environment. It also reduces operating costs, enhances marketability, potentially increases occupant productivity (in office or other commercial buildings), and helps create a sustainable community.

Incentives for achieving LEED certification include:

1. recognition for commitment to environmental issues in the community;
2. third party validation of achievement;

3. qualification for a growing array of state and local initiatives; and
4. marketing exposure through the USGBC website, Greenbuild conference, case studies, and media announcements.

Project design teams (consisting of owner and consultants) interested in LEED certification for their project must register online during early phases of their project. The LEED website, www.leedbuilding.org, contains important details about the certification review process, schedule, and fees. Applicants must document achievement of a number of prerequisites and must achieve a minimum number of points on the LEED point scale.

The LEED point scale is geared toward construction of buildings. A project such as the proposed park development at Whitehall Regional Parklands contains only small structures such as a concession stand and restroom building. A review of the LEED-NC 2.2 project checklist indicates that approximately 45 of the total 69 points in the LEED point scale may be possible for the Whitehall Road Regional Parklands development. The remaining points (24) apply to office buildings containing more complex utility systems, air quality controls, etc. LEED project certification requires achieving a minimum of 26 points. This is a difficult feat when all 69 points are possible, and even more difficult when only 45 points possible. The lack of a major building in the proposed development decreases chances for approval. Further, park development at Whitehall Road Regional Parklands can be environmentally-sound and incorporate “green” design elements without LEED certification.

SUSTAINABLE SITES INITIATIVE

The Sustainable Sites Initiative (SSI) is an interdisciplinary effort by the American Society of Landscape Architects (ASLA), the Lady Bird Johnson Wildflower Center, and the United States Botanic Garden to create voluntary national guidelines and performance benchmarks for sustainable land design, construction, and maintenance practices. The SSI and its guiding principles focus on reducing harm done to the environment, as well as preserving and renewing natural and cultural resources when developing or re-developing land.

The 2008 Draft of the SSI Guidelines and Performance Benchmarks, available at www.sustainablesites.org, supports the idea that sound land development and management practices restore or enhance natural functions or ecosystem services provided by their landscapes. The SSI sets forth an evolving set of guidelines and benchmarks that serve as incremental steps helping to guide traditional land development and management practices toward sustainability. Through these guidelines, the SSI explores opportunities for initial certification after construction, with re-certification requirements to ensure that the site performs as anticipated over time.

The SSI rating system is a supplement to LEED certification programs and those of other green rating systems. The SSI system is based on points and includes several prerequisites, much like LEED ratings. However, the SSI system is focused solely on site design and development, rather than on buildings. The SSI also gives information on resources for many of the design “credits,” which are achieved in order to earn points toward certification.

This Master Plan recommends that the CRPR apply for SSI Certification upon beginning the detailed design process for the proposed park development at Whitehall Road Regional Parklands.

PARK SUSTAINABILITY GUIDELINES

“Creating Sustainable Community Parks, A Guide to Improving Quality of Life by Protecting Natural Resources”, published by the Pennsylvania Department of Conservation and Natural Resources (DCNR) in 2007, provides valuable recommendations regarding how to implement sustainable practices into design, maintenance, and operations of parks across the Commonwealth. The guide can be obtained from www.dcnr.state.pa.us/brc/GreeningPennsylvania.pdf

These practices are based on the following principals:

- Retain as much of the pre-existing landscape as possible during new construction, including the soil, rocks, native vegetation, wetlands, and contours. This will minimize disturbances, which can open up an area to invasive species. It can also keep costs down, as fewer new plants, soil amendments, and habitat enhancements will be needed.
- Maintain high quality soils that will hold water and supply plants with proper nutrients. During construction, leave as much existing topsoil as possible. When new soil is brought in, ensure that it is certified weed free, in order to prevent the spread of new invasive species. Using compost and other natural products for mulch and fertilizer will help enhance the soil and feed the native plants. Good quality soil will reduce the need for fertilizers and supplemental watering.
- Connect new landscape components with the surrounding native vegetation to create larger contiguous areas of habitat. Many wildlife species need large ranges to find adequate food, mates, and shelter. By reducing the amount of roads, parking lots, and turf areas, or by placing these together, habitat quality will be enhanced.
- Create natural storm water management systems and other green infrastructure, such as rain gardens and swales of native grasses. These systems help to minimize downstream flooding, recharge and filter groundwater, and are more cost-effective and environmentally-sound than man-made systems of pipes and storage tanks.
- Protect wetlands from disturbance and fill. Avoid placing construction projects, day-use areas, and roads/parking lots near or in wetlands. Natural wetlands provide many benefits to the environment that cannot easily be duplicated with man-made ones.
- Use integrated pest management (IPM) strategies to minimize the use of chemical pesticides to control plant and insect pests. IPM is an ecologically-based approach to pest control that helps maintain strong and healthy plants. IPM can include the use of traps, sterile male pests, and quarantines.
- Minimize impermeable surfaces like roads, parking lots, and paved trails. Consider replacing asphalt and concrete with permeable pavement, mulch paths, gravel lots, and native vegetation. Permeable surfaces help to recharge ground water, reduce erosion, lessen flooding events, and filter out pollutants. When impermeable surfaces must be used, arrange them in an area where they will not fragment habitat, make them as small in area as possible, and keep them away from water bodies.
- Reduce turf to only those areas essential for recreational and other human use activities. Turf offers little habitat benefit and is not as effective as many native plants in pollution filtration, flood prevention, and erosion control. In addition, turf maintenance can have negative impacts on the surrounding environment and can require lots of mowing, watering, and fertilizing. Replace non-native turf grasses with native warm season grasses, which, once they are established, have lower maintenance needs.

- Use native plants in riparian buffers. Riparian buffers help to filter pollutants before they reach water bodies, and the vegetation discourages nuisance geese from staying in the area. Roots from riparian vegetation also prevent erosion of soils into the water body and minimize flooding events. Shade from these buffers acts as a temperature control for the water body, which enhances habitat value for aquatic organisms. The food and shelter values of these buffers also enhances habitat. In addition, by selecting the right kinds of plants, the scenic views of the water bodies can be enhanced.



- Identify and remove invasive plant species whenever possible. Invasive plants have a number of detrimental effects on natural habitats. Most invasive plants grow so densely and spread so rapidly that native vegetation is choked out.

Opportunities for sustainable design in Whitehall Regional Parklands include permeable paving, rain gardens, native species, removing invasive species, reducing the amount of turf, and promoting alternative transportation, to name a few.

GREEN PRINCIPLES FOR PARK DEVELOPMENT AND SUSTAINABILITY

DCNR has recently developed a set of principles to help communities develop practical projects that conserve resources, generate economic and environmental benefits, and become healthier, more sustainable places to live. More information can be found at [www.dcnr.pa.gov/CommunityEngagement/Principles](#). The following are the five basic principles:

- Principle #1: Maintain and Enhance Trees and Natural Landscaping
- Principle #2: Connect People to Nature
- Principle #3: Manage Stormwater Naturally
- Principle #4: Conserve Energy
- Principle #5: Integrate Green Design and Construction

A more detailed document describing the principles is located in the Appendix.

REDUCE PARK WASTE

The Master Plan recommends that the CRPR expand their efforts to reduce waste from each park. The park should offer recycling containers near each facility or restrooms, concession stands, picnic shelters, individual picnic tables, athletic fields bleachers, trailheads, sports courts, etc. Containers should clearly state what items are recyclable, per local recycling programs. CRPR now has recycling in 5 parks, nature center, and 2 pools.

The CRPR may even chose to partner with a local scout group, Centre County Solid Waste Authority, or other organizations to manage the recycling effort at the park. For instance, local scouts could build recycling containers as they have done in Harris Township, or periodically collect recyclables from recycling containers provided at the park by the CRPR (assuming this did not conflict with local recycling ordinances). In exchange for collecting recyclables, the scouts would keep recyclable materials such as aluminum cans, which can be sold for scrap metal.



Possibilities exist at the park site for large-scale composting during warmer months. Composting organic waste from the proposed concession stand, as well as leaves and grass clippings, will produce rich planting soil that could be used in park landscaping if needed, sold to the public, or donated to local organizations such as the Penn State Master Gardeners of Centre County. The Master Gardeners hold periodic composting workshops and may be able to provide assistance in composting education and implementation. For more information, the CRPR should contact the PSU Master Gardeners of Centre County - Molly Sturniolo, Coordinator - via the PSU Cooperative Extension (contact information shown later in this section) or via email: mas79@psu.edu.



DESIGN AND CONSTRUCT SUSTAINABLE TRAILS

Trail design is dependent on the trail type, location, and the use the trail will receive. The proposed perimeter trail at Whitehall Road Regional Parklands is primarily a walking trail, although bicyclists may use the trail to access the park from Linden Hall Road. Thus, the trail should be considered a Shared Use Path.

A shared use path is a facility that is typically removed from the vehicular transportation network, within its own right-of-way, not the vehicular right-of-way. In this case, the path is located entirely on the park property. As its name suggests, many different types of users may be present on a shared use path. Users generally include walkers, joggers, bicyclists, and in-line skaters.

CONSERVE AND MANAGE SITE FORESTED AREAS

The park's only sizable contiguous forest area is located on the northeast corner of the park property. The forest canopy in this area is young pole timber of both native and invasive species. The Master plan recommends conserving this forested area, while removing invasive species wherever possible. Only upon forest maturity, still decades away, should the CRPR consider timbering of any kind.

The CRPR should implement forest management (for wildlife habitat, removal of invasive species, etc.), as described in the previous section, through the DCNR Bureau of Forestry's Forest Stewardship Program.

Chapter 5: Public Participation & Design Process

Chapter 5: Public Participation & Design Process

Together with the inventory and analysis, public participation played a key role in helping Pashek Associates develop the final Master Plan for Whitehall Road Regional Parklands. This chapter describes that process.

A project study committee, comprised of COG Parks Capital Committee and the Centre Regional Recreation Authority / CRPR Board, led the decision-making process with help from the consultants. The committee offered specific information about the recreation area and helped guide park design. Concept plans represented the initial design ideas. After committee feedback on the concept plans, desired design ideas from each concept plan were included in a Draft Master Plan. The Draft Master Plan was presented for comment at a public meeting. With public comments in mind, the consultants further revised the Draft Master Plan and developed the specific recommendations, cost estimates, and phasing plan detailed towards the end of this chapter.

PUBLIC PARTICIPATION

Public participation in the design process is important in ensuring that the Final Master Plan reflects community recreational needs and is fully supported by local decision makers and members of the community.

In 2008, surveys were mailed to a random sample of residents to identify preferences for parks. Over 22% responded. The same survey was also posted on the CRPR website with over 500 responses. Although done as part of the Oak Hall Regional Parkland Master Plan, the results are relevant to planning Whitehall Road Regional Parkland. Those results include the following:

The top 3 facilities used by respondents are:



Paper Survey

1. Walk or Bike Paths
2. Used existing facilities (fields, playground)
3. Picnicking

Web-based Survey

1. Used existing facilities (fields, playground)
2. Walk or Bike Paths
3. Picnicking

The top 10 facilities suggested for the new regional parks

Rank	Paper Survey	Web-based Survey
1	Walking trails	Walking trails
2	Picnic Pavilions	Picnic Pavilions
3	Shade Trees / Flowers	Shade Trees / Flowers
4	Playgrounds	Playgrounds
5*	Open Space	Soccer Fields
6	Sledding	Open Space

7	Tennis	Sledding
8	Pool	Tennis
9	Soccer Fields	Basketball
10	Fitness Stations	Pool

Sports Groups were also interviewed as part of the Oak Hall Regional Parkland Master Plan and formed the basis for programming for both regional parks. In addition to establishing a need for specific sports fields, as described in the Activities and Facilities Analysis chapter, the following additional observations were mentioned:

1. To attract tournaments, similar types of fields need to be clustered together.
2. There is interest in developing a “challenger” type of baseball field for kids with disabilities.
3. One of the benefits of providing a synthetic turf field is that play may take place in early spring.

Public Input Sessions – Two open public meetings were held to both inform and gather input from the public on the Master Plan.

Study Committee Meetings – The Study Committee is a group of people from the region representing a variety of backgrounds and perspectives. All five municipalities and the school district were represented on the committee.

COG General Forum – During the planning process we met five times with the COG General Forum, a gathering of all of the elected officials and managers. They must approve the master plan.

Key Person Interviews – Throughout the process, we contacted stakeholders with special knowledge for the proposed park improvements. Many of the conversations with local sports organizations took place through focus group meetings and key person interviews as part of the Oak Hall Regional Parkland Master Plan. So the key person interviews for this master plan focused more on the logistics of implementation or policy formation. We contacted the following:

- Paul McClellan, Project Manager for PennDot’s Whitehall Road Widening Project for District 20 (814-765-0465)
Paul was able to give us an update on the widening project and how that might impact our project, guidance on calculating trip generation estimates for park use and how those impacts might impact improvements to the Whitehall Road/Blue Course Drive intersection upgrade.
- Dick Lahr, Engineer for University Area Joint Authority (UAJA) (814-238-5361)
To develop estimates for EDU’s for the park, we talked to Dick about sewage demand and how they would like the EDU’s estimated. Discussion also involved access to an existing sewer along Whitehall Road (requiring a lift station) and a future gravity flow connection to Route 45 (in the very early talking stage). Dick also advised on pipe sizes for sewer lines within the park.
- Rob Bose, DEP Sewage (570-327-3399)
We explored various alternative systems for sewage disposal for the park. Specifically, we talked about composting toilets. Rob advised us that the variation in flows (from inundation on the weekends to little flow during the week) prevented us from using composting toilets.
- Jerry Andree, Cranberry Township Manager (724-776-4806)
Cranberry Township recently developed a major sports complex along the PA Turnpike. They were very successful in developing partnerships to help finance the complex. The park includes a challenger field. We met with Jerry to go over strategies for fund raising, expectations for corporate giving, in-kind services and the mechanics of floating a bond for park development.

- Dan Pacella, CPA, Garvey and Garvey, Inc. (412-734-1691)
As we started to explore financing strategies, Dan assisted us in setting reasonable parameters for financing and inflation rates and developing spreadsheets to explore the annual bond costs of various options for park development.
- Dave LaSota, USTA engineer (814-674-2650)
Dave worked with the tennis group in State College, developing plans for both an indoor facility as well as an area for outdoor courts. These plans were provided to us as part of their tennis complex feasibility study.
- Greg Roth, Maintenance Supervisor, CRPR (814 231-3071)
Greg provided us with detailed information on how the CRPR manages their maintenance for existing parks. He provided us with breakdowns of staffing (full-time, 8 month and part-time) estimates of man-hours to complete maintenance tasks, and how they handled turf and building maintenance. He also advised us on the building needs for maintenance structures proposed for the park.

The input process culminated in the identification of proposed facilities and their relationship to each other, which the Master Plan reflects. Actual meeting minutes are located in the Appendix of this report.

The public process for this master plan focused on the study committee setting policies, recommending designs and funding strategies. Their recommendations were forwarded to the COG General Forum, made up of all elected officials of the participating municipalities. The COG Forum reviewed the master plan at various stages of the planning process. At their July 2001 meeting, they received the master plan from the study committee and forwarded the plan to the five participating municipalities for their review and comments. A final plan was then developed incorporating the municipal review comments and presented to the COG Forum in August 2010 for their adoption of the plan. All COG Forum meetings were televised on the local access cable channel.

It has been challenging to arrive at a consensus plan, especially the financing aspect of the plan, given the divergent views held by each municipality.

CONCLUSIONS

It became obvious, after meeting with representatives of the various athletic organizations, that there is a significant shortage of diamond and rectangular fields. This shortage has reduced preferred practice time, number of games (especially make-up games), and forced some teams to use unsuitable fields. Some leagues have been forced to limit registration due to lack of field time.

