



RESEARCH FOREST

EFFINGHAM COUNTY | OCT 2-4, 2009

DESIGN CHARRETTE



This 2009 report was produced by the University of Georgia's Center for Community Design and Preservation for Effingham County Industrial Development Authority.

**College of Environment & Design**
The University of Georgia



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I. INTRODUCTION

Who | What | Where | Why



WHO WAS THERE?

A team of landscape architects and historic preservationists from the University of Georgia's College of Environment and Design spent the weekend of October 2-4, 2009, in Effingham County. Led by the Center for Community Design & Preservation (CCDP), the team conducted an intensive, three-day public design session, or 'Charrette' for Research Forest at the request of the Effingham County Industrial Development Authority.

Charrettes are product-oriented and fast becoming a preferred method to solve planning challenges confronting American cities.

I. INTRODUCTION

Who | What | Where | Why



Source: National Charrette Institute
<http://www.charretteinstitute.org>

WHAT IS A CHARRETTE?

Charrette is a French word that translates “little cart.” At the leading architecture school in the 19th century, the *Ecole des Beaux-Arts* in Paris, students were assigned tough design problems to complete under time pressure. They would continue sketching as fast as they could, even as the little carts (*charrettes*) carried their drawing boards away to be judged and graded.

Today the word “charrette” describes a rapid, intense, and creative work session, in which a design team focuses on a particular design problem and arrives at a collaborative solution.

The charrette process is a way of evaluating resources through new eyes. Fresh ideas are what help communities maintain and build their vitality. With the report and supporting materials, readers will experience the enthusiasm and commitment which comes from a broad-based group of students, faculty, practitioners, and the public.



I. INTRODUCTION

Who | What | Where | Why

HISTORY

Located about 22 miles northwest of Savannah, Effingham County boasts one of the earliest settlements in the United States and is considered one of the nation's fastest growing counties today.

The story of Effingham County's settlement begins in 1731 when a Catholic prince enacted the Edict of Expulsion against the Lutheran population of Austria. In harsh winter conditions, Alpine villagers from the Salzburg province fled first to Germany, and appealed to the Protestant English King, George II, for passage to America. In 1734, the first boat of "Salzburgers" arrived in Georgia, where English Colonial Governor James Edward Oglethorpe strategically offered them a low-lying area by a creek they christened, "Ebenezer", meaning, "stone of help".

An inhospitable location, in which the Salzburgers effectively served as a buffer between Savannah and the Indians and

Spaniards, this first settlement failed due to swampy cropland and the spread of dysentery. In 1736, the community relocated to "New Ebenezer", a high bluff near the mouth of the Savannah River where they eventually flourished. The Salzburgers built the still-congregated 1769 Jerusalem Evangelical Lutheran Church, the first water-powered grist mill in the country, and a successful silk filature.



John Adam Treutlen, the first elected Governor of Georgia (1777), grew up in New Ebenezer.



Today, the Georgia Salzburger Society operates a living history museum adjacent to the church, widely recognized as one of the jewels of Effingham County. As proud as Effingham County is of its heritage, it is intently focused on its growth. Springfield is the County seat, home to 2000 residents and a member city of Georgia's Better Hometown Program – a small town revitalization effort based on the National Main Street model of Downtown Revitalization. The other incorporated cities include historic Guyton (pop. 1,900) and Rincon (pop. 4,300), which is closest to Savannah. Rincon is Effingham's largest city and retail center, with traffic counts of approximately 34,000 vehicles per day, and is described as a bedroom community for Savannah.

As the sixth-fastest growing county in the nation*, Effingham County is experiencing both positive and negative results



from growth. The growth in Rincon has occurred during the past ten years, and much of it within the past three years. While recognized as a great place to buy a house and send kids to school, Effingham County loses most of its residents who work during the day in Savannah/Chatham County, and has a deficit of recreational opportunities for residents to participate in when they are at home. Rincon has several new "fast food" eating locations, but lacks a full service restaurant; it has many shopping opportunities, but lacks a town center. Springfield has not been able to attract much new development to its Downtown, as all the new commercial growth has followed the pattern of sprawl radiating from the I-95 interchange and northward along Highway 21 in Rincon.

**US Census Bureau, March 2008*

I. INTRODUCTION

Who | What | Where | Why

OVERVIEW OF SCOPE

The Industrial Development Authority (IDA) is the economic development arm of Effingham County, and manages several industrial manufacturing sites. Their most recent acquisition is the “Research Forest” tract, formerly operated by Union Camp/International Paper to research pine trees for their production purposes. The 2,600 acre Research Forest site is just east of Hwy 21 in Rincon and is criss-crossed by CSX and Norfolk-Southern railroad lines and a north-south gas line easement, and is bounded on the west by Hodgeville Road. It is surrounded by several residential neighborhoods. The sole on-site development is Blandford Elementary School, built after the paper companies sold the site – to an ultimately unsuccessful private subdivision development – and before it was purchased by the IDA.

The IDA described the “perfect storm” of components that their industrial park site contains: dual railroad tracks, close

proximity to major interstates and the large port of Savannah, and the proposed North-South corridor running through the site. The IDA wants to develop this site in a way that distinguishes it from other manufacturing sites – higher quality facilities, upper-end skilled jobs, design covenants, sign controls and tree protection. In addition, the IDA desires recreational and community center components that take full advantage of the resource they have and the central gathering spot that the community feels is missing.





Therefore, the goal of the design charrette was to create a plan for the former Research Forest tract, including land planning for manufacturing locations, a new East-West Corridor, passive recreational opportunities and wetland protection. We hope this project can establish a new ethic that combines progressive development AND green infrastructure.

In meetings with the public, the Charrette Team learned about the history of Effingham County – the perseverance of its early settlers, and the pride of their descendents. Residents shared that Effingham County is thought of as a retreat, a place away from the urban environment of Savannah. Citizens said there are a lot of residents here, but no “community”.

The Charrette Team also heard of the need for recreation facilities so that people might enjoy some amenities in the place where they live – not a sports

field complex, but places for adults to walk, and sit, and listen to the birds.

The landscape of Effingham County is handsome, bucolic and not found in many other places in the world. A *Taxodium disticum*, or Bald Cypress, stand says so much about you, your past and the land itself.

Effingham County is a different place, full of surprises and hidden charm that in many ways is slipping away.



