



BATTLEGROUND
PARKS
DISTRICT

Where history meets nature



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Civil Designs, PA



Battleground Parks District Master Plan

Facilities Management Group:

Greensboro Parks and Recreation Department

Chris Wilson, Parks and Recreation Division Manager
Nasha McCray, Planning Project Development Manager
Steve Branson, Regional Parks Superintendent
Larry Barham, Country Park Manager
Mike Moyer, Cemetery Superintendent
Harold Gunn, Country Park Assistant Park Manager
Shelton Becton, Cemeteries Supervisor

Guilford County

Roger Bardsley, Planner for Parks and Open Space

Natural Science Center

Glenn Dobrogosz, Executive Director
Lindsey Zarecky - Director of Business Operations

Guilford Courthouse National Military Park

Chuck Cranfield, Park Superintendent

Greensboro Planning Department

Mike Kirkman, Comprehensive Planning Manager

Master Plan Funded By:



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The Vision

Four hundred acres in the heart of Greensboro contains the Guilford Courthouse National Military Park, the Natural Science Center, Country Park, and Forest Lawn Cemetery, together they will become the Battleground Parks District.

It is a bold new idea to reinvent some of Greensboro's distinctive treasures and build local, state, and national awareness of these rapidly evolving cultural icons of the community.

A half-million people annually visit the existing parks. Heritage, nature based, and cultural tourism are experiencing phenomenal growth nationally. By linking these attractions the visitor will stay longer, visit other attractions and businesses and contribute to the local economy.

The Battleground Parks District maximizes public funds and investment by expanding the use of these existing parks. By pooling and sharing resources the whole becomes greater than the sum of the parts.

The District will demonstrate Greensboro's commitment to a city rich in history, culture, and natural resources. A reason why people choose to live and invest in Greensboro. This major enhancement to existing resources makes a strong statement about improving quality of life and enhancing the value of both residential and commercial property in the area.

The Battleground Parks District can be a model in the state of North Carolina, where federal and local parks are unified to jointly leverage investment; and thereby creating a must see destination for residents and visitors.





Background

The Opportunity

Chicago has Grant Park, San Diego has Balboa Park, St. Louis has Forest Park and New York City has Central Park. All of those parks are an oasis of green space containing multiple attractions for both residents and visitors. Greensboro will now have that same type of park - the Battleground Parks District.

Near the proposed urban loop in the northwest region of Greensboro is a collection of significant public amenities contained in a 400-acre green space. These facilities: Guilford Courthouse National Military Park, Country Park, the Natural Science Center, Forest Lawn Cemetery and the Atlantic and Yadkin (A&Y) Greenway represent a significant opportunity for the city and the region to create a cohesive park that offers rich historic, educational, natural and recreational opportunities for both residents and visitors. Together these facilities will be known as the Battleground Parks District.

Battleground Parks District offers experiences in history, science, nature, recreation and culture through the wide range of facilities attracting local, regional and national visitors. Guilford Courthouse National Military Park draws visitors from the region and across the country and the Natural Science Center is the 14th most visited attraction in North Carolina. Hundreds of students each day already visit the parks for field trips, events and tournaments. These are already popular and well utilized facilities. By bringing them under a unifying umbrella and offering a cohesive and seamless experience the Battleground Parks District will become a Greensboro and state of North Carolina landmark.

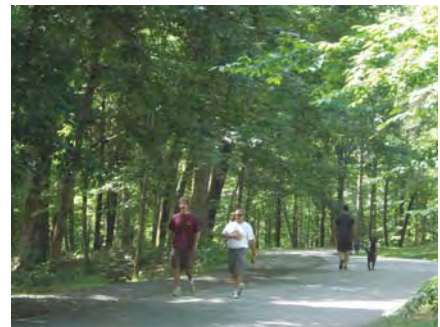
The Battleground Parks District can build on existing momentum and significant upcoming milestones. The Natural Science Center is in the midst of implementing the first phase of a three phase expansion plan that was enthusiastically supported by the public in 2009 through a bond referendum. The completion of each phase will draw increased attendance and interest. The Guilford Courthouse National Military Park is a unit of the National Park Service which will be celebrating its Centennial in 2016. It is essential to use significant events or milestones for each individual facility, as an opportunity to reinforce the Battleground Parks District “brand”.

The Idea

The idea for the Battleground Parks District originated with the personnel responsible for managing the facilities: the superintendent of the Guilford Courthouse National Military Park, director of the Natural Science Center, Country Park and Forest Lawn Cemetery, the parks and recreation division manager for City of Greensboro, and the principal planner for Guilford County Parks and Open Space. These



Guilford Courthouse National Military Park



Atlantic and Yadkin Greenway



Photo courtesy of Greensboro Park and Recreation Department

Natural Science Center



Photo courtesy of Greensboro Park and Recreation Department

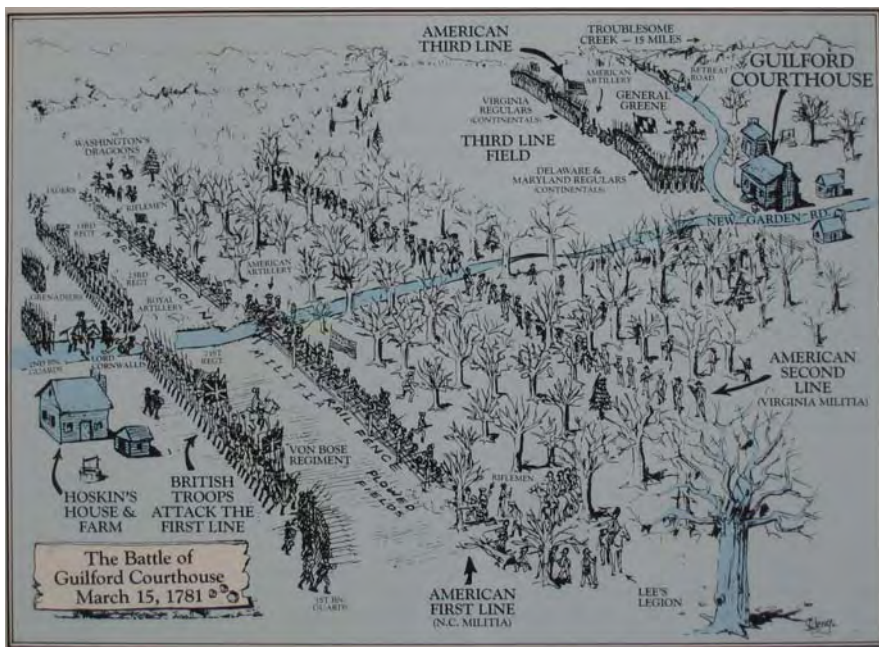
Country Park Lake

individuals proposed the idea of working cooperatively to develop an identity and a master plan that would tie all the facilities together to create a destination location and an economic development tool for the city. The City and National Park Service have established a precedent for cooperating and coordinating efforts through recently transferred ownership of the Colonial Heritage Center, or Tannenbaum Historic Park, to the National Park Service and through cooperating on various maintenance projects. Action Greensboro, a foundation that funds significant local projects that improve the quality of life for Greensboro residents, supplied the funds for this master plan. The organization supports the idea of a multi-agency coordinated effort to create a unique and significant partnership for Greensboro.

The History

The Battleground Parks District has a rich history; it is one of the factors that makes this a unique and notable location. The following is a compiled timeline.

1781: The largest, most hotly-contested battle of the Revolutionary War's Southern Campaign was fought at the small North Carolina backcountry hamlet of Guilford Courthouse.



Major General Nathanael Greene, defending the ground at Guilford Courthouse with an army of almost 4,500 American militia and Continentals, was tactically defeated by a smaller British army of about 1,900 veteran regulars and German allies commanded by Lord Charles Cornwallis. After two and a half hours of intense and often brutal fighting, Cornwallis forced his opponent to withdraw from the field. Greene's retreat preserved the strength of his army, but Cornwallis's frail victory was won at the cost of over twenty-five percent of his army.

Guilford Courthouse proved to be the high-water mark of British military operations in the Revolutionary War. Weakened in his campaign against Greene, Cornwallis abandoned the Carolinas hoping for success in Virginia. At Yorktown, seven months after his victory at Guilford Courthouse, Lord Cornwallis would surrender to the combined American and French forces under General George Washington.

1887: The Guilford Battleground Company was formed, it was conceived by Judge Schenck as an organization dedicated to preserving and adorning the grounds of the battlefield. Through the work of acquiring the battlefield land, the company laid the foundation for its eventual adoption as a national military park.

1917: The battlefield of Guilford Courthouse, in the state of North Carolina, is declared to be a national military park. Guilford Courthouse, by this time grown to one hundred and twenty-five acres marked with twenty-eight monuments and graves, was the first Revolutionary War battlefield preserved as a national park.

1928: Forest Lawn Cemetery is opened.

1934: Country Park, part of a large tract of land purchased in 1924 with cemetery bond funds, officially opens to the public on Independence Day. Work was initiated by Mayor Paul Lindley with assistance from the Civil Works Administration and the Federal Relief Administration. The bathhouse and boardwalks sited along the lakes were the main attraction.

1957: The Natural Science Center opens. It is called the Greensboro Junior Museum and provides a small nature center and environmental programs.

1964: Lewis Center multipurpose facility is built in Country Park.

1971: Greensboro Jaycee Park, the largest athletic complex, developed by the City of Greensboro, is built.





1973: The Country Park zoo is deeded to the Natural Science Center, Inc.

1978: J. Spencer Love Tennis Center at Jaycee Park is built.

1988: Tannenbaum Historic Park opens to the public and hosts the first anniversary commemoration of the Battle of Guilford Courthouse. Park visitors learn about everyday life in the backcountry of North Carolina before, during and after the Battle of Guilford Courthouse. That year, the Hoskins House Historic District, located at Tannenbaum Historic Park, is officially listed on the National Register of Historic Places.



1990: Greensboro Parks and Recreation takes over the operation of the city cemeteries.

1992: The Colonial Heritage Center opens at Tannenbaum Park.

2009: Twenty million dollar bond for the Natural Science Center expansion and renovation is approved by voters. Ownership of Tannenbaum Park is transferred from the City of Greensboro to the National Park Service.

Note: The history of the facilities in the Battleground Parks District is taken primarily from: *Guilford Courthouse National Military Park, Administrative History*, October 12, 2010 (updated February 2003) and *Celebrating 75 Years, Timeline of the Greensboro Park and Recreation Department*.

Existing Conditions

Existing Facilities

The existing facilities in the Battleground Parks District offer a wide range of educational and recreational opportunities. The age and quality of maintenance varies by facility.

Guilford Courthouse National Military Park (GCNMP)

- Vehicular access from New Garden Road, Old Battleground Road. Green Acres Lane abuts park property, but does not access the interior circulation system.
- Visitor's Center
- Tannenbaum Historic Park, Revolutionary War era house, barn, blacksmith shop and visitor's center
- Research library
- Self-guided tour of battleground
- One-way loop road with pedestrian zone and one way bicycle lane
- Monuments
- Stand along restroom facility
- Amphitheater



Visitor's Center



Park Entrance



Nathanael Greene Memorial

Natural Science Center (NSC)

- Vehicular access off Lawndale Road
- A hands-on natural science museum which is the only dually AZA and AAM accredited attraction in North Carolina and one of just fourteen nationwide.
 - Dinosaur Gallery
 - Herpetarium
 - Gem and mineral collection
 - Sea life in Sea Cove
- Animal Discovery Zoological Park
- Omnisphere theater
- Greensboro Council of Garden Clubs, meeting facility (not part of the NSC but part of the campus)



Photo courtesy of Greensboro Park and Recreation Department

Natural Science Center



Photo courtesy of Greensboro Park and Recreation Department

Natural Science Center



Photo courtesy of Greensboro Park and Recreation Department

Animal Discovery Zoological Park



Photo courtesy of Greensboro Park and Recreation Department

Natural Science Center



Photo courtesy of Greensboro Park and Recreation Department

Natural Science Center



Photo courtesy of Greensboro Park and Recreation Department

Animal Discovery Zoological Park



Photo courtesy of Greensboro Park and Recreation Department

Animal Discovery Zoological Park



Greensboro Council of Garden Clubs

Country Park

- Two vehicular access points from Lawndale Road, and there is an entrance from Pisgah Church Road
- Lewis Center
 - Gym, multi-purpose rooms, game room, kitchen
 - Varied programs including-dance, dog obedience, rose society meetings, fly fishing
 - Safetytown
 - Baseball stadium
- Jaycee Park
 - Stoner-White Baseball Stadium
 - J. Spencer Love Tennis Center, 13 clay courts.
 - Soccer and football fields
 - Volleyball court
 - Free Ride Zone, BMX course
 - Single tire mountain bike trails (4+ miles)
- Two fishing lakes, fishing pier and seasonal paddle boat rentals
- Concession building
- Nature and hiking trails within an extensive passive recreation area
- Guilford County Veterans' Memorial
- Playgrounds (3)
- Picnic shelters (8)
- Stephen M. Hussey Bark Park, dog park
- Battle reenactment and Guilford Native American Association Pow-Wow
- Summer shuttle, allows for pedestrian and bicycle use of main loop road
- In addition to the facilities the following reoccurring events take place at Country Park: Carolina Cup bike race, Easter Seals walk, Trail Race, Light the Night walk, Half Marathon run, Cannonball run, Veterans' Day service, American Cancer Society walk



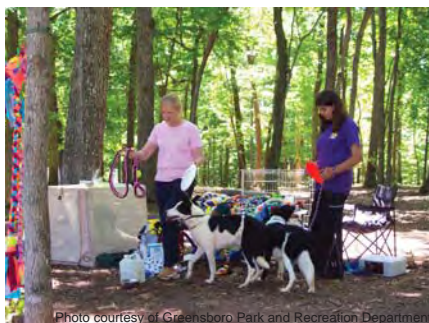
Lewis Center



Safetytown



Stoner-White Baseball Stadium



Stephen M. Hussey Bark Park



Guilford County Veteran's Memorial



Historic Jail

Forest Lawn Cemetery

- Vehicular access from Pisgah Church Road and occasionally the gate is opened for access from Old Battleground Road.
- Internments continue in this 70 acre cemetery
- 26,000 gravesites with approximately 3,000 sites still for sale



Forest Lawn Cemetery

Atlantic and Yadkin (A&Y) Greenway

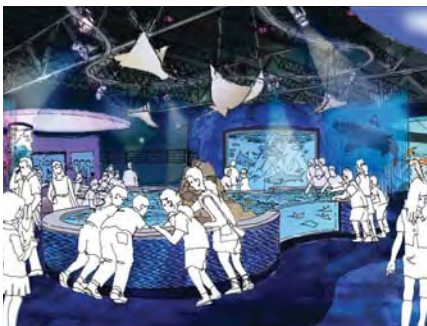
- The Atlantic and Yadkin railroad ran from Wilmington to Mount Airy. The A&Y Greenway follows the same routes. When completed the greenway will begin in downtown Greensboro as part of the Downtown Loop Greenway and run northwest, traveling through the District, up into the town of Summerfield. It will continue into the countryside to the town of Stokesdale. This regional greenway will connect three communities that were historically connected by rail and provide trail users with a beautiful route that passes through a number of different environments, from urban to rural.



