







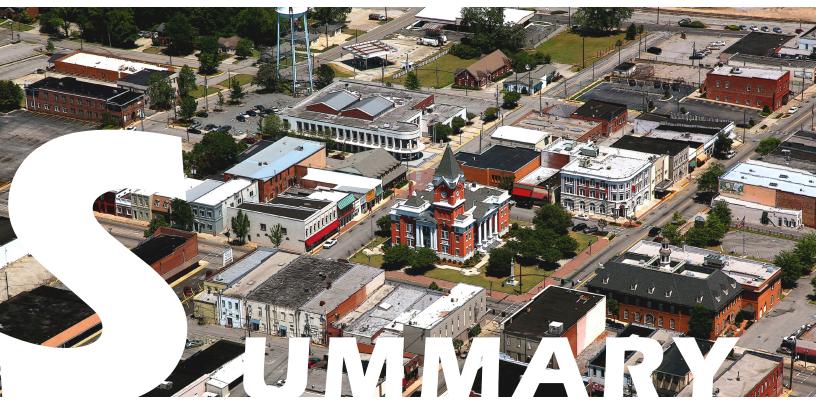


## CENTER OF COMMUNITY









Downtown Statesboro Aerial View

The Georgia Downtown Renaissance Fellows Program pairs the resources of the Georgia Municipal Association, the Georgia Cities Foundation, and the Carl Vinson Institute of Government with emerging design professionals from the University of Georgia College of Environment & Design to enhance downtown development in communities across Georgia.

With the assistance of the Georgia Municipal Association and the Georgia Cities Foundation, the City of Statesboro was selected as one of three communities to take part in the 2015 Georgia Downtown Renaissance Fellows Program. Partner cities are selected based on the criteria of strong local leadership, community commitment, and fiscal readiness to act on projects. We thank the people of Statesboro for their steadfast commitment to community improvement and invaluable role in the partnership.

Through the Georgia Downtown Renaissance Fellows Program, Tianyi "Tan" Jiang, a summer Fellow (intern), was assigned to the City of Statesboro and worked 40 hours per week over a 12-week period during the summer, beginning the week of May 19th. Jiang worked from the Spectrum Design Studio, located on the UGA campus at the Carl Vinson Institute of Government, under the supervision of Danny Bivins and Kaitlin McShea.

Jiang, a graduate landscape architecture student from the University of Georgia's College of Environment & Design, worked directly with Allen Muldrew, the executive director of the Downtown Statesboro Development Authority, to provide technical and design services to downtown Statesboro. She visited the city several times in order to create a plan that captures and addresses the community-identified priorities to aid in downtown and community development.

Jiang worked with two other Renaissance Fellows, Megan Hull who supported the City of Toccoa and Juan Da Silva who assisted the City of Chamblee.

#### Partners and Credits











### The Georgia Municipal Association

Chris Higdon, Community Development Manager

Created in 1933, the Georgia Municipal Association (GMA) is the only state organization that represents municipal governments in Georgia. Based in Atlanta, GMA is a voluntary, nonprofit organization that provides legislative advocacy, educational, employee benefit, and technical consulting services to its members.

#### The Georgia Cities Foundation

Perry Hiott, Director of Community Development

Founded in 1999, the Georgia Cities Foundation is a nonprofit subsidiary of the Georgia Municipal Association. The foundation's mission is to assist cities in their efforts to revitalize and enhance downtown areas by serving as a partner and facilitator in funding capital projects through the revolving loan fund. Its services include the Revolving Loan Fund Program, the Heart and Soul Bus Tour, the Peerto-Peer Mentoring Tour, the Downtown Development Authority Basic Training, and the Renaissance Award.

#### The Carl Vinson Institute of Government

**Danny Bivins**, Renaissance Fellows Supervisor, Principal Investigator **Kaitlin McShea Messich**, Community Designer

T. Clark Stancil, Landscape Designer

For more than 85 years, the Carl Vinson Institute of Government at the University of Georgia has worked with public officials throughout Georgia and around the world to improve governance and people's lives. The Institute of Government has helped government leaders navigate change and forge strong directions for a better Georgia.

### The College of Environment & Design

The UGA College of Environment & Design hosts various degree programs, including landscape architecture, historic preservation, and environmental planning and design as well as a specialized certificate program in environmental ethics. Special thanks to **Juan Da Silva** and **Megan Hull**, Renaissance Fellows.