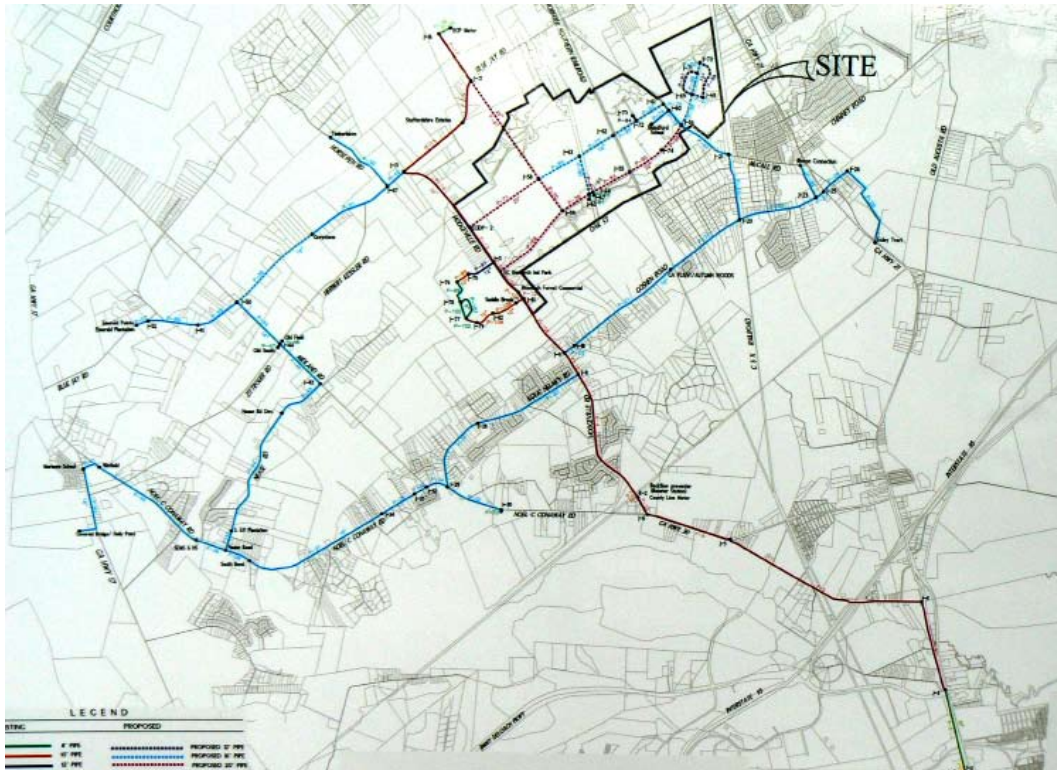
II. RESEARCH FOREST PARK

a. Overview/IDA Vision:

The UGA team began the charrette by meeting with the IDA Executive Director, John A. Henry, and the Board of Directors to learn the importance of the site for industrial purposes. The

Research Forest is optimally located only six rail miles from the Georgia Ports Authority – and served by both CSX and Norfolk-Southern rail lines – and is close to Interstates 95 and 16. It has

a natural gas pipeline, treated water and sewage capabilities. The only amenity it is lacking, according to the IDA, is a major four-lane road through the site, but a North-South state highway bypass to run alongside the gas easement has been proposed. The IDA needs the site to have an East-West Corridor as well, which the County can develop to connect with Hodgeville Road on the west and Highway 21 on the east.



The IDA plans to develop the site from east to west, as developing railroad crossings is expensive – a two-year timeline and \$10 million for a bridge overpass. The IDA envisions a “New Town” concept for the easternmost section near 17th street in Rincon, echoing the “Whistle Stop” that Rincon was planned to be originally. Given the lack of a “center” in Rincon, the IDA saw Research Forest as an opportunity for the County to create a central gathering place from scratch, citing recent “new town” retail developments in the Goshen Road area (at Highway 21)

as an example of local developers following this trend. IDA Director Henry also had images of a farmstead concept that could incorporate a community center and farmer's market. It was noted that Effingham County does not have a community or conference facility other than New Ebenezer, which is a private Lutheran-owned retreat center. The IDA also expressed their desire to use the federally-protected wetlands on site to their full advantage by incorporating passive recreation, such as walking and biking trails and bird watching opportunities.

The IDA Board had recently traveled to Florida to see the Chain of Lakes Recreation Complex – a partnership between the Brevard County Parks and Recreation Department and Stormwater Utilities Department. The 250 acre Chain of Lakes complex has a combination of active recreation fields, passive park areas, stormwater retention lakes, and wetland and conservation areas adjacent to Brevard Community College's Titusville campus. Specific amenities that appealed to the IDA were the system of joined lakes, raised boardwalks through the natural areas, the observation tower and the recreation trails.

www.brevardparks.com/visittheparks/parks/prkna1.php



The Chain of Lakes trail system hosts a statewide high school cross country tournament that represents a \$2 million rate of return for the county over one weekend.



Image credit: www.frunners.com

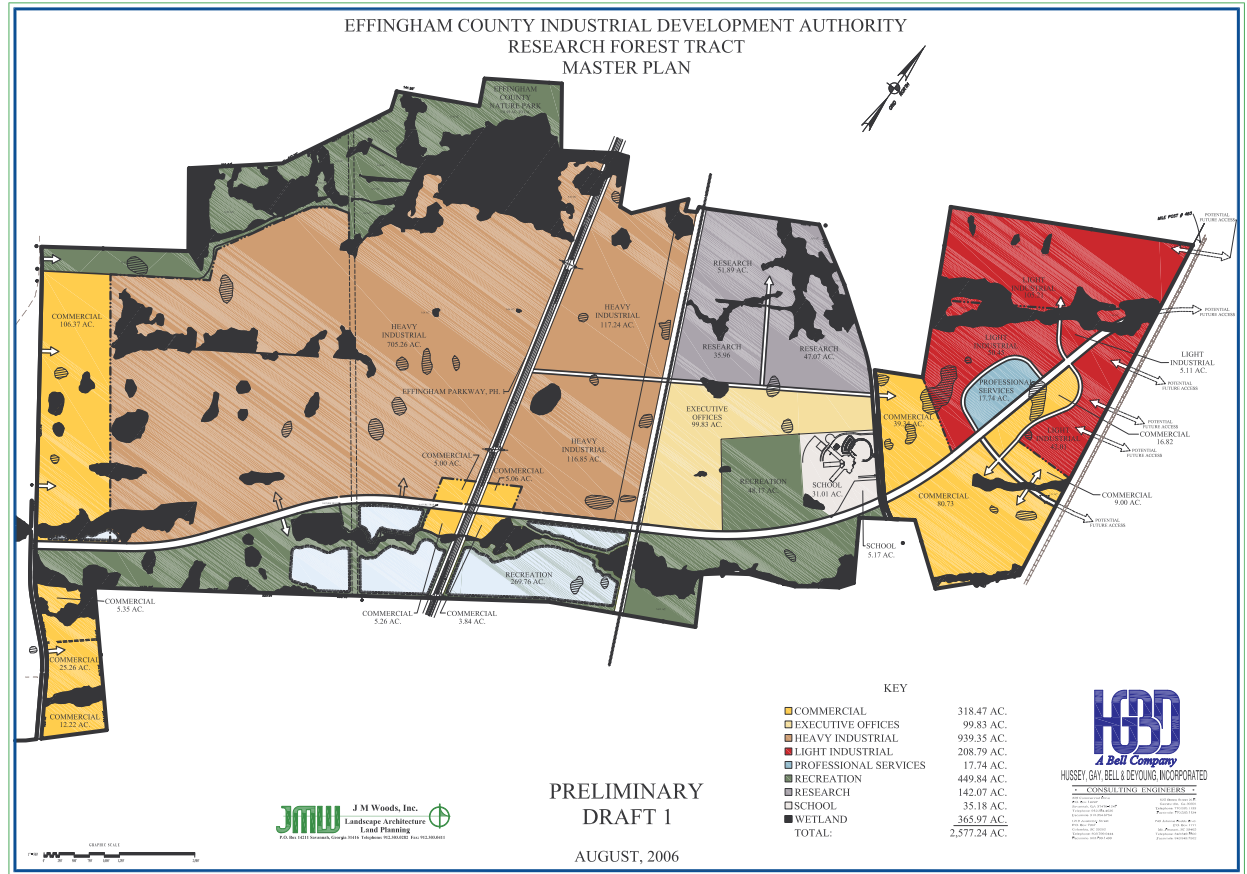
II. RESEARCH FOREST PARK

b. Initial Master Planning:

The IDA has hired the engineering firm of Hussey, Gay, Bell and DeYoung for Master Planning purposes, and the firm has provided wastewater and stormwater management plans as well as land use concepts.