Atlantic & Yadkin Greenway

Complementary Planning Efforts

There are other planning efforts or improvements underway for the Natural Science Center and the Guilford Courthouse National Military Park. The Natural Science Center is designing Phase I of a multi-phase expansion and renovation program, which will include a sciuarium, a science focused aquarium with hands on learning opportunities, an improved ticket and entrance sequence, and improved and expanded parking. Later phases include improvements to the existing facility and a new attraction called Sanctuary Station - Endangered Species Village that will be an expansion of the zoological park, see Appendix A for Natural Science Center Master Plan images. The Natural Science Center's current \$20M *Science City, USA* expansion project is projected to increase visitation from 250,000 to 400,000 visitors per year and expand local economic impact from \$10M to \$20M per year.



Planned addition to Natural Science Center



Planned addition to Natural Science Center

Guilford Courthouse National Military Park has completed an assessment of options for a new, renovated, or expanded visitor's center at several locations within the existing park. The assessment of visitor center options occurred because the existing visitor's center for the Guilford Courthouse National Military Park is located within a culturally important area of the battlefield. There is a second visitor's center at the Colonial Heritage Center (previously called Tannenbaum Park). The assessment identified that the preferred alternative is to expand the facility at the Colonial Heritage Center. The superintendant of the Guilford Courthouse National Military Park will pursue funding for the new visitor's center and partner with the Battleground Company to raise private funds for the facility. A study of alternative transportation and operations plan for a tram system will also be completed by the National Park Service as a follow-on to the previously completed Transit Feasibility Study which identified potential tram routes in the Battleground Parks District.

Site Analysis

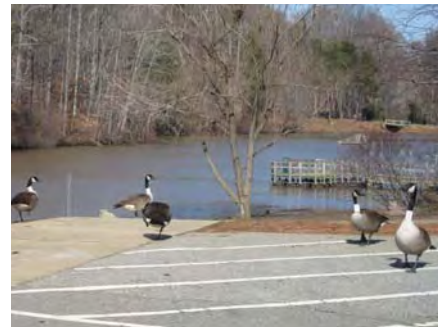
The site analysis of the 400-acre site identified the following significant characteristics that will be incorporated or addressed in the master plan. The National Park Service continues to acquire land to create a larger contiguous area between the National Military Park and the Colonial Heritage Center, see Appendix B for land holdings.

Natural Features

Vegetation - The site is primarily wooded and thus the site contrasts with the developed areas on its periphery. The woods on site are second growth oak-hickory forests containing species common to the southern piedmont including a wide variety of oaks (red, scarlet, white, black and chestnut), several species of hickory, maples, tulip poplars, sweetgums and sycamores. Understory trees are predominantly dogwoods and redbuds. There are some significant stands of short, loblolly and Virginia pines located in the Guilford Courthouse National Military Park.



Water - The stream fed lakes are an important focal point on the site. The lakes are located in the Hunting Creek watercourse. Lake Lindley is the southern lake and the northern lake is Lake Sloan. It appears that water quality is poor due in part to significant silting reducing the depth of water in each lake. Two earthen dams were built to create the lakes. The North Carolina Department of Natural Resources regularly assesses the dams. They were last assessed in 2009 and the assessment recommended removing vegetation from the dam, evaluating seepage issues and replacing the spillway on the lower dam, see Appendix C Dam Assessment. The south to north running Hunting Creek has five tributaries on site. It appears there are wetlands on site along Hunting Creek to the north of Lake Sloan. There are also floodplain in this area. Additional low areas that could contain wetlands are along the tributary below the Jaycee Park parking lot and below the zoological park at the Natural Science Center.



Topography -The site has gently rolling topography which creates opportunities for extended views. Forest Lawn Cemetery, Jaycee Park and the Natural Science Center site are located on large relatively flat areas. Those areas were graded to build those facilities. Erosion is a problem on slopes without adequate vegetation to stabilize the soil, for example the slope between the Natural Science Center and the lakes is significantly eroded and unsightly.

Wildlife - Significant deer and goose populations are the observed wildlife. Given the size and wooded character of the site it is anticipated that there are a significant number of other species on site.

Viewsheds - There are significant views from the following high points: the parking lot of the Natural Science Center looking towards

the lakes; the terminus of Jaycee Park Drive looking towards the lakes and from the Veterans Memorial looking towards the lakes. These viewsheds are particularly important because those views encompass the three main facilities in the Battleground Parks District and offer a visitor a sense of orientation to the entire site.



Photo courtesy of Greensboro Park and Recreation

Country Park One-Way Loop

Manmade Features

Roads - Because these facilities developed as independent entities, there is a limited road connectivity between facilities and virtually no cut through traffic on district roads. Unfortunately, Old Battleground Road bisects the Guilford Courthouse National Military Park and thus negatively impacts that park by dividing it. The road system serving the site is composed of four main components:

1. Guilford Courthouse National Military Park one way loop
2. Country Park one-way loop
3. Jaycee Park Drive, a two-way connector road/parking lot drive
4. Forest Lawn Drive, access road for the cemetery

The Guilford Courthouse National Military Park one-way loop is 20' wide and is marked to accommodate pedestrians, vehicles and bicycles and is potentially a model for other roads in the Battleground Parks District, see Appendix D, Guilford Courthouse National Military Park one way loop road markings.



Pisgah Church Entrance

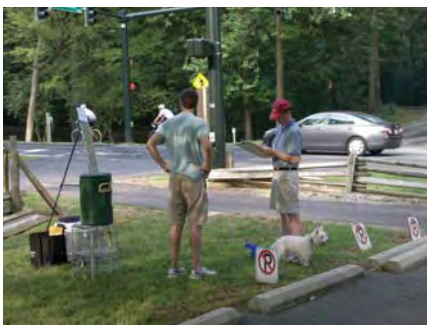
Entrances - There are entrances into the district from Battleground Avenue, Old Battleground Road, Pisgah Church Road, New Garden Road and Lawndale Road. The multiple entrances provide accessibility from all directions, but can be confusing to visitors. Signage and other elements, such as a consistent landscape treatment, are needed to indicate to visitors that they are entering the district.



Guilford Courthouse National Military Park

Trails and Paths - There are a number of different types of trails and paths in the Battleground Parks District. Paths in the Guilford Courthouse National Military Park include: a designated pedestrian area on one-way road loop, over two miles of paved walking trails, a section of Nathanael Greene Road that excludes vehicles and four dirt paths that connect to surrounding neighborhoods.

In Country Park the one way loop road is closed to vehicular traffic on the weekends in the spring, summer and fall and it then becomes an oversized pedestrian path around the lake. There are approximately four miles of single tire mountain bike trails on the western sides of the lakes in Country Park. The all persons nature trail is a paved path in Country Park that follows the southeastern edge of Lake Sloan. There are other paths that typically connect facilities or connect between facilities and parking.



Atlantic & Yadkin Greenway

The A & Y Greenway is a 10-foot wide paved asphalt trail that parallels Old Battleground Road and is part of the greenway system that will eventually connect into downtown.

Unified standards, quality and use restrictions for paths and trails would reinforce a district identity.

Parking -The majority of parking is located in seven lots:

GCNMP /A & Y Greenway/Old Battleground Road	50+/-
GCNMP/Visitor's Center	40+/-
Colonial Heritage Center	30+/-
County Park/Orman Road	50+/-
Country Park/Jaycee Park	300+/-
Lewis Center	80+/-
Natural Science Center	230+/-

At peak times the parking lots are typically full. Capacity in many of the parking lots could be increased by restriping and designating compact spaces. A lack of a close parking lot for the dog park creates safety concerns due to conflicts between the pedestrians using the road as a path and dog park users parking on the side of the road.

Buildings and Structures - The existing structures are visually a small component of the overall character of the district. Buildings in the district include a wide variety of materials, design and uses. The buildings with historic significance are: the Colonial structures in the Colonial Heritage Center, the former superintendant residence (now a research facility) in the Guilford Courthouse National Military Park and the former jail in Country Park which housed inmates constructing the cemetery. The Guilford Courthouse National Military Park visitor's center, the J. Spencer Love Tennis Center and the Lewis Center are all brick structures which reflect typical park and recreation building character. Open air and very small structures such as the concession building and park office in Country Park are wooden structures. The Natural Science Center has the widest range of style, materials and types of buildings due to variety of functions and ages of building in that complex. To reinforce a district identity future buildings and building renovations should be designed with a sense of establishing a more consistent architectural vocabulary, see Appendix E Country Park Building Assessment.

Tram Operation - A tram is operated by the City of Greensboro in Country Park during the weekends in the spring, summer and fall when the Country Park loop road is closed to automobile traffic. The tram stops at benches located along the route although there is no signage or information to inform users about the tram. A tram route feasibility study was developed by the National Park Service, for potential routes see Appendix F, Potential Tram Routes and Stops.

Areas of Opportunity - The eastern and northern shores of the lakes offer significant opportunity to create a central focal point for the Battleground Parks District due to their central location and visibility.



Colonial Heritage Center



Park Office

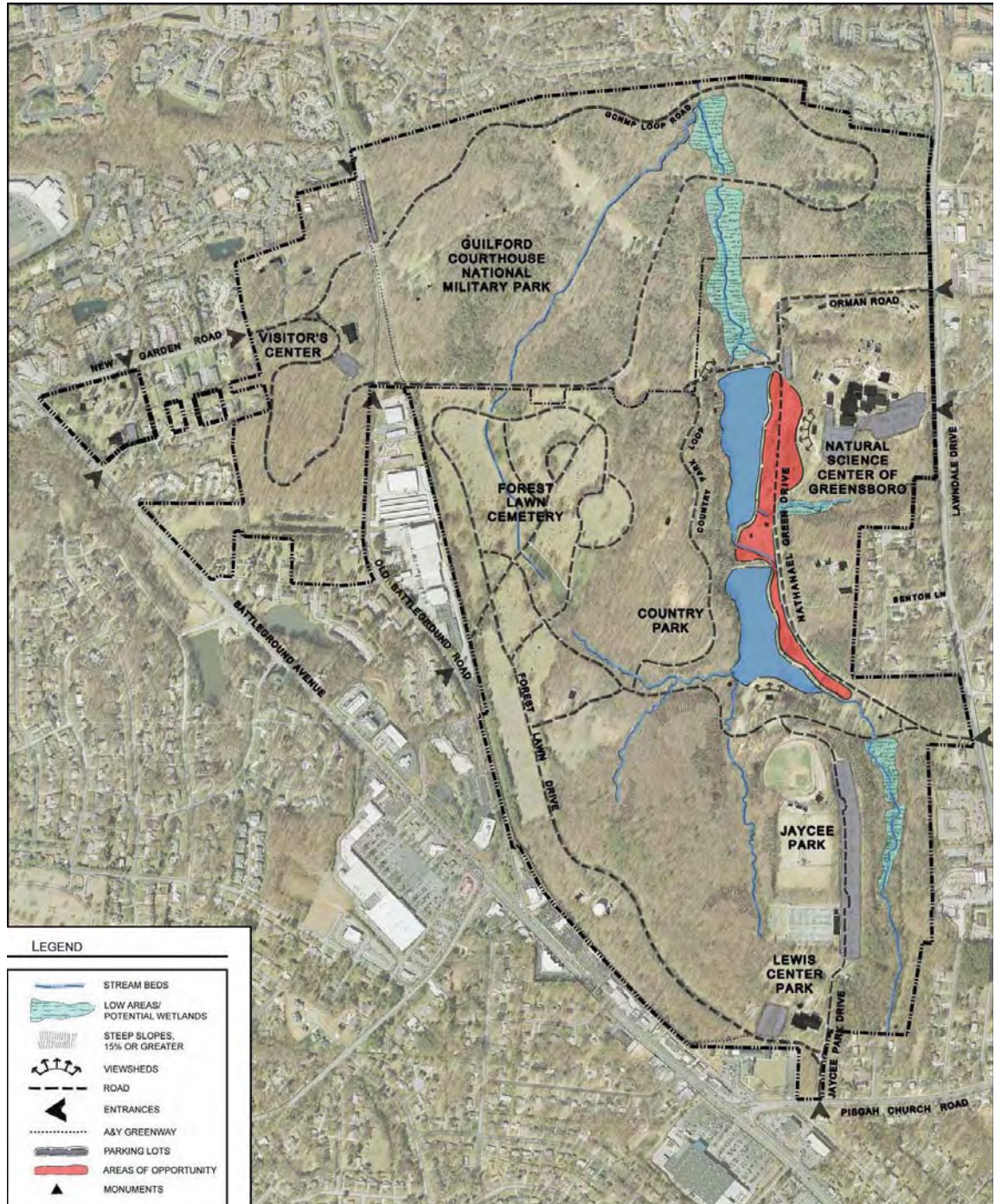


Lewis Center



Shore of Lake Sloan

Relationship to Surroundings - The district is bordered by Lawndale Drive, Battleground Avenue, New Garden Road, Pisgah Church Road, and Old Battleground Road. In general the district is surrounded by a mix of commercial uses and residential development and a small industrial area. The commercial uses offer places for visitors to eat and shop, and the district is a significant resource and amenity for surrounding residential development. Pedestrian connectivity between the various uses, particularly the residential development, and the Battleground Parks District, needs improvement.



Master Planning Process

Public Involvement

The public involvement in the master planning process included two components, a survey and public meetings. The existing facilities in the Battleground Parks District are individually very popular and well used, but there is no existing constituency for the Battleground Parks District because it is a new concept. Understanding that there was no existing constituency it was determined that a survey would be an effective method to reach out to the public. To maximize effective input both an on-site survey and an internet survey were executed with just over 600 responses, see Appendix G for the Survey Results. The on-site survey occurred on a Saturday morning in June from 8:30 am to 11:30 am at the following five locations: Jaycee Park parking lot, Orman Drive parking lot, the entrance to the national park trails, A & Y Greenway and the Natural Science Center.



Our conversations with visitors during the survey revealed the following reoccurring points:

- These are highly used and beloved parks
- There is a lack of wayfinding, many people asked for directions
- Communication about park activities and offerings is lacking, many people asked about events and tram stops or length of a park loop
- Pedestrian connectivity is an issue for those living nearby, many drive their cars to the parks to walk or jog
- Greenway users have difficulty safely crossing Pisgah Church Road because of traffic
- If this is going to become a major destination in Greensboro then upgrades and improved maintenance in Country Park will be necessary



Although this was not a scientific survey, the results do indicate the following user trends:

- The majority of respondents use the park at least once a month with many indicating they use the parks much more frequently.
- They have always known about it
- Jogging, running, cycling and visiting the Natural Science Center were the predominate reasons for their visits
- They primarily drive to the parks
- If arriving by foot or on bicycle many visitors use the greenway to access the park
- Majority of visitors are from Greensboro
- More visitors use the facilities at Country Park but there was relatively consistent visitorship across facilities with the exception of the cemetery





The feedback at the public meetings was thoughtful and insightful. In the first public meeting participants were broken into small groups and asked to develop responses to the following questions:

The head of a major company is thinking about moving their operations to Greensboro. In considering the area's quality of life, this CEO is going to be checking out park facilities, including the Battleground/Country Park Area. The CEO will be accompanied by a spouse, their school-aged children, and the children's grandparents.