Additional meetings allowed us to better understand the capacity of the land, whether through soils composition, availability for utilities and the impact of park development on adjacent property owners.

DESIGN PROCESS

DESCRIPTION OF CONCEPT PLANS

Potential design alternatives were generated to allow the project study committee opportunity to consider features to incorporate into a Draft Master Plan.

An evaluation of conclusions from the site analysis and proposed program of uses lead to several key assumptions:

- 1) The priority for uses on the site is athletic facilities.
- 2) Based on the conclusion that the Oak Hall Regional Park will primarily accommodate diamond fields for softball, the Whitehall Road Regional Parklands will focus on rectangular fields and tennis.
- 3) Secondary uses will complement the athletic facilities.
- 4) Favorable conditions will allow for active uses on most of the site, areas to the east that are forested and include moderate topography will be devoted to secondary complementary activities.
- 5) The large site of open fields will require deliberate spatial organization of circulation, core uses, and new vegetation to create a park with unified character, comfortable use, and park like beauty.
- 6) The 25-acre parcel under option will be acquired and planning will proceed for a 100-acre park.

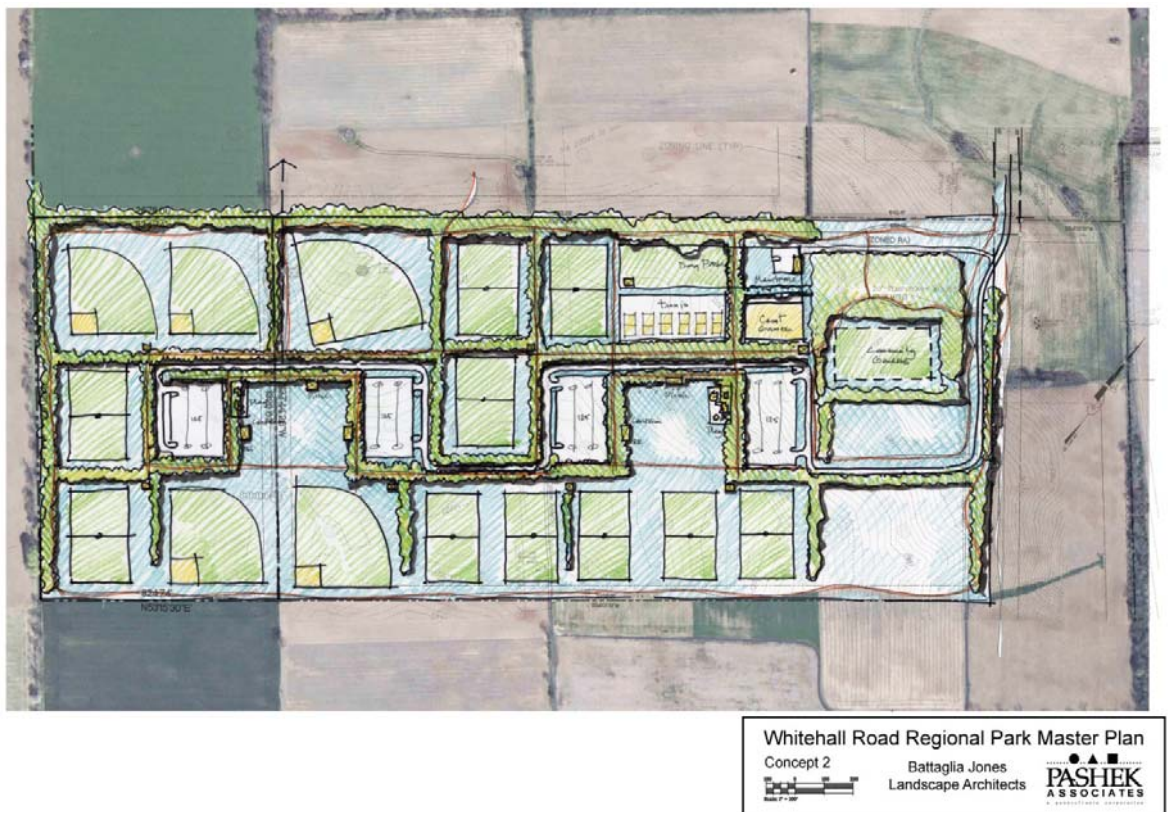
Three concept alternatives were considered and compared. All plans are similar in program, use of central core areas for parking, services and complimentary uses, a rectilinear layout, and use of trees for shade and unity. The plans vary in circulation pattern and organization of athletic fields and support facilities.

Improvements for each concept are shown in the chart on the below:

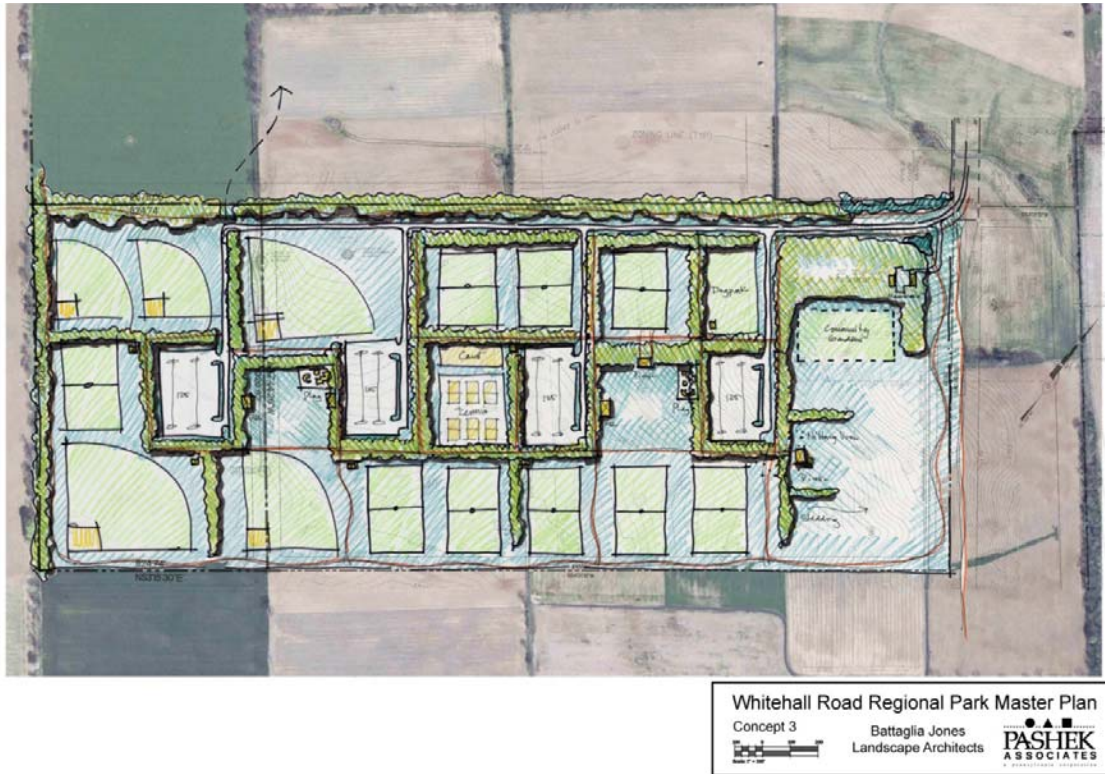
CONCEPT #1



CONCEPT #2



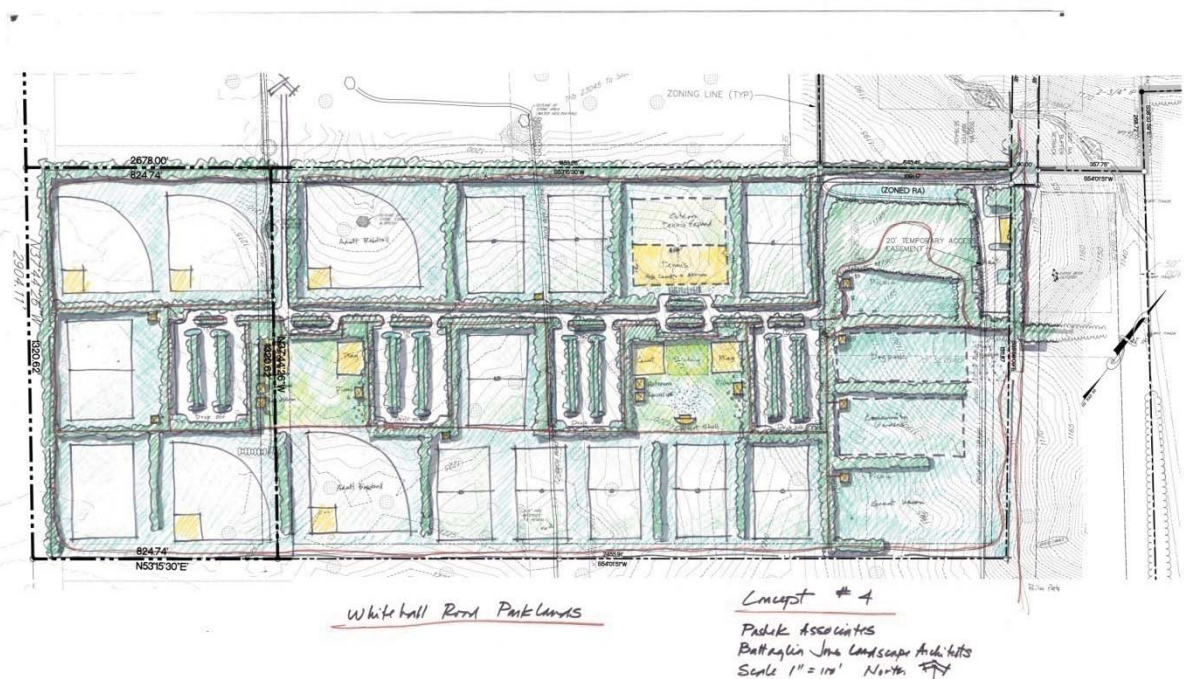
CONCEPT #3



CONCEPT PLAN CONCLUSIONS

The study committee's reaction to the concept plans was mostly positive. The primary difference was the park road layout. It was determined generate a new concept, Concept 4, which offered the most recreational benefits and fit best within the site. This layout allowed direct access to facilities without crossing a park road for the southern fields. This alternative had less road than several concepts.

CONCEPT #4



CONCEPT COMPARISONS

Improvements	Concept # 1	Concept # 2	Concept # 3	Concept # 4
Retainage of existing forested area of the site	Yes	Yes	Yes	Yes
Enhancement of the local rural aesthetic by retaining and expanding upon existing hedgerows	Yes	Yes	Yes	Yes
Proposed large ball fields (300' baselines and 350' center field)	2	3	3	2
Proposed small ball fields (200' baselines and 250' center field)	2	2	2	3
Proposed rectangular fields (330' x 195')	9	10	9	11
Proposed tennis courts	6	6	6	6 outdoor 6 indoor
Proposed playgrounds	2	2	2	2
Large shelters	2	2	3	2
Medium shelters	0	0	0	2
Smaller shelters in view of the sports fields	Several	Several	Several	Several
Proposed basketball / volleyball court area	1	1	1	2
Proposed restrooms / concession facilities	2	2	2	2
Proposed community gardens	Yes	Yes	Yes	Yes
Proposed dog park	Yes	Yes	Yes	Yes
Casual picnic opportunities as individual picnic tables	Several	Several	Several	Several
Proposed sledding hill	Yes	No	Yes	No
Large unprogrammed lawn areas	Yes	Yes	Yes	Yes
Proposed amphitheatre	No	No	No	Yes
Proposed perimeter trail	Yes	Yes	Yes	Yes
Proposed park access road straight through the site	South Half	Center	Northern Boundary	North Half
Proposed four parking lots each with:	125 spaces	125 spaces	125 spaces	175 spaces
Proposed maintenance facility	Yes	Yes	Yes	Yes

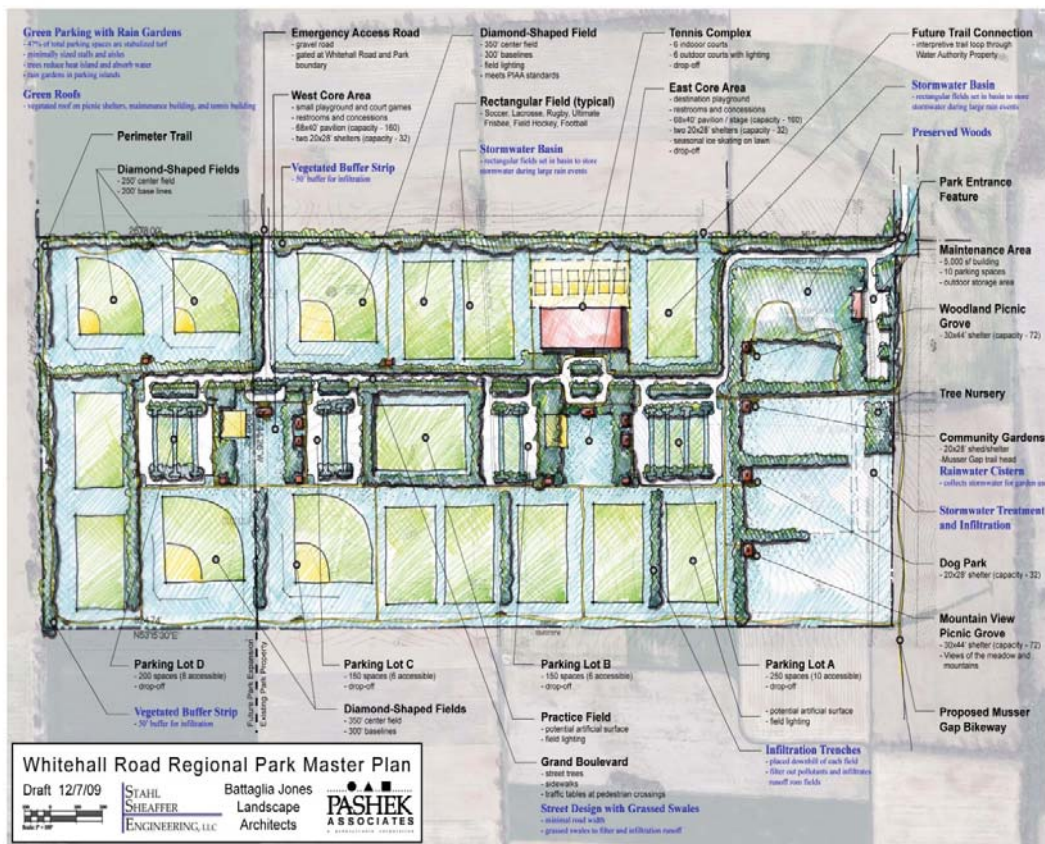
DRAFT MASTER PLAN DESCRIPTION

The Draft Master Plan incorporates favorable elements from the three concept plans and addresses comments from the project study committee and the public. General conclusions included:

- 1) The organization of use zones, rectilinear layout and program of activities was endorsed.
- 2) The circulation system should provide a balance of safety, access, logic, aesthetics and cost.
- 3) Athletic facilities should be grouped by type to facilitate tournament use.
- 4) Potential for an indoor tennis facility and multi use sports facility could be accommodated.
- 5) Nonathletic uses including the dog park, community gardens and primary picnic facilities could be grouped on the east side of the site, utilizing moderate topography and forest.
- 6) Stormwater design could utilize both infiltration and athletic fields graded to serve as basins.