### Downtown Statesboro Development Authority/

#### Main Street Statesboro

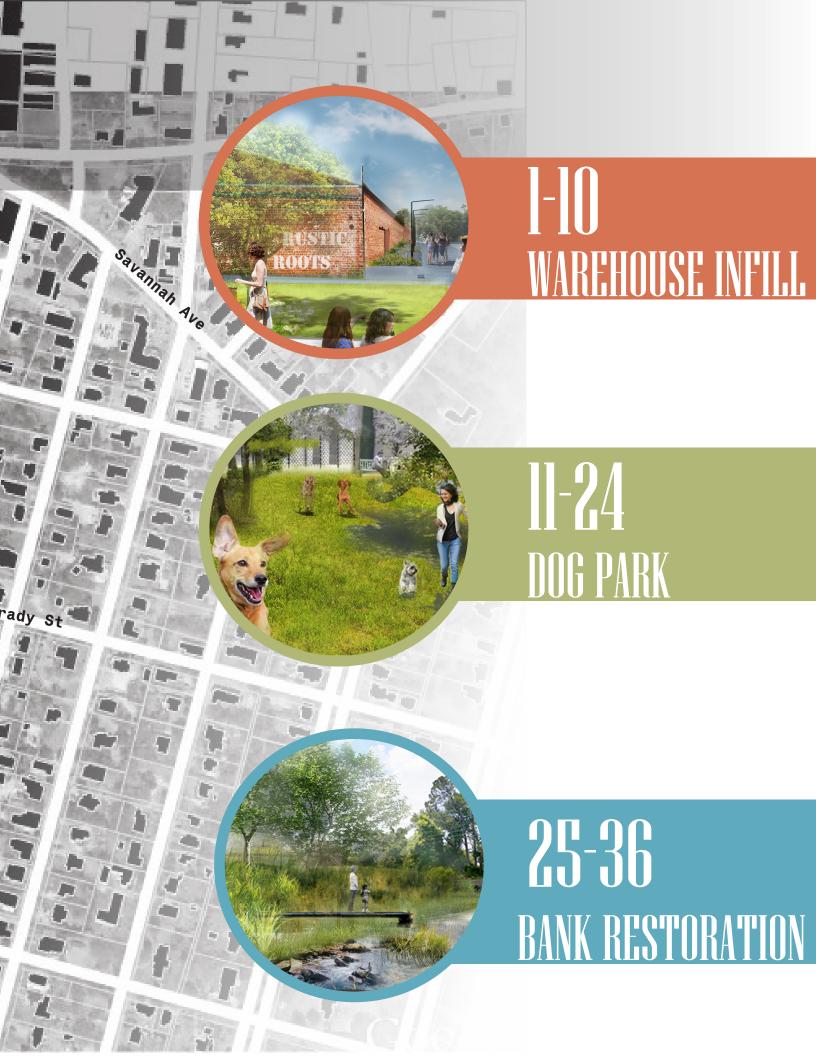
**Allen Muldrew**, Executive Director, Downtown Statesboro Development Authority

**Jason Boyles**, City of Statesboro

Maria Proctor, Madame Couture's Consignment Boutique

The Main Street Program and Downtown Statesboro Development Authority work as two organizations in one. Main Street Statesboro and the Downtown Statesboro Development Authority are committed to the economic development, historic preservation, and beautification of Statesboro's downtown area.





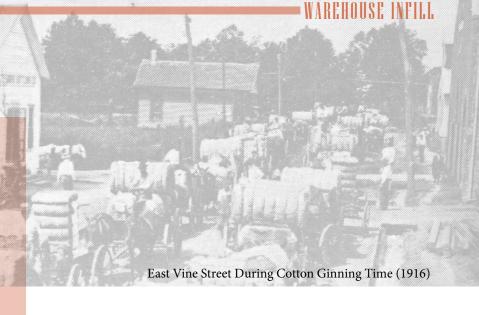
# WAREHOUSE INFILL

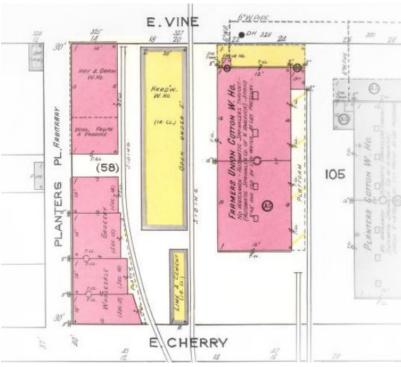


# Site Summary

uring the early 20th century, Statesboro was one of the biggest cotton markets in the United States. According to a 1902 news story, Statesboro "handled about 8,000 bales of Sea Island cotton annually(1902)". The East Vine Street warehouses (Sanborn Insurance map from left to right) were once the Hay & Grain Warehouse, Hardware Warehouse House and Farmers Union Cotton Warehouse, respectively, according to a 1922 Sanborn Insurance map. The currently abandoned warehouses are located one block from the center of downtown Statesboro, within walking distance of restaurants and churches as well as only one block to the west of the McTell Trail. The infill plan for the warehouses attempts to add vitality to the Statesboro downtown area. The three warehouse sites are listed in the National Register of Historic Places, which could garner preservation benefits and grants for planning and rehabilitation.