QUESTION 1: What specifically would you WANT THEM TO SEE OR EXPERIENCE in the Battleground/Country Park Area?

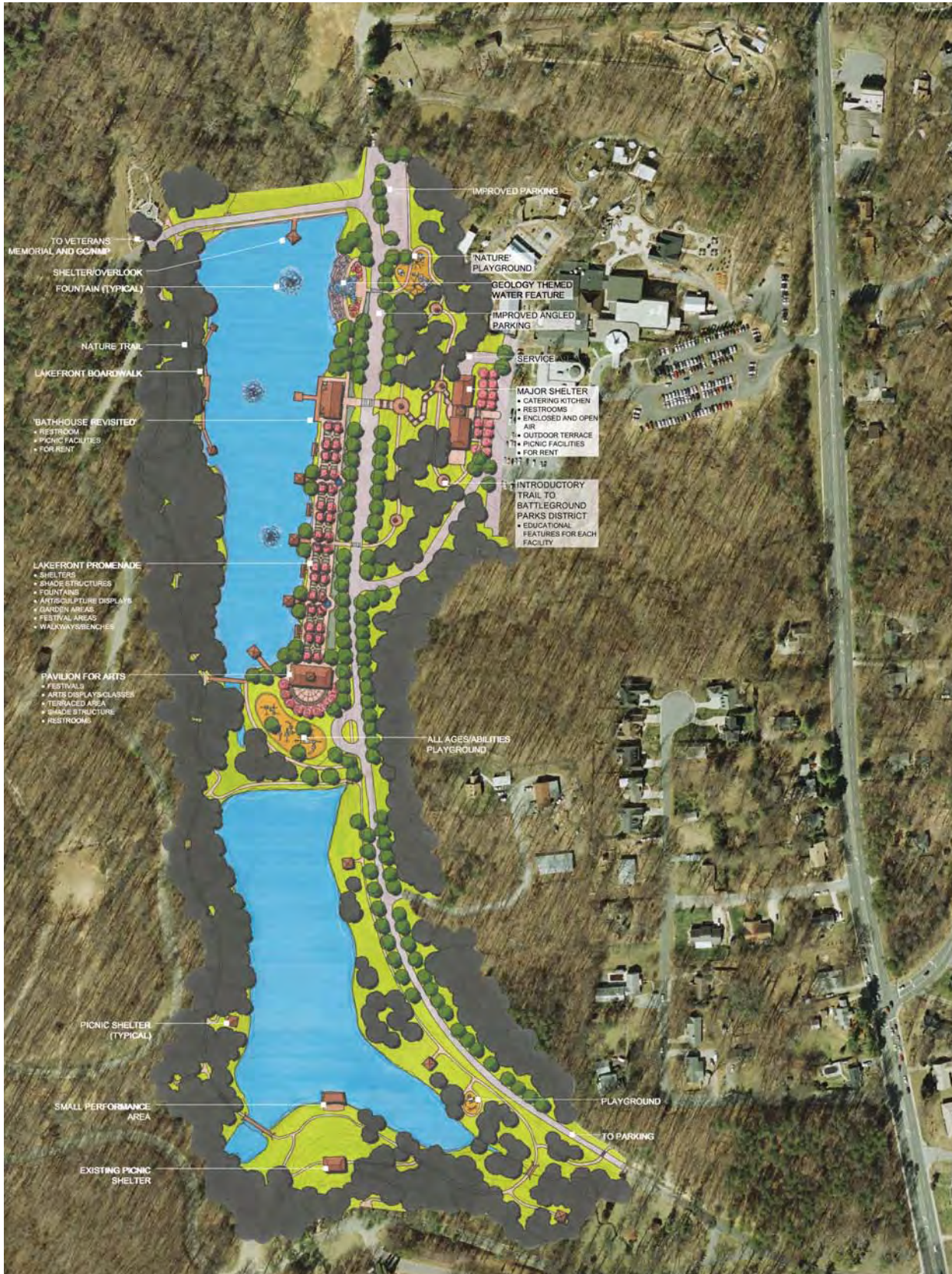
QUESTION 2: What would you prefer that they NOT SEE OR WISH COULD BE IMPROVED OR ADDED TO THE AREA before they arrived?

Within the small groups the responses from each attendee were written on flip charts. The flip chart sheets were taped up on the wall and the attendees were asked to indicate their preference for the top five responses listed for question one and the top five responses for question two by affixing an adhesive dot beside their preferences. The lists were organized by aggregating duplicate items and the preferences tallied, see Appendix H, Results from First Public Meeting.

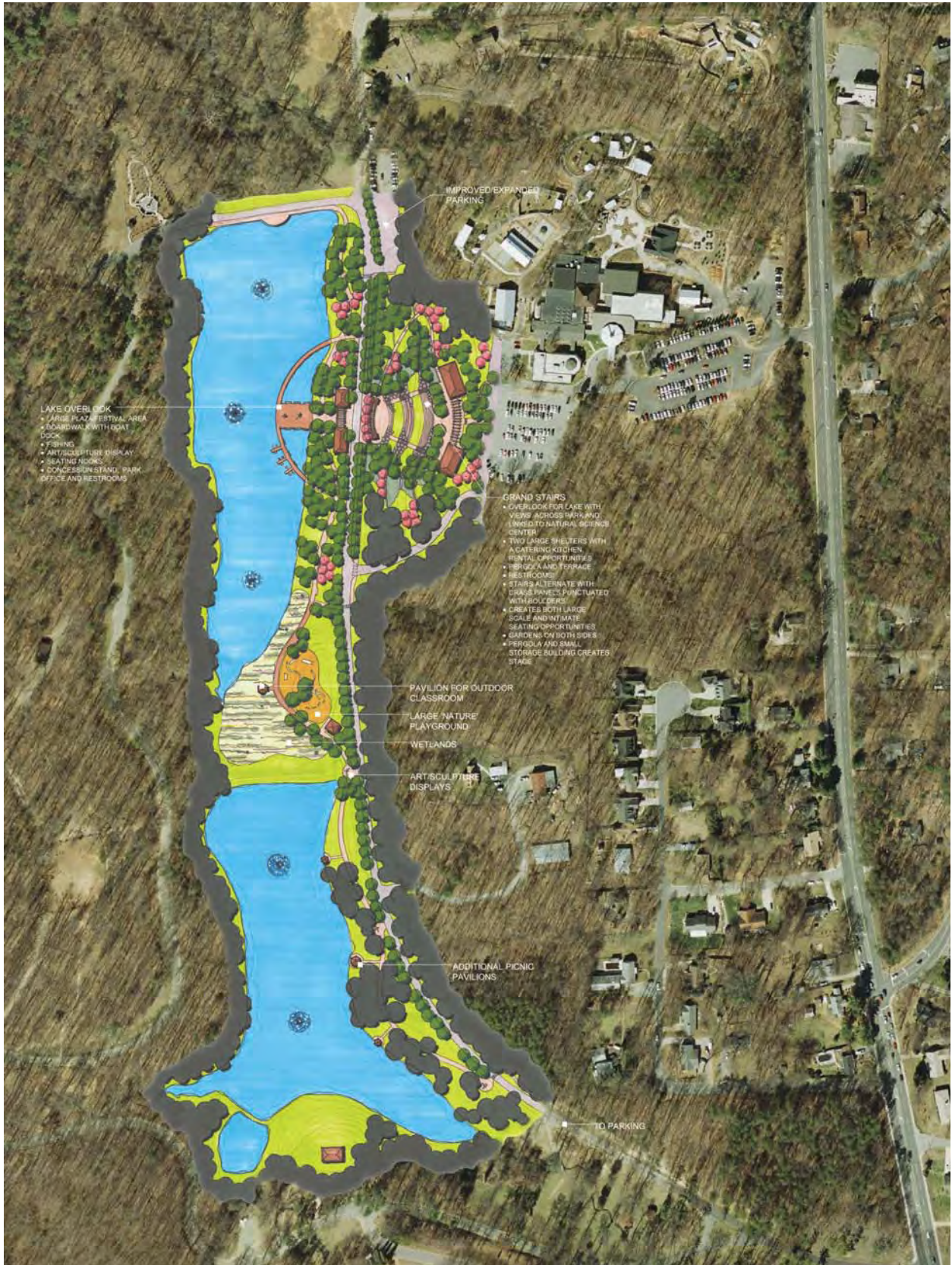
The Natural Science Center, monuments and memorials, bicycling and walking facilities, educational programming, natural areas and lakes and access to lakes were the items participants rated as "good". The "not so good" were image and appearance issues, walking and biking facilities, maintenance and upkeep and better wayfinding and signage needed.

In the second public meeting participants were asked to signal preferences for components of two concepts, shown on the following pages. In Concept A the focal point of the plan is a promenade that celebrates the experience at the lakefront. Concept B utilizes the changing topography to link the lakes of Country Park with the Natural Science Center. The final master plan, logo and tag line reflect the input from the public.

Concept A



Concept B



Recommendations

Recommendations for developing the Battleground Parks District cover a wide range of issues. The first recommendation describes the identity package which includes the area name, a tag line logo, promotional material and wayfinding. The recommendations for physical improvements are organized by infrastructure and comprehensive improvements and a concept for creating a center for the Battleground Parks District. Other recommendations include several studies that will guide future decision making, potential partnerships and management strategies.

Identity Package

Originally coined the Greensboro Landmark Project, the area of Greensboro that is home to the Guilford Courthouse National Military Park, the Natural Science Center of Greensboro, Country Park, Jaycee Park, the Atlantic and Yadkin Greenway and Forest Lawn Cemetery is one of the most unique collections of park and public amenities in any mid-sized American city. The district has the potential to be a smaller version of such well-known areas as Balboa Park in San Diego, Lincoln Park in Chicago, and Grant Park in Atlanta with the added distinction of being home to one of the pivotal battles in the Revolutionary War.

Consequently, the district must have an identity package that achieves two key goals. First, the package must provide a clear consistent name for the area that relates to its purpose and its history. Second, the package must allow each of the partners in the district to maintain their own distinct identity and not become a “subset” of the overall district.

In exploring the identity package the following factors were considered: name, tagline, typeface, logo, and color system.

Area Name

The first public meeting allowed citizens and stakeholders to provide input into what the area has been and should be called. Several stakeholders commented that the overall area has been called “Northwest Greensboro” and others commented that the area was sometimes referred to as the “Battleground Area”. Participants also provided suggestions for future names for the area including Centennial District, Heritage District, and Battleground District.

The partner stakeholders in the project including the City of Greensboro Parks and Recreation Department and Planning Department, Guilford Courthouse National Military Park, and the Natural Science Center of Greensboro held an internal workshop to discuss name options.



The name needed to have three components:

1. It must be recognizable to the public. Early concepts such as “Discover District” and “Explore District” were viewed as too vague.
2. It must be simple. Several of the names of amenities in the district are very long: Guilford Courthouse National Battlefield, Natural Science Center of Greensboro, and Atlantic and Yadkin Greenway are each quite long. The overall area should have a more compact name.
3. Connect as many aspects of the area together. The name and overall brand should attempt to reference all aspects of the area recognizing that there are diverse missions for each amenity.

The selected name for the area was “Battleground Parks District.” Each word has particular significance. “Battleground” signifies the unique nature of the overall area as the site of a Revolutionary War Battle. It is a unique name for a district that will set this area apart from other similar park areas in peer cities. “Parks” was chosen deliberately because the area is not just one but a collection of many park and recreation facilities each with different missions. “District” was chosen to be inclusive of all the amenities, such as the Natural Science Center and Forest Lawn Cemetery.

Tagline

Once the name was established, a tagline was explored to help modify what the Battleground Parks District means to the visitor, the resident, and the stakeholder groups themselves.

Several different suggestions were made for a tagline and were presented at a public meeting in September. Among the suggestions were the following:

- Science, History, Recreation
- Uncover our Past, Discover our World
- Greensboro's Place to Explore, Experience and Discover
- Where History Comes Natural
- Exploring History, Life, and Science
- Experience Greensboro's Past, Present and Future
- “Where History Comes Natural” was quite popular with the public though one citizen suggested it be modified to be “Where History Meets Nature.”

“Where history meets nature” garnered significant positive feedback from the community members in attendance and was selected as the project tagline.

Logo Design

The logo concept went through a similar vetting process that involved the various stakeholders, interested citizens, and the consultant team. Again, the logo for the Battleground Parks District is not intended to replace the existing identities of the stakeholder attractions in the area



but rather to serve as a platform to serve up these attractions and a way to organize them into one identifiable area. Each of the partner location's logos are shown below and each has special significance for each partner.



The logo design for the Battleground Parks District does not attempt to combine all of these concepts into one but rather attempts to convey the importance of the overall district in a clean design. The selected typeface for battleground and parks is a classic bold serif in all-capital case. The word district is a contemporary sans serif typeface. Each of the words is stacked with parks as the largest and most prominent word. The icon takes a circular ring of thirteen stars similar to those found on early American flags and modifies them into the letter G. The arm of the G is the familiar oak leaf found on the City of Greensboro brand system. This creative approach was suggested by a citizen at the second public meeting as a modification to similar circular "G" star concepts. A rich blue and green color are used in the design.

Some alternate color concepts were also explored for the identity system including a solid blue, an inverted color scheme with a more contemporary green color as well as a black on white and white on black pattern to ensure that the system is applicable in a variety of formats and uses. A CD Rom style guide accompanies the logo system showing proper usage and a resource system provides a wide variety of frequently used file formats so that each partner group can easily select the best file for each application of the logo.





Promotional and Marketing Material

Another important consideration for the identity system is promotional and marketing material with the logo incorporated. An example of a tee-shirt design is shown below. A key marketing concept for the area would also be to have a web page that provides links to all of the partner entities in the Battleground Parks District. Currently www.battlegroundparksdistrict.com and www.battlegroundparkdistrict.com are available and should be secured for the area.



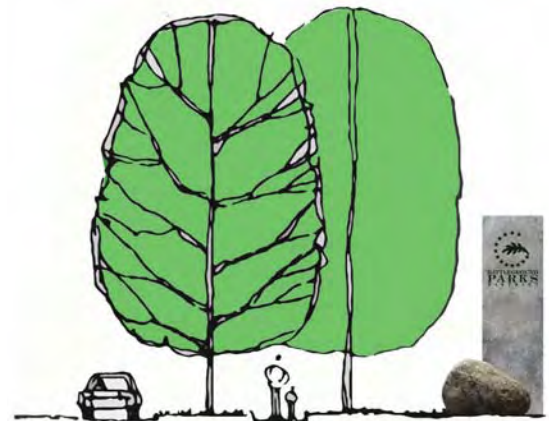
Wayfinding

One of the most important uses for the identity system will be on a series of signs that will be placed throughout the district. These signs are designed to complement existing signs of each partner group while providing the visitor with easy directional guidance to all of the district’s attractions.

The signs positioned within the city and along highways will need to be reviewed for consistency and to determine the most effective locations to guide visitors to the Battleground Parks District. The planned urban loop will be located in close proximity to the district and will need to be effectively signed to direct visitors.

Identification Sign

The District Identification Sign should be placed at key “gateways” to the Battleground Parks District. These signs are designed as monument signs with a boulder at the base and a tall cast stone pillar with the logo on it. The name of the district could be carved into the sign and colored. The gateway signs could be lit with ground lighting that shines onto the pillar.