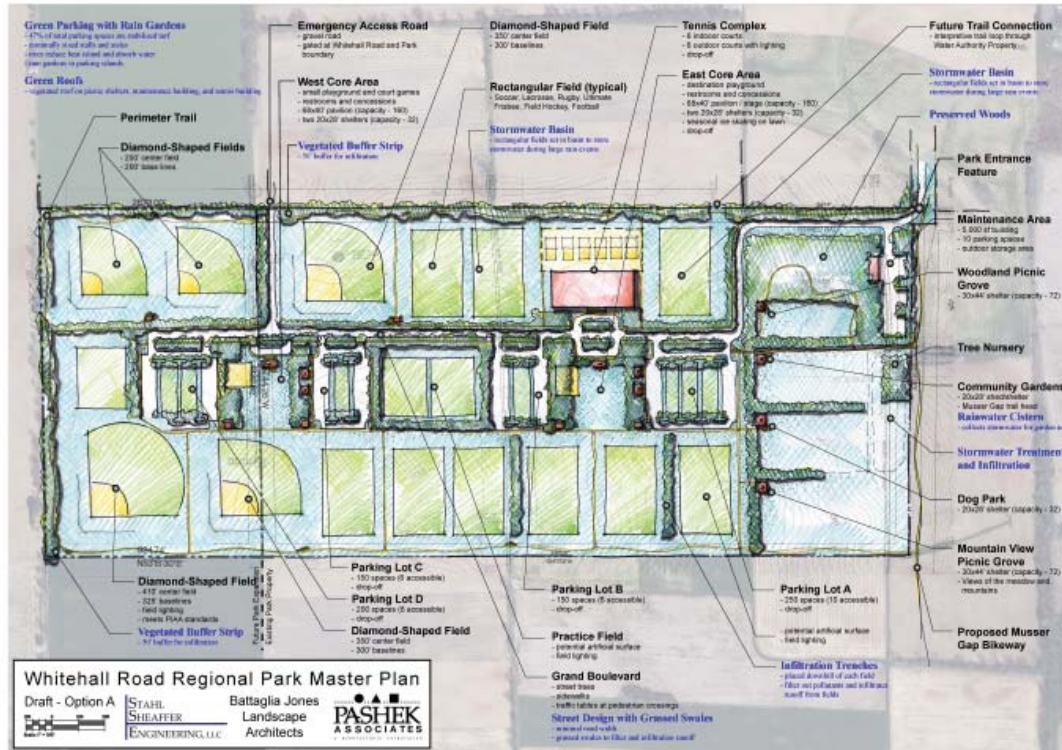
A Draft Master Plan was prepared and continued discussion by the project committee and the public lead to four Draft Master Plan options.

- An entrance road bisects the site into three sections: two of athletic facilities and one core area of parking, support facilities and complimentary uses. The road creates a “main street” with a series of athletic neighborhoods on both sides.
- 8 of the 10 soccer fields are located in the central section of the site, along with a practice field.
- The five diamond fields are located in the western section of the site, as well as two potential rectangular fields.
- A tennis complex includes six outdoor and six indoor courts.
- A woodland picnic grove, tree nursery, dog park, community garden and mountain view picnic grove are grouped on the east side of the site.
- Four parking areas accommodate 800 parking spaces and drop-off zones.
- Two core greens with playgrounds, concessions, picnic shelters, restrooms, informal play areas and performance areas.
- A pedestrian system of internal walkways connects to a perimeter path with sitting areas and with the Musser Gap Bikeway.
- A maintenance facility is located near the park entrance.
- A system of tree lined streets and athletic fields provide shade, wind breaks, vistas and beautiful spaces.



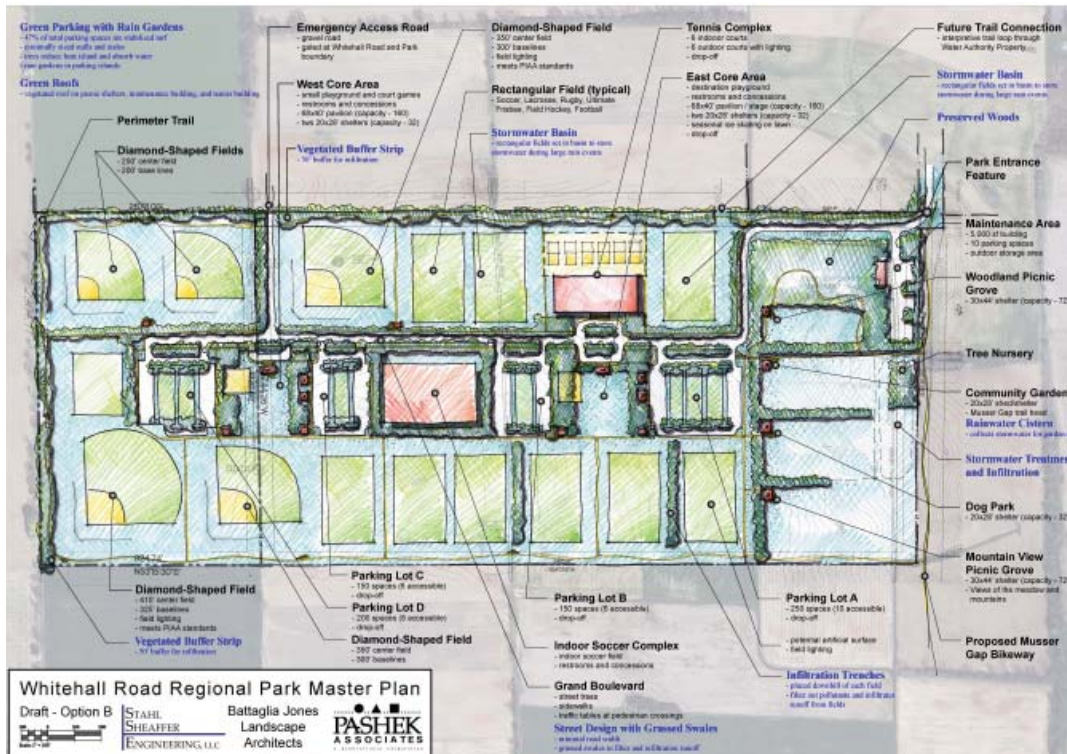
OPTION A

- This plan illustrates a full sized baseball field (410' center field) in the southwest corner of the site, with adjustments to other elements on the west side.



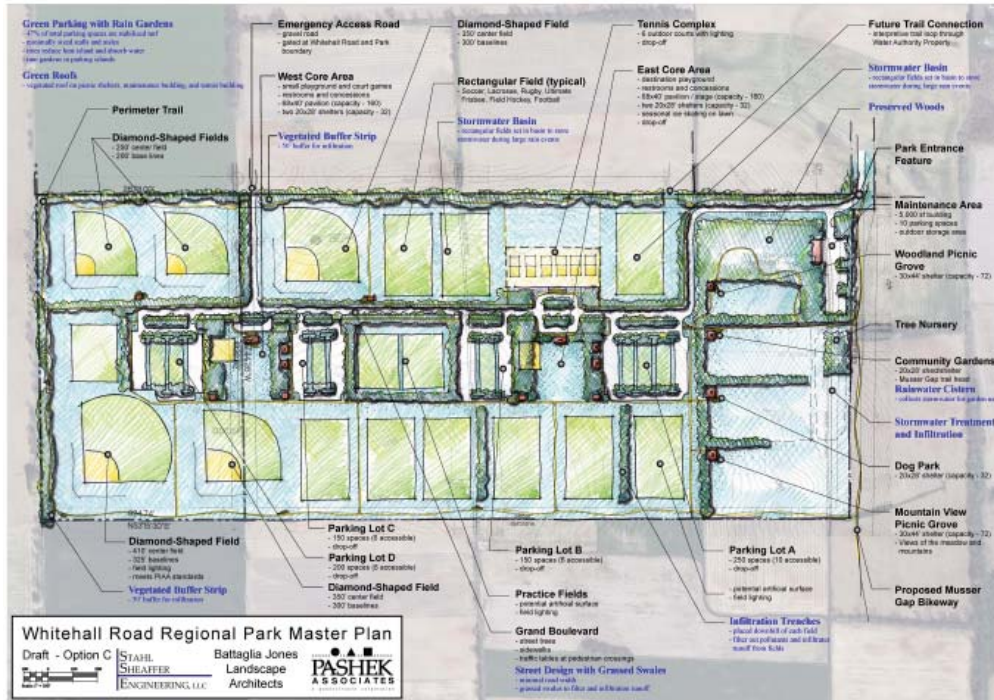
OPTION B

- A second building is included on the site of the central practice field for multi-purpose use.



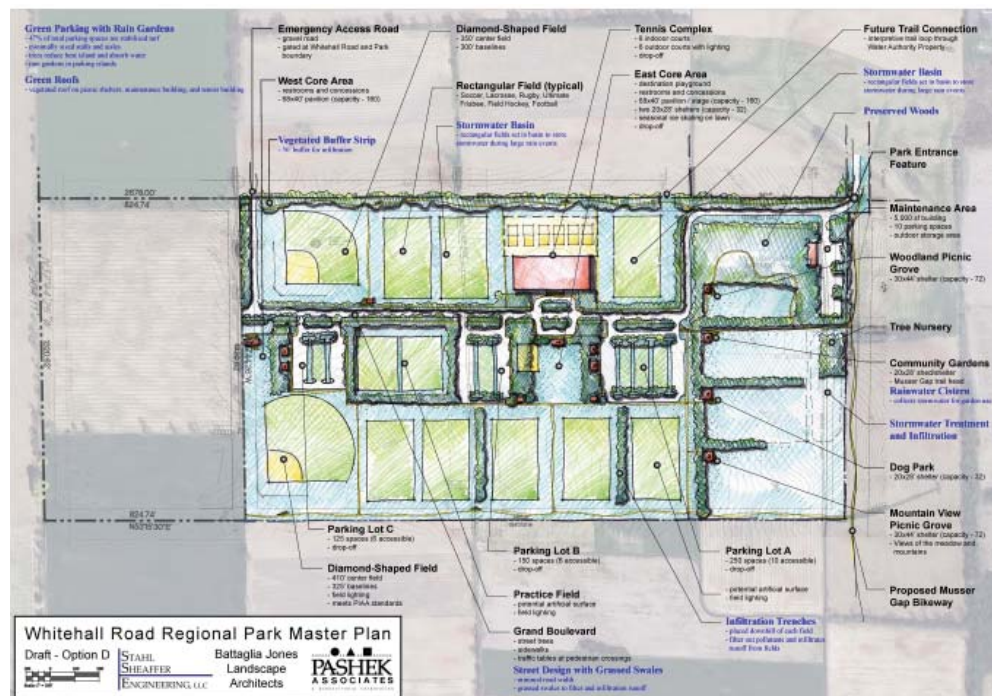
OPTION C

- This plan is the same as option A with no buildings.



OPTION D

- This plan illustrates an arrangement if the 25-acre option site is not available, and the park size is limited to the 75-acre parcel.
- Two diamond fields are located on the west side of the site, eight rectangular fields are included and one practice field.
- Parking is reduced to 525 spaces.
- The west core area is reduced to restrooms, concessions and picnicking.
- Other aspects of this option are similar to options A,B, and C.



PARKING STANDARDS

Parking must be considered for almost every recreation facility. It would not be feasible to provide the amount of formal parking required for peak use events, such as Softball or Baseball tournaments, July 4th festivities, or other large public gatherings. The COG would be investing substantial funds in capital improvements that would only be utilized a few times each year. Excess parking facilities occupy space that could be used for the development of other recreational facilities. Further, “proper sizing” of parking spaces also minimizes impervious surface and reduces storm run-off. Dimensions for parking spaces proposed in Concept Plans, the Draft Master Plan, and Final Master Plans are detailed in an earlier chapter.

Parking Standards for this study were estimated using standards from Pashek Associates’ prior experience with similar projects. The highest possible use rate by players and spectators at any facility is its peak use. A facility’s daily use is 60% of its peak use. Parking should accommodate average daily use while providing opportunity for overflow parking to meet peak use event needs. Parking standards for this study were figured from the daily use rate assuming 2.5 persons per car. Parking for some facilities may vary from this formula, as users may arrive with a higher frequency.

FINAL MASTER PLAN DESCRIPTION

GOALS

The final Master Plan reflects the following project goals:

- Environment – Conserve and enhance natural conditions and features.
- Community – Respond to conditions and needs of adjacent and regional community.
- Program – Accommodate a logical mix and quantity of park uses.
- Economics – Maximize relationship between cost and benefits to community.
- Identity – Create a dignified and beautiful park space that improves over time.

PROCESS OF REFINEMENT

The final Master Plan was resolved after consideration of the various Draft Master Plan options with the project committee, the public and Centre Region staff. The Master Plan is a refinement of Draft Master Plan Option 3.

Refinement of the Draft Master Plan included consideration of preliminary grading studies, cost factors, and future flexibility.

ACCESS, CIRCULATION, WASTEWATER, STORMWATER

Access from Whitehall Road Regional Parklands to the northeast corner of the site proceeds to a central boulevard that provides access to the park uses and parking. Pedestrian circulation connects interior uses with a perimeter trail and the regional bike path. A sewer line connects restrooms to a pump station near the entrance. Stormwater will be accommodated in a balanced system of infiltration and athletic fields that double as basins.

ACTIVE RECREATION AREAS

Emphasis on nine rectilinear fields is balanced by a tennis complex and five diamond fields. A centrally located practice field is positioned between two core Greens that provide services including restrooms and concessions. These core areas are also spaces that accommodate play, performance, winter activities and civic functions.

If the 25-acre parcel is not acquired, one full size baseball field will be moved onto the 75-acre tract, rather than having two rectangular fields on that parcel.

COMPLEMENTARY USES

Opportunities for other uses include trails for walking, community gardens, a dog park, and picnic groves with dramatic valley views. A maintenance facility and tree nursery provide support services.

SPATIAL ORGANIZATION

The existing site is open with dramatic distant views. The park is organized to respond to these conditions by creating a rectilinear pattern of outdoor rooms that connect directly to the adjacent agricultural context of Nittany Valley. Proposed rows of trees extend the existing forest block to provide a pattern for the roads, walkways and athletic fields. The Master Plan attempts to create a beautiful, unified space that will satisfy athletic and passive needs and add to the enjoyment of park users.

Table 1. Trip Generation Estimates
Whitehall Road Regional Park Master Plan
Ferguson Township, Centre County

Land Use	Land Use / Unit Intensity	Entering Trip Generation Rate Per Unit	Exiting Trip Generation Rate Per Unit	P.M. Peak Hour Total New Trips		
				IN	OUT	TOTAL
Regional Park - Phase I	75 ACRES					
Soccer Fields ⁽¹⁾	9 Fields	23.00	8.05	207	72	279
Baseball Fields ⁽¹⁾	2 Fields	27.00	9.45	54	19	73
Tennis Courts ⁽¹⁾	12 Courts	2.00	0.70	24	8	32
Common Parkland ⁽²⁾	34 Acres	0.21	0.38	7	13	20
TOTAL NEW TRIPS PHASE I				292	112	404
Regional Park - Phase II	25 ACRES					
Soccer Fields ⁽¹⁾	2 Fields	23.00	8.05	46	16	62
Baseball Fields ⁽¹⁾	3 Fields	27.00	9.45	81	28	109
Common Parkland ⁽²⁾	5 Acres	0.21	0.38	1	2	3
TOTAL NEW TRIPS PHASE II				128	46	174
Grand Total (Phase I+Phase II)				420	158	578

TRAFFIC MASTER PLANNING

TRIP GENERATION

Trip generation estimates for the P.M. peak hour of traffic were developed for the proposed Whitehall Road Regional Park Master Plan (dated 12/7/09). New trip estimates are shown in Table 1. The trip generation rates were developed from a combination of local trip-making assumptions and data included in the Institute of Transportation Engineers (ITE) *Trip Generation* manual. Local trip making assumptions for soccer fields, baseball fields, and tennis courts were adopted as documented in *Need and Design for Eastbound Whitehall Road Right-Turn Lane at Blue Course Drive* Memo, Dated May 1, 2009. Since a majority of the parkland is anticipated to be used by organized sports groups, no reductions in trip generation are assumed due to pedestrian, bicycle, or transit (bus) trips. The impact of pedestrian, bicycle, and transit (bus) trips to the site is assumed negligible for the purposes of conservatively analyzing vehicular impacts on adjacent intersections.

