Satellite Parks for a Growing Community

Study: Brandenburg, Kentucky
To locate open areas that can be developed into satellite parks

Comprehensive Project
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Abstract

A number of towns are on the fringe of being overrun by the pressures of urban sprawl. As the sprawl overtakes their town, the town's people are at risk of losing their towns character and open spaces. As a beginning quest to fully understand the issues of planning and protecting open space, this project addressed the growth and loss of open space of Brandenburg, Kentucky.

5th year comprehensive project:
Development of satellite parks in a fast growing town
Case Study: Brandenburg, Kentucky
Looking at open space and planning for satellite parks

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In closing, I just have one more thing to state.................I Can Color Now!
Introduction

With the dawn of a new century, we notice that more and more people are moving out or sprawling out of big cities into the smaller communities of the rural landscape. As people encompass these small towns, the small towns are rarely prepared to handle the sudden growth because it happens so quickly. Most of these small towns have no plan for long term growth and as growth happens, the towns open space disappears. Why is open space so important? Many developers do not ask this question because they do not care. Open space loses them money. Open space is important mainly because it offers a place where people can go to enjoy the outdoors and get out of the busy city life.

The town of Brandenburg, Kentucky is one of these communities. The town is located 26 miles southwest of Louisville, Kentucky. Brandenburg was founded in 1825 and was known as a river port for Ohio River traffic. Its old downtown is still located in its original site even after a flood destroyed it in the early 1937. However, as more people move out of Louisville into these smaller towns, the over take of its outlying open space by strip malls and subdivisions is in its near future. When growth sneaks up on these small towns without any warning, they are overwhelmed by the unplanned growth and lack of open space. Growth cannot be stopped, but if a town is ready for it, the pressure is not so hard to deal with. One way that growth into open spaces can be accommodated is through satellite parks.

The topic of satellite parks for a growing community was of deep interest to me. I have grown up in a small town community my entire life and watched as rapid growth has
taken over most of the open space in the community. The idea of satellite parks is to develop a plan for open areas surrounding a community to be used as areas of recreation for areas where growth is going to occur. These areas may not be developed for years, but they are there for developmental purposes.

The reason why I chose Brandenburg, Kentucky, is because they do not have parks that their community can use. The town is a growing community that needs a park for activities like festivals, parades, or for everyday use. If the community can have a place for activities and an easy access to this park, they might enjoy the area a great deal more and also find out what they have been missing.
Review of Related Literature

A successful park is more than an island of green space. Its success emerges from its relationship to surrounding development and from the special features that attract users and make the park central to the town’s image and personality (Rosen, 55). In researching the literature, there were numerous case studies developed over years of research of park systems. All of the studies could be applied to any city or town. The possibilities are endless for anyone who wants to research a case study on park development. However, not a single park design can fit into every city. Each city has its own unique characteristic that makes it different from all other cities. For a town to respond positively to a design, a designer must meet the towns needs. For a park to be successful, there are many resources that can be looked at, such as city planners, political bodies, and the community themselves. But no matter where the impetus comes from, the most successful partnerships include the widest range of stakeholders who together provide the major financial support for a park project (Rosen, 55).

Langdon believed that parks can help bring communities together by allowing a place where citizens can go to enjoy recreation and converse with others in the community (76). The components of a community help shape how a park will function, how people will interact, and the expansion of the park in the future. Parks are often successful because of careful planning.

In Brandenburg, sprawl is beginning to explode over the community and its surrounding rural landscape. Like many communities, developers and numerous individuals have purchased lots that at one time were corn fields.
has become a factor in this community over the past 5 to 7 years and with more people moving out of the urban life, it will continue to happen for many years to come. I imagine the types of commercial development that comes when population begins to grow. Wal-Marts, fast food restaurants, strip malls....you name it. They all come and take up the open space around a community just as fast as residential developers do.