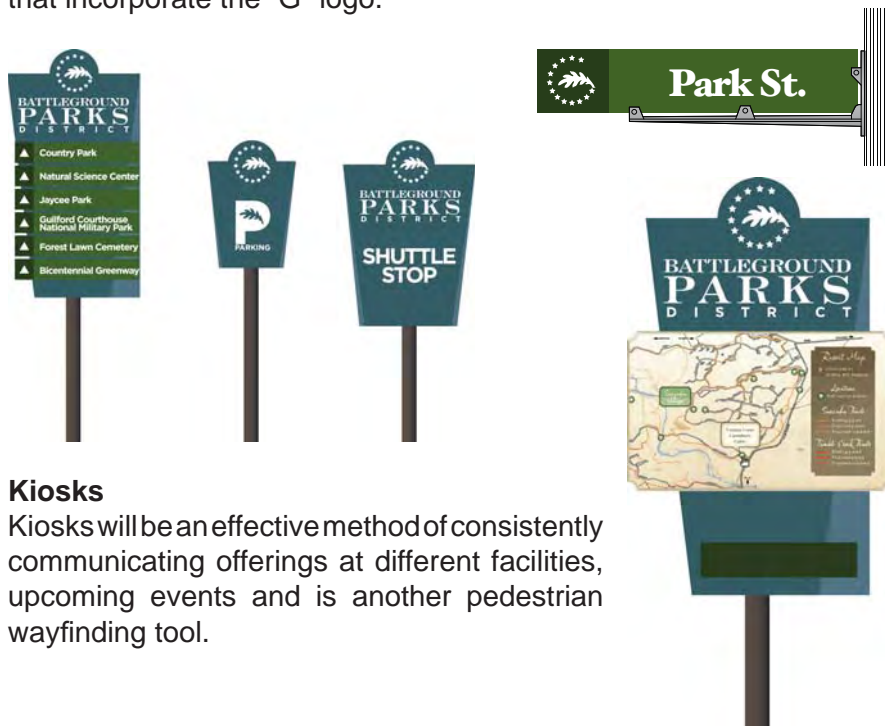
Facility Identification Sign

The facility identification sign is likely to be used primarily for County Park facilities in the district as both the Guilford Courthouse National Military Park and the Natural Science Center of Greensboro have existing and planned identification signs. This sign is designed as a two panel metal sign on a stacked stone base. A blue panel contains the “Battleground Parks District” name and a green panel includes the name of the facility and the “G” logo.



Vehicular and Pedestrian Directional Signage

Vehicular and pedestrian directional signage will be scaled to the various locations where they are placed. Vehicular signs should have a maximum of four locations listed on the sign while pedestrian signs can list more locations. The sign system also incorporates parking directional signage, shuttle stop signage, and a sample kiosk design. The sign system might also incorporate street sign blade redesigns that incorporate the “G” logo.



Kiosks

Kiosks will be an effective method of consistently communicating offerings at different facilities, upcoming events and is another pedestrian wayfinding tool.



Infrastructure and Comprehensive Improvements

Circulation, Parking Plan and Other Infrastructure Improvement Plans

The master plan recommendations build on the existing significant recreational, educational, cultural and historic resources of the Guilford Courthouse National Military Park, Country Park, the Natural Science Center, Forest Lawn Cemetery and the A&Y Greenway. The Circulation and Parking Improvement Plan and the Other Infrastructure Improvement Plan depict recommendations for improvements across the entire 400 acres. Those recommendations are focused on improved connectivity, access, locations of automobile oriented wayfinding signage or improvements or changes to existing facilities.



Proposed Circulation and Parking Improvements

On Site

Vehicular Improvements

- A. Realign intersection of entrance road from Pisgah Church Road and Forest Lawn Drive to create a “T” intersection.
- B. Reconfigure Nathanael Green Drive entrance to create a “T” intersection with loop road.
- C. Widen the Country Park loop road to 20’ with a center lane of one way traffic, a one way bike lane on the outside and a two way pedestrian path in the inner edge of the loop, matching the loop road condition in the Guilford Courthouse National Military Park.
- D. NPS will work with the City to close Old Battleground Road through the GCNMP.
- E. New Garden Road will intersect from the GCNMP park loop road with a “T” intersection to distinguish the public road from the park loop road.
- F. Realign GCNMP Loop Road to intersect with Nathanael Green Drive, cross the dam and create a new road on the existing trail that connects at the Winston Monument. This road segment will include designated pedestrian and bicycle lanes similar to the GCNMP and Country Park loop roads.

Pedestrian Improvements/Additions

- G. Add trail connecting the A&Y Greenway to Jaycee Park parking lot.
- H. Add a man gate for access from the A&Y Greenway into Forest Lawn Cemetery at existing gate. Sign a connection from the greenway to the Country Park loop road via the cemetery roads.
- I. Add a trail connecting the Country Park Loop Road and the A&Y Greenway on the west side of the Jaycee Park facilities.
- J. Add a trail from Forest Lawn Cemetery to the Guilford Courthouse National Military Park.
- K. Add a trail from Lawndale Avenue along the Nathanael Green Drive.
- L. Add a trail from Lawndale Avenue along Orman Drive connecting to Nathanael Green Drive.

Parking Improvements/Expansion

- M. Add two parking lots on either side of the Forest Lawn Drive for facilities in the Lewis Center area for the dog park and adjacent facilities.
- N. Improve the Jaycee Park parking lot by right sizing parking lot to standard 60’ bays (existing bays are 70’) and thereby expand the center island. An expanded center island could provide more room for existing trees or be redesigned as rain gardens. Add handicapped spaces and increase parking spaces by designating 20% as compact spaces. Reorient access into and the circulation through the parking lot to create through drives. The access through the lot will occur in the aisle furthest from the building to minimize pedestrian conflicts.
- O. Retain the parking at the existing GCNMP visitor’s center.
- P. Create a new parking lot with approximately 100 spaces at the terminus of Orman Road. Much of the lot is in the flood plain and design will need to respond to that condition.
- Q. Use Old Battleground Road R.O.W for additional parking when the road is closed (it is anticipated that when the Urban Loop is built there is the potential to close Old Battleground Road).

Tram System

- R. Develop two tram loops to adequately serve the Battleground Parks District.

Off Site

- S. Build new/expanded sidewalks on Lawndale Avenue, Old Battleground Road and Battleground Avenue.
- T. Create safe pedestrian crossing for A&Y Greenway at Pisgah Church Road/Battleground Avenue for future connections to downtown greenway.

See map on the following page for improvement locations.

Parking and Circulation Improvements





Other Proposed Infrastructure Improvements

On Site

Wayfinding

- A. Battleground Park District Identification signage at the following major entrances:
- Pisgah Church Road Entrance
 - Lawndale Drive/Nathanael Greene Drive
 - Lawndale Drive/Orman Road
 - Battleground Avenue/New Garden Road
- B. Specific Facility Identification Signage
- Country Park at Pisgah Church Road Entrance, Lawndale Drive/Nathanael Greene Drive and Lawndale Drive/Orman Road.
 - Use existing signs for Natural Science Center and the planned new sign for the Guilford Courthouse National Military Park on Battleground Avenue/New Garden Road.

Vehicular Directional Signage

- Pisgah Church Road Entrance
- Lawndale Drive/Nathanael Greene Drive
- Lawndale Drive/Orman Road
- Battleground Avenue/New Garden Road

Pedestrian Directional Signage

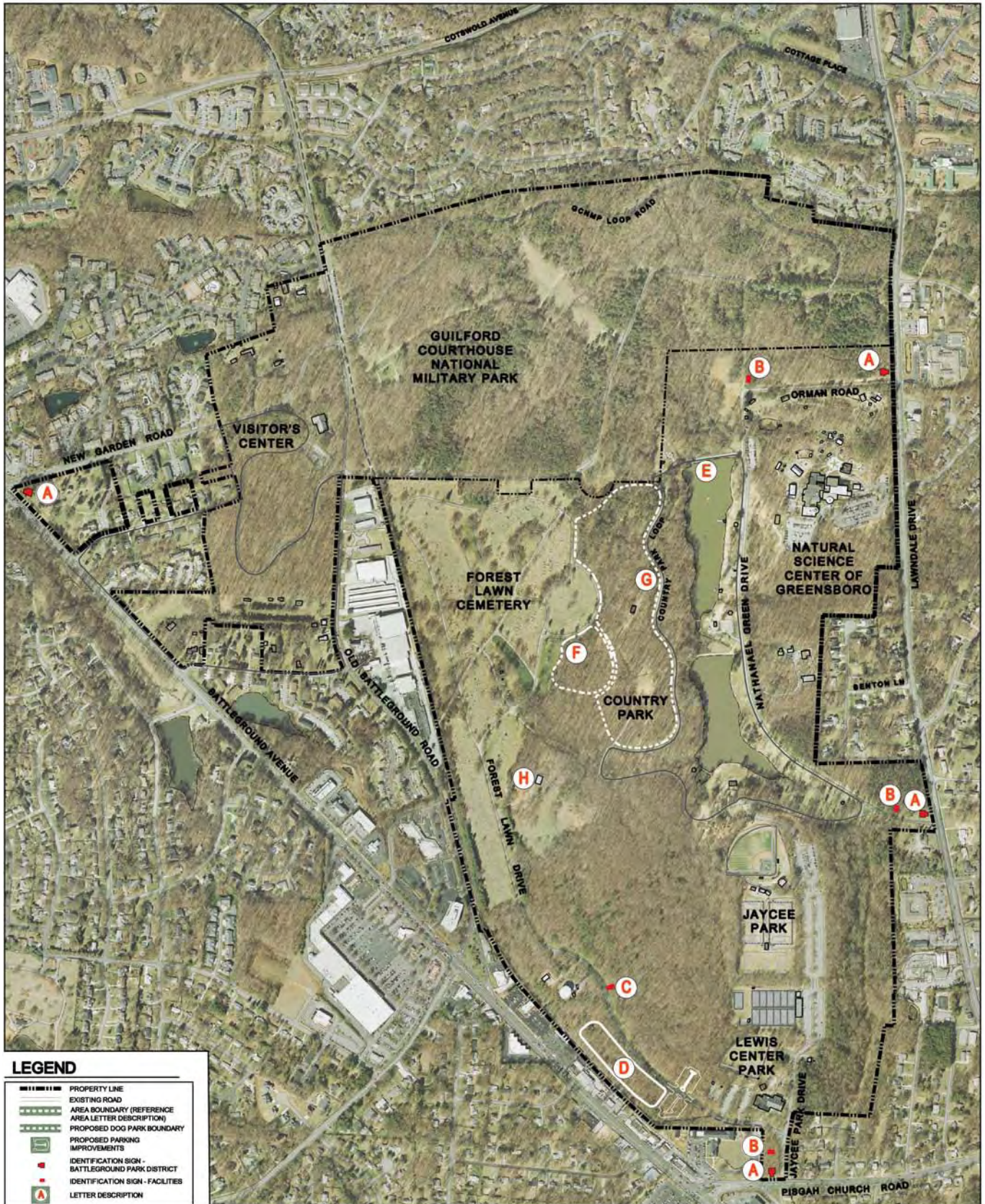
- At major intersections and trailheads.
 - Sign all roads to facilitate wayfinding.
- C. Replace Forest Lawn cemetery gateway along Forest Lawn Drive with a new gateway positioned to the north of the proposed parking lots and dog park.

Improvements/Changes to Existing Facilities

- D. Move the dog park to the south side of Forest Lawn Drive with additional parking lots.
- E. Repair dam and spillway to create a wider crossing to accommodate vehicles and pedestrians. Dredge lake to clean out silt accumulation.
- F. Define eventual cemetery expansion area, based on the topography and other relevant factors. Fence the expansion area to clearly define the boundary.
- G. Once the dog park is moved, use that space for single tire bike trails.
- H. Restore the historic jail building as a community space with interpretive displays explaining the use, the relationship to the cemetery and the sweat box.
- Improve the landscape maintenance to create a seamless and continuous experience between parks.
 - Improve existing picnic shelters to reflect the history of the park

See map on following page for improvement locations

Proposed Infrastructure Improvements



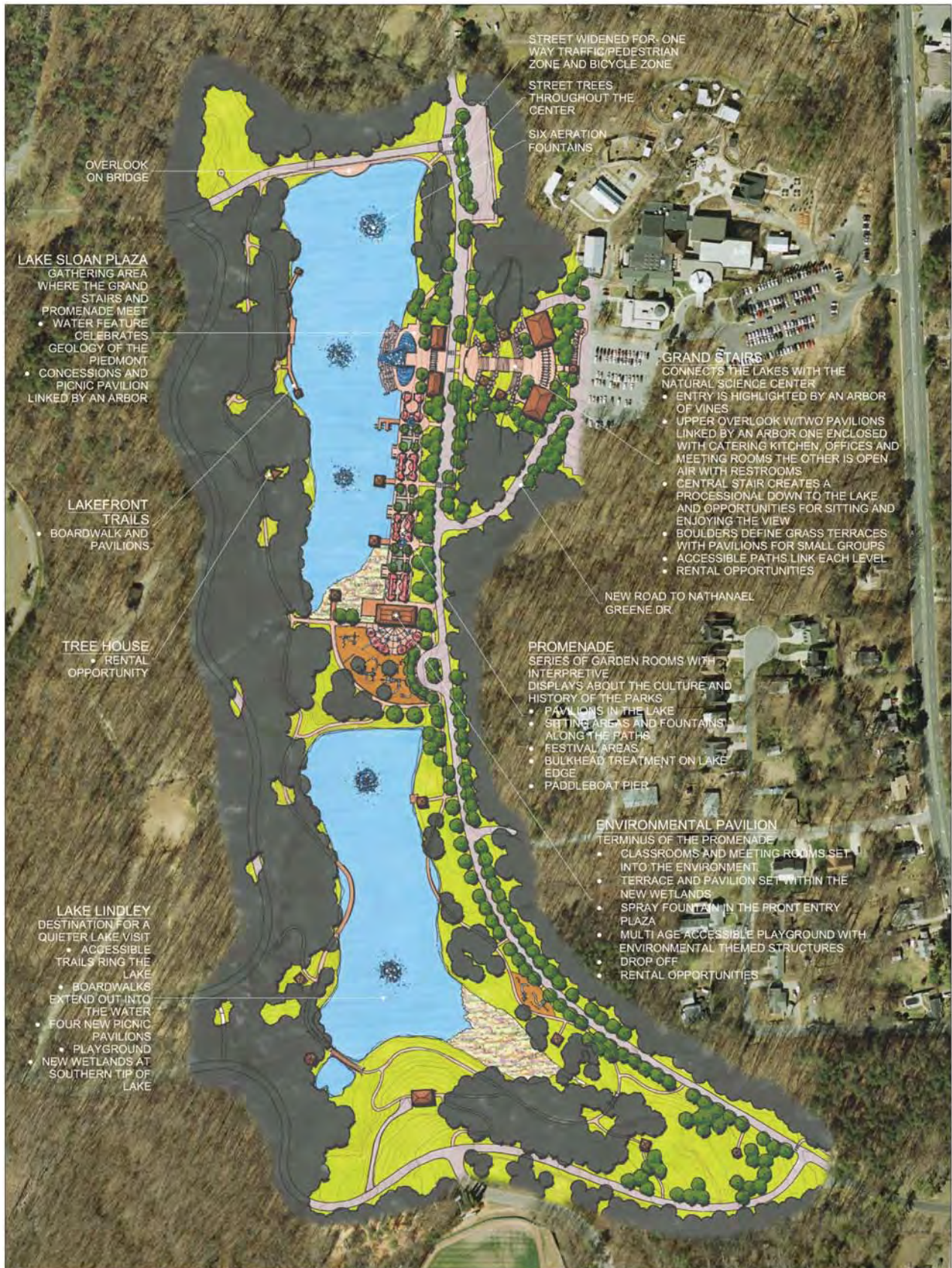


Creating a Center for the Battleground Parks District

Presently the Battleground Parks District is a collection of facilities. To become a recognizable and unified district it needs a center, a focal point, a place to get oriented and to gather. The area around the lakes offers a fantastic location for a center since it is geographically central, has visibility to almost all the existing attractions and is naturally a point of interest and focus.