TRIP DISTRIBUTION

Peak hour trip distribution is shown in Figure 1. The trip distribution is based upon existing traffic patterns at the intersection of Blue Course Drive & Whitehall Road and reflects the following:

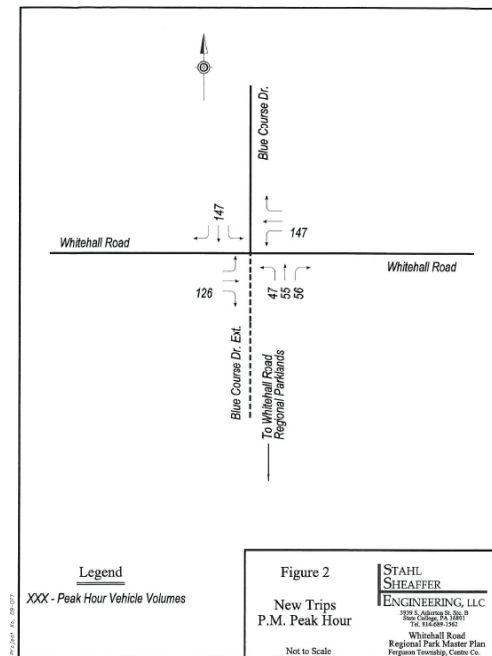
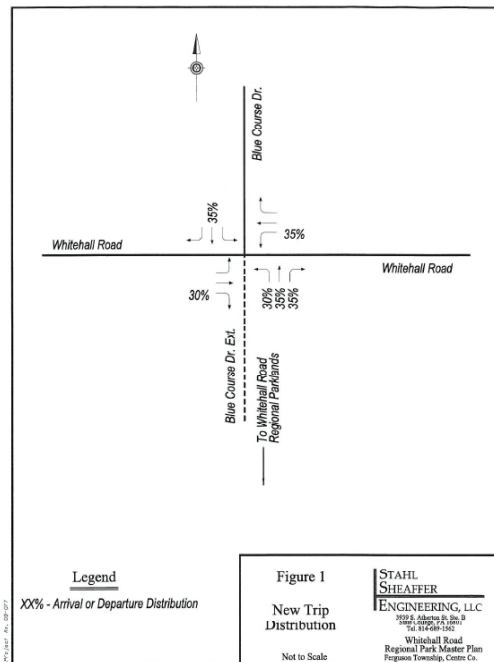
New trips to / from the west on Whitehall Road: 30%

New trips to / from the east on Whitehall Road: 35%

New trips to / from the north on Blue Course Dr.: 35%

NEW TRIPS DUE TO WHITEHALL ROAD REGIONAL PARK

The trip distribution estimates from Figure 1 were applied to the new trips estimated in the trip generation task to produce the new trip volumes for the P.M. peak hour for the Whitehall Road Regional Park (Figure 2).



RIGHT TURN LANE LENGTH (EASTBOUND WHITEHALL ROAD)

Based upon the Memo, *Need and Design for Eastbound Whitehall Road Right-Turn Lane at Blue Course Drive*, Dated May 1, 2009, a right turn lane on eastbound Whitehall Road will meet the warrants for installation based on criteria in PennDOT Publication 46, *Traffic Engineering Manual*. The anticipated design requirements for an eastbound left turn lane on Whitehall Road are as follows:

Storage Length = 200 feet;

Taper Length = 60 feet

Buffer Length = 30 feet

PRELIMINARY OPINION OF PROBABLE COSTS

A detailed cost estimate for the construction of an eastbound right turn lane is provided in Table 2. A summary of anticipated construction and engineering costs are provided below:

Traffic Impact Study for Whitehall Road Regional Park - \$15,000

Eastbound Right Turn Lane for Whitehall Road

Engineering – \$15,000

Construction – \$92,000*

Signalization of Blue Course Drive Extension

Engineering – \$5,000

Construction – \$20,000*

*Does not include right-of-way or utility relocation costs

STORMWATER MANAGEMENT PLANNING

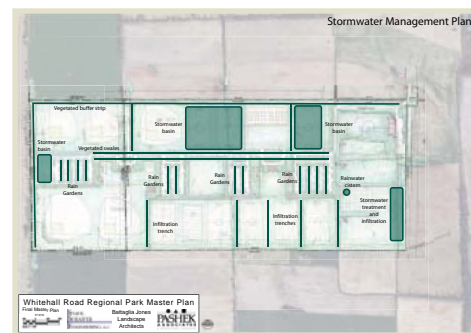
This narrative is presented to summarize the means of stormwater management for the proposed Whitehall Road Park Master Plan located in Ferguson Township, Centre County. The park master plan includes the recreational improvements including athletic fields, tennis courts, volleyball, indoor tennis and playground areas. The park will also provide areas for community gardens, picnic pavilions, and walking paths. Other buildings include restrooms and a maintenance facility.

The proposed site is located on an existing 75 acre parcel of agricultural land currently used for crop farming. The overland slopes across the property average 3 to 8 percent and direct runoff through several closed depressions and offsite to Slab Cabin Run. A site investigation revealed no evidence of concentrated flows in or around the existing property. Due to the large acreage of cropland and shallow depressions, it is assumed that limited stormwater runoff currently leaves this site. There are no identified wetlands on the site.

The soils found on the site are of the Hagerstown and Nolin series. The Hagerstown series is a well drained, silty clay loam with a shallow bedrock depth and moderately slow permeability. The Nolin series is a well drained local alluvium with a very deep bedrock depth and moderate permeability and is located along the northern property boundary with the State College Water Authority property.

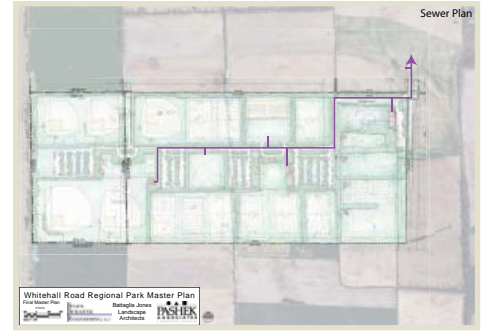
The proposed parkland development includes approximately 8 acres of new impervious surfaces. These surfaces include roof area, paved driveways, paved parking areas, and outdoor tennis courts. A large portion (up to 50%) of the proposed parking will be pervious by using grass pavers, gravel pavers, and/or pervious paving blocks.

The additional runoff generated by the increase in impervious area will originate from various locations throughout the park. In general, the stormwater maintenance for this site will include numerous separate retention and infiltration facilities in order to manage impervious runoff at the locations where it is being generated. Shallow open swales along the buffers will be incorporated along with infiltration trenches between certain athletic fields, paved driveways, and parking areas. The estimated storage necessary to address Ferguson Township ordinance requirements is approximately 2.5 acre – ft of water volume. Although the various small retention areas will most likely address individual runoff generators such as a restroom roofs, etc, they will not be able to handle the anticipated flows from large impervious areas. Therefore, several larger, conventional retention and/or detention facilities are proposed at key locations. Athletic fields on either side of the tennis facility are proposed to also serve as shallow basins. In addition, a large water quality and recharge/detention facility is planned for the lower portion of the site below the nursery and community gardens. In accordance with DEP's BMP manual, the bioretention and detention areas will be designed to hold the additional volume generated during a 2 year design storm. These areas will also serve as both retention and detention facilities to address local ordinance requirements for the proposed increase in runoff.



SANITARY SEWER MASTER PLANNING

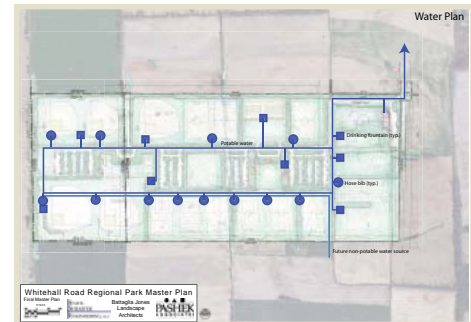
Based upon local sewer authority rate tables and the expected usage for the Whitehall Road Park, it is estimated that 5 EDU's will be required to service the park. This results in an average daily effluent of approximately 875 gallons. The two most feasible options for service include on site septic and connection to a municipal system. Due to possible limitations of the soils for use as drain fields, and the numerous locations that would require septic fields, the preferred option is connection to a municipal system. This option, however, will require the expansion of the regional sewer service area to include the parkland. It will also require a pump station in order to connect to the existing gravity system at Whitehall Road. This pump station will also be required for the future multi-family residential development planned for the adjacent site between the parkland and Whitehall Road.



The most practical location for the pump station is at a low point within the future residential property. It is recommended that the park sewage infrastructure is built and connected to a holding facility near the park maintenance facility until the residential property is developed and the pump station is installed. The park sewage infrastructure will consist of a main collection line with manholes that will follow the entrance drive. Laterals with cleanouts will connect each facility requiring service to this main collection line.

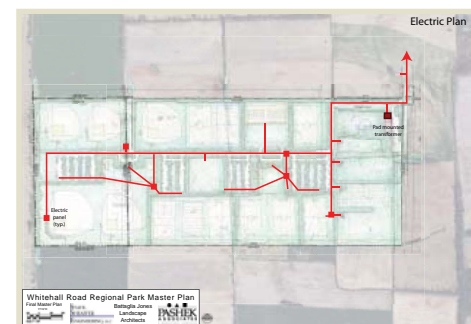
WATER SERVICE MASTER PLANNING

Water service is anticipated to be from the public source along Whitehall Road. A distribution system will be installed through the entrance easement and along the main entrance drive. Laterals will be installed to serve each of the facilities (restrooms, fountains, hose bibs, and maintenance). A parallel distribution line is proposed along the southern line of athletic fields to provide service for irrigation. This second line may be physically disconnected from the potable water system in the future if the beneficial reuse water source becomes available near the park.



ELECTRIC SERVICE MASTER PLANNING

Underground electric service is anticipated to be supplied from a private utility along Whitehall Road. A distribution system is proposed that will include a main transformer panel and several subpanels in order to efficiently distribute power throughout the site. Facilities requiring power include: ballfield and athletic field lighting (2 locations), outdoor tennis courts and future indoor tennis building, restrooms, pavilion lighting, main entrance drive street lights, and the maintenance area.



ACCESSIBILITY IN THE MASTER PLAN

Although all facilities receiving public funding are required to meet ADA requirements, the following is a list of accessible notes that were part of the discussion leading to the final master plan:

1. One of the smaller diamond shaped fields would be constructed to meet the needs of a “Challenger” program. This would include artificial surfacing.
2. All parking areas will include accessible parking. Although the intent for the foreseeable future is for aggregate surfacing for roads and some parking, the accessible spaces would be a bituminous paving surface. Parking spaces will have a maximum 2% slope in both directions.
3. The parking areas and streets will not have curbs. Therefore, there will be no need to include any curb ramps.
4. All buildings will be fully accessible.
5. All of the facilities will be fully accessible including accessible routes to every facility, including players benches at all fields.
6. In picnic areas, some of the tables will have overhangs to accommodate wheel chairs. Where benches or stands exist, additional surfacing will be provided for wheel chair bound spectators to sit next to someone in the stands or on a bench.
7. All walks and trails will be graded to 5% or less with a maximum 2% cross slope.

Green Parking with Rain Gardens

- 47% of total parking spaces are stabilized turf
- minimally sized stalls and aisles
- trees reduce heat island and absorb water
- rain gardens in parking islands

Green Roofs

- vegetated roof on picnic shelters, restroom / concession stands, and maintenance building

Perimeter Trail

- 8' wide, aggregate surface
- 1.7 miles long

Diamond-Shaped Fields

- 250' center field
- 200' base lines
- one could be challenge field

Emergency Access Road

- gravel road
- gated at Whitehall Road and Park boundary

West Core Area

- small playground and court games
- restrooms and concessions
- 68x40' pavilion (capacity - 160)
- one 20x28' shelters (capacity - 32)

Vegetated Buffer Strip

- 50' buffer for infiltration of stormwater

Diamond-Shaped Field

- 350' center field
- 300' baselines

Rectangular Field (typical)

- Soccer, Lacrosse, Rugby, Ultimate Frisbee, Field Hockey, Football

Stormwater Basin

- rectangular fields set in basin to store stormwater during large rain events

Tennis Complex

- 6 outdoor courts with lighting
- drop-off
- future phase tennis building

East Core Area

- destination playground
- restrooms and concessions
- 68x40' pavilion / stage (capacity - 160)
- two 20x28' shelters (capacity - 32)
- drop-off
- seasonal ice skating on lawn
- amphitheater lawn with shelter as stage area

Future Trail Connection

- interpretive trail loop through Water Authority Property

Stormwater Basin

- rectangular fields set in basin to store stormwater during large rain events

Preserved Woods

- Future Sewer Pump Station
- Park Entrance Feature

Maintenance Area

- 5,000 s/f building
- 10 parking spaces
- outdoor storage area
- temporary sewage holding tank

Woodland Picnic Grove

- 30x44' shelter (capacity - 72)

Tree Nursery

Dog Park

- 20x28' shelter (capacity - 32)

Stormwater Treatment and Infiltration

Community Gardens

- 20x28' shed/shelter
- Musser Gap trail head
- Rainwater Cistern
- collects stormwater for garden use

Mountain View

- 30x44' shelter (capacity - 72)
- Views of the meadow and mountains

Proposed Musser Gap Bikeway

Parking Lot A

- 245 spaces (10 accessible)
- drop-off
- perimeter parking - aggregate surface
- internal parking - stabilized turf
- potential artificial surface
- field lighting

Infiltration Trenches

- placed downhill of each field
- filter out pollutants and infiltrates runoff from fields

Parking Lot B

- 140 spaces (6 accessible)
- drop-off
- perimeter parking - aggregate surface
- internal parking - stabilized turf

Practice Fields

- potential artificial surface
- field lighting
- potential location for future phase multi-purpose building

Grand Boulevard

- street trees
- sidewalks
- traffic tables at pedestrian crossings
- Street Design with Grassed Swales
- minimal road width
- grassed swales to filter and infiltrate runoff

Parking Lot C

- 140 spaces (6 accessible)
- drop-off
- perimeter parking - aggregate surface
- internal parking - stabilized turf

Parking Lot D

- area for potential large diamond field if 25 acre parcel is not acquired
- 185 spaces (8 accessible)
- drop-off
- perimeter parking - aggregate surface
- internal parking - stabilized turf