The literature sources define parks as areas for recreation, both passive and active, gathering, and a center for community life. Brandenburg, a fast growing community, it is appropriate to focus on the development of open space and the identity that this town is known for. Understanding that development, both residential and commercial, can not be eliminated in the future, components of this “Satellite Park” will center around land uses and circulation.
Site Setting and Context

Once a small town that lies along the Ohio River just downstream from Louisville, the town of Brandenburg is a rapidly growing community. Centered along the Ohio River in Meade County, this once small river town struggles to hold on to its open space that is being taken over by sprawl. Brandenburg established itself as a river port town in the 1800 and 1900's for Ohio River traffic. Now with growth away from the river, the area is losing its open space that once was abundant to development.
Background

Brandenburg was founded in 1825 and was known as a river port town. The old downtown is located on the river and had an inn and a tavern. All of this was destroyed in 1937 by a flood. The town relocated to the top of the hill above the old downtown. The old downtown is still used today. At the site of the old inn and tavern a new building was established and was made into a restaurant. Houses were built around the restaurant and the main street was developed with shop, apartments, and a bar. There used to be a ferry that would take travelers from Kentucky to Indiana. The ferry operated from 1804 until the Matthew E. Walsh bridge was completed in 1966.

On April 3, 1974, another tragedy struck Brandenburg. On this day, fierce tornadoes ripped through the town causing mass destruction to Brandenburg and its outlying communities. The tornadoes followed the river to the northeast to Louisville and continued to the northeast. Brandenburg recovered and rebuilt to what it is today.

Brandenburg is also an historic town. Morgan's Raiders, a confederate Calvary during the Civil War came here to cross the river on the ferry the Alice Dean. They crossed the river on July 8, 1963 and headed north to Corydon to battle the militia and won. They burned the Alice Dean after crossing the Ohio River. Morgan and his Calvary marched northward to Columbus, Ohio where they surrendered. Morgan later escaped and returned to the south. The battle of Corydon made Morgan famous because it was one of only two battles fought on northern soil.
Project Goal and Programming

The vast areas of open space of Brandenburg are one of its greatest assets. In a time of growth and development of residential and commercial areas, the townspeople would like areas of open space to be saved and developed in amongst the residential and commercial areas. With the project goals, the community needs to balance out its planning of other open spaces so they can coordinate with each other and help strengthen the town's character. The primary goals of the project were classified into the following categories:

I. Locating areas that can be developed into satellite parks.
   1. Open Space
      a. Opportunities for active space
      b. Opportunities for passive space
   2. Park system
      a. Developing a trail system to connect the parks

II. Establishing a park identity that will carry into the future.
   1. Short term growth
      a. Development of parks now for the community to use
      b. A base plan for other parks to follow
   2. Long term growth
      a. Expansion of old parks
      b. Areas of recreation for future generations

III. Increasing the awareness of Brandenburg's history and culture.
   1. Historic Identity
      a. Landmarks that tell the story
      b. Implement the old into the new
   2. Cultural identity
      a. Community events and programs
Assumptions

Throughout the project, the design process was based on the idea that the development of satellite parks would be met without constraint. The inventory and analysis of the community land uses and circulation identified several areas that could be developed into satellite parks. It was assumed that one area would be developed and fully addressed in detail. The remaining areas of the landscape would be treated as areas of future development.

Limitations

The nature of the research proposal itself called for a designer to be highly informed expert in design. Due to the timeframe of the project, it was important to form a knowledge-base on a portion of the problem at hand. When studying a whole community, it can become very exhausting. The limits of this project called for assumptions to be made of the site, its setting and context.
Clientele

The clients for this project were the residents of Brandenburg. Such as the children for recreation and sports, the residents for recreation, the school systems for educational purposes, and the elderly.
The Project

Site Location
Located in the center of Meade County along the Ohio River, the community of Brandenburg has witnessed growth away from the river and into its rural countryside. As sprawl takes over the community, Brandenburg is currently preparing for the future. The town is defined by three major corridors, State highways 135 and 448, and the Ohio River.

A View of Brandenburg

Map of Meade County
Inventory
At first glance, Brandenburg is no different from any other small town. It is a small rural community that has things like a golf course, restaurants, a school system, and a lot of open farm land. You will be given a tour of the town of Brandenburg first around the bypass and then into the town and finally to the outskirts of town.

1. Matthew E. Welsh Bridge was built in 1965 to allow travelers quicker access to Kentucky and back to Indiana.

2. Meade County Fairgrounds was built to hold the county fair as well as other exhibits.

3. The old Rock Quarry is where the town got its gravel from for its early roads.

4. Meade County Community Golf Course was built for the community and its visitors to play golf on its rolling hillsides.