The following plan illustrates proposed elements such as a grand stair, a promenade and an educational pavilion designed to create a center for the Battleground Parks District. It will be a center that celebrates and highlights the unique place that is the Battleground Parks District. Following the overall plan are descriptions and graphics of specific areas contained in the center.

Final Plan



The Grand Stair

- A fantastic vine arbor, which is highlighted with sculptures and references to the animal park, connects the Natural Science Center to the grand stairs.
- The entry pavilion begins the grand stairs, a processional from the Natural Science Center to the lakes.
- The upper plaza is defined by two large pavilions. One of the pavilions contains park offices, meeting rooms and a catering kitchen. The other is an open air pavilion with restrooms. The architecture of the pavilions and all the buildings in the district's center should reflect the era when Country Park was established with use of large scale stone, and wood timbers.
- The stairs offer a continuous panoramic view of the lakes and the steps can be used for seating and landings used as mini stages.
- Four grass terraces step down the slope. Each terrace has a small picnic pavilion, the perfect spot for school groups or family picnics on the weekend. The terraces have additional seating built into the large boulder retaining walls that create the terraces
- On the north side of the stair an accessible path connects to each level.



Lake Sloan Plaza

- The grand stair and the promenade meet at the Lake Sloan Plaza.
- The large concessions pavilion and the picnic pavilion with restrooms will draw visitors from throughout the Battleground Parks District.
- The plaza is animated by an interactive water feature designed to illustrate and celebrate the geology of the Piedmont.
- Lake Sloan Plaza is ideal for festivals, street performers and food vendor carts.



Promenade

- The promenade is defined at one end by the Lake Sloan Plaza and on the other by the environmental pavilion.
- A series of garden rooms are linked by a central curvilinear path punctuated with fountains. Each garden room explores a different aspect of the culture and history of the Battleground Parks District through art and interpretive displays.
- Rent a paddleboat and explore the lake
- Open alcoves and pavilions set out in the water offer a variety of seating options
- The edge of the lake is bulkheaded so the water flows right up to the edge of promenade restricting access for geese and ducks.
- Festivals and special events can be set-up along the promenade.
- Three aeration fountains in each lake animate and improve water quality.



Environmental Pavilion

- The environmental pavilion is the other terminus for the promenade. It contains classrooms, meeting rooms and restrooms. It is an opportunity to teach environmental issues in a setting very close to many different environments. The terrace that is surrounded by wetland is an outdoor classroom. The pavilion and terrace would be available for event rental.
- Spray fountain in the front entry plaza.
- Large multi-age accessible playground with environmental themed structures.
- Drop-off pick-up area.



Lakefront Trails

- Paved trail on the forested western side of Lake Sloan.
- Boardwalk and pavilions located in the same spot as the original Country Park boardwalk.
- Tree house in the mature trees, offers an unusual vantage point to experience the forest canopy and a unique rental opportunity.



Lake Lindley

- Lake Lindley has a more passive, quieter character.
- A paved, accessible trail rings the lake with boardwalks extending out into the water.
- Four new picnic shelters and the existing picnic shelters are refurbished.
- Small toddler playground located close to the picnic pavilions.
- New wetlands planted at the southern tip of the lake.
- New street trees shade the park loop road.



Other Recommendations

Suggested Studies

Additional studies will be an important tool in implementing the master plan and developing interpretive materials for the Battleground Parks District. There is an opportunity to take advantage of expertise in the local universities and colleges in the Greensboro region since the scale and type of study is well suited for a class project. The following studies are recommended to be utilized as a resource for future planning and development:

Activity Center Potential Location Study - development of an Activity Center is a recommendation of the City's Comprehensive Plan. It is envisioned as an area of private development that leverages and supports the public facilities of the district. The intersection of New Garden Road and Battleground Avenue is the identified location for the Activity Center. As plans for the center are developed it will be important to consider: economic conditions, existing land-use and all the potential sites on the periphery of the district.

Economic Analysis - document the baseline economic impact at the existing facilities. At periodic intervals update the economic impact of the district.

Wildlife Study and Management Plan - inventorying and categorizing existing wildlife in the park and developing a plan to manage species that are overpopulated such as the geese and deer.

Tree Inventory and Management Plan - inventory the tree species and relative sizes of the trees identifying areas to be preserved. Develop a management plan to create a cohesive approach to the species and monitor any threats to the health of the canopy.

Stormwater Management Plan - develop a master stormwater plan for the Battleground Parks District to plan the stormwater improvements required for the implementation of the master plan and the planned improvements to the Natural Science Center and the Guilford Courthouse National Military Park.

Policy Review - policies for each individual facility may need to be reviewed and amended for the Battleground District Park implementation. The following policies have been identified that might be considered for modification as the project progresses:

- Consider allowing use of bicycles in Forest Lawn Cemetery

Create Partnerships

The concept of the Battleground Parks District is based on public agencies working together. Creating and expanding on existing partnerships will be essential in implementing the master plan and



long term maintenance for the Battleground Parks District. Foster the existing partnership with Action Greensboro and create new partnerships with similar groups as a source of both support and funding.

Recreation groups such as the mountain bike organizations, soccer, tennis and baseball leagues are also important constituencies. The Battleground Company and Board of Directors of the Natural Science Center are important supporters and they need to be informed of the potential the Battleground Parks District has to positively impact both the Guilford Courthouse National Military Park and the Natural Science Center.

The garden clubs of Greensboro have historically been an active group in the community and a partnership with them as the master plan is implemented can potentially be a source of volunteers and a resource. Creating new partnerships and fostering existing partnerships will grow a dedicated constituency for the Battleground Parks District.

Management Recommendations

The idea of creating the Battleground Parks District, securing funding for the master plan and developing the master plan are a result of cooperation and collaboration between the National Park Service, City of Greensboro, Natural Science Center and Guilford County. The following management recommendations and strategies for creating an organization structure are based on continuing, fostering and institutionalizing that cooperation and collaboration.

Formalize the Cooperation and Collaboration

To ensure that the cooperation and participation that started the Battleground Parks District continues, it is recommended that the National Park Service, City of Greensboro, Natural Science Center and Guilford County enter into a memorandum of understanding or a similar agreement device that documents the participation of each entity. A memorandum of understanding should help ensure that the cooperation and collaboration continues beyond the tenure of the present managers at each facility. It also communicates and establishes with both elected officials and the management of each entity that there is a formal commitment to the Battleground Parks District.

Establish a Board

It is recommended that a Battleground Parks District Board be established. Potentially members could include representatives from: the Board of Directors of the Natural Science Center, Greensboro Parks and Recreation Commission, Guilford Battleground Company and the management of each entity. Other members might include members of the chamber of commerce, surrounding neighborhood

organizations and Action Greensboro. Until the board is established create a working staff committee that meets two to three times a year to begin implementing the master plan.

Role of the Board

The following are potential items that could be included in the work plan for a Board of Directors for the Battleground Parks District. Eventually it may be appropriate for the Battleground Parks District to become a non-profit entity. There are successful precedents in other cities that can be used as a model for Greensboro.

- Establish a joint calendar for events at each facility to avoid conflicting events and to coordinate events district wide when appropriate.
- Oversee the web site for the Battleground Parks District and the links to the participating facilities.
- Monitor implementation of the master plan.
- Marketing the district by: serving as an ambassador of the district and publicizing milestones and important news. As the Battleground Parks District becomes established as a brand and a location the board would shift to overseeing a proactive marketing effort aimed at Greensboro and beyond and coordinating those efforts with each participating facility.
- Developing comprehensive maintenance standards.
- Coordinate potential shared operating expenses such as the tram system.
- Develop a Capital Improvement Plan.
- Develop a cohesive policy statement that: identifies appropriate and inappropriate land-uses and encourages appropriate and complementary development in the surrounding area and advocates connectivity with the surrounding neighborhoods.
- Pursue grant funding not available to public entities.
- Develop an endowment that could be used to respond to the aftermath of natural disasters, for long term maintenance or matching grants.
- Fundraising for projects and for funding the endowment.

Working together the National Park Service, City of Greensboro, Natural Science Center and Guilford County will need to monitor how the management of the Battleground Parks District should evolve to meet the needs of the district and work compatibly with each public entity.



Implementation

Implementation of the master plan will require continued cooperation and collaboration between the National Park Service, Natural Science Center, City of Greensboro Park and Recreation Department and Guilford County Parks and Open Space.

Near Term

Creating the Organization

- Develop the memorandum of understanding
- Constitute a staff committee that meets quarterly to start immediately on the near term action items and demonstrate that the establishment of the Battleground Parks District is beginning.
- Begin to assemble a board of directors

Establishing the Brand

These tasks are in the very short term timeframe within the first year. Since the Battleground Parks District is a new concept a concerted effort must be made to educate the community about this exciting concept. The follow tasks are some of the initial steps that will focus on communicating to Greensboro and Guilford County residents and visitors.

- Internet Communication
 1. secure website domains
 2. set-up the web site, include the master plan and a printable brochure with map
 3. develop a concise statement describing the initiative to be used by each participating facility and included with each web site link.
 4. Link the Guilford Courthouse National Military Park, Natural Science Center, City of Greensboro Park and Recreation Department and the Guilford County and all other web sites that describe Greensboro attractions.
- Inform the public about this exciting idea.
 1. Present the master plan to the Natural Science Center Board of Directors, Guilford Battleground Company, Parks and Recreation Commission, other civic groups and organizations such as garden clubs and Rotarians.
 2. Consider including a slip sheet in city utility bills.
 3. Give an on-site media tour for local news outlets
- The Parks and Recreation Department should immediately pursue relocation of the dog park.

- Supply each facility in the district with Battleground Parks District brochures.
- Replace street sign blades in the park with signs including the Battleground Parks District logo.

Mid-Term

Preparing the Milestones

This mid term time frame of three to four years focuses on tangible results in preparation for the significant milestones, completion of construction of Phase I of the Natural Science Center and Centennial of the National Park Service.

- Design and construct and install the wayfinding system as the project funded by the 2009 bond funds.
- Implement the infrastructure improvements that can be completed within yearly budgets and 2009 bond funds. Potential road improvement projects include: widening/marketing the Country Park Loop Road, add/improve connector roads so that one-way loop roads in the Guilford Courthouse National Military Park and Country Park are actually joined, and modifying intersections.
- Institute the linking tram system with established stops and signage.
- Adding parking lots at the terminus of Ormond Drive and by new dog park location

Building the Brand

- Develop a yearly event that incorporates the Battleground Parks District name and include all the facilities.

Completing Studies and Plans

- Work with local universities to complete the studies and inform the media about those partnerships.
- Complete the stormwater master plan

Long Term

- Pursue a bond referendum to finance construction of the “Center”
- Continue Implementation of the infrastructure improvements
- Design and construct the district’s “Center “
- Establish an endowment for both maintenance and promotion of the Battleground Parks District.