Diamond-Shaped Field

- 350' center field
- 300' baselines

Diamond-Shaped Field

- 410' center field
- 325' baselines
- field lighting
- meets PIAA standards

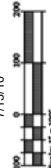
Vegetated Buffer Strip

- 50' buffer for infiltration

Whitehall Road Regional Park Master Plan

Final Master Plan

7/13/10

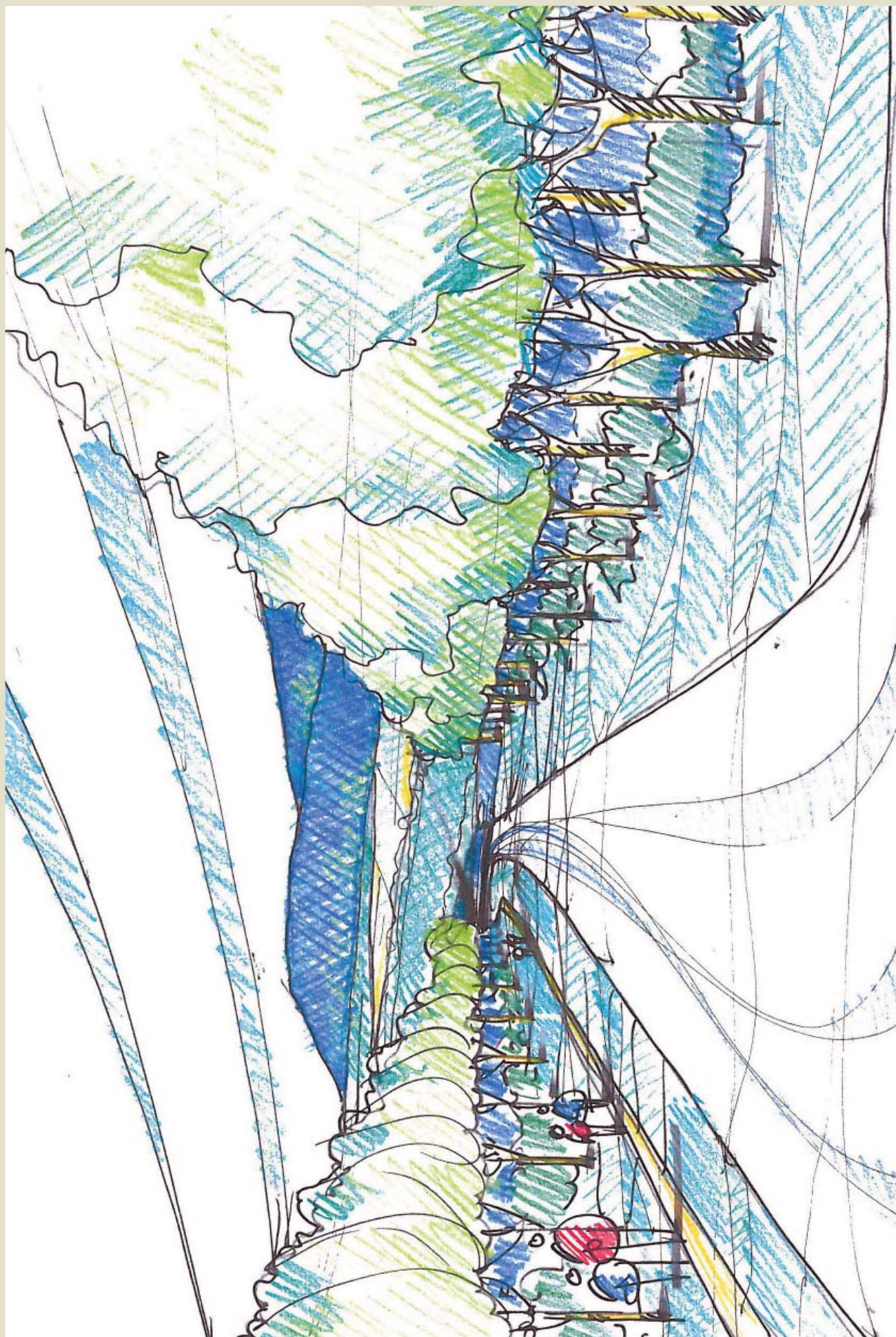


Battaglia Jones
Landscape Architects

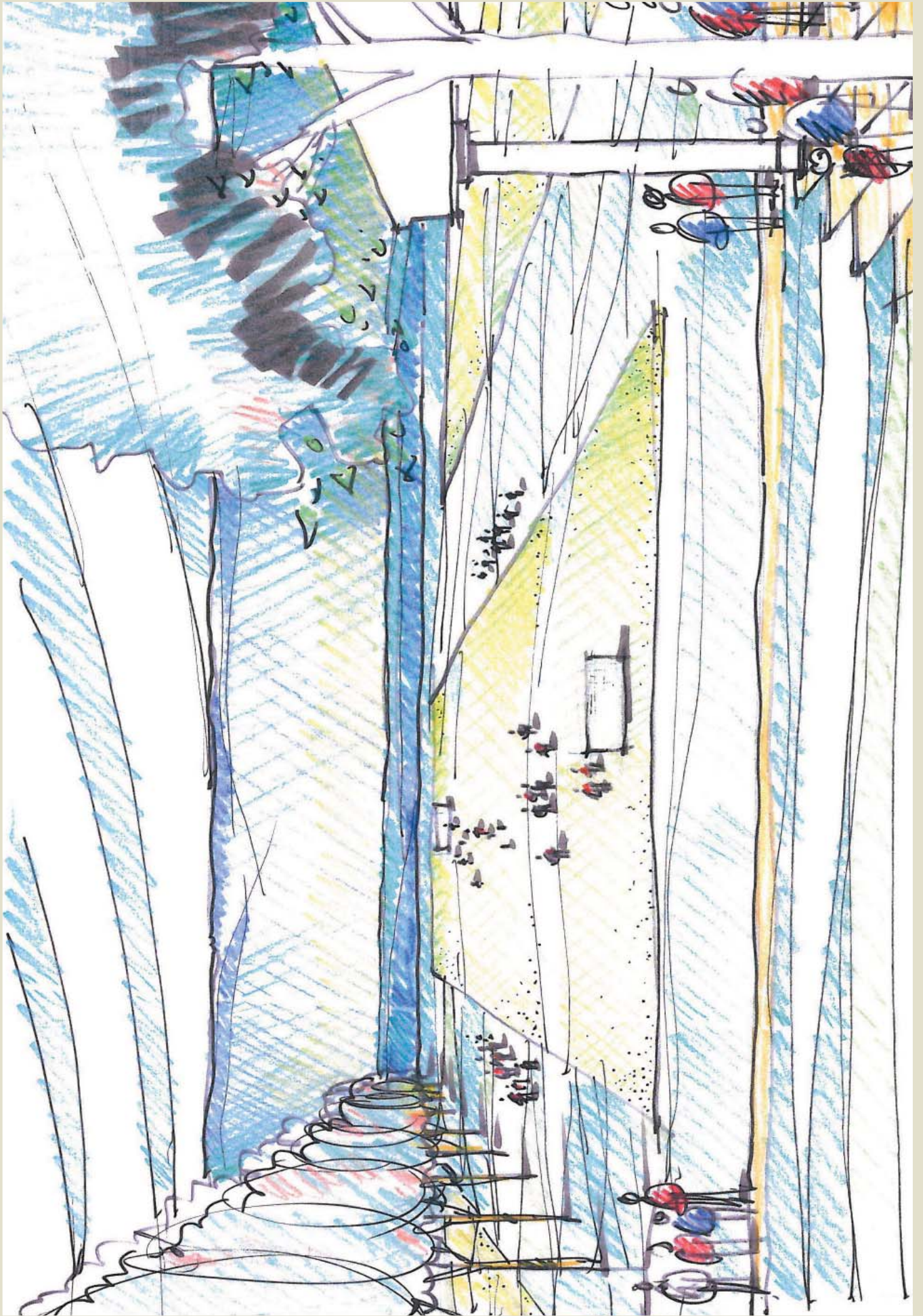
STAHL
SHEAFFER
ENGINEERING, LLC



PARK ROAD BOULEVARD



VIEW FROM PICNIC SHELTER



STORMWATER CISTERN AND COMMUNITY GARDENS



PARKING, BIOSWALE, AND STABILIZED TURF



Chapter 6: Cost Estimates & Financing

Chapter 6: Cost Estimates & Financing

COST ESTIMATE FOR DEVELOPMENT

Pashek Associates developed an opinion of probable construction costs for the proposed site improvements, based on the assumption that the implementation of the facilities will occur through a public bidding process, utilizing the Prevailing Wage Rates. To budget for inflation of costs for future improvements, we recommend a four percent (4%) annual increase be budgeted for all work occurring after 2010.

In Pennsylvania, all projects over \$25,000 are required to use the State's Prevailing Wage Rates for Construction. However, volunteer labor, as well as donated equipment and materials, may reduce construction costs. Centre Region Parks and Recreation may choose to construct some of the facilities utilizing volunteer and/or donated labor or materials. Additionally, alternate sources of funding, including grant opportunities identified herein, may help to offset the expense to the CRPR.

Based on these requirements, the opinion of probable construction cost to implement all of the improvements being proposed at Whitehall Road Regional Parklands is summarized as follows:

Whitehall Road Regional Parkland Master Plan				
PROPOSED MASTER PLAN - Opinion of Probable Construction Costs				
ENTRANCE				
Item / Recommendation	Quantity	Unit	Unit Cost	Total Item Cost
Minor Excavation (2 locations)	1	LS	\$20,000	\$20,000
Minor Removals (emergency exit)	1	LS	\$3,000	\$3,000
Aggregate entrance road	2900	SY	\$25	\$72,500
Aggregate emergency exit road	2800	SY	\$25	\$70,000
Entrance sign and other wayfinding signs / regulatory signs	1	LS	\$5,000	\$5,000
Traffic control signs / wayfinding signs / gate at emergency entrance	1	LS	\$5,000	\$5,000
Eastbound Right Turn Lane	1	LS	\$92,000	\$92,000
Signalization at Blue Course Road	1	LS	\$20,000	\$20,000
Traffic Study	1	LS	\$15,000	\$15,000
Utility - Water - 8” line	30	LS	\$1,100	\$33,000
Utility - Electric/telephone	10	LF	\$1,100	\$11,000
Utility - Sanitary - none, using holding tank on interim basis.				
E&SC / stormwater management / OH / 10% contingency				\$34,650
Add 10% for design, permitting and approvals				\$38,115
TOTAL FOR TEMPORARY ENTRANCE RD AND PERMANENT EMERGENCY EXIT TO WHITEHALL RD				\$419,265

Whitehall Road Regional Parkland Master Plan

PROPOSED MASTER PLAN - Opinion of Probable Construction Costs

PHASE 1

Item / Recommendation	Quantity	Unit	Unit Cost	Total Item Cost
Excavation	290500	CY	\$5	\$1,452,500
Park road (20' wide crushed stone surface)	9000	SY	\$25	\$225,000
Parking (aggregate surface - 60' wide isles, 20' wide lanes)	12510	SY	\$25	\$312,750
Parking (turf stabilized - 60' wide isles, 20' wide lanes)	8340	SY	\$25	\$208,500
Parking maintenance area (aggregate surface)	3000	SY	\$25	\$75,000
Perimeter pathway 8' wide aggregate trail	3600	SY	\$20	\$72,000
Interior pathways / walks - 5' wide aggregate	7000	SY	\$20	\$140,000
Shelter - East Core Area 68'x40'	1	EA	\$175,000	\$175,000
Shelter - Soccer Fields 20'x28' (with equipment storage)	3	EA	\$60,000	\$180,000
Restroom / Storage / Concessions (25'x50') x 1	1250	SF	\$100	\$125,000
Maintenance building	1200	SF	\$110	\$132,000
Covered storage for equipment	1000	SF	\$50	\$50,000
Security fencing around maintenance area	1400	LF	\$50	\$70,000
Community playground	1	LS	\$275,000	\$275,000
Large baseball field with dugouts, stands, clay infield mix, fencing, shelter	1	LS	\$117,000	\$117,000
Basketball court	1	EA	\$40,000	\$40,000
Soccer goals and player benches	7	LS	\$5,000	\$35,000
Irrigation	9	EA	\$20,000	\$180,000
Electrical distribution - underground electrical	3750	LF	\$40	\$150,000
Electrical distribution - transformers	5	EA	\$3,000	\$15,000
Water distribution - water main	5850	LF	\$50	\$292,500
Water distribution - laterals	1575	LF	\$35	\$55,125
Water distribution - meter pits	4	EA	\$3,500	\$14,000
Water distribution - hydrants	2	EA	\$2,500	\$5,000
Sanitary - sewer lines	2025	LF	\$100	\$202,500
Sanitary - laterals	565	LF	\$60	\$33,900
Sanitary - manholes	5	EA	\$2,500	\$12,500
Sanitary - sewage holding tank	1	EA	\$20,000	\$20,000
Perimeter, light duty fence	4200	LF	\$5	\$21,000
Security lighting along streets and in parking areas	44	EA	\$5,000	\$220,000
Wayfinding directional and regulatory signs	1	LS	\$15,000	\$15,000
Miscellaneous plaza paving	600	SY	\$80	\$48,000
Miscellaneous site amenities including picnic tables, benches, and trash receptacles	1	LS	\$32,000	\$32,000
Seeding	42	AC	\$5,000	\$210,000
Trees	234	EA	\$250	\$58,500
<i>E&SC / stormwater management / OH / 10% contingency</i>				<i>\$526,978</i>
<i>Add 10% for design, permitting and approvals</i>				<i>\$579,675</i>
TOTAL FOR PHASE 1				\$6,376,428

Whitehall Road Regional Parkland Master Plan

PROPOSED MASTER PLAN - Opinion of Probable Construction Costs

PHASE 2

Item / Recommendation	Quantity	Unit	Unit Cost	Total Item Cost
Restroom / Storage / Concessions (25'x50') x 1	1250	SF	\$100	\$125,000
Shelter - Lacrosse Field 20'x28' (with equipment storage)	1	EA	\$60,000	\$60,000
Lacrosse and football goals and player benches	1	LS	\$20,000	\$20,000
Outdoor tennis courts, color coated, 10ft perimeter fence	6	EA	\$60,000	\$360,000
Tennis court lighting	6	EA	\$15,000	\$90,000
Trees, shrubs, perennials, and seeding	1	LS	\$5,000	\$5,000
Irrigation	2	EA	\$20,000	\$40,000
<i>E&SC / stormwater management / OH / 10% contingency</i>				<i>\$70,000</i>
<i>Add 10% for design, permitting and approvals</i>				<i>\$77,000</i>
TOTAL FOR PHASE 2				\$847,000

Whitehall Road Regional Parkland Master Plan

PROPOSED MASTER PLAN - Opinion of Probable Construction Costs

PHASE 3

Item / Recommendation	Quantity	Unit	Unit Cost	Total Item Cost
Excavation	155000	CY	\$4	\$620,000
Park road (20' wide crushed stone surface)	2560	SY	\$25	\$64,000
Parking (aggregate surface - 60' wide isles, 20' wide lanes)	3600	SY	\$25	\$90,000
Parking (turf stabilized - 60' wide isles, 20' wide lanes)	4500	SY	\$25	\$112,500
Perimeter pathway 8' wide aggregate trail	2700	SY	\$20	\$54,000
Interior pathways / walks - 5' wide aggregate	2000	SY	\$20	\$40,000
Shelter - West Core Area 68'x40'	1	EA	\$175,000	\$175,000
Shelter - Playground - 20'x28' (with equipment storage)	1	EA	\$60,000	\$60,000
Shelter - Baseball Field - 20'x28' (with equipment storage)	1	EA	\$60,000	\$60,000
High school-sized baseball field with all support structures, including: fencing, stands, scoreboard, dugouts, irrigation, lighting, warning track	1	LS	\$232,000	\$232,000
JV-sized baseball field with all support structures, including: fencing, stands, scoreboard, dugouts, irrigation, lighting, warning track	1	LS	\$143,000	\$143,000
Large baseball field with dugouts, stands, clay infield mix, fencing, shelter	2	LS	\$117,000	\$234,000
Sand volleyball courts	2	EA	\$25,000	\$50,000
Irrigation	4	EA	\$20,000	\$80,000
Electrical distribution - underground electrical	1250	LF	\$40	\$50,000
Electrical distribution - transformers	2	EA	\$3,000	\$6,000
Water distribution - water main	1950	LF	\$50	\$97,500
Water distribution - laterals	525	LF	\$35	\$18,375
Sanitary - sewer lines	675	LF	\$100	\$67,500

Sanitary - laterals	185	LF	\$60	\$11,100
Sanitary - manholes	2	EA	\$2,500	\$5,000
Security lighting along streets and in parking areas	14	EA	\$5,000	\$70,000
Perimeter, light duty fence	3000	LF	\$5	\$15,000
Seeding	19	AC	\$5,000	\$95,000
Trees	60	EA	\$250	\$15,000
<i>E&SC / stormwater management / OH / 10% contingency</i>				\$246,498
<i>Add 10% for design, permitting and approvals</i>				\$271,147
TOTAL FOR PHASE 3				\$2,982,620

Whitehall Road Regional Parkland Master Plan

PROPOSED MASTER PLAN - Opinion of Probable Construction Costs

PHASE 4

Item / Recommendation	Quantity	Unit	Unit Cost	Total Item Cost
Interior pathways / walks - 5' wide aggregate	1100	SY	\$20	\$22,000
Fencing around dog park and community garden	2800	LF	\$50	\$140,000
Shelter - Dog Park 20'x28' (with equipment storage)	1	EA	\$60,000	\$60,000
Shelter - Woodland Grove & Mountain View picnic groves 30'x44'	2	EA	\$100,000	\$200,000
Artificial surface for one rectangular field with fencing and gates	1	LS	\$600,000	\$600,000
Artificial lighting for on diamond-shaped field	1	LS	\$600,000	\$600,000
Lighting for one rectangular field	1	LS	\$160,000	\$160,000
Perimeter, light duty fence	1700	LF	\$5	\$8,500
Composting bins	1	LS	\$5,000	\$5,000
Cistern pump for garden irrigation and hose bibs	1	LS	\$20,000	\$20,000
Seeding	4	AC	\$5,000	\$20,000
Trees	90	EA	\$250	\$22,500
Shrubs & perennials	1	LS	\$15,000	\$15,000
<i>E&SC / stormwater management / OH / 10% contingency</i>				\$187,300
<i>Add 10% for design, permitting and approvals</i>				\$206,030
TOTAL FOR PHASE 4				\$2,266,330

Entrance	\$419,265
Phase 1	\$6,376,428
Phase 2	\$847,000
Phase 3	\$2,982,620
Phase 4	\$2,266,330
Total	\$12,891,643

PHASING

Ideally, the COG would construct all park improvements in one phase, minimizing construction activities, disruptions, and realizing “economies of scale” construction savings. However, few municipalities or organizations can afford to proceed in this manner and find it more appropriate to phase construction over a period of time.