Sanborn Insurance Map of the Site (1922)

Bird's View of the Site (2015)



### EAST VINE STREET





# Design Concept

The master plan builds upon the warehouse area's most unique and significant characteristics while accommodating the current development needs of downtown Statesboro. The whole site is transformed into one- to three-bedroom apartment-style lofts, ranging from about 650 to 1,800 square feet. They feature a courtyard in front and high ceilings. The development preserves the site's historic aesthetic, including the exterior materials, frames, entryways, and loading platform and also houses the amenities for the residential lofts, such as a swimming pool, clubhouse, parking lot, gym, and green space. A new building at East Vine Street fills in the formerly vacant area in front of the warehouse. The first floor is used as a restaurant,

> The second floor could be developed into several 500-square-foot studio apartments with a separate entrance at the back of the building and a roof garden above.

# Plan View

## Description and Legend

- 1. Ramp and Entrance of Apartment Office
- 2. Apartment Parking Lot
- 3. Apartment Swimming Pool
- 4. Lawn
- 5. Platform
- 6. Courtyard
- 7. Bicycle Parking Lot
- 8. Restaurant Outdoor Dining Space
- 9. Apartment Square
- 10. Alley Light
- 11. Corridor with Glass Roof
- 12. Courtyard







60'

# East Vine Street Building Infill



- ▲ Before The area is vacant and the sidewalk of East Vine Street is not well designed.
- After A new building at East Vine Street fills in the formerly vacant area in front of the warehouse. The first floor is used as a restaurant, with apartments and a roof garden above. The proposed first-floor restaurant features metal, brick, glass, and wood to give it an antique but contemporary look.





**View Direction** 



# Square and Alley View



- ▲ Before The area is vacant and warehouses are abandoned.
- After On the left, this square is located directly behind the infill building on East Vine Street. The square uses simple rectangular forms with an open space at the center. The square features a lush tree canopy, benches, and open lawns. The warehouse on the right includes a retail/restaurant space in front. The rest of the warehouse is allocated into six individual two- or three-bedroom/two- or three-bathroom loft apartment each with a 20'x12' courtyard separated with wooden screen walls.

View Direction

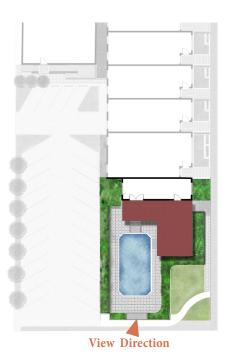




# Swimming Pool and Platform



▲ Before The area is vacant, and the platform is abandoned.







# 1 DOG PARK









Double-gated entryway

## **Essentials**

- ► Unleashed dog area should be fenced, a 4' fence is the minimum required, usually 4'-7', no 90 degree angles
- ▶ 1 acre or more
- ► Separate areas for large and small dogs
- ➤ Double-gated entryways/exits and a maintenance gate for routine mowing and maintenance
- ► Drinking fountain and shade for dogs
- ► Seating area
- ► Pet waste clean-up stations
- ► Posted rules and regulations
- ► Public restrooms
- ► Restricted open hours, closed at night

## Dog Park Design Considerations

**Location** The proposed site is on the vacant land near the intersection of East Grady Street and the McTell Trail. Currently, only part of the land is public property. A contract is needed before the entire space can be used for constructing a dog park.

**Dimensions** The total area of the dog park is about 1.8 acres

**Signage** Signage is needed to clearly define the offleash and on-leash areas.

**Shade** The site already includes large to medium-sized trees that provide adequate shade.

**Vegetation** Removing all invasive exotic plant species and adding some landscaping trees is recommended. Vegetation selection recommendations are on page 23. **Amenities** Drinking water for dogs and poop clean-up stations are needed.

**Surface Materials** The off-leash area should have turf suitable for dogs. Other paving materials are selected based on cost and suitability. See material selection recommendations on page 24.

**Site Drainage** Part of the site is on a 1% annual chance flood event floodplain. An appropriate drainage solution is needed.