Appendix A

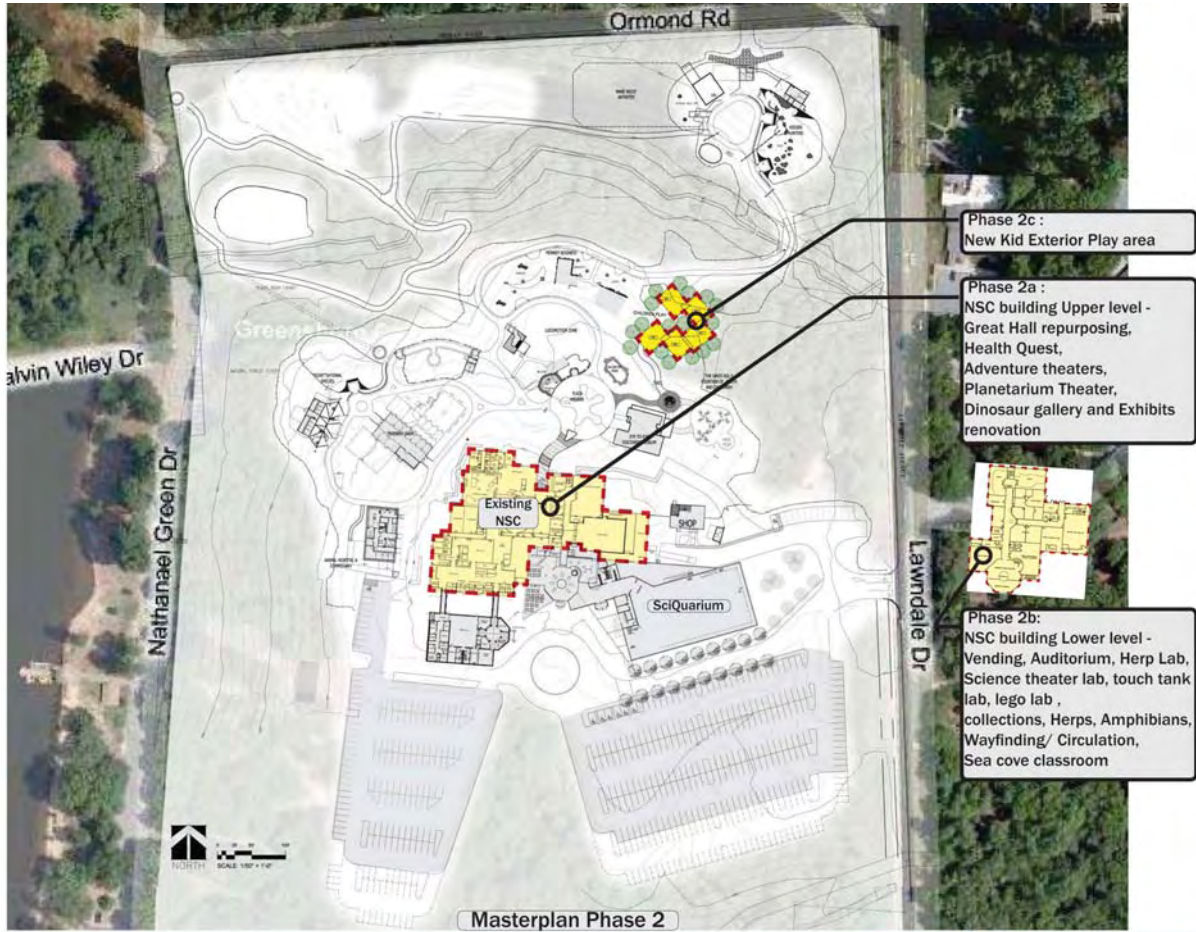
Natural Science Center Master Plan



Aug. 12, 2010

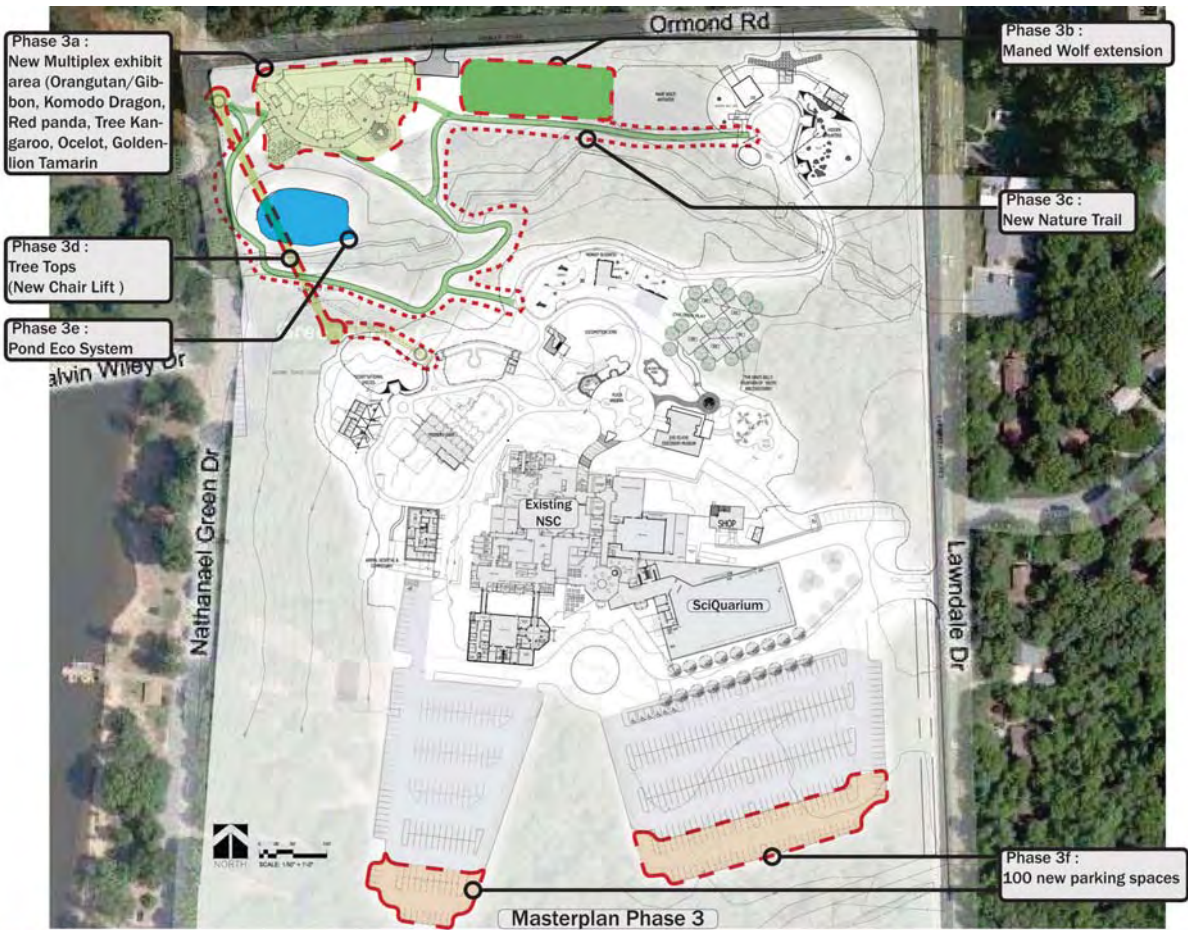


Cambridge Seven Associates, Inc.



Aug. 12, 2010

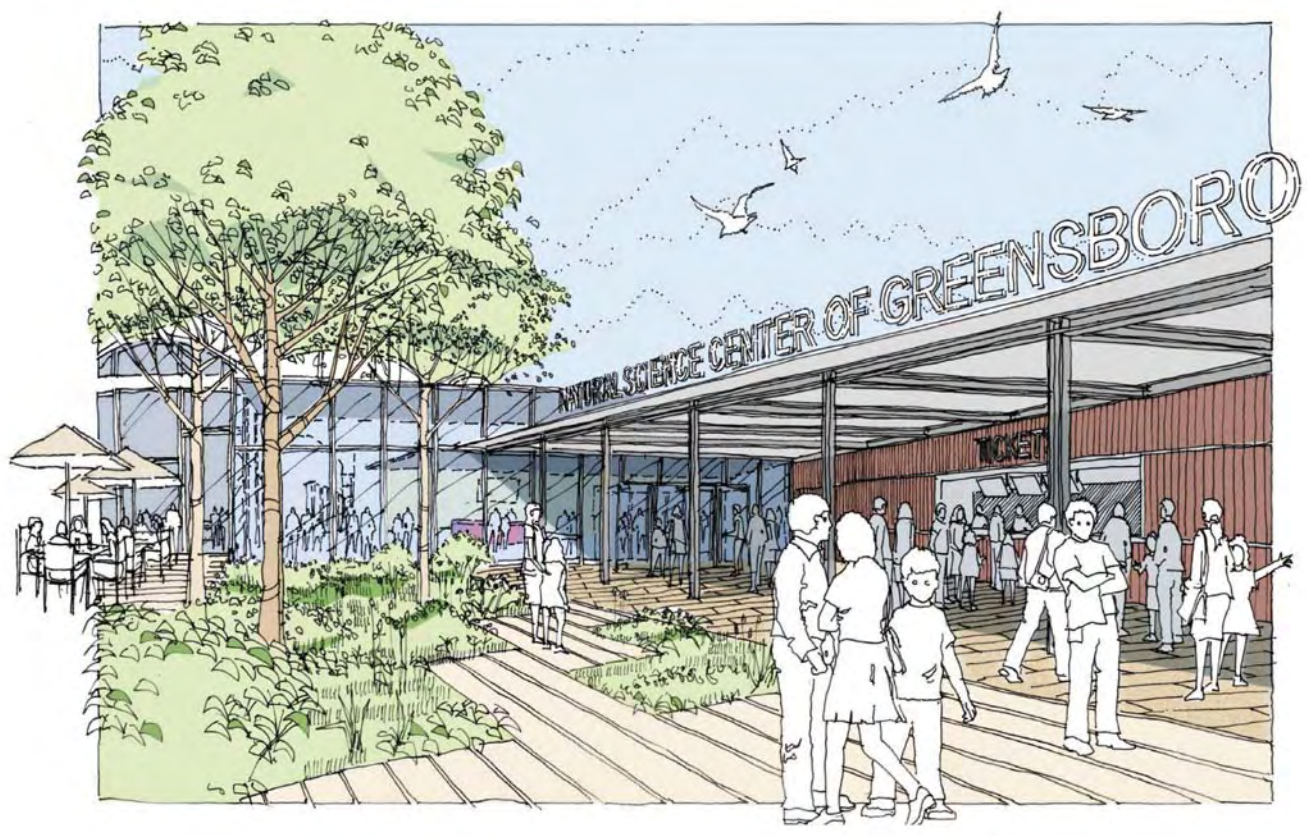




Aug. 12, 2010



Cambridge Seven Associates, Inc.

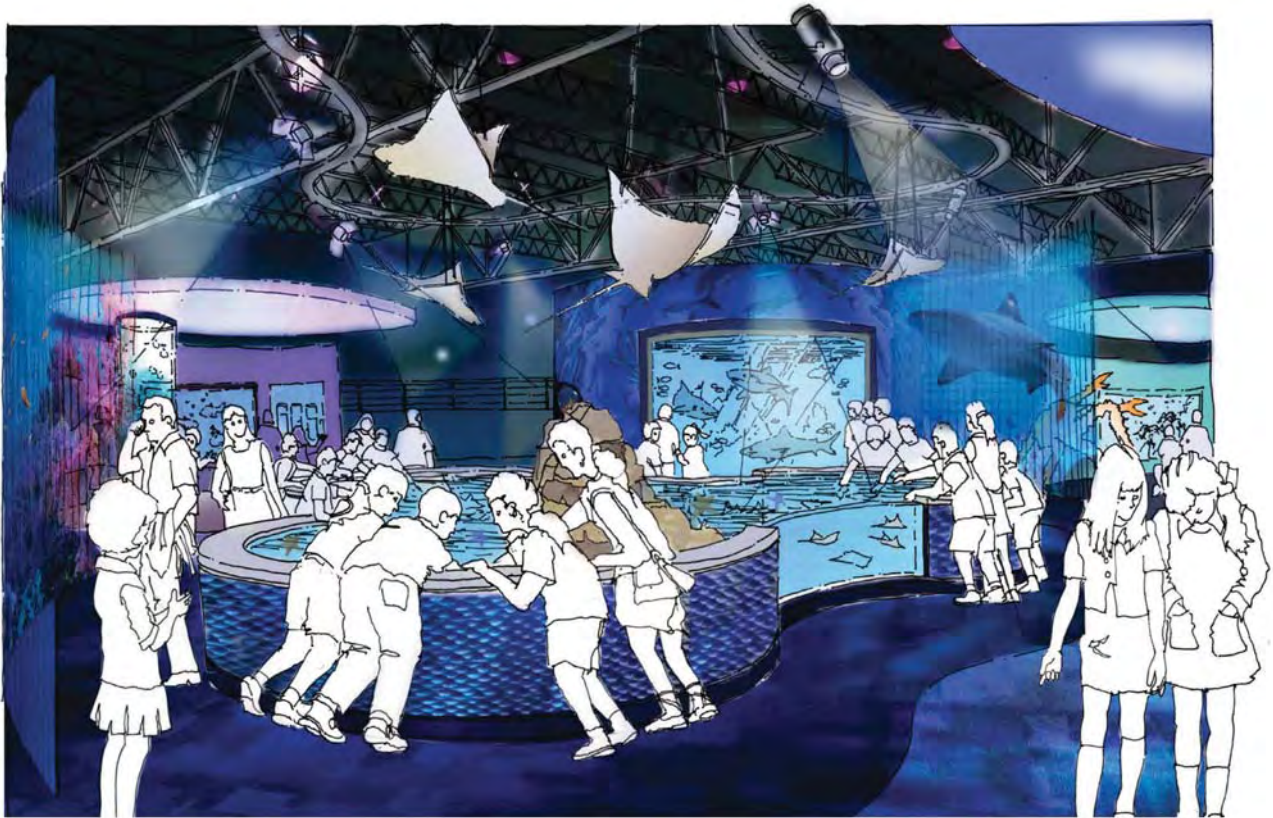


Perspective View at Entry



Aug. 12, 2010





Perspective View of Touch Tank and Ocean Tank

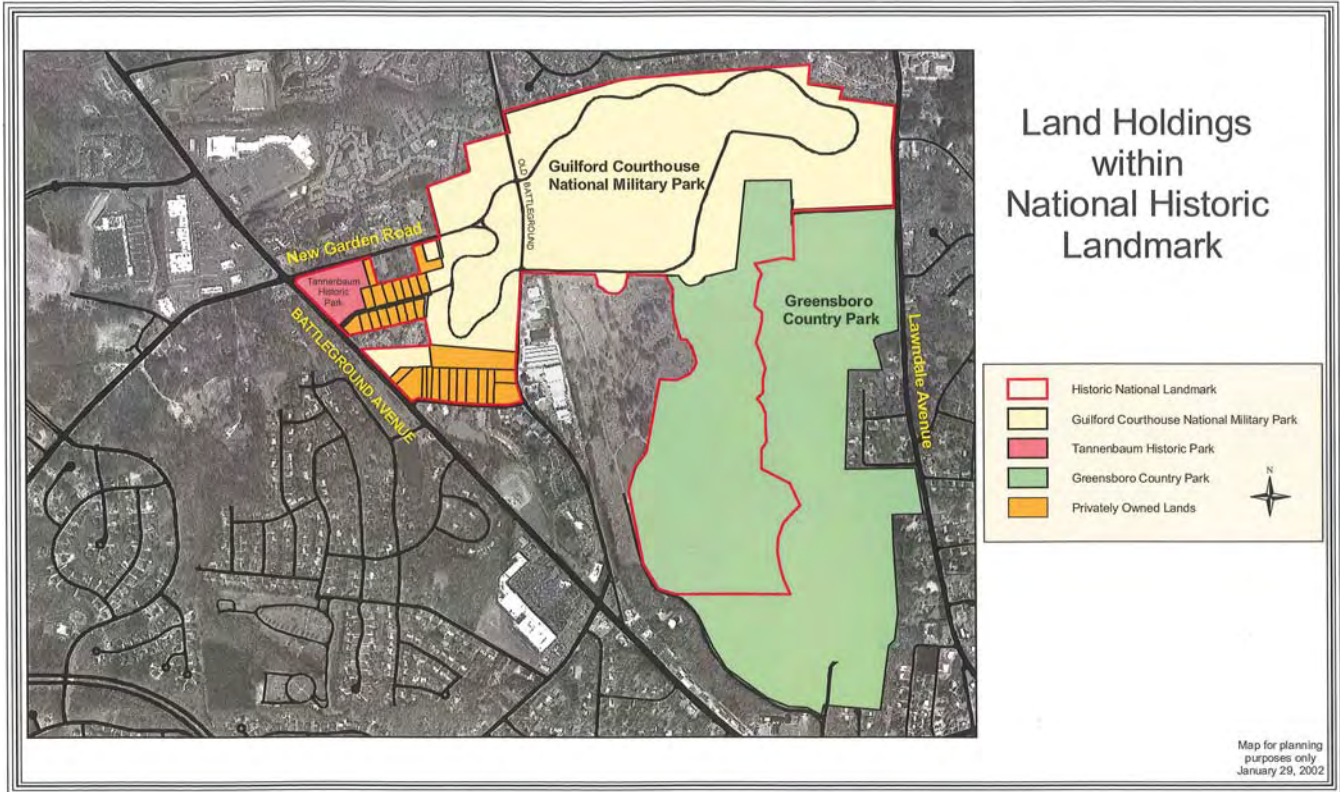


Aug. 12, 2010



Appendix B

Land Holdings



Appendix C

Dam Assessment

ASSESSMENT OF TWO EXISTING DAMS CITY OF GREENSBORO COUNTRY PARK

Executive Summary:

The City of Greensboro Parks and Recreation Department owns and maintains two earthen dams (referred to as the “upper” dam and “lower” dam within this report) within the Country Park property located off of Lawndale Drive in northern Greensboro. CivilDesigns, P.A., under contract with Haden Stanziale, has made an assessment of information for each dam available from the State of North Carolina Department of Environment and Natural Resources (NCDENR), Division of Land Resources, Land Quality Section. Documents reviewed included the State Dam Registry (available from the NCDENR website) and records of inspections and associated correspondence, dating back to June 1976, obtained from the office of the Winston-Salem Regional Office, NCDENR.