In addition, the Norfolk-Southern Railways Corporation has provided a conceptual plan for where industry could be located to best take advantage of the dual-service rail lines.

The UGA Charrette team was able to use these initial planning documents to build upon a new concept of planning, protection and development



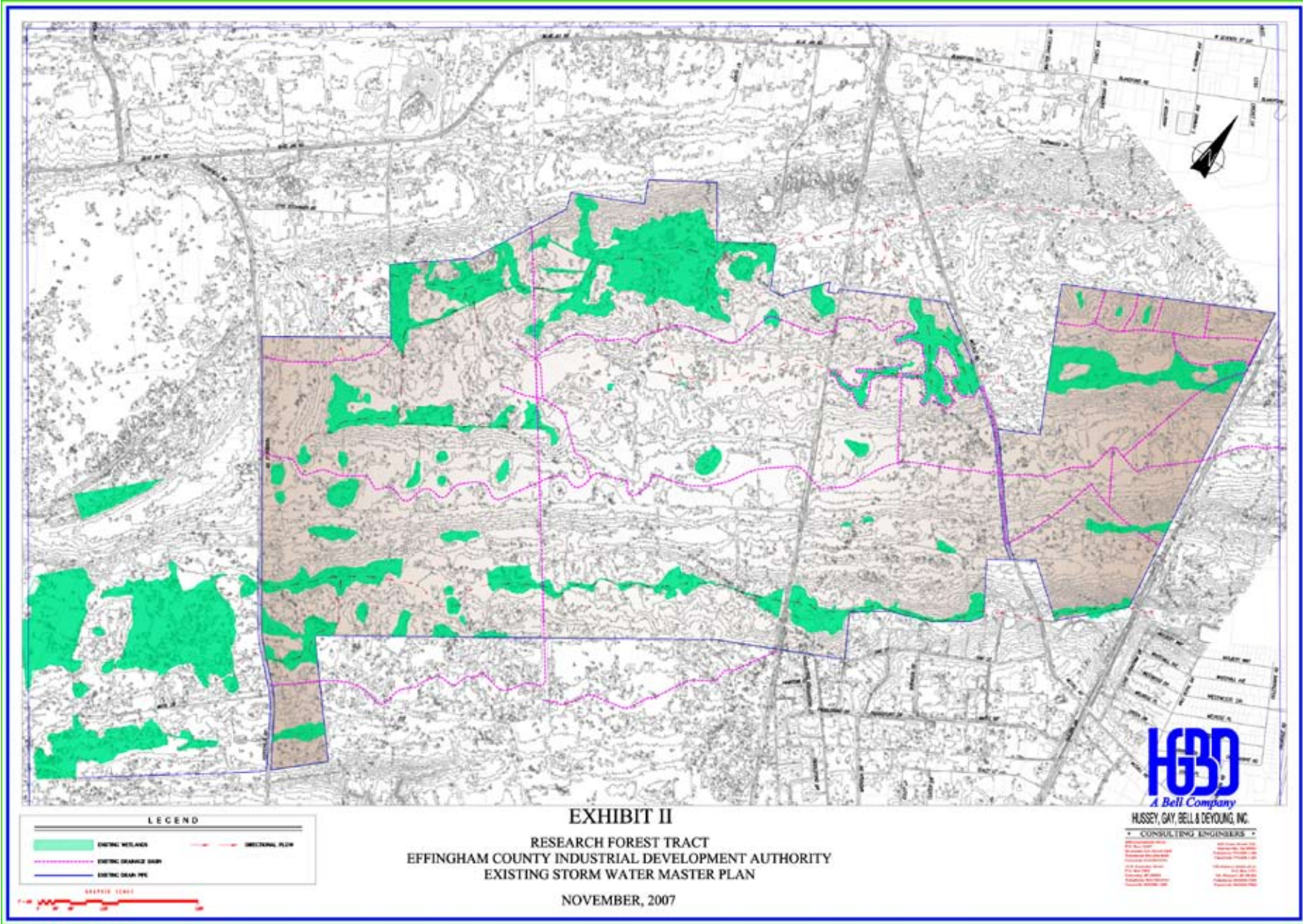


EXHIBIT II
RESEARCH FOREST TRACT
EFFINGHAM COUNTY INDUSTRIAL DEVELOPMENT AUTHORITY
EXISTING STORM WATER MASTER PLAN
NOVEMBER, 2007

HGBD
A Bell Company
HUSSEY, GAY, BELL & DEYOUNG, INC.
CONSULTING ENGINEERS

III. SITE ANALYSIS RESEARCH

a. Our Approach:

The UGA Charrette Team immediately recognized that this was a tough parcel to think about creatively. Many folks might see it and say, “What a ‘natural’ and large piece of undisturbed land”, when in fact it is a highly disturbed tract. Timbering and silviculture is hardly a natural process. This land needs remediation and enhancement to even begin to associate it with a natural landscape setting as impressive as the natural landscapes we all know and have fondness for in the Savannah River watershed.



For these reasons the Team strongly felt that a slow and gradual process of placing development in the less vulnerable portions of the tract is the first level of intervention. That means protecting ecosystems like the wetlands and interpreting the places that have cultural significance like nearby residential zones and school grounds... even the “Clone Bank” of specimen pine trees that was part of the research process when the land was originally set aside for timber and pulp wood production.

The Charrette Team learned that Effingham County’s location beside Savannah was both a blessing and a curse – a blessing for Effingham County’s proximity



to the largest port on the East Coast, but a curse for Savannah’s ability to lure folks away with its amenities. Effingham County should not try to be Savannah, but instead should focus on what makes Effingham County unique and appealing.



The charrette team understood the desire for a community “center”, and references to a “new town” concept similar to what is in Goshen. And yet, so much commerce has sprung up along Highway 21 in the past three years, additional retail space would be overkill. We saw four new commercial developments around Goshen Road that were individually-developed strip mall shopping centers – of varying size and quality of construction – but none were connected and none captured the feeling of a true downtown, even if they had all the right building elements. What was missing was the *context* of a town center.

Downtowns are not only comprised of one- and two-story brick buildings with shared party walls along a front sidewalk, but blocks and blocks of this pattern across the street from each other creating an urban grid, peppered with public buildings such as schools and churches. Isolating this retail form along a highway,

disconnected from its neighbors, does not achieve the feeling of a distinct and special place.

While many people see this as an improvement over just the metal “Butler Building” shopping strip of previous decades, it is only a decorative skin that will not age well – especially in a subtropical climate. Synthetic stucco and brick veneer is not authentic! Effingham County can look more distinctive than this.

Furthermore, developing a new “town center” will only further detract from the county seat – Downtown Springfield. Springfield is rightly the geographical and cultural center of the County, but uncontrolled growth has removed investment from Downtown. Your county seat needs to be a point of pride. Springfield and the Better Hometown efforts there should factor into a countywide picture of a new development paradigm. The County Chamber of Commerce should partner with the city in ways that benefit

Springfield rather than duplicate efforts that result in a lesser product for both city and county.



New retail should be encouraged with incentives to locate in Downtown Springfield rather than sprawl across the remaining open spaces of the County.