The total cost of the park as currently proposed is \$12,810,100.

To determine Phasing, we needed to approach a strategy informed by:

- the amount the municipalities were willing to fund in the first phase, and subsequent phases;
- the highest priority facilities
- construction efficiencies like bulk excavation economies of scale, underground work in preparation for surface improvements and need to complete E&SC and Stormwater management improvements early in the project.

FUNDING COMMITMENT

This has been one of the most challenging aspects of the master planning process, getting unanimous agreement of the five municipalities on how much to commit to funding a loan for first phase development of the parks. Although contentious at times, significant agreement was reached on a variety of issues related to funding. The agreement among all five municipalities included:

- Regional Park development is needed
- Public funds should be invested in the development of regional parks
- Full build out with a single borrowing is unaffordable
- Hess Field should be acquired
- Oak Hall Master Plan is approved
- The Whitehall Road Regional Parklands Master Plan is nearing approval
- A Master Plan for Hess Field was initiated
- First Phase development should include improvements at all three parks

At the beginning of the discussion on financing and phasing development at the regional parks, there was a wide range of opinions among the municipalities on the level of funding that should take place.

They ranged from maintaining the current commitment from the five municipalities of \$367,693 per year to financing the entire estimated cost for development of all three parks, a construction cost of \$18,730,100.

To better understand these options, a spreadsheet was developed assuming four strategies:

- Pay for everything and finance development we referred to this as the “Everything – Issue Bonds” scenario
- Develop Sports Fields only and defer all other park development, referred to as the “Sports Fields Only – Issue Bonds.”
- Develop everything but use only the money currently committed by the municipalities, referred to as “Everything – Pay As You Go”
- Develop Sports Fields Only and use the money currently committed by the five municipalities, referred to as “Sports Fields Only – Pay As You Go.”

Under the Issuing Bonds strategies, the following were suggested as possible increases in annual payments to cover the financing costs (assume interest rate of 4.25%, inflation rate of 3% and bond terms of 20 years).

Municipality	Current Annual Commitment	Everything Annual Commitment Increase (years 3-20)	Sports Fields Only Annual Commitment Increase (years 3-20)
State College	\$97,007	\$224,475	\$145,097
College Township	\$75,292	\$174,226	\$112,617
Ferguson Township	\$93,224	\$215,721	\$139,438
Patton Township	\$72,341	\$167,398	\$108,203
Harris Township	\$29,829	\$69,025	\$44,616
Annual total	\$367,693	\$850,845	\$549,971

Under the Pad As You Go scenarios, we estimated how long it would take to complete the master plan for Whitehall Road, relying on the current allocation of funds each year from the municipalities and using the same inflation rate.

Everything – 88 years to complete
Sports Fields Only – 50 years to complete

The purpose of this analysis was not to suggest a winning strategy but to begin a dialogue as to what is acceptable in terms of financial commitment to this project by each of the five municipalities. It became clear that some financing would be required to develop the parks in a reasonable time line.

Concurrently with this analysis, we interviewed Jerry Andree, Cranberry Township (Butler) Manager regarding their new park facility. They had just developed a sports complex through a combination of fund raising and borrowing. The following chart describes their financing cash flow for the park.

Graham Park Financing	
Mashuda Corp. (In-kind services)	\$1 Million
Dick's Sporting Goods	\$1 Million
Athletic Associations	\$1.25 Million
Township Bond	\$10 Million
Grants from DCNR	\$0.75 Million
Total	\$14 Million



Through the spring of 2010, each municipality identified their comfort level with borrowing based on all of the other municipal needs and revenues they face. This increased funding for parks may result in increased taxes. These were not easy decisions. How much to finance the first phase of development was the focus of many discussions once the total cost of all three parks was estimated. Everyone wanted development to occur in all three parks and to focus on getting as many fields developed as possible. The barrier was an agreement among the municipalities on how much to finance.

To better understand how funding impacted development, the cost estimate was reconfigured, to show how much development could occur based on various funding scenarios suggested by several municipalities. We started in February looking at a development plan for the three parks based on an \$8,100,000 Capital Improvements program for all three parks. We were then asked to look at the impact of development of fields and trails with a total budget for all three parks of \$5,500,000 and \$10,100,000. This strategy assigned the following amounts to each park:

Oak Hall	\$ 2,437,659	\$ 2,437,659
Hess Field	\$ 500,000	\$ 500,000
Whitehall Road	\$ 2,563,341	\$ 7,162,341
	\$ 5,500,000	\$10,100,000

The numbers did not tie specifically to facility development. So another analysis was developed that tied directly to which facilities would be constructed under several strategies. For this analysis, we looked at a \$12,000,000 construction budget for all three parks (a \$10,000,000 loan) and a \$9,000,000 construction budget (a loan of \$7,000,000). The following matrix identifies which facilities included in the master plan for Whitehall Road, would be developed under each funding scenario.

Facility	Original Plan	\$12,000,000 development based on \$10,000,000 loan	\$9,000,000 development based on \$7,000,000 loan
Earthwork/ESC/Storm		(1)	(1)
Interior Park Road		(1)	(1)
Parking		(1)	(1)
Sewage/Electric/Water		(1)	(1)
Temp. Entrance Road			
Diamond Shaped Fields		(2)	(2)
Trail from Musser Gap			
Perimeter Trail			(3)
Large Picnic Shelter		(3)	(3)
Small Picnic Shelter			(3)
Group Picnic Shelter			(3)
Dog Park			
Community Garden			
Playground			
Maintenance Building			
Outdoor Tennis Courts			(3)
Restroom/Concessions		(3)	(3)
Baseball Upgrades			
Basketball/V-ball Courts			
Artificial Surface/Lighting			
Other Items Not Included		(3)	

- (1) Within the 75-acre parcel
(2) Surface facilities for 1 field
(3) 50% of facilities proposed

What evolved towards the end of the planning process was:

- College, Ferguson and Harris Townships supporting a \$10,000,000 loan
- Patton Township will support a borrowing that requires payments of 1.5 of their current contributions.
- State College Borough supports more than a \$7,100,000 loan if municipal contributions can increase over time

The COG prepared a funding analysis for both \$7,100,000 and \$7,500,000 borrowing options and the impacts on the annual contribution of each municipality. The following chart illustrates those various cash flow options, adding length of loan as a second variable.

<i>Municipality:</i>	<i>Current Funding Level</i>	<i>% of Total</i>	<i>1.5 times Current Level</i>
Borough of State College	\$97,007.00	26.38%	\$145,510.50
College Township	\$75,292.00	20.48%	\$112,938.00
Patton Township	\$72,341.00	19.67%	\$108,511.50
Harris Township	\$29,829.00	8.11%	\$44,743.50
Ferguson Township	\$93,224.00	25.35%	\$139,836.00
	\$367,693.00	100.00%	

<i>Municipality:</i>	<i>2011 COG Formula</i>	<i>\$475,000.00</i>	<i>\$516,295.00</i>	<i>\$545,383.00</i>	<i>\$449,717.00</i>	<i>\$475,053.00</i>
Borough of State College	23.37%	\$111,007.50	\$120,658.14	\$127,456.01	\$105,098.86	\$111,019.89
College Township	18.11%	\$86,008.25	\$93,485.54	\$98,752.50	\$81,430.26	\$86,017.85
Patton Township	21.08%	\$100,130.00	\$108,834.99	\$114,966.74	\$94,800.34	\$100,141.17
Harris Township	9.40%	\$44,635.75	\$48,516.24	\$51,249.64	\$42,259.91	\$44,640.73
Ferguson Township	28.05%	\$133,223.25	\$144,805.26	\$152,963.57	\$126,132.13	\$133,238.11
	100.00%	\$475,004.75	\$516,300.16	\$545,388.45	\$449,721.50	\$475,057.75

Borrowing Scenario	Annual Amount
Borrowing 7.1 million @ 4% for 20 years	\$516,295.24
Borrowing 7.5 million @ 4% for 20 years	\$545,383.30
Borrowing 7.1 million @ 4% for 25 years	\$449,716.99
Borrowing 7.5 million @ 4% for 25 years	\$475,053.16

PRIORITY FACILITIES

The first phase of development needed to address the well documented shortage of sports fields. So funds were allocated for safety upgrades at Hess Field, the development of all three softball fields at Oak Hall and as many sports fields that could be built with the remaining funds at Whitehall Road Regional Parklands.

In addition, staff and several municipalities suggested several additional stipulations. They included:

- Oak Hall and Whitehall Road Regional Parklands having flush toilet restrooms available in the first phase
- The perimeter trails be developed at both Oak Hall and Whitehall Road Regional Parklands
- Phase One for Whitehall Road Regional Parklands should include the proposed maintenance facility

CONSTRUCTION EFFICIENCIES

1. Grading – although there are ways of attempting to balance the excavation in terms of cut and fill in smaller areas, the grading of the entire park area has significant advantages. This results in the most efficient cut/fill balance. Economies of scale are realized with the larger bulk excavation projects which lowers the cost of park development.

2. Erosion and Sedimentation Control and Stormwater Management – like grading, one can phase these measures. However, we are relying on stormwater detention along the lower sides of the park, areas that might not be in the first phase of development, requiring staged stormwater management that can become costly.
3. Underground utilities – there is nothing more frustrating than completing the construction of a new facility, only to have it torn up as you install underground utilities for a subsequent phase. We would suggest installing a gravity sewer line from the Restroom in the East Core Area to the location of the proposed Sewage Lift station, even if port-a-johns are used in the short term. Then, when the restrooms are built, there will not be any disruption to roads, parking or other facilities.

At the COG Forum on June 28, a phasing strategy was presented. It included:

- Oak Hall development costing about \$3,200,000 and included:
 - All grading, erosion and sedimentation control and stormwater management measures for the entire park
 - Entrance improvements and 2/3 of parking lot construction
 - Three softball fields
 - Restrooms with flush toilets
 - Perimeter trail
- Whitehall Road Regional Parklands development costing about \$6,100,000 and included:
 - All grading, erosion and sedimentation control and stormwater management measures for the 75 acre parcel
 - All parking and interior park roads
 - Temporary entrance road
 - Restrooms with flush toilets
 - Perimeter and interior trails
 - 7 rectangular fields and one practice field
 - 1 diamond shaped field
 - Underground utilities or sleeves for future utilities
 - Regional playground
 - Basketball and volleyball courts
 - Shelters
- Without a master plan for Hess Field, it is difficult to determine what should be developed first and a magnitude of development. We have allocated \$300,000 as a placeholder for safety repairs until more information is developed later in 2010.

The rest of Whitehall Road Regional Parklands would be developed in three additional phases. Given the significant development of Phase One and the lack of clarity as to when the additional 25 acres will be acquired, we proposed a second phase that completes the two remaining rectangular fields, develops six outdoor tennis courts, plants trees and adds more shelters not built in Phase One.

The Third Phase would include all of the development in the 25-acre parcel, pending acquisition.

A Fourth Phase would complete the large reservation picnic areas, community gardens and dog park on the eastern end of the park and other improvements to the park that were not included in earlier phases.

1 Phase 1

- All grading, E&SC, stormwater for the 75 acres
- Parking and interior park roads
- Temporary entrance road (excl. intersection/PennDot improvements)
- Flush toilets in restrooms, concessions and storage
- Perimeter and interior trails
- Rectangular fields F, G, H, I, J, K, L, and M
- Diamond shaped field C
- On-site utilities (excluding lift station)
- Maintenance Facility
- Regional Playground
- Basketball courts
- Shelters in support of east core area

2 Phase 2

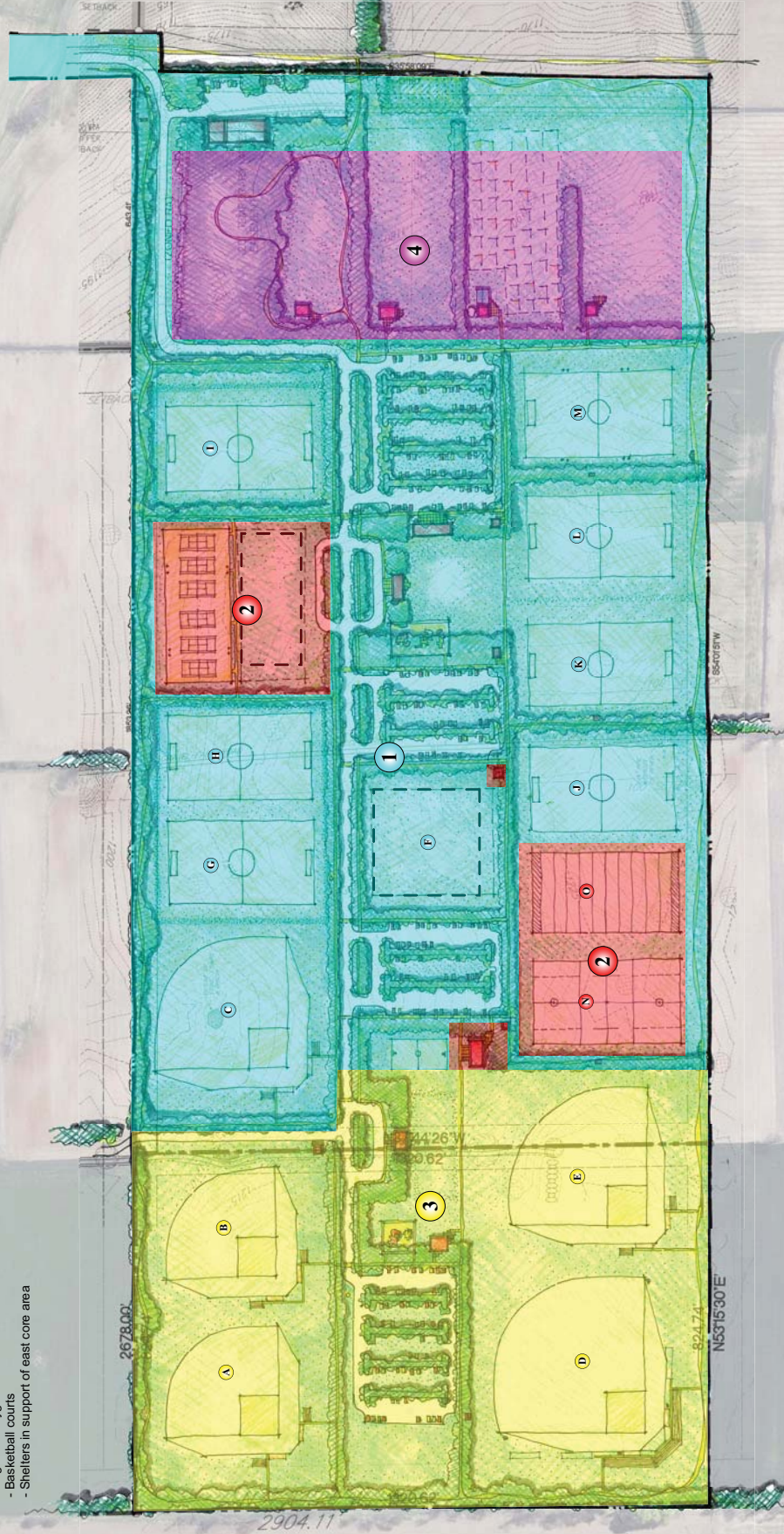
- Football and lacrosse fields N and O
- Outdoor tennis courts
- Shelters in support of fields
- Trees
- Fencing