5. Cap Anderson Cemetery is an old cemetery. Some of its tombstones date back to the early 1770's to the present.

6. Meade County Community Schools are located in the middle of the town limits. Located here are the elementary, middle, and high schools.

7. Meade County Community Park has softball fields, tennis courts, basketball courts, shelters, and open space for the community to use.
8. Old downtown is located in the middle of the town along the river. This is the site of the new river park.

9. Olin Chemical Plant produces paint products and is located in the 100 year flood plane outside of town.

10. Doe Valley Park is a private park with its own private lake.
Circulation

Circulation is a key factor in the location of open areas that can be developed into satellite parks. The local roads will serve as access roads to these open areas as well as gateway entrances into Brandenburg.

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State Highway 135

State Highway 448

High and Broadway St.

State Highway 228

State Highway 933

City Limits
Land Use

Land use is a very important factor in the location of the satellite parks. In locating the areas of open space, commercial areas, residential areas, school area, community parks, and the chemical plant help to determine the best areas for the satellite park(s).
Proposed Site Areas

After reviewing the circulation and the land uses for Brandenburg, three areas were chosen for possible satellite parks.

- Site 1 is located along State Highway 135 directly across from the fairgrounds.

- Site 2 is located on the corner of State Highway 135 and 448. It is located at the old rock quarry.

- Site 3 is located on along State Highway 933 in the 100 year flood plane. It is located 300 yards from the Chemical Plant.
Site #1

The first area chosen for a park is the area located along State Hwy. 135, which is the bypass around the town of Brandenburg, and Frogtown Road, which is an artery road that leads into the downtown of Brandenburg. It is an open area that is owned by GTE and is relatively flat. It is located across from the Meade County fairgrounds. Below are a list of opportunities and constraints.

- **Opportunities**
  - Located on a major Highway
  - Graded area, relatively flat
  - In an area of future growth
  - Surrounded by residential areas
  - Next to Fairgrounds
  - Fairgrounds and Golf Course can provide greenway corridor

- **Constraints**
  - Growth of site is limited
  - Close to a highly traveled Highway
  - Pedestrian crossing to each side of the Highway

- **Size** - 24 acres (8 more possible to southwest)
Views of Site #1

View to the northwest from the entrance road to GTE. The open field is owned by GTE and now it is used as a lawn area. The tree line is the outer edge of a small forest area and the tree line also follows Frogtown Road which is the North boundary of the site. Frogtown Road is a 2-lane county road.

View of the site and the GTE building from the intersection of State Hwy. 135 and Frogtown Road. The tree area to the left of the picture is a sinkhole and the treeline to the right of the picture divides the site and a pasture area.
Site #2

Site #2 is located along State Hwy. 135 and State Hwy. 448, which runs to Fort Knox. The area is an old abandoned gravel quarry that serves nothing. This site could be used more for education purposes than for an area of recreation. Below are a list of its opportunities and constraints.

- **Opportunities**
  - Old Rock Quarry
  - Educational Area
  - Located at the intersection of 2 main Highways
  - Room to the South for expansion
  - Located around more commercial than residential

- **Constraints**
  - No pedestrian corridors
  - Close to 2 heavy traffic areas
  - Growth of city is less likely this way

- **Size** - 14 acres (6 more possible to the South and East)
Views of Site #2

View to the southwest of the open pit of the old rock quarry. The road in the background is State Highway 448 which represents the southern border of the site. State Highway 448 is a 4-lane road here and then merges back into a 2-lane road.

View of the open field that is located across State Highway 135 from the site. The field is not used for cattle or for crops, at one time it was. State Highway 135 is a 3-lane road at this point, then goes to a 2-lane road.
Site #3

Site #3 is located along State Hwy. 933, which runs along the river until it turns and heads south. The site is located in a field that is located next to Olin Chemical Plant. The field is located in the 500 year flood plane and has a trail that connects it to the new river park in old downtown Brandenburg (labeled as River). The site is also located close to Doe Valley, which is a private park.