Before the recent economic down turn, South Effingham's future (especially its visual quality) was slowly becoming that of bedroom community sprawl. Too often, highway commercial buildings with a myriad of duplicative corporate images say nothing about the unique "character place" found in Effingham County.

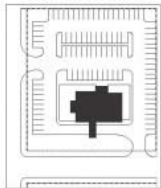


This scene could be ANYWHERE.

Luckily, both the economics of growth and our ability to deal with past mistakes are getting more sophisticated. Therefore, before the establishment of a new commercial town center of any sort, a good hard look at how to heal the highway mistakes has already been made.

SPRAWL REPAIR TOOLKIT: RESTAURANT PAD LINERS

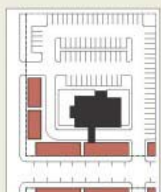
BEFORE



Existing Suburban Restaurant Pad



AFTER



Proposed Liners



New neighborhood center intersection with mixed-use infill structures

SPRAWL REPAIR TOOLKIT: GAS STATION EXTENSION

BEFORE



Existing Gas Station



AFTER



Proposed Addition



Mixed-use addition with corner store

SPRAWL REPAIR TOOLKIT: STRIP CENTER ADDITIONS

BEFORE



Existing Strip Center



AFTER



Proposed Building Additions



Expansion and re-purposing of strip center with multi-story wings and public plaza

images credit: <http://www.re-burbia.com/2009/08/04/sprawl-building-types-repair-toolkit/>

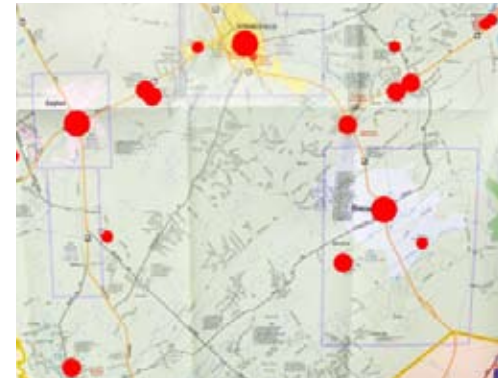
III. SITE ANALYSIS RESEARCH

b. Connections:

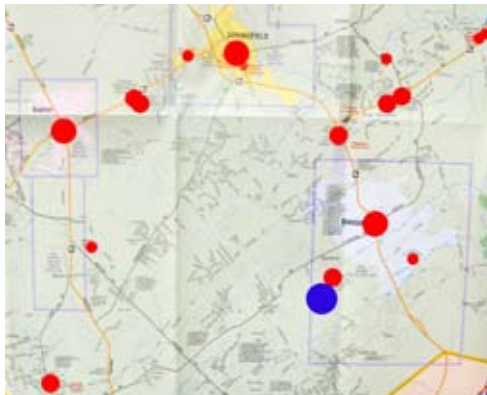
As the Charrette Team began to explore the Research Forest site and surrounding areas, it became obvious that the project site was centrally located not only for industrial development, but for recreational facilities as well. The Team explored the possibilities for connections to other key locations.



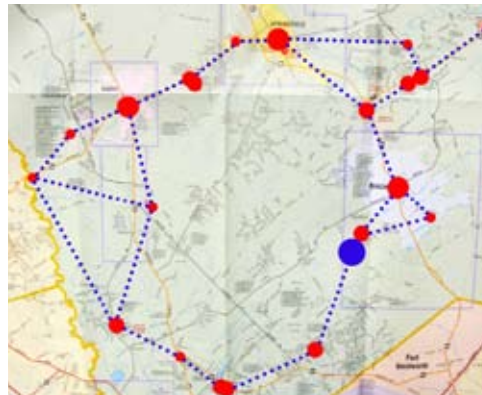
These dots indicate the proximity of the three major city centers in south Effingham county (Guyton, Springfield and Rincon).



Around these centers are scattered schools and other educational and recreational centers that create a ring of possible bike trail connections.



The Research Forest site fits perfectly into an emerging loop system.



Here you can see the major relationships between urban centers, schools, and other recreational opportunities. The Research Forest site could become the keystone of a new multi-modal transportation system in Effingham County.

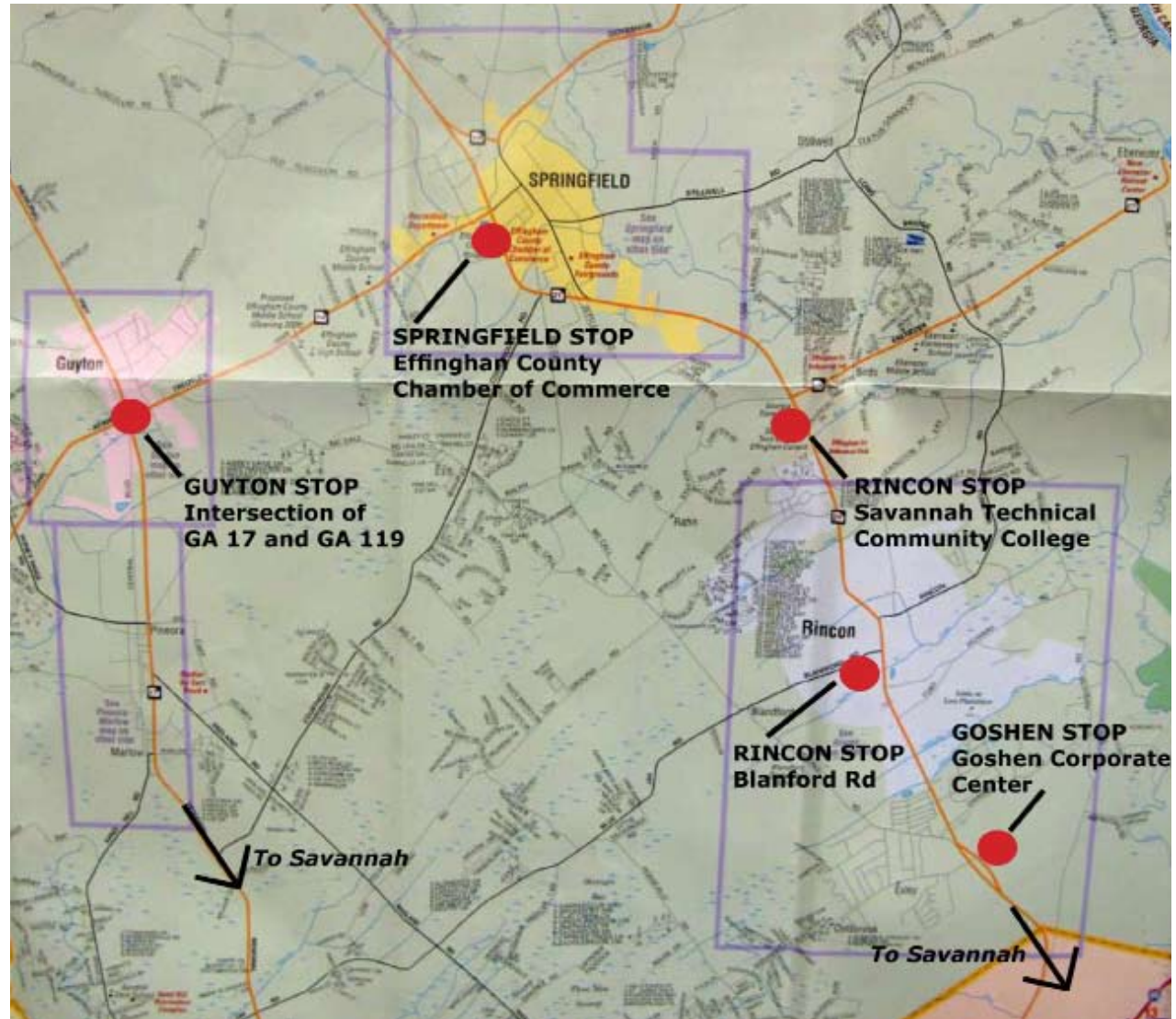


Alternative transportation is an important consideration on this site, for it is so centrally located. A ring can become a web, a whole system of bike trail connections, creating another transportation option and a healthier, happier community.