**Parking and Public Restrooms** A proposed parking area and restrooms are at the entrance of the McTell Trail next to East Grady Street. Additional parking is available at the Statesboro Regional Visitor Information Center.

**Accessibility** A path is needed to connect the McTell Trail and the Statesboro Regional Visitor Information Center. The dog park should also help to promote use of the nearby McTell Trail.



Site Map

# Dog Park Phase I Plan View

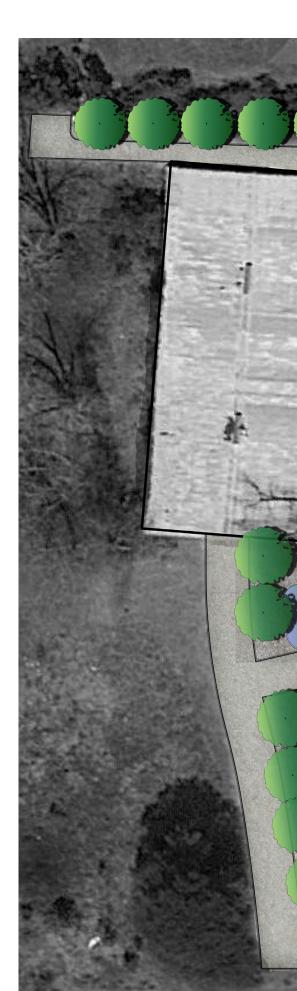
## Description and Legend

- 1. Entrance to the Statesboro Regional Visitor Information Center
- 2. Existing Building
- **3, 11.** Double-gated Entrance and Signage Post
- 4. Seating Area
- 5. Off-leash Big Dog Area
- **6.** Bridge to the McTell Trail
- 7. Big Dog Area Seating Area
- **8, 14.** Drinking Water for Dogs and Pet Waste Clean-up Station
- 9, 10. Maintainance Gate
- 12. Off-leash Small Dog Area
- 13. Seating Area
- 15. Existing Creek
- 16. McTell Trail
- 17. Railway



)' 10' 40'

70°





## Dog Park Phase II Plan View

## Description and Legend

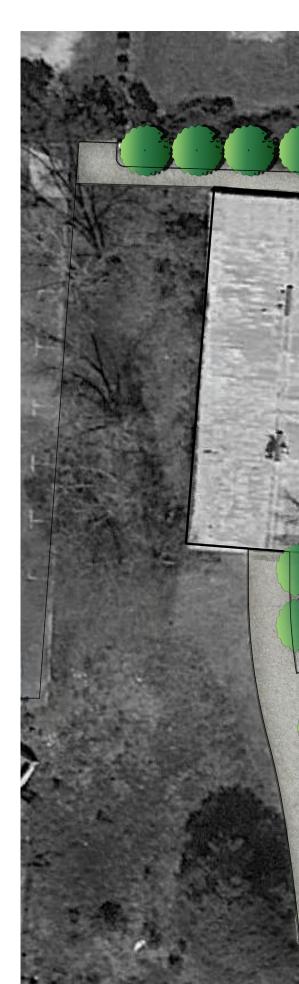
- 1. Entrance to the Statesboro Regional Visitor Information Center
- 2. Existing Building
- **3, 15.** Double-gated Entrance and Signage Post
- 4,11,18. Seating Area
- 5. Off-leash Big Dog Area
- **6, 17.** Walkway within Off-leash Dog Area
- 7. Hedge Trees
- **8,10.** Bridge to the McTell Trail
- **9.** Wooden Platform Picnic Area and Creek Overlook
- 12, 19. Drinking Water for Dogs and Pet Waste Clean-up Station
- 13, 14. Maintainance Gate of Big Dog Area
- 16. Off-leash Small Dog Area
- 20. Landscaping along the Creek
- 21. Existing Creek
- 22. McTell Trail
- 23. Railway