- **Opportunities**
  - Large open area
  - Trail corridor
  - Possible expansion area for town do to its large open fields, park here could benefit in the future
  - Correlation with Doe Valley

- **Constraints**
  - Close to Chemical Plant
  - No major roadway
  - Located on a flood plane
  - Close to Doe Valley private park

- **Size** - 40 acres (60-80 more acres all around could be added)
Views of Site #3

Right-Top - This view is to the northeast and looks across State Highway 933 to a pasture area on the hillside.

Right-Bottom - This view is to the East down the trail road that is already there. It is gated off due to people driving up the road and dumping trash.

Below - The view comes form the trail corridor about 300 yards from the gate. It is looking South over the same field that is to the left.
Concepts

The concepts that have been formed are composed of the information gathered of the town of Brandenburg. To help understand the areas of the concepts better, here is a brief description of each area.

1. SB=Softball complex- This is made up of a softball field, bleachers, and concession area.

2. SC=Soccer Field- This includes the field for soccer, bleachers, goals, and out of bounds area.

3. AT=Athletic Areas- The athletic areas will include facilities like basketball courts, volleyball courts, tennis courts, and horseshoe pits.

4. O=Open Space- These are areas of open field for people to perform athletic activities, both passive and active.

5. P=Parking- Areas that will provide ample parking for people who come to use the park.

6. B=Buffer- Buffers will be areas that will provide protection and block any negative views that surround the park.

7. M=Memorial- The memorial will represent the history of Brandenburg and become the entrance icon for the park.

8. PIC=Picnic Areas- Areas that contain picnic tables and open area for people to come and enjoy the outdoors while they eat.

9. --- =Existing Road- these are entrance roads to the site.
**Concept #1**

The first concept addresses the idea of creating a park geared toward active recreation. By creating areas of activity throughout the park that allow for numerous types of active recreation making it possible for all of the areas to be considered one. Furthermore, establishing areas of parking to accommodate the visitors and allow them to enjoy the park. The memorial would be located at the intersection and become an icon for the park as well as Brandenburg. This approach emphasizes athletic areas, remembers the history of Brandenburg, and becomes an area for residents to enjoy the outdoors.
Concept #2

The second concept includes a definite separation of active and passive spaces. Two large areas of open space take up most of the park and is geared toward passive recreation. This concept also has an area for people to come and enjoy a picnic while they enjoy the park. The southern part of the site contains the active recreation areas. Each area has its own parking lot and entrance way. This approach creates a "large" park setting in a small area.
Final Concept

The merger of the two concepts created the final design strategy. This concept utilizes the positive features of both #1 and #2, synthesizing the design approach. The large open area in the northeastern corner provides enough space for passive and active recreation. The soccer and athletic areas to the west provide users the opportunity to conduct physical activity to help improve their skills. The athletic areas are located away from the road for safety reasons. Parking is centralized so that it can accommodate all of the areas. The entrance road divides the active from the passive but the only reason it does so is because of its location. The memorial is still located at the intersection because it becomes an entrance icon for visitors and for the town of Brandenburg. This concept can become a model for designers to use on the other satellite parks around the Brandenburg area.
Master Plan - Alexander Memorial Park

This park design utilizes specific design features that represent the town as well as the functional guidelines for the framework for this comprehensive project. In the terms of “satellite parks” for Brandenburg, viewing the vehicular traffic and land uses was key. Many parks around the nation are centered around road ways for access and the parks are also centered around people. Bringing people into the park was one of my main concerns. In that spirit, this plan focuses on major road ways for access and an open area that is centered around people as well as the growth of Brandenburg.

Another significant portion of this project addresses the idea of how the past might be interpreted into this park. After reviewing the history and culture of Brandenburg and seeing how important it was to the community, that idea became important in the project.

Open space in towns like Brandenburg are beginning to disappear due to development taking over these areas of open space. Some of these areas of open space can be developed into parks as the growth of the town increases. As indicated earlier on the land uses page, there are a lot of areas of open space around the town of Brandenburg. Before this project took shape, the town had on plan for its open space. The development of a land acquisition plan is essential to the long-term health of Brandenburg. As the towns growth increases rapidly, these areas of open space will begin to disappear and in a town that does not have a plan for its future growth, the open spaces will be developed without the idea for parks. Without parks, the town of Brandenburg will miss out on what these parks can provide to their community. Communities that take
the initiative to sensitively define the parameters by which prospective growth will occur create quality environments for their citizens.