PARK AND RIDE BUS ROUTE FOR EFFINGHAM COUNTY:

This approach – the necessary revitalization of Downtown Springfield, the mitigation of the urban sprawl on Highway 21, and the unique opportunity to add multiple connections for county recreation offerings – drove the Charrette Team’s design for a central, unifying vision. This vision is of a Research Forest site that does not rely on creating a New Town retail center, but instead created a unique place that could serve as a true community “center.”

Coupled with the conservation of the natural topography and water systems surrounding and within the site, the Team began to develop a vision for what Research Forest could become.



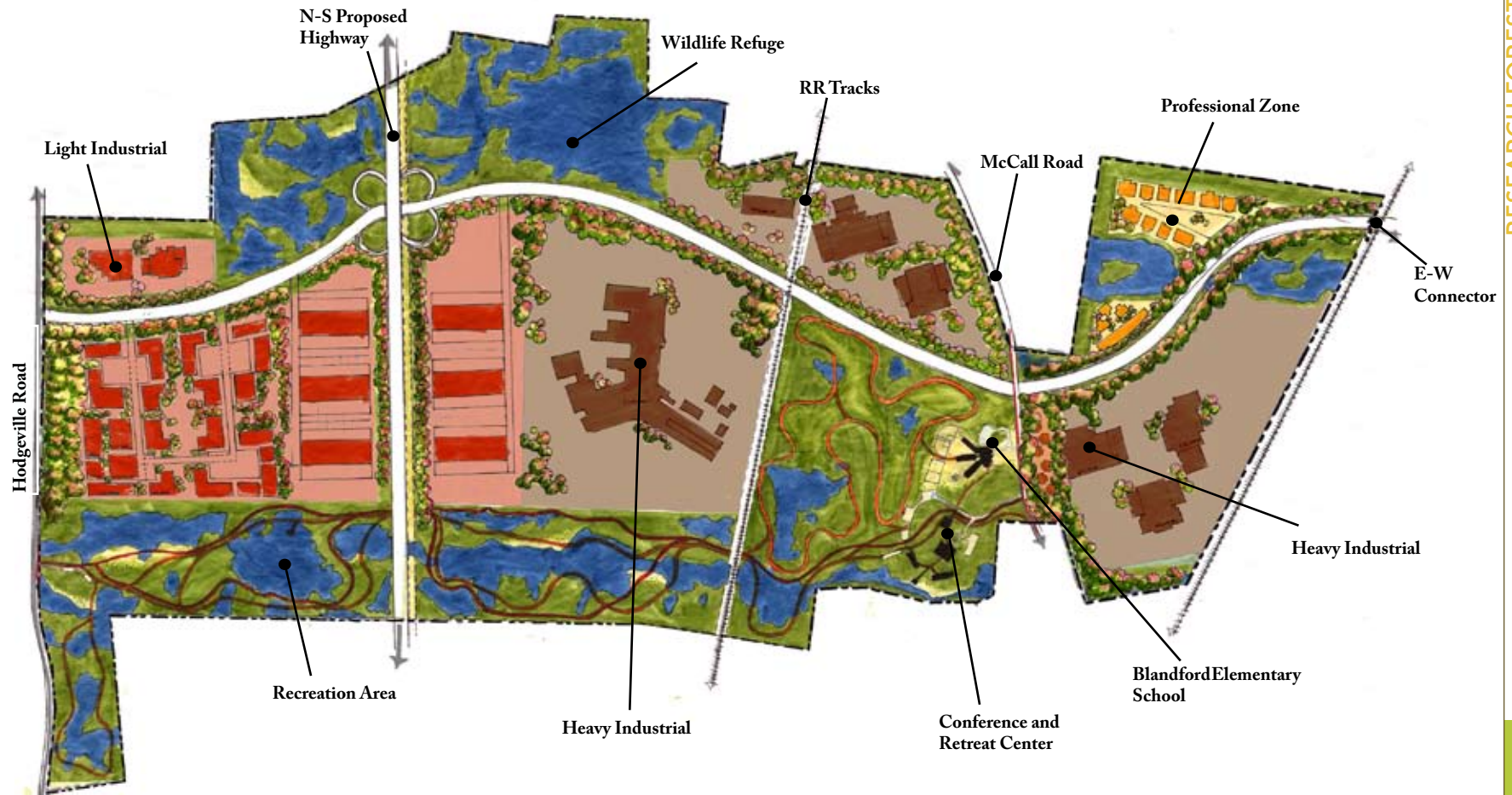
One of the main issues expressed to the group regarded high traffic problems in Rincon. One way to combat this problem is to create a park and ride systems between the major centers of Effingham County to Savannah.

IV. MASTER PLAN

for Research Forest Park – An Industrial, Recreation and Retreat Center



This drawing illustrates utilizing the new east-west road as a backbone for the industrial development so that industries would have good access to this transportation system.



The Team analyzed the existing plans that HGBD Engineering had developed, and used this as a starting point. Because we are not engineers, some of our suggestions differ from what has been presented to the IDA and the public thus far. We are land designers and physical planners with a goal to PROTECT, ENHANCE and then develop parcels, rather than the other way around.

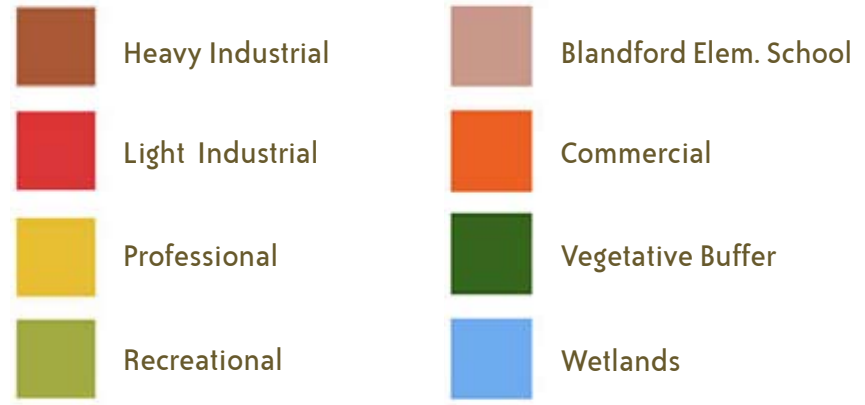
The Charrette Team generally agreed with the placement of industrial and wetland zones, but thought differently about how

these areas should be connected to and buffered from each other. Also proposed is a Conference and Retreat Center within the Recreation Area and adjacent to the school.