0,

40°

70 |





# The Trail Entryway Vision

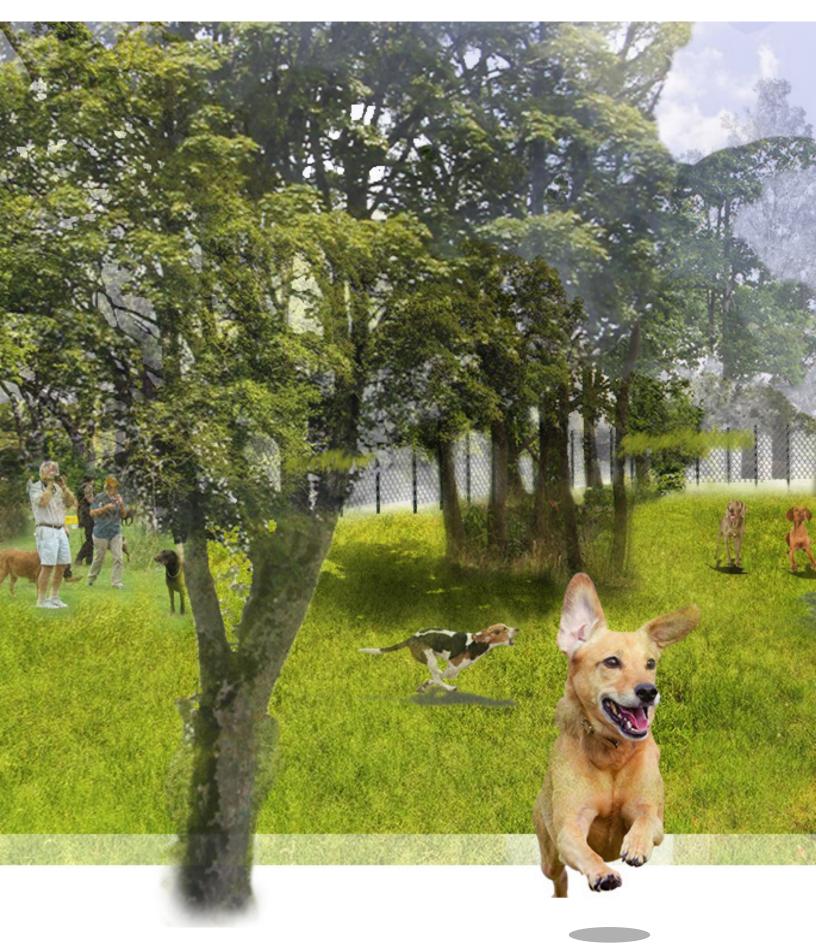


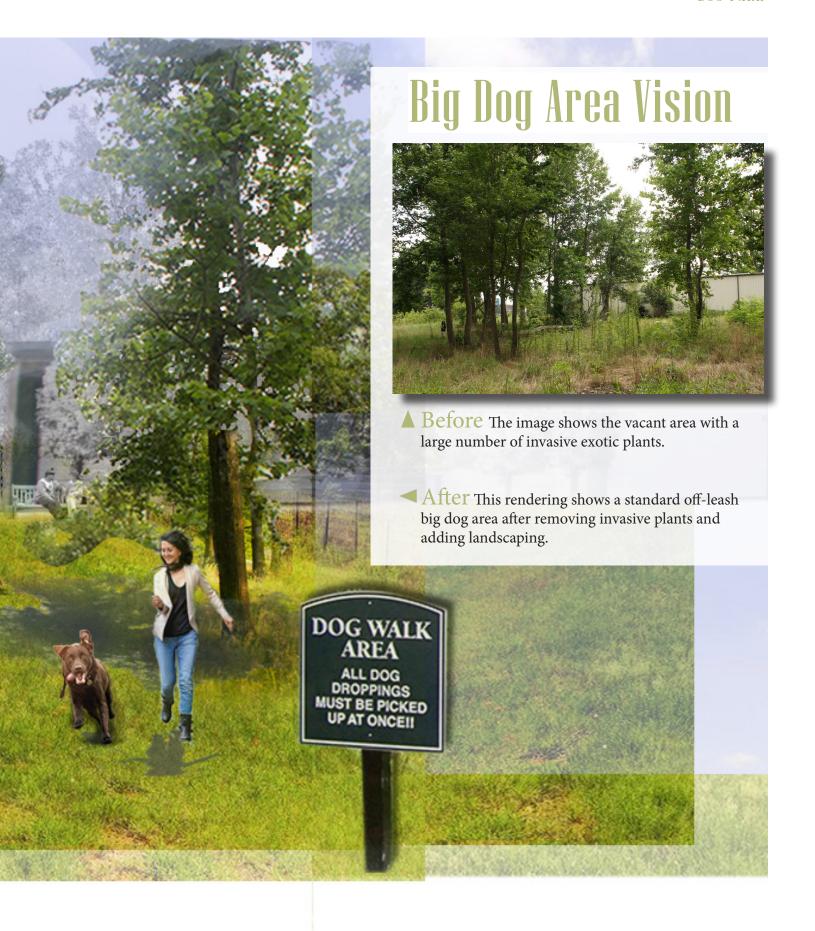
▲ Before No access to the dog park from the McTell Trail available. Invasive and messy plants along the bank of the creek. Water quality is problematic.