3 Phase 3

- All grading, E&SC, stormwater for the 25 acres
- Parking and interior roads
- Perimeter and interior trails
- Diamond-shaped fields A, B, D, and E
- Lighting for field D
- Shelters in support of west core area and fields
- Trees
- Fencing

4 Phase 4

- Shelters and facilities for picnic groves, dog park and community gardens
- Interior trails
- Trees
- Artificial surfaces on fields M, F, and B
- Lighting for fields M and F



Whitehall Road Regional Park Master Plan

Phasing Plan

7/13/10



STAHL
SHEAFFER
ENGINEERING, LLC

Battaglia Jones
Landscape
Architects

PASHEK
ASSOCIATES
A PROFESSIONAL CORPORATION



MANAGEMENT, OPERATION, RISK MANAGEMENT AND MAINTENANCE

MANAGEMENT

The success of all of the Regional Parklands is dependent on the Centre Region Parks and Recreation's (CRPR) ability to successfully manage, operate, and maintain the park. The details of the Management Plan includes an Administrative Plan, Program Plan, Risk Management Plan, and Maintenance Plan are described in the previously completed Oak Hall Road Master Plan. The same systems apply to this master plan as well.

Much of this type of management plan already exists within the Centre Region Parks and Recreation. Some adaptations or additions may be required to meet the specific needs of this new park.

MAINTENANCE

CRPR has an established maintenance staff consisting of a parks supervisor, assistant supervisor, six caretakers, and fourteen seasonal staff that will be responsible for maintenance and upkeep of the regional parks in addition to all the existing community parks. The staff is experienced and adept at the maintenance of park lands and the types of facilities that are to be located in this park.

Planning for maintenance and operations is an important consideration in the development of new park facilities. Consideration must be given to on-going staffing and maintenance costs, as well as major equipment needs. Additionally, development of a Park Maintenance Plan is the first step in risk management.

A Park Maintenance Plan should establish standards of care that will keep recreation facilities functional and safe, reduce liability risks, and plan for prevention of accidents. A sample maintenance plan can be found in the appendix of this report.

Routine equipment maintenance and servicing must be scheduled and performed on a regular basis. With proper care, replacement of maintenance equipment can be kept to a minimum. An equipment and tool inventory should be kept accurate and up-to-date to assure the availability of proper tools when they are needed. A fund should be established to provide for new maintenance equipment and a regular replacement program.

Regular review of legal requirements and inspections for conformance to sanitary regulations, criteria for licensing, fire laws, building codes, pesticide applications, and safety procedures should be a priority for the maintenance staff. The CRPR should keep up-to-date with safety standards such as those published by the American Society for Testing Materials and the Consumer Product Safety Commission.

The maintenance plan will set standards of care for all facilities. This allows for a measure of productivity in park and facility maintenance. Park maintenance should be monitored and compared to the standards established in the Park's Maintenance Plan.

The National Recreation and Parks Association's publication Operational Guidelines for Grounds Maintenance, describes various levels of care for park facilities. The publication assists in determining the appropriate level of maintenance of park facilities based on size and usage and provides productivity standards, which are useful in determining the efficiency and effectiveness of park maintenance staff. This publication is also a valuable tool for projecting maintenance requirements of proposed projects and, with current cost estimating guides, can assist in establishing park maintenance budgets.

The NRPA classification system identifies five levels of care that a park facility may receive. These are as follows:¹

MODE I

State of the art maintenance applied to a high quality, diverse landscape. Mode I care is usually associated with high traffic urban areas, such as public squares, malls, governmental grounds or high visitation areas.

MODE II

High level maintenance associated with well developed park areas with reasonably high visitation.

MODE III

Moderate level of visitation, locations with moderate to low levels of visitation, or with agencies that because of budget restrictions can't afford a higher intensity of maintenance.

MODE IV

Moderately low levels of maintenance usually associated with low levels of development, low visitation, underdeveloped areas, or remote parks.

MODE V

High visitation natural areas usually associated with large urban or regional parks. Size and user frequency may dictate resident maintenance staff. Road, pathway, or trail systems relatively well developed. Other facilities at strategic locations such as entries, trailheads, building complexes, etc.

For Whitehall Road Regional Parklands, Mode II identifies the appropriate description of care for its facilities. The sample maintenance standards provided in the appendix, and the operating and maintenance cost estimates included in this section are based on this level of care.

Whitehall Road Regional Parklands is a highly developed park with many facilities for both active and passive recreation. The entire 100 acres of the park is planned to be developed with recreation facilities. A great deal of non-recreational amenities is included to support visitors in their use of the park.

The park will have very high visitation levels, often with hundreds of users in the park for regular activities. Because of the multitude of recreation facilities and the high user loads, the park will require a great deal of maintenance.

Maintenance needs will be as varied as the number and types of facilities found within the park. A sophisticated maintenance system will be needed to ensure the park is functional, safe, and attractive.

The following general list of facilities in the park that will require various types of maintenance.

FACILITY TYPES FOR MAINTENANCE

- Grass fields – baseball/softball, soccer, lacrosse, field hockey etc.
- Artificial turf fields – rectangular only
- Buildings – restrooms, concession stands, picnic shelters, stage, maintenance facility
- Roads, parking lots, and bridges
- Tennis courts
- Maintenance facility
- Dog park
- Tree nursery
- Seasonal ice rink
- Ornamental trees, shrubs, grasses, flowers
- Trails – interior (2.8 miles at 5' wide), perimeter (1.7 miles at 8' wide)
- Playgrounds

¹ Operational Guidelines for Grounds Maintenance, Published by Association of Higher Education Facilities Officers, National Recreation and Park Association, and Professional Grounds Management Society, 2001

- Sport courts – multiple
- Field and court lighting
- Community gardens
- Irrigation system
- Water and sanitation systems
- Stormwater management areas - rain gardens, storm water infiltration trenches, grass swales, stormwater basin, rainwater cistern

MAINTENANCE STAFFING, SUPPLIES, AND EQUIPMENT

In order to plan for the operation and maintenance of Whitehall Road Regional Parklands, CRPR needs to understand the estimated costs and activities involved. The following assumptions were made to project operation and maintenance costs for Whitehall Road Regional Parklands:

- CRPR will be responsible for total operation of the Park.
- All maintenance will be conducted to meet high level maintenance standards of safety and quality.
- One full-time maintenance person will be used to maintain the Park. He or she will be assisted by three seasonal staff persons.
- Staff, equipment, and supplies will be shared with the operation and maintenance of the other parks under the jurisdiction of CRPR.

STAFFING

Based on an interview with the CRPR Parks Supervisor the following staffing is projected.

For Phase I Development

Maintenance Staffing for Phase One Development			
Position	Number	Annual Rate	Total
Park Caretaker	1	\$38,000	\$38,000
8-month Full-time laborers	3	\$16,000	\$48,000
Summer help	4	\$3,500	\$14,000
Turf specialist - 25 hours annually			\$4,000
Total Staff Costs			\$104,000

A full-time Park Caretaker will be needed to oversee and maintain the park. Based on 2010 salaries for similar positions within the CRPR, this position cost approximately \$38,000 per year (including typical benefits). Three seasonal Park Maintenance Workers will also be needed for a forty hour week for eight months with a staggered weekend schedules to cover the park seven days per week. The cost for these positions is about \$11.25 per hour. Total anticipated cost for the positions would be about \$48,000 annually.

Specialty turf work including aeration, topdressing, infield grading, fertilization, overseeding, etc. would require about 20 days with a skilled operator from within the existing CRPR staff. The cost for this will be about \$25/hr for a total annual expense of about \$4,000.

Additional temporary staff (probably 3 to 4 people) will be needed to support seasonal maintenance, programming, and facilities needs during the peak use season. These staff will cost about \$10 per hour. The anticipated cost for 10 weeks of temporary staff approximately 35 hours per week will be between \$10,000 and \$15,000 annually.

At Full Build Out

Maintenance demands will be much greater when the park is completely built. This will result in the need for additional staffing to maintain the park. Anticipated staff will include the Full-time park caretaker as

recommended for Phase I development. Additionally, we anticipate the need for two full-time, year-round park laborers. The increase in full time staff will decrease the need for the 8-month laborers to two instead of three. The number of summer helpers will likely remain at four. The number of hours needed for the Turf Specialist will increase to at least 50 per year. Because this park is rather turf intensive, there may be value in training one of the full-time staff as a turf specialist. We have also recommended the use of an arborist to maintain the trees in the park. While this is listed as a staff person, it may be more cost effective to contract for the arborists services rather than hire one on staff.

Maintenance Staffing at Full Build-out			
Position	Number	Annual Rate	Total
Park Caretaker	1	\$45,000	\$45,000
Full-time laborer	2	\$35,000	\$70,000
8-month Full-time laborers	2	\$28,000	\$56,000
Summer help	4	\$4,000	\$16,000
Turf specialist - 50 hours annually	0.2	\$40,000	\$8,000
Arborist - 50 hours annually	0.2	\$40,000	\$8,000
Total Staff Costs			\$203,000

Maintenance Equipment

The CRPR park maintenance department is already outfitted with a series of excellent maintenance equipment. Much of that equipment, including the aerator, slit seeder, fertilizer spreader, top dressing machine, core aerator, and sod cutter is shared among all of the agencies parks and also can be used at Whitehall Road Regional Parklands. In addition to these, the following pieces of equipment will be needed as well.

Equipment	Estimated Cost
Utility truck – light duty (Gator, Cushman, Mule or similar)	\$10,000
Utility truck – heavy duty	\$20,000
Toro Groundsmaster 4500D (large area mowing)*	\$40,000
Toro Groundsmaster 328D (smaller area mowing)*	\$20,000
Debris blower for Toro 328D*	\$4,000
Toro Infield Pro with front blade and drag mats*	\$25,000
Small power and hand tools	\$40,000
Total	\$150,000

*CRPR currently uses Toro cutting and field maintenance equipment so that brand is specified in this list.

All of this equipment will not need to be purchased at one time. Equipment that is already owned by CRPR may be able to be shared with Whitehall Road Regional Parklands as operations begin. New equipment can be purchased as the demand dictates over the first several years of operation.

In addition to the above listed large equipment, additional smaller equipment will be needed to supplement the departments existing inventory. This could include push mowers, string trimmers, blowers, chain saw, air compressor, air tools, mechanics tools, carpenters tools, lawn and landscape tools, power tools, and hand tools. A full complement of these tools will initially cost about \$40,000. This cost may be reduced if some of the equipment is already available within the parks system.

As the CRPR continues to expand its major equipment inventory, it is recommended that they evaluate the option of renting some of the major pieces of equipment rather than to purchase them. When comparing purchase prices, maintenance, equipment replacements, insurance, and other costs, renting may be more cost effective than purchase.

Supplies and Materials

In addition to manpower and equipment costs there will also be associated consumable supplies and materials expense for park maintenance. Consumable supplies are a bit more difficult to predict as they are affected by a multitude of variables. The chart below estimates these consumable expenses. One column shows anticipated costs for the first phase of development and a second column shows the costs at full build-out.

<i>Maintenance Materials, Supplies, and Services</i>	<i>Phase One</i>	<i>Full Build Out</i>
Utilities	\$16,000	\$30,000
Water and Sanitary System	\$12,000	\$25,000
General Repairs and Maintenance	\$20,000	\$60,000
Trail Maintenance Supplies	\$12,000	\$20,000
Road, Parking, and Sidewalk	\$5,000	\$15,000
Building Materials and Supplies	\$5,000	\$20,000
Contracted Repairs	\$10,000	\$40,000
Small Tools / Minor Equipment	\$8,000	\$16,000
Equipment Repairs / Supplies	\$10,000	\$20,000
Turf Maintenance Supplies	\$12,000	\$20,000
General Expenses - insurance, staff training, transportation, office administration, and other expenses	\$20,000	\$35,000
Total Maintenance and Operations Supply Costs	\$130,000	\$301,000

Summary of Anticipated Operations and Maintenance Expenses		
Materials supplies, and services	\$130,000	\$301,000
Staffing	\$104,000	\$203,000
Total Expenses	\$234,000	\$504,000
Cost per Acre for O&M	\$4,680	\$5,040

Cost per Acre for Operations and Maintenance

One way to compare operations and maintenance costs to other parks of similar size and features is by considering the *cost per acre* per year to maintain the park. While there are not good benchmarks to available in the industry, research conducted by Pashek Associates shows that typical annual operation and maintenance costs per acre for parks similar to Whitehall Road Park range from about \$4,000 per acre to \$8,000 per acre. Cost projections for Whitehall Road Park identify the operations and maintenance cost per acre at \$4,680 for the first phase of development and \$5,040 once the park is fully developed. Both of these estimates are in the lower end of the range yet seem reasonable for the Centre Region.

POTENTIAL REVENUE PRODUCTION

ESTIMATED PHASE I REVENUE PRODUCTION

The primary sources of revenue production for Whitehall Road Regional Park will come from sportfield use and pavilion rentals. In 2008 CRPR initiated their Sportfield Reservation Process to “Effectively manage the high demand for public sportfield uses and to recover some of the costs associated with sportfield maintenance.” This policy was based upon their pavilion reservation system, in place for over 20 years.

SPORT FIELD USE

Seven soccer fields, a baseball/softball field, and a rectangular practice field area are planned for the first phase of development in Whitehall Road Regional Park. CRPR charges a reservation fee for various levels of field use. Based on the Fee Schedule (shown to the right), the following revenue can be expected from sportfield use.

CRPR FEE SCHEDULE

SPORT FIELD FEES

Reservation Fee - \$15 – charged for all reservations of one or more fields for more than a single 4-hour block of time

Sport Season Reservation Fee - \$140 per field per sport season for resident groups; \$210 for non-resident groups

Tournament Fee - \$110 per field per day (additional fees may be charged according to CRPR’s Large Group Event Policy)

PAVILION RATES

Reservation Fee - \$40-\$45 depending on the pavilion
Additional Fee for Electric - \$5

LARGE GROUP EVENT

Standard Fee - \$45 per day

Electric Fee - \$5 per day

Reimbursements for event-related costs incurred by CRPR

ANTICIPATED USE OF FIELDS

Soccer Fields

- Seven fields reserved four days per week for both the summer and fall seasons at \$140 each. Total revenue \$7840/yr.
- Twelve tournaments with four fields reserved for three days each. Total revenue \$5280/yr.
- Large Event Fee for tournaments - \$1620/yr.
- Additional electric fees charged at negotiated rates of \$75 per day - \$2700/yr.