The first difference in our plan is that the new East-West connector is on the upper portion of the tract, through the center of the areas best used for industrial development. We use this roadway as the primary heavy materials movement corridor for trucks and equipment. While the north-south connector for that purpose is completely

dependent on the successful completion of the Effingham parkway (by the Georgia Department of Transportation), we do not encourage or support the 4-laning of either McCall Road or Hodgeville Road since they need to retain their “slow paced, country lifestyle, and family-friendly” two-laned character. Development along Hodgeville Road should especially be discouraged, as the west side is residential and should have a thick vegetative buffer from future industrial tract development.

Industry should be concentrated in the central part of the site to maintain a buffer between manufacturing sites and the surrounding residential properties. Also, the majority of the wetlands were already situated at the north and south of the site. The Team concurs with the IDA's desire to phase development from east-to-west, having the first phase of development occur between the railroad lines. This will allow for smaller developments to occur while the county's best options for larger heavy industrial developments are secured.



IV. MASTER PLAN

a. Industrial, Professional and Commercial Uses:



The wetlands are a prime component of this site, therefore a wetland recreation zone at the northern and southern portions of the site and adjacent to the elementary school will restrict development.

The cultural significance of nearby residences and the school grounds served as a starting point in eliminating any chance of noxious, unattractive or noisy land uses. Chiefly this is achieved through the sensitive location of industrial uses and vegetative buffering.

The remaining middle section of the site is developable land, with access to current and planned roadways and the dual rail lines.

The entrance into the tract should not appear as intensive development but one of a coastal parkway, accommodating truck traffic but also allowing for auto access as well. A Bald Cypress stand in the wetlands flanks

the primary entrance into the industrial park. This would serve as a visually distinctive gateway. This concept emphasizes wildlife and natural systems, once again reinforcing local ecology as design precedent in future

Effingham County development and setting this development apart in its high standards.



The lowland Bald Cypress landscape is found throughout this region, and makes a beautiful gateway.



Professional Zone:

The Professional Zones (shown in Yellow) take advantage of a location close to the new entrance intersection at Hwy 21 so that the public entering the site can have the great experience of the wetlands but not get too overwhelmed with an intensive, large footprint monolithic industry.



Heavy Industrial Zone:

We chose to put the Heavy Industry Zones (shown in Brown) as close as possible to the center of the site where they could take advantage of road and train transportation and also be furthest away from existing neighborhoods.



Light Industrial Zone:

The Light Industrial (Red) Zones are closer to the edges of the industrial areas so that they can use road networks but are still well enough buffered, especially along Hodgeville Road.



The EFACEC plant offers a new look for industrial design in Effingham County, however it does require rather heavy vegetative buffering to soften the visual impact along US 21. Our design for the new tract will use existing buffers with limited plant introduction rather than wholesale site clearing.



New industrial development should appear as structures in a forested park; industry should be screened from public view with thick vegetative buffers along the edge of the tract where they already exist. New plantings where the land must be cleared for construction, should be part of development requirements.

Conservation of existing plants is a high priority while all newly introduced plant material should be native species informally planted. This illustration (left) shows new manufacturing facilities buffered and softened by local and relevant flora, including live oak, bald cypress, and saw palmetto. Include recreation space for employees, but also have industries reach out to local residents by connecting facilities to a larger system of park and trails.

From the main gateway, a side road branches off and leads to McCall Road and the Recreation Area, as well as a small commercial node.



Commercial Zone:



The small Commercial Zone (represented in Orange) should be located across from the elementary school on McCall Road. This retail center could cater to regular users of the site, such as industry employees, parents visiting the school, and recreational users. Possible amenities include a fine dining restaurant and a day care center.

Architecturally sensitive buildings can house businesses hidden within live oaks and dappled light. Any new commercial architecture should follow the same model as the Conference & Retreat Center (see page 43). A live oak allee down McCall would greatly enhance this corridor. Establishments are welcoming and unique, parking is tucked into the treeline, and the location is walkable from other venues on site.



CASE STUDY: Nike World Headquarters

Beaverton, Oregon

INDUSTRY GUIDELINES:

The Effingham County Industrial Development Authority has no existing guidelines for development within the Research Forest. Fortunately, the IDA has been thorough in their initial planning strategies and this level of detail is commendable. The charrette team encourages the IDA to develop protective covenants outlining the expectations for the overall appearance and environmental performance of the park. The Center of Community Design and Preservation worked with the Hart County (Georgia) Industrial Building Authority who have created the Gateway Hi-Tech Industrial Park Joint Authority Protective Covenants of Franklin-Hart-Stephens Counties, their example can serve as an outline for the Effingham County Industrial Development Authority.

Architecture:

- NO plain, rectangles that are highly visible from roads by surrounding community
- Environmentally conscious-windows that function, consider LEED for buildings and landscapes, etc.
- Cohesive character in conjunction with the proposed natural recreation opportunities and other buildings
- Articulate façade (human-scale, especially around shared green space) with variety of materials (no corrugated metal huge expanses)
- Neutral, soft, natural colors



In 1995, Nike embarked on an expansion of their original headquarters completed in 1907. Their main objective was to create a campus-like feel, reflective of Nike's essence as a company. Outdoor amenities such as sports fields, athletic training facilities, playgrounds, pleasant eating areas and relaxation spaces were important site features for both employees and visitors. One of the main guiding principles throughout the design process was the preservation of the site's

woodlands and wetlands. Maintaining these features at the core of the campus served as the developmental framework and remains a wildlife habitat for the site. A carefully placed running track to be set within the campus creating a unique running experience.

The Radial site plan allows more remote buildings to be connected back into the center while parking lots flank the perimeter with connections to the public bus line and

Site Specifications:

- Minimize clear-cutting to maintain a buffer between the industry and greenspace
- Decrease the heat island effect of pavement and parking with shade trees
- Less prominent parking lots. Share employee parking lots between lighter industries whenever possible.
- Cluster industry towards the center of the site so it can be buffered from community by greenspace usable for passive recreation. Especially light industrial, cluster to give campus-like feel with shared parking and greenspace
- The new E-W corridor forms a backbone for the development of industry within the site. Only well-designed signage for the businesses are visible for the road at the turn-offs that are limited due to the grouping of the buildings.
- Allow access to the recreation center and greenway for the school.

The Hart County Industrial Building Authority Contact Information:

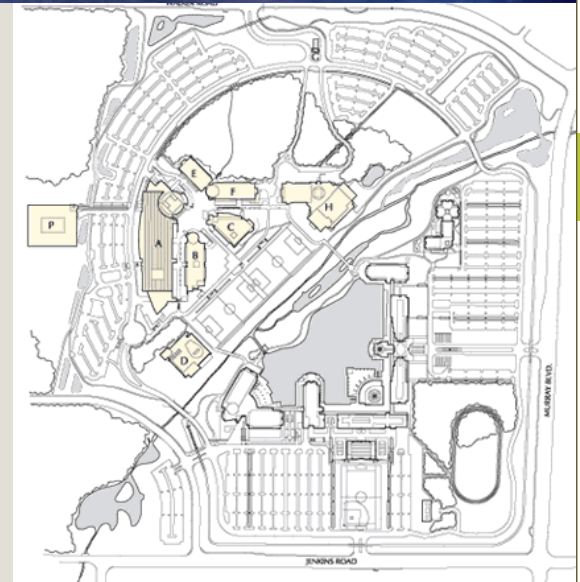
Hart County IBAPO
 Box 156Hartwell, GA
 706.856.2452
iba@hartcom.net

Dwayne Dye,
 Director of Economic Development
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nearby light rail line. Current surface parking or open fields may accommodate future buildings but the site was constructed to accommodate growth without removing existing trees. Constructed wetlands and sedimentation ponds were built to handle stormwater runoff from the parking lots and athletic field. The campus has a strong pedestrian orientation linking the expansion with the south campus via walkways and bridges. A majority of these paths are covered and use plant material to screen parking and buildings.