In addition, a report has been prepared by Schnabel Engineering South, P.C., titled “Report to City of Greensboro Parks and Recreation, Results of Field Investigation, Geophysical Study and Hydrological and Hydraulic Analysis”, dated April 18, 2008. This study and report made for the lower dam structure and outlet works provides a detailed analysis of the condition and capacity of the spillways and makes recommendations for maintenance and repair of the dam and spillways.

Both the upper and lower dam were originally constructed in 1934. No information was available which provided data on when, or if, any major repairs or replacements have been made to either dam since they were constructed. The upper dam impounds a lake of approximately 5 acres, and the lower dam impounds a lake of approximately 10 acres.

The State has performed periodic investigations of each dam. The following is a summary for each dam which includes information from the State dam inventory and information from the periodic investigations.

NCDENR Dam Inventory Data as of August 11, 2010 (Lower Dam & Lake):

Dam Name:	Greensboro Park Lake Dam 5-B Lower (Guilf-053-1)
Owner:	City of Greensboro (Parks and Recreation Department)
Hazard Classification:	Intermediate
Dam Type:	Earth
Year Constructed:	1934
Tributary to:	Richland Creek
Dam Structural Height:	20± feet
Normal Freeboard:	3± feet
Crest Length:	200± feet
Crest Width:	24± feet (with asphalt roadway)
Normal Pool Surface Area:	10± acres



NCDENR Field Inspection Report Summary (Lower Dam & Lake):

January 9, 2009

- Trees and bushes growing on the dam.
- Seepage noted on downstream slope of dam.
- Muskrats or other animals burrowing along waters edge on upstream slope of dam.
- The concrete chute principal spillway is undercutting and causing severe erosion under the spillway.

March 23, 2006

- Trees and bushes growing on the dam.
- Muskrats or other animals burrowing along waters edge on upstream slope of dam.
- Erosion under the concrete slab at emergency spillway.
- Wave erosion occurring on the upstream face of dam.

January 27, 2003

- Trees and bushes growing on the dam.
- Erosion under the concrete slab at emergency spillway.
- Seepage noted on downstream slope of dam.

January 29, 1998

- Trees and bushes growing on the dam.
- Erosion at emergency spillway.
- Muskrats or other animals burrowing along waters edge on upstream slope of dam.

May 18, 1995

- Trees and bushes growing on dam.
- Erosion at emergency spillway.
- Muskrats or other animals burrowing along waters edge on upstream slope of dam.

January 13, 1992

- Trees and bushes growing on dam.
- Seepage noted on downstream slope of dam.
- Left spillway has lateral cracks across the concrete.

February 11, 1987

- Trees and bushes growing on dam.
- Seepage noted on downstream slope of dam.

December 9, 1981

- Trees and bushes growing on the dam.
- Seepage along toe of dam.
- Erosion at emergency spillway.

June 8, 1976

- Trees and bushes growing on dam.
- Erosion at emergency spillway.



NCDENR Dam Inventory Data as of August 11, 2010 (Upper Dam & Lake):

Dam Name:	Greensboro Park Lake Dam 5-A Upper (Guilf-054-I)
Owner:	City of Greensboro (Parks and Recreation Department)
Hazard Classification:	Intermediate
Dam Type:	Earth
Year Constructed:	1934
Tributary to:	Richland Creek
Dam Structural Height:	20± feet
Normal Freeboard:	3± feet
Crest Length:	200± feet
Crest Width:	10± feet
Normal Pool Surface Area:	5± acres

NCDENR Inspection Report Summary (Upper Dam & Lake):

January 8, 2009

- Trees and bushes growing on down stream slope dam.

December 10, 2008

- Trees and bushes growing on downstream slope of dam.
- No trash guard on the riser pipe.

March 23, 2006

- Trees and bushes growing on downstream slope of dam.
- Seepage noted on downstream slope of the dam.
- Muskrats or other animals burrowing along the waters edge on the upstream slope of dam.

January 27, 2003

- Trees and bushes growing on downstream slope of dam.
- Seepage noted on downstream slope of dam.
- Muskrats or other animals burrowing along waters edge on the upstream slope of dam.
- Inlet of principle spillway partially blocked by beaver dam.

January 29, 1998

- Downstream face of dam needs to be mowed or bush-hogged.
- Log lodged in 42" culvert.
- Muskrats or other animals burrowing along waters edge on the upstream slope of dam.

May 18, 1995

- Very minor burrowing.
- Seepage, no flow.

January 13, 1992

- Trees and bushes growing on downstream slope of dam.
- Seepage noted on downstream slope of dam.



November 11, 1988

- Seepage noted on downstream slope of dam. No flow rate detectable.

February 11, 1987

- Seepage noted on downstream slope of dam.

December 9, 1981

- Trees and bushes on downstream slope of dam.

June 8, 1976

- Trees and bushes on downstream slope of dam.

Conclusions and Recommendations:

Based on our review of the State maintenance reports along with the information contained in the report prepared by Schnabel, both the upper and lower dam need maintenance and repair work. As a minimum, the following work needs to be considered:

Upper Dam

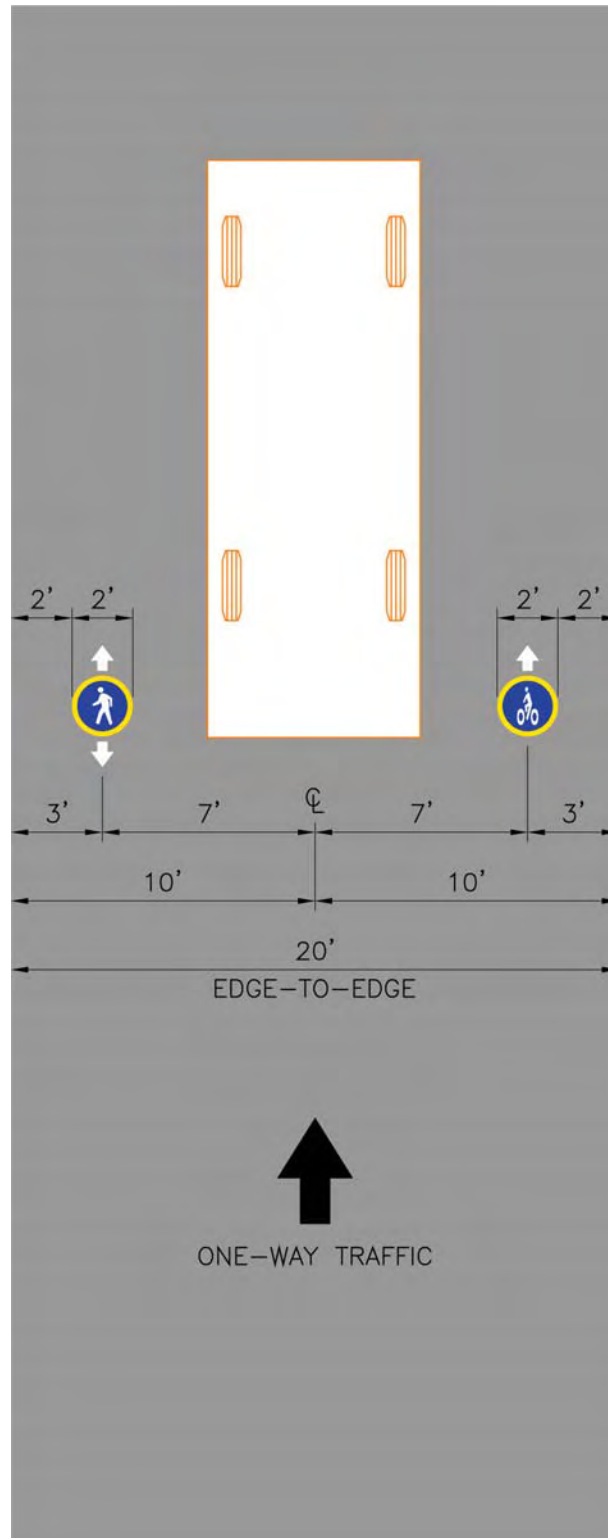
- Remove vegetation from downstream slope of dam. Any large trees (6" diameter or larger) should remain. All disturbed areas should be seeded and mulched.
- Have seepage on downstream slope evaluated by a licensed engineer. A foundation drain at the toe of the dam may be needed to control the seepage/soil migration.

Lower Dam

- Remove vegetation from downstream slope of dam. Any large trees (6" diameter or larger) should remain. All disturbed areas should be seeded and mulched
- Have seepage on downstream slope evaluated by a licensed engineer. A foundation drain at the toe of the dam may be needed to control the seepage/soil migration.
- Replace the left side spillway in accordance with the Schnabel report.
- Make repairs to the low level drain and outlet per the Schnabel report.

Appendix D

Guilford Courthouse National Military Park One-Way Loop Road Markings



Appendix E

Country Park Building Assessment

General Notes:

- Country Park buildings are in fair condition. However, paint and finish upgrade may be required.
- Buildings are uniform with selected materials and designs. Upgrades (aesthetically) are recommended.
- Unifying building design characteristics is recommended.
- Buildings are in general are built of durable materials such as brick and steel framing.
- Integrating distinct building designs with natural and/or man-made elements, connecting with each other to provide enjoyable experience for visitors.
- Evaluation of interior and exterior signage is recommended.



Jail Building

This terracotta exterior with tin roof building may have historical value to maintain.

Can be utilized for different uses for park visitors or staff, uses such as an office, exhibit, chapel, or for events.



- The terracotta walls need repair.
- The tin roof needs to be replaced.
- Doors and windows replacements.
- Requires wall and roof insulation to provide environmentally controlled interior spaces.
- Interiors are in need for complete upfit.
- Re-grading around the building is required.
- Interiors have architectural wood framework and windows that allow natural light and southern exposure.
- Building has venting chimneys that can be restored for historical value.
- ADA, bike racks, car or service access needs to be developed.
- Surrounding open space and shaded area offers a calm and attractive vista.

Picnic Shelters



- Shelters have consistent design and they are in fair condition. Require periodic paint and upgrades.
- Structures are sound, but need upgrade in finish and seating.
- Restrooms are available in some shelters and they are spread along Country Park Loop. Some restrooms require renovation and repairs.
- ADA access is not provided in most shelters.

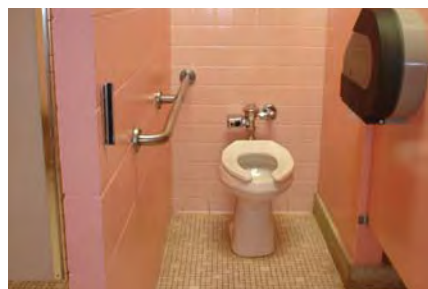
Park Office and Misc Buildings on Lake

- ADA access is not provided.
- There is no connectivity between structures. Landscape and playful trellises can be utilized.
- The buildings are in fair condition and need upgrade aesthetically, perhaps new color schemes.
- Providing covered area is recommended for sitting and eating.



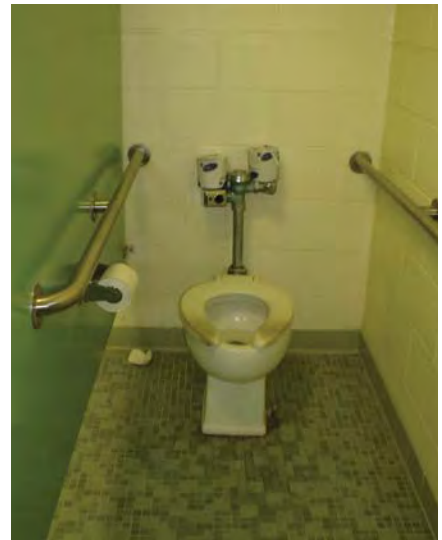
Lewis Center

- The building is contemporary and in fair condition.
- Surroundings require upgrading, perhaps adding landscape and new paint.
- Some exterior pathway and steps are not ADA compliant.
- Interiors are in fair condition, but required upgrade in finishes and replacing casework and fixtures.
- ADA access is provided on most of the building entrances.
- Drinking fountains, restrooms and showers are not per current ADA code.
- Access to restrooms is not per ADA code.
- Door widths and clearances are not per current ADA code.
- The center needs upgraded finishes.



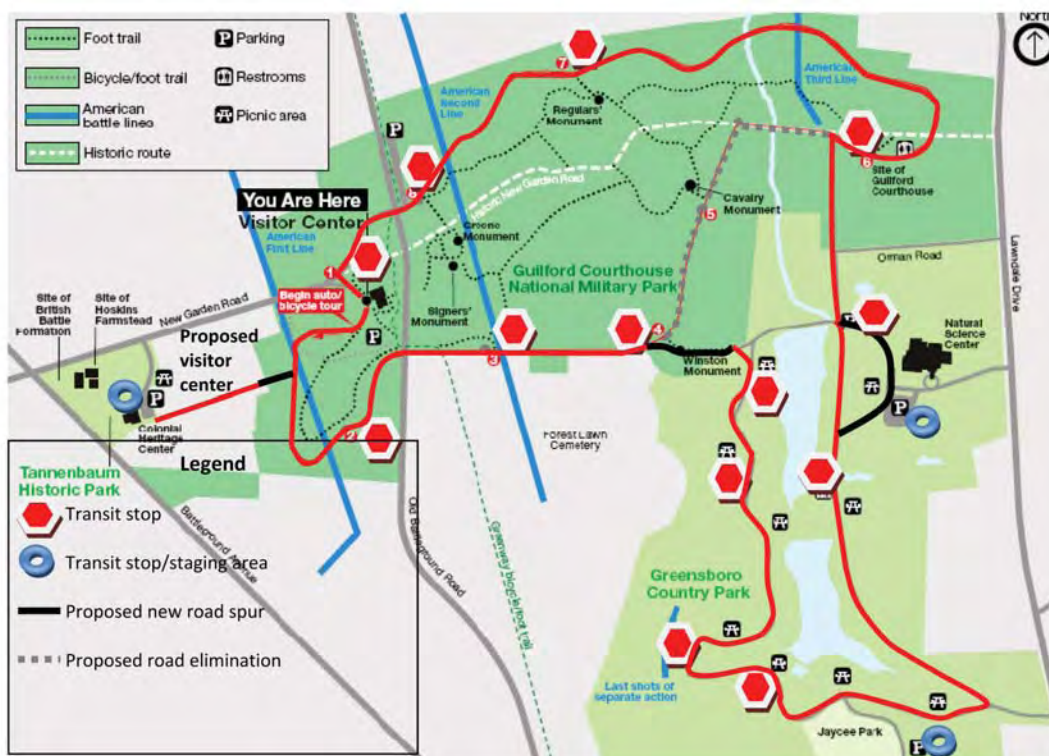
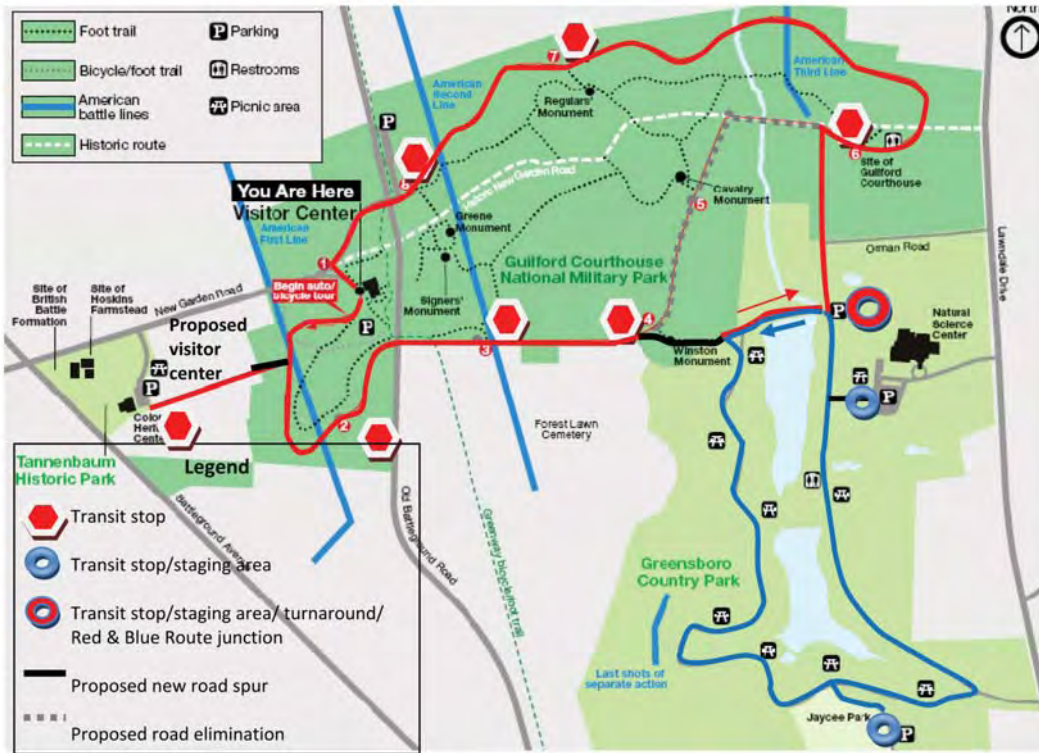
Tennis Center