Baseball/Softball Field

- One field reserved five days per week for both the summer and fall seasons. Total revenue \$1400/yr.

Estimated Annual Sport Field Revenue - \$17,440

ANTICIPATED USE OF PICNIC PAVILIONS

There are two picnic shelters planned for the first phase of Whitehall Road Regional Park. Shelters can be rented for the day or portion of a day for picnic-type group activities and family events. Reservations must be made through CRPR. Shelters rent for \$40 to \$45 per use with an additional \$5 for the use of electricity. In 2008, CRPR pavilions were rented an average of 38 times each. Based on this average Whitehall Road Pavilions would be rented a total of 72 times at \$45 each.

Estimated Annual Pavilion Revenue - \$3240

RECREATIONAL PROGRAMMING

CRPR currently offers a wide variety of recreational programs to area residents. Whitehall Road Regional Parkland would be suitable as a location for many kinds of outdoor recreation programs. CRPR should analyze the program needs of the community in comparison to the facilities available in this Park to make a decision as to which, if any, programs would be held here. It is not likely that typical recreation programming held at the park would produce any amount of revenue in excess of the expense of operating the programs.

CONCESSION STAND SALES

At this point it is unclear who will operate the concession stand in the park. If it is operated by sports organizations, any revenue produced would likely go directly to that organization. If it is to be operated by CRPR, it would be best to contract out its operations to a private vendor. This removes the CRPR from the burden of operating the facility on an ongoing basis. A local vendor would pay CRPR an agreed upon fee or portion of the profits to operate the stand. If the park becomes as active as anticipated, it would produce tens of thousands of dollars in gross income annually.

Estimated Annual Concession Revenue - \$12,000

OTHER FUNDING SOURCES

Revenues produced through park activity will not offset the cost of operating the park. Additional funds will need to be provided. Other funding sources could include sales of advertising signs for on ballfield fences; selling of naming rights to individual fields; or securing seasonal sponsors for programs or facilities. These types of activities have produced tens of thousands of dollars for other communities. If CRPR chooses to pursue any of these, it would be wise to consult other communities who have been successful with these types of financial programs before.

REVENUE POTENTIAL SUMMARY PHASE I

SPORTFIELD USE FEES - \$17,440
PAVILION RESERVATION FEES - \$3,240
CONCESSION STAND REVENUE - \$12,000
TOTAL REVENUES - \$32,680

FUTURE REVENUE

Revenues will increase proportionally as the facility is further developed and used. At full capacity, revenues should approach \$100,000 annually.

FUNDING SOURCES

Many agencies provide grants to assist in providing financial resources to implement design and construction of facilities similar to those proposed for the Regional Parklands. Some offer grants to implement educational programs in concert with these facilities. Still others support the planning and implementation of projects with preserve habitat. Assistance can also take the form of technical help, information exchange, and training.

Submission of a thorough application may result in award of monies, given the competition for grant funding. Strategies for improving the chances of receiving a grant include:

- Being well-prepared by knowing the funding agency (contact persons, addresses, phone numbers); ensuring your agency or municipality (if submitting on your behalf) and the project are eligible; and submitting a complete and accurate application ahead of the deadline.
- Clearly indicate the funding agency's vision and plans in the application, to portray where your project fits their goals. Describe how matching funds such as private contributions, and other grants will leverage the funding. Describe how maintenance of the site will be accomplished, to help justify the request for the grant. Show past successes such as how past recreation projects were funded and built and how this project impacts those successes.
- Contacting the funding agencies by personally meeting with them to show your commitment to the project.

Based on the potential funding sources for the project, we recommend pursuing the following grant opportunities:

- **PA Department of Conservation and Natural Resources (DCNR) Community Grants** (for local recreation, park, and conservation projects (part of the Growing Greener Program): construction of recreation and park improvements, trails, roads, etc. Grants require a 50% match.

Address: Northcentral Region (4)

Wes Fahringer

300 Pine Street

Suite 400

Williamsport, PA 17701

Phone: (570) 326-3521

Email: mfahringer@state.pa.us

Website: www.dcnr.state.pa.us

- **Environmental Education Grants Program**, through the PA Department of Environmental Protection. Includes grants for Public and Private Schools (K-12) (teachers and/or students); Conservation and Education Organizations (teachers) including colleges, universities, intermediate units, government agencies, and non-profit conservation/education organizations; and Conservation Districts.

Website: www.pde.state.pa.us.

- **Community Conservation Partnerships Programs**

Agency: Department of Conservation & Natural Resources

Program Goals: To develop and sustain partnerships with communities, non-profits and other organizations for recreation and conservation projects and purposes. The Bureau of Recreation and Conservation is responsible for fostering, facilitating and nurturing the great majority of these partnerships through technical assistance and grant funding from the Community Conservation Partnerships Programs.

Program Restrictions: See DCNR grant application manual for the Community Conservation Partnerships Program, as program restrictions vary by type.

Use of Funds: Planning and Technical Assistance; Comprehensive Recreation, Park and Open Space Plans; Conservation Plans; County Natural Area Inventories; Feasibility Studies; Greenways and Trails Plans; Rails-to-Trails Plans; Master Site Plans; River Conservation Plans; Education and Training; Peer-to-Peer; Circuit Rider; Acquisition Projects; Park and Recreation Areas; Greenways,

Trails and Rivers Conservation; Rails-to-Trails; Natural and Critical Habitat Areas; Development Projects; Park and Recreation Areas; Park Rehabilitation and Development; Small Community Development; Greenways and Trails; Rails-to-Trails; Rivers Conservation; Federally Funded Projects; Land and Water Conservation Fund (LWCF) Projects; Pennsylvania Recreational Trails

Address: Northcentral Region (4)
Wes Fahringer
300 Pine Street
Suite 400
Williamsport, PA 17701
Phone: (570) 326-3521
Email: wfahringer@state.pa.us
Website: www.dcnr.state.pa.us

- **U.S. Soccer Foundation**

Agency: The United States Soccer Federation Foundation, Inc. is a not-for-profit corporation qualified under section 501 (c) (3) of the Internal Revenue Code.

Program Goals: The Foundation's Grants Program is open to anyone with a soccer specific program or project that benefits a non-for-profit purpose. A complete list of guidelines for the Foundation's Grants Program can be obtained by reviewing the Instructions section of the grant application. Earnings from the permanent endowment fund of the Foundation are the source for grants made by the Foundation for worthy soccer projects. The Foundation is now in its ninth year of awarding grants for soccer projects to worthy soccer organizations, civic groups, municipalities and governing bodies, having awarded approximately \$17,000,000 in grants during its first nine years of operation. The Foundation commences its grant process in the fall and announces the recipients each spring.

The following, listed in priority order, have been established to fund innovative and creative programs.

- Ethnic, minority, and economically disadvantaged players
- Player and coaching development
- Referee development
- Field development

Address: US Soccer Foundation
1050 17th Street, NW
Suite 210
Washington, DC 20036
Attn: Grants Department

Website: Grant Applications may be filed electronically ONLY at the Foundation's website ussoccerfoundation.org

- **Baseball Tomorrow Fund**

Agency: Baseball Tomorrow Fund

Program Goals: The Baseball Tomorrow Fund missions is to promote and enhance the growth of youth participation in baseball and softball throughout the world by funding programs, fields, coaches' training, and the purchase of uniforms and equipment to encourage and maintain youth participation in the game. Grants are designed to be sufficiently flexible to enable applicants to address needs unique to their communities. The funds are intended to finance a new program, expand or improve an existing program, undertake a new collaborative effort, or obtain facilities or equipment. The Baseball Tomorrow Fund provides grants to non-profit and tax-exempt organizations in both rural and urban communities. The Baseball Tomorrow Fund awards an average of thirty grants per year totaling more

than \$1.5 million. The average grant amount is \$51,000. The Baseball Tomorrow Fund is funded annually by Major League Baseball and the Players Association.

Address: 245 Park Avenue
New York, NY 10167
Phone: (212) 931-7878
Website: www.baseballtomorrowfund.com

- **Community Improvement Grants**

Agency: Pennsylvania Urban and Community Forestry Department

Program Goals: Focus is to support Agreeing@ partnerships linking grassroots organizations, local community groups and natural resource experts in support of community resource management and natural resource.

Use of Funds or Support: Encourages partnerships with and between diverse organizations and groups. Supports local improvement projects, tree planting projects in parks, greenbelts, schools, and community public spaces.

Address: David Jackson
Centre County Cooperative Extension Office
Willowbank County Office Building
420 Holmes Street
Bellefonte, PA 16823-1488
Phone: (814) 355-4897

- **Environmental Education Grants Program**

Agency: Pennsylvania Department of Environmental Protection (DEP)

Program Goals: The Environmental Education Act of 1993 sets aside 5% of the pollution fines and penalties collected each year to stimulate environmental education in Pennsylvania. The goal is to develop new environmental education programs or improve the quality of existing programs.

Program Restrictions: This is a reimbursement program. Awards do not exceed \$10,000. A 25% match is required of all granted organizations, except for county conservation districts.

Use of Funds or Support: Grants may be used to purchase materials, equipment, and other resources. Funding may also provide public and private schools for youth environmental education. Also, to promote conservation and education organizations and institutions for the purpose of providing environmental education training to teachers, county conservation districts and Bureau of State Parks Environmental Education Program to be used for training, in-service workshops, staff salaries, some transportation costs, speakers, substitute costs, and more.

Address: Sandra Titel - Environmental Education Grants Program Administrator
Pennsylvania Department of Environmental Protection
Environmental Education Grants
P.O. Box 2063
Harrisburg PA 17105
Phone: (717) 772-1828
Website: www.dep.state.pa.us

- **Environmental Quality Incentives Program (EQIP)**

Agency: Natural Resources Conservation Service

Program Goals: The EQIP, established by the 1996 Farm Bill, is one of the several voluntary conservation programs which are part of the USDA A Conservation Toolbox@ to install or implement structural, vegetative, and management practices.

Program Restrictions: Through the locally led process, EQIP works primarily in priority areas identified by conservation district-led local work groups involving local community members, state and federal agencies, and others.

Use of Funds or Support: EQIP offers financial, educational, and technical help to install or implement structural, vegetative, and management practices.

Address: RR#12

Box 202 C

Greensburg, PA 15601-9271

Phone: (724) 834-9063 ext. 3

Website: www.pa.nrcs.usda.gov/programshom.htm

- **Land and Water Conservation Fund (LWCF) Grants**

Agency: National Park Service

Program Goals: This federal funding source was established in 1965 to provide park and recreation opportunities to residents throughout the United States. Money for the fund comes through the sale or lease of non-renewable resources, primarily federal offshore oil and gas leases and surplus federal land sales. In the past, Congress has also appropriated LWCF monies for state-side projects. These state-side LWCF grants can be used by communities to acquire and build a variety of park and recreation facilities, including trails. This funding source has little or no funding allocated for state-side projects for several years. State-side LWCF funds are annually distributed by the National Park Service through the Pennsylvania Department of Conservation and Natural Resources. Communities must match LWCF grants with 50 percent of the local project costs through in-kind services or cash. All projects funded by the LWCF grants must be exclusively for recreation purposes, into perpetuity. Administered through Community Conservation Partnerships Program.

Use of Funds or Support: Plan and invest in existing park system.

Address: Northcentral Region (4)

Wes Fahringer

300 Pine Street

Suite 400

Williamsport, PA 17701

Phone: (570) 326-3521

Email: mfahringer@state.pa.us

Website: www.dcnr.state.pa.us

- **KaBOOM!**

Agency: KaBOOM! (National Non-profit)

Program Goals: To bring together people, community organizations and businesses to develop safe, healthy and much-needed playgrounds.

Program Restrictions: N/A

Use of Funds or Support: Leveraged spending power with well-established companies in the play equipment industry. Also, corporate and foundation support that can include volunteers and technical resources.

Address: 2213 M Street, NW

Suite 300

Washington, DC 20037

Phone: (202) 659-0215

Website: www.kaboom.org

- **Pennsylvania Conservation Corps**

Agency: Pennsylvania Department of Labor and Industry

Program Goals: This program provides work experience, job training, and educational opportunities to young adults while accomplishing conservation, recreation, historic preservation, and urban revitalization work on public lands.

Program Restrictions: The project sponsors receive the services of a Pennsylvania Conservation Corps crew, fully paid, for one year. Sponsors can also receive up to \$20,000 for needed materials and contracted services. Sponsors must provide a 25% cash match on material and contracted services costs.

Use of Funds or Support: Funds may be used for materials and contracted services needed to complete approved projects.

Address: Lou Scott, Director
1304 Labor and Industry Building
7th and Forster Streets
Harrisburg, PA 17120

Phone: (717) 783-6385

Website: www.dcnr.state.pa.us

- **Nike**

Agency: Nike

Program Goals: Get kids more physically active, get kids involved in the teamwork of sport, and have real, measurable, positive impact.

Use of Funds or Support: Tax exempt, non profit agencies or a unit of government if the contribution is solely for charitable or public purposes. Corporate giving is focused on communities where Nike has a significant employee or Niketown retail presence. In 2004, Nike donated 37.3 million in cash and products to non-profit partners around the world. The nearest Niketown Factory Store is located at the Grove City Shops, in Mercer County.

Address: Global Community Affairs
Nike, Inc.
P.O. Box 4027
Beaverton, OR 97076

Website: www.nike.com.nikebiz

- **Wal-Mart - Good Works**

Agency: Wal-Mart Foundation

Program Goals: Allows local non-profit organizations to hold fundraisers at their local Wal-Mart or Sam's Club. Wal-Mart and Sam's Club can elect to match a portion of the funds collected, up to \$1,000. Events held off the premises are eligible for funding when a Wal-Mart or Sam's Club Associate is actively involved in the event. Additionally, once the Wal-Mart or Sam's Club has met certain criteria in the Matching Grant Program each year, a second source of funding is awarded to the store / club to use in the community. These funds do not require a fundraiser to be held, instead the funds can be awarded directly to a deserving organization.

Program Restrictions: Organizations that may qualify to receive funding through the Matching Grant Program are 501(c)(3) non-profit organizations or organizations that are exempt from needing 501(c)(3) status, such as public schools, faith-based institutions such as churches (must be conducting a project that benefits the community at large), and government agencies.

Use of Funds or Support: Community Improvement Projects.

Contact: Community Involvement Coordinator at your local Wal-Mart or Sam's Club store.

Website: www.walmartfoundation.org/wmstore/goodworks

- **Lowe's Charitable and Educational Foundation**

Agency: Lowe's Charitable and Educational Foundation

Program Goals: Education. Community improvement projects such as projects at parks and other public areas, housing for underprivileged and innovative environmental issues.

Program Restrictions: Organizations that may qualify to receive funding through the Matching Grant Program are 501(c)(3) non-profit organizations.

Contact: The Foundation only accepts grant applications submitted via online application.

Website: www.easy2.com/cm/lowe/foundation/intro.asp

- **Central Pennsylvania Convention and Visitors Bureau**

Agency: Central PA Convention and Visitors Bureau

Program Goals: Promote the region including:

facilitate the development and use of a new tournament quality sports complex

assist with promotion of current events to help increase attendance

Funding Source: In part, county hotel tax

Contact: CPACVB

800 E. Park Avenue

State College, PA 16803

814-231-1400 (814-231-8123 fax)

Website: www.centralpacvb.org

Appendices

Appendix A:

PA Historical and Museum Commission Review

Appendix B: Soil Survey

Appendix C: PNDI

Appendix D: Meeting Minutes and Materials

Appendix E: Newspaper Articles and Other Public Communications

Appendix F:

Practice and Game Field Analysis and Spreadsheets

Appendix G: 2002 CRPR Needs Memo

Appendix H: Sample Maintenance Plan

Appendix I: DCNR Green Principles for Park Development

Appendix J: Tennis Feasibility Study

Appendix K: Cost Analysis Spreadsheets

Appendix L: Park Development Challenge Memo