This project is a remarkable example of how to incorporate major manufacturing developments into a natural setting through site planning and design. This plan works within the perimeters of the site's natural resources, improving the ecology while allowing for appropriate development. Effingham County has a unique opportunity to create a working environment that will benefit the employees as well as the larger community.



NIKE NORTH CAMPUS

A	MIA HAMM	NIKE DESIGN CENTER	430,000 S.F.
B	KEN GRIFFEY JR.	OFFICE BUILDING	95,000 S.F.
C	PETE SAMPRAS	OFFICE BUILDING	95,000 S.F.
D	LANCE ARMSTRONG	ATHLETIC CLUB	65,000 S.F.
E/F	JERRY RICE	OFFICE BUILDING	180,000 S.F.
G		GUARD HOUSE	300 S.F.
H	TIGER WOODS	CONFERENCE CENTER	140,000 S.F.
P	THE PARK	PARKING STRUCTURE	1500 CARS

IV. MASTER PLAN

b. Wetlands, Recreational and Educational Uses



WETLAND PROTECTION

The site plan for the industrial park consolidates the wetlands to provide better habitats as well as more visually interesting recreational areas. This consolidation is augmented by a 10% increase in wetland area. The northern area of the site remains unprogrammed as a wildlife refuge. A 250' buffer on exterior boundaries, 200' on interior roads and at least 75' by the wetlands is proposed throughout the tract.

The southern edge of the property is developed as a wetland Recreation Area, with almost 5 miles of bike trails and walking/jogging trails including over 9 miles of a cross country track. Trails and bike paths experience varying senses of enclosure, occupying wooded areas, grassy openings, and even crossing the wetlands on boardwalks. These trails link the elementary school, the retreat and surrounding neighborhoods. At the points where these paths cross railroads and roads, they come together to facilitate minimal interference with these systems (and minimum cost for crossings).



The primary entrance to the industrial park is to the southern side of Blandford Elementary, with a secondary entrance and parking point on the far west side of this area. The siting of the park facilitates better interaction between the community and the school, and allows for the school property to become multi-purpose.

The wetlands are compromised, at best. While there are some areas where we see an ecosystem trying to repair itself. Mostly it is

not a fast or productive restoration process. The net gain in “naturalized” passive recreation and redistributed wetlands far outpaces what the parcel now carries. Additionally the reintroduction and secessional replacement of native species (especially hardwoods) will make a powerful environmental impact in the county. This process is generally referred to as “eco-industrial development.”



An example of an earthen (or possibly paved) walking trail through the existing pine forest. The trails connect all parts of the park with one another and cross through the wetland area.



TRAIL SYSTEM

The wetlands and the forest land present are opportunities for shaded, quiet walking trails.

The existing roadway immediately serve a recreational purpose. Because the county's high school cross-country teams have to drive to Richmond Hill for runs, working with the current cross country runners and coaches to develop and map a regulation trail system would result in an immediate and rewarding new use for the tract. All that may be needed is a map and a large tent for a stretching and water station, and the site can begin to be explored.

Network with the Brevard County (Florida) Parks and Recreation staff to learn how they recruited the statewide cross-country tournament. The Charrette Team has suggested a regulation-length cross country track located directly behind Blandford Elementary School, can take advantage of site features such as wetlands and the tallest Pines of the clone bank study area.



Ample footpaths should be developed throughout the wetland areas, but this drawing illustrates how the current roads can be utilized for a network of bicycle trails. Sunset is a good time for biking!





Platforms within a wetland area provide places for birdwatching.



While silviculture is a part of the heritage of the site, it is not a use that significantly contributes to the coastal eco-system. However, the trees should remain to educate the public about the site's history. A portion can be harvested and replaced with native hardwood species speeding up the natural succession of the forest and creating an unique recreation experience for visitors.



This image depicts how the rows of pine trees- once they have been reforested with hardwoods could be an excellent location for natural walking trails.



CONNECTION TO ELEMENTARY SCHOOL

The new Blandford Elementary School should not be a deterrent to developing the rest of the site. In fact, this an opportunity to improve the site. The current bare and isolated school landscape is NOT what supports creative learning or provides a sense of inclusion in the greater community.

Too often, Georgia's schools and Georgia's prisons are running a race to see who can be the most stark. Our plan envisions a planting plan for the school grounds to blend it into the forested site, and incorporate the school into larger plans for the tract.



Native planting will soften the institutional environment, ideally connecting to adjacent park space to activate the school and its curriculum. There is ample room for ball fields and other open active recreation fields, should the county need a location for sports on a site that is already county-owned and already frequented by a large segment of the population!



A larger trail system on the southern side of the Blandford Elementary School facilitates better interaction between the community and the school, and allows for the school property to become multi-purpose. A new Conference and Retreat Center is shown south of the school.

CONFERENCE AND RETREAT CENTER

Given the desire for a community center...a gathering place... a retreat, the UGA Team wanted to create a place that is attractive and appreciated by all segments of the public, yet fills a gap in services.

There was much talk of needing a gathering place, a “center”. Effingham County has a true gem in New Ebenezer Retreat Center.



Many of the citizens we talked to had fond memories of participating in group functions at New Ebenezer, whether it was summer camp as a child, family reunions or business retreats as an adult. It is a much appreciated venue, but it is a non-secular, privately-owned venture. The IDA could build off of this precedence with a unique venue that serves its Industrial base customers but the County residents as well.

Rather than another commercial shopping center in an already saturated market, a Conference and Retreat Center could provide that public space and serve as an income-producing venture. It could include a restaurant – either fine dining or more rustic country food – and would be used by the Industries for meeting space and the public for its unique environment.

This map (on page 42) shows a new Conference and Retreat Center situated to the southern end of Blandford Elementary School. This facility can house industrial visitors and regional conferences as well as people coming for cross country meets and other recreational ventures. Those staying at the Retreat Center can enjoy the Recreation Area and its amenities.

The Charrette Team drew inspiration for the “look” of a Conference & Retreat Center from existing places that are significant to Effingham County. Some are historic, like the Methodist Campground and its timber-framed pavilion, but newer buildings were inspirational as well, including the



extremely well-designed Effingham County Chamber building! The characteristics of all the aforementioned buildings – one to two stories, wood siding, metal roofs, bands of windows, open porches, Craftsman detailing – all can contribute to a common architectural vocabulary for new non-industrial buildings within Research Forest Park.



Exposed beams and timber-framing of the Methodist Campground site are good design elements to be incorporated into a new building aesthetic on the Research Forest site.

This illustration shows a modern conference facility designed to fit among the wooded, naturalized landscape of the pines and wetlands. It is modeled from the Lynches River County Park Nature Center in Florence County, SC. This building features a contemporary design with traditional building elements – the rough hewn vertical board-and-batten wood siding reflects the tobacco barns indicative of this South Carolina region (which is very similar to Effingham County). The Conference Retreat Center suggested for Research Forest could follow a similar aesthetic, making it a distinctive place and complementary to the landscape.