- Facility is in fair condition.
- No ADA access in entry.
- Exterior and interior paint, new finishes and new light fixtures are recommended.
- ADA compliance is not per ANSI 117.1-2003 in some interior spaces. Upgrade is not required if occupancy type is not changed.
- Restrooms are in poor condition. Need some repair and upgrade in finishes. ADA stalls are not up to current code.
- Drinking fountains are not to code.
- Other services such as vending machines and seating areas need to be updated.



Appendix F

Potential Tram Routes and Stops



Appendix G

Survey Results

5 Minute Survey of Country Park, Guilford Courthouse National Military Park, Natural Science Center Visitors

The Guilford Courthouse National Military Park, the Natural Science Center, Country Park and Bicentennial Greenway are part of an exciting new initiative to unify these special places into a Greensboro destination.

1. About how often have you visited the Country Park/Guilford Courthouse National Military Park/Natural Science Center area during the past 12 months?

- a) Almost daily 16%
- b) At least once per week 28%
- c) At least once per month 25%
- d) Less than once a month 20%
- e) Other frequency _____ 11%, once, and a variety of other answers

2. How did you first hear about these facilities?

- a) Seems like I have always known they were here. 55%
- b) Was told about it or a friend brought me. 20%
- c) Newspaper 1%
- d) Brochure 1%
- e) Website (City, County or National Park Service) 5%
- f) A school trip 2%
- g) Saw a sign along the road 5%
- h) Other _____ 6%, live nearby

3. What is your usual reason for visiting these facilities?

- a) Running, jogging or walking 35%
- b) Bicycling 26%
- c) Picnicking 3%
- d) Playing in the Dog Park 6%
- e) Checking out the Natural Science Center 23%
- f) Checking out the Guilford Courthouse National Military Park 6%
- g) Other _____ 2%, events

4. What sort of transportation do you usually take to get to these facilities?

- a) Car 73%
- b) Motorcycle <1%
- c) Bicycle 19%
- d) On Foot 7%
- e) Other 1%

5. If you arrive on foot or by bicycle, do you use the greenway?

- a) Yes 37%

- b) No 12%
- c) I don't come on foot or by bicycle 52%

6. Where do you live? (Please read all responses before answering this one.)

- a) Greensboro 80%
- b) Guilford County, other than Greensboro 12%
- c) Triad area, other than Guilford County 5%
- d) North Carolina, outside the Triad area 2%
- e) Outside North Carolina _____ 1%

7. Please circle ALL of the area amenities you have visited or used in the past year

- a) Guilford Courthouse National Military Park 15%
- b) Walking/biking 20%
- c) Natural Science Center 14%
- d) Fishing pier 3%
- e) Paddleboats 2%
- f) Dog park 6%
- g) Free Ride Zone 6%
- h) Jaycee Park, tennis courts /baseball diamond 5%
- i) Picnic pavilions 7%
- j) Lewis Center 4%
- k) Forest Lawn Cemetery 3%
- l) Bicentennial Greenway 13%
- m) Other _____ 2%, mountain biking, playgrounds

8. Circle the place(s) below that you do NOT use or visit.

- a) Guilford Courthouse National Military Park 15%
- b) Natural Science Center 14%
- c) Country Park (Jaycee Park, Lewis Center) 5%
- d) Forest Lawn Cemetery 35%
- e) Bicentennial Greenway 17%

9. For each place circled under Question 8, please say why you do NOT use the place(s) you circled. For example, I don't visit or use item _____ because...

Most common response –don't use the cemetery because they are not dead

ABOUT YOU

The following questions will help us better understand who is visiting these facilities

10. Gender

a) male 51% b) female 49%

11. Race

a) Caucasian 87% b) African American 11% c) other 2%

12. Approximate Age.

a) Less than 20 years old 3% e) Fifties 19%
b) Twenties 11% f) Sixties 10%
c) Thirties 32% g) 70 or more years old 3%
d) Forties 22%

13. May we have your e-mail address to notify you of upcoming public meetings?

e-mail: _____

THANK YOU FOR PARTICIPATING!

Appendix H

Results from First Public Meeting

Results of public input meeting held July 15 at the Natural Science Center.

The “Good and Not So Good” of Park Amenities and Improvements

	The Good	votes
1.	Natural Science Center	14.0
2.	Monuments and Memorials	9.5
3. (tie)	Bicycling and Walking Facilities	8.5
3. (tie)	Educational Programming	8.5
3. (tie)	Natural Areas	8.5
4.	Lakes and Access to Lakes	8.0
5.	Reenactments	6.0
6.	Battleground Visitors Center	5.5
7. (tie)	Park Safety	4.5
7. (tie)	Special Events	4.5
8. (tie)	Lewis Center and Safety Town	3.5
8. (tie)	Variety and Uniqueness	3.5
8. (tie)	Tannenbaum Park	3.5
9.	Dog Park	3.0
10.	Appearance and Aesthetics	2.5
11. (tie)	Play Areas	2.0
12. (tie)	Picnic Areas	1.0
12. (tie)	Parking	1.0
12. (tie)	Tennis/Sports Center	1.0
---	Miscellaneous	--

3.	Walking and Biking Facilities—Room for Improvement	13.0
4.	Maintenance and Upkeep	12.0
5.	Better Wayfinding and Signage Needed	11.0
6.	Safety and Security Issues	9.5
7.	Eating Places Needed	7.0
8.	Lake Improvements	6.0
9.	Parking Issues	5.0
10. (tie)	Geese Problems	4.5
10. (tie)	Better Linkages Needed	4.5
10. (tie)	Tram Service Needed	4.5
11. (tie)	BMX Course In Rough Shape	3.5
11. (tie)	Old Prison—Rehab or Remove	3.5
11. (tie)	Natural Areas (if damaged)	3.5
12.	Dog Issues	2.5
13.	Funding Needed	1.5
	Miscellaneous	--

	The Not So Good	votes
1.	Poor Rest Rooms	19.5
2.	Image and Appearance Issues	16.5

Full Meeting Results

Note: In tabulating the meeting results, related items that were listed but received no priority sticker were nonetheless credited a half vote, so as to acknowledge the number of times a similar issue or idea was raised.

Things We Would Want a Visitor to See (The Good)	
Natural Science Center	14.0
Natural Science Center	5
Natural Science Center	4
Zoo	2
Natural Science Center	1
Sci-quarium (that's being planned)	
Zoo at the Natural Science Center	
Natural Science Center	
Science center and zoo is not just for children it also has special days	
Monuments and Memorials	9.5
Guilford County Veterans Memorials at Country Park- all branches of service honored	5
General Greene's monument Greensboro's symbol	3
Veterans Memorial	1
Monuments	
Bicycling and Walking	8.5
Trails in military park	2
Leisurely bike ride along Bicentennial Greenway (around other parks also)	2
Safer crossing of Old Battleground Road for pedestrians and cyclists	1
Walking trail and lake with picnic areas	1
Want to experience it with no cars/use tram	
Greenway	
The greenway system	
Open space and trails	
Trails behind memorial	
Educational Programming	8.5
Military park "History" the way it is presented	6
Guided walking tour of Guilford Courthouse National Military Park	1
Programs at Battleground	
Driving tour of Battlefield- interpretive markers	
The history of the parks	
Natural Areas	8.5
Natural beauty - 400 acres	3
Natural areas- lack of development	3
Natural areas- upper view toward lake	1
Natural areas are a plus- for escapes	
Quiet natural area	



Experience the natural wildlife	
Lakes and Access to Lakes	8.0
Lakes at Country Park- tranquility/relax/paddleboats	7
Paddleboats	
Better access to lakes, to experience them	
Reenactments	6.0
Reenactment of the battle	5
Reenactment Pow Wow	1
Battleground Visitors Center	5.5
Museum at Guilford Courthouse National Military Park Visitor's Center and the movie they show	5
Battleground Visitors Center	
Park Safety	4.5
Safe clean, fun environment for children	2
Ranger cars frequent surveillance	1
Park passport (stamped)	1
Safety for users	
Special Events	4.5
Guilford Courthouse National Military Park events	2
Tennis Center (NC Hall of Fame)	1
Candlefest is beautiful	
Lewis Center and Safety Town	3.5
Lewis Center and Safety town	2
Lewis Recreation Center- bridge for adults- lots of activities	
Safety town- teaches children	
Safety town	
Variety and Uniqueness	3.5
Collection of parks that celebrates what makes each park unique	2
A facility for all ages	1
Overall variety	
Tannenbaum Park	3.5
Tannenbaum history park heritage center	3
Tannenbaum Park is interesting place	
Dog park	3.0
Dog Park areas for "parents" and large sections for each dog type, water fountain and trees	2
Experience dog park on a Saturday AM	

Bark Park	
Appearance and Aesthetics	2.5
Character of the complex	1
Beautiful landscapes, Forest Lawn Cemetery	1
Play Areas	2.0
Handicapped accessible playground at Country Park	1
Play areas	
Playgrounds	
Picnic Areas	1.0
More picnic areas in addition to the ones in the shelters	
Picnic tables	
Parking	1.0
Well organized parking, on Orman Rd additional on street parking	
Close Old Battleground Road through the park	
Tennis/Sports Center	1.0
Tennis Center	
Sports Center	
Miscellaneous	--
BMX Free Ride Zone	2
Battlefields-because of CEO's children	
Skate board park	
Cemetery	



Things We Would Not Want a Visitor to See Before We Improve It (The Not So Good)	Votes
Rest Rooms	19.5
Country Park Restrooms	10
More restrooms & concessions & rest areas	3
Need more restrooms	3
Bathroom in Country Park	2
Need clean ventilated restrooms	1
Lack of bathrooms	
Image and Appearance	16.5
Improve landscaping going down towards the lake (behind Natural Science Center)	9
Attractive curb appeal at all entrances	2
No added commercial-even on approach on Lawndale Rd.	2
Hill from Science Center to lakes is ugly	1
Would not want them to see our park office at Country Park	1
Removal of prison fence that separates -unsightly, non-functional, costly	1
Graffiti	
Walking and Biking	13.0
Link to the community with trails, walks, greenways and wayfinding	3
Greenway at Pisgah Church/Battleground intersection is not safe	3
Shared trails (bike and walk) too narrow	2
More shortcut trails back to parking	2
Access on foot from Lawndale Rd	1
More sidewalks on hill behind Science Center	1
Separate walking area along roads in Military park	
Maintenance and Upkeep	12.0
1.6 miles of paving in country park looks like back roads-it's awful, needs complete resurfacing	4
Orman Road parking area is full of pot holes	2
Parking- resurface and rework-safe	2
City park-- need better maintenance	2
Picnic areas/grills have not been updated	1
Tennis courts need work	
Trash cans open and animals getting into them/general trash pick-up needed	
Wayfinding and Signage	11.0
Kiosk map	3

Improve navigation/signage	2
Coordinated signage, including directional signage	1
Wayfinding	1
Signage -warning about locking car and sex offenders is not visitor friendly	1
Signage-on site-off site, consistent	1
Signage or direction for weekend people in particular	
Information kiosks (number depends upon number of access points)	
Better signage to bark park	
Links between facilities- want people to be aware of all available	
Safety and Security	9.5
No emergency phones/call boxes	6
Public safety, need cameras	3
#2888-1776 National Park , promote for safety calls	
Eating Places	7.0
Central place for food, no restaurant/place to get refreshments, there are no covered areas	4
Place to eat	1
Utilize plumbing/kitchen at Lewis Center for public eating	1
Might need multiple locations to eat if this is a hub park	
Places to eat (similar to Meerkat Café)	
Lake Improvements	6.0
Build/expand boat house like in 1934 with a big deck, meeting rooms-rustic log frame	2
The lakes (aerators)	2
Dams- fix/improve	1
Improve lake edges	
Dams in poor condition	
Parking	5.0
Parking (lack of)	2
Better parking for accessibility and convenience	2
Parking is inadequate unless you know where to look (plenty at Jaycee is not known)	1
Geese	4.5
Goose control- they don't leave	1
Goose poop	1
Geese droppings (feeding is an issue)	1
Geese and beavers	1
Geese/poop/eat destroy grass	
Linkages	4.5
Accessibility to other areas from Science Center	1



How all the facilities tie in	1
Connect Tannenbaum with visitors center	1
Dog Park location-possibly move to nearby adequate parking, e.g. Orman Drive	1
Maintain and enhance the individuality of the parks, but also unifying and tying together	
Tram Service	4.5
Tram, proposed route	2
Improve trams and transportation	2
Tram/transit between parks	
BMX Course	3.5
BMX course is not very attractive (construction site gone bad)	2
Mountain bike area looks rough	1
Improve BMX course	
Old Prison	3.5
Country Park Jail- either restore or demo it	3
Prison building needs attention	
Natural Areas	3.5
Don't change the topography or take down trees	3
Maintain the open space	
Dogs	2.5
Dogs on leashes	2
Dog poop	
Funding	1.5
Funding, how is this project going to be paid for?	1
Private sector can be involved, no tax increase	
Miscellaneous	--
Picnickers- using loud radios/control noise pollution	2
No increase in traffic (cars) in the parks	1
Utilize open area at Orman Drive /Country Park	1
Deer crossing problems	
Place for teens separate from adults/kids	
Update and expand existing NSC	
Playground facilities (more shaded areas)	
Need more benches, seniors	
Colonial Heritage Center (Tannenbaum Park)	