The idea of competition between developers for the open spaces throughout the city of Brandenburg can become a complicated matter that sees the disappearance of open space as well as park space. It is feasible for coexistence between developers and the town to establish places for park development.

The key for this park is to establish different areas for the citizens to come and enjoy. There are areas for both passive and active recreation that could help to bring the town even closer together. This park will serve as a model park for future parks development, such as sites two and three, around the town of Brandenburg.
Details and Perspectives

The details and perspectives will help to emphasize the ideas of my park plan in more detail. In the design process, several things were looked at that dealt with various activities the park could provide and they include the following:

A boulevard system with roundabouts

A memorial

Soccer fields

Playgrounds

A Pond

A trail system with berms

Shelters

Additional parking

Athletic areas

Open space
Boulevard System

The boulevard system runs throughout the park to allow access from the major roadways. The boulevard system is a one-way system that has soft curves that allow the drivers to view the park as well as slow them down. The boulevard is curbed to keep vehicles from driving into areas where people are located. Angled parking is provided in two areas along the boulevard to allow people to park. The boulevard is lined with street trees to provide a visual line while driving and also to provide shade. Lighting is also provided for vehicles who drive through at night and for safety. There are also three roundabouts to allow drivers to turn around and go back the way they came.
Memorial

The memorial has three distinct features that represent the history and culture of Brandenburg. The first is a map of the town of Brandenburg located around the memorial. Its paving pattern is stepped to allow some things to go down and others to go up. The blue pavers indicate the river and there is a paving pattern of the symbol of the Commonwealth of Kentucky. The second is a memorial water wall that has etchings of some of the historical features of Brandenburg. People are welcomed to touch and feel the etchings if they like. The third is the two statues of people who are known from the history of Brandenburg. One is Solomon Brandenburg, the towns founder, and the other is of Morgan Raider, the confederate general who marched through here during the Civil War.
Soccer Fields

The two soccer fields located at the park serve two purposes. The first one is that these soccer fields take the place of the one that is being destroyed in the old downtown for the building of the new river front park. The second is due to the increasing number of people in this area who are beginning to play soccer. The sport is growing rapidly down here and the addition of two soccer fields will help to accommodate those people.
The Playgrounds

The two playgrounds located at the park serve two different age groups. One playground will serve as a young playground. It will accommodate age groups ranging from 3 to 8 years of age. The other will be a youth playground, accommodating age groups ranging for 9 to early teens. The playgrounds offer a wide variety of playground equipment. The children are protected if they fall by chopped up rubber that lines the ground. The playgrounds are boxed in by landscaping tembers to provide a boundary as well as keep the rubber in.
The Pond

The pond will serve as the main water feature for the site. It will offer things like fishing and a place for quiet meditation. A spill way is located to the south of the pond to allow an overflow to drain out keeping a constant water level. A parking lot located across from the pond will serve as a place for people to leave their cars as they enjoy the park.
Trail System

The trail system that runs around the park is a one mile loop. Along the trail are a series of berms that allow the walker a different view than the people below. The berms only rise up three to five feet, but that is enough to allow a visual difference. The berms also create spaces for various types of activities. The trail is made of pot ash cement, it is ten feet in width, and it is handicap accessible.
Other Amenities

There are three shelters located around the site that can provide users a place for a picnic, social gathering, or a place to get out of the weather. Located on the south end of the park is a place for additional parking if the angled parking along the boulevard is full. Also located at the south end are the athletic areas. There are four basketball courts, four tennis courts, and two volleyball courts. There are also two large areas of open space in the park for a variety of activities.
Conclusion

Throughout this comprehensive project, issues from land uses and circulation down to the design and details of the park have been addressed. This case study represents the opportunity to understand how small towns can cope with sprawl and preserve land for parks in their community. As open spaces begin to diminish and be taken over by structures, it is our call as landscape architects and environmental designers to respond to help create areas for people to enjoy and improve the atmosphere of any town. The protection of open space for communities is a noble cause—as concerned citizens and beneficiaries of those open spaces that surround our communities, we must make it our task to help establish a plan for all communities aimed toward preserving our parks and open spaces.

This is one case study that shows how the development of open spaces into parks can benefit any town.