CASE STUDY: Environmental Discovery Center Lynches River County Park; Florence, S.C.



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Lynches River County Park is a 676-acre site in the Pee Dee Region of South Carolina. Located along the banks of the Lynches River, it is surrounded by towering cypress trees and offers nature trails, canoeing and the newly built Environmental Discovery Center. The Environmental Discovery Center (EDC) provides visitors with an understanding of ecosystems in the park, “from

the view of the worm in the ground, to the bird’s eye view in the top of the trees”, via the Tree Top Canopy Walk. Other features at the EDC include a back-lit topographic map table of the park, bird watching guides and supplies, and live environmental monitoring of soil, water and weather conditions. The innovative Nature Swap Program allows young visitors to earn points by bringing in



rocks, insects and other specimens to trade. Points are awarded based on rarity, quality, and the finder's knowledge of the item, and can be traded for other natural items. Handheld GPS units are distributed for assisting EDC staff in recording significant observations, and can be used in "geocaching" exercises.

The innovative design of the LEED-certified Environmental Discovery Center mirrors the creative and environmental programming inside. Designed by Drakeford Architects, the building used reclaimed siding and flooring from a soon-to-be-destroyed century old tobacco barn. Indoors, a simulated barn façade frames an interactive exhibit on this agricultural staple that has defined the Pee Dee Region. The high-ceilinged, open air plan glows inside and out, and blends into the natural landscape. Screened porches and verandas blur the line between indoors and out, and lead visitors to the 328-foot-high canopy walk.



LODGES

Overnight accommodations associated with the Research Forest Park's Conference and Retreat Center should reflect the landscape by using natural materials, operable windows, and screened porches to take advantage of wetland views. The Charrette Team drew inspiration for the design of the Lodges from the historic Salzburger cabins and the Dining Hall at New Ebenezer. Lodges should be designed to accommodate business travelers and large groups, thereby filling a niche not served by the smaller New Ebenezer Retreat Center. Locate lodges so that visitors can easily access the trail system and other accommodations on foot, such as the Commercial Zone across McCall Road.



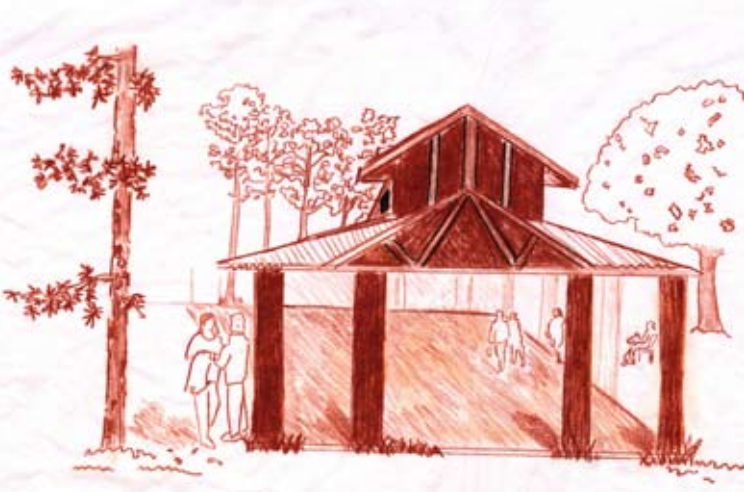
NATURE CENTER

The IDA has the opportunity to create a gathering space for residents and visitors of all ages. A Nature Center is shown as part of this complex and is placed adjacent to Blandford Elementary School, making it very accessible for school involvement. A Nature Center could serve to educate the public about the natural resources of Effingham County and the Savannah River area as well as explain the unique activities that have occurred on this parcel when it was used as a research forest.

The history of the site as a research forest for paper companies, the regeneration of the

landscape, the location of the elementary school and the size of the county-owned track presents a unique opportunity to develop an education center that teaches about the site and can serve as a trailhead for the public pathways throughout. It should be easily accessible by the public; particularly within walking distance to the elementary school. It should follow the same design aesthetic as the Conference Center and other non-industrial buildings in the Park in order to maintain that strong visual identity and to blend into the landscape.





A pavilion could be constructed for outdoor events. The Charrette Team envisioned a large, open-air structure with a roof that reflects the historic design of the Methodist Campground. The versatile structure is intended to house a number of activities and can be converted into a more weather friendly venue with drop-down tent sides. Nestled amongst the tall pines, the Pavilion's exposed wooden piers are sturdy but appear weathered, allowing it to blend in with the surroundings. It can serve as a large event space while remaining in tune with its setting and heritage.

BELOW: An example of a metal and wooden bridge over wetlands- creates a nice viewing spot and enables the trails to continue over wet areas.



An enhanced wetland park provides adult and school-aged children with opportunities for exercise, learning and relaxation.



CASE STUDY: Oxbow Meadows

Columbus Water Works; Columbus, GA.



Oxbow Meadows Environmental Learning Center is a regional, hands-on nature center in Columbus, Georgia, dedicated to providing quality educational programs and resources that promote environmental awareness and citizen science and to inspire individuals to conserve, protect and restore the natural environment.

Working in conjunction with Columbus State University, Columbus Water Works created the Oxbow Meadows Environmental Learning Center with the goal of educating and reaching out to the community - both young and young at heart - to foster a life-long interest in the environment and environmental issues. When visiting the scenic site of the Learning Center, it's difficult to imagine that it was a mining site in the 1940s and '50s, and a landfill in the 1970s.

Through an extraordinary step in leadership and vision, CWW and the City of Columbus decided to purchase the 1,600-acre property in 1992 after a joint study showed the area would be a good site for an inert landfill (a disposal site for lawn waste such as leaves, grass, and sticks) and for the application of biosolids from CWW's wastewater treatment process. Old mining pits in the center

of the property are used for the inert landfills. Long-term plans include converting those areas into hardwood wetlands once they near capacity of inert disposal. CWW uses approximately 300 acres near the river on the western side of the property for growing millet and wheat as part of its biosolids program.

Recognizing the potential for a use that would benefit the community in broader terms, the jewel of the property was constructed on the eastern side - the Environmental Learning Center. It is here that the true vision of Oxbow Meadows comes to life. The nature discovery center lets visitors see native flora and fauna firsthand, and learn about the natural and cultural history of the region.

Citation from: Columbus Water Works (Columbus, GA). Columbus Water Works/Environmental Stewardship/Oxbow Meadows website: <http://www.cwwga.org/subpages.asp?pageid=17> (Accessed December 1, 2009)



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V. CONCLUSION

Summary

Subtle (yet daring) design solutions and a return to one's roots are recurring themes in this report and the visions presented here. The ideas presented stress land conservation, outdoor recreation, connectivity, vegetative buffering, community education and place making. The notion of a return to the fundamental characteristics that make Effingham unique and the continuation of a vernacular (place based) building tradition is not such a new idea; however it is not the direction in which the County has been moving.

This project can set a new standard for the County's future. The situation has been described as "the perfect storm" for positive land redevelopment. This analogy rings true due to a series of decisions resulting in conditions to create something of great impact, that present vibrant opportunities for new partnerships and which will bring long-term positive outcomes for the county, the region and the state.

The University of Georgia's College of Environment and Design hopes that these visions for change can start a process for positive improvement. It has already resulted in providing the perfect learning laboratory for design and preservation students. This cannot be reproduced in the classroom and we appreciate being able to make our ideas part of your plans.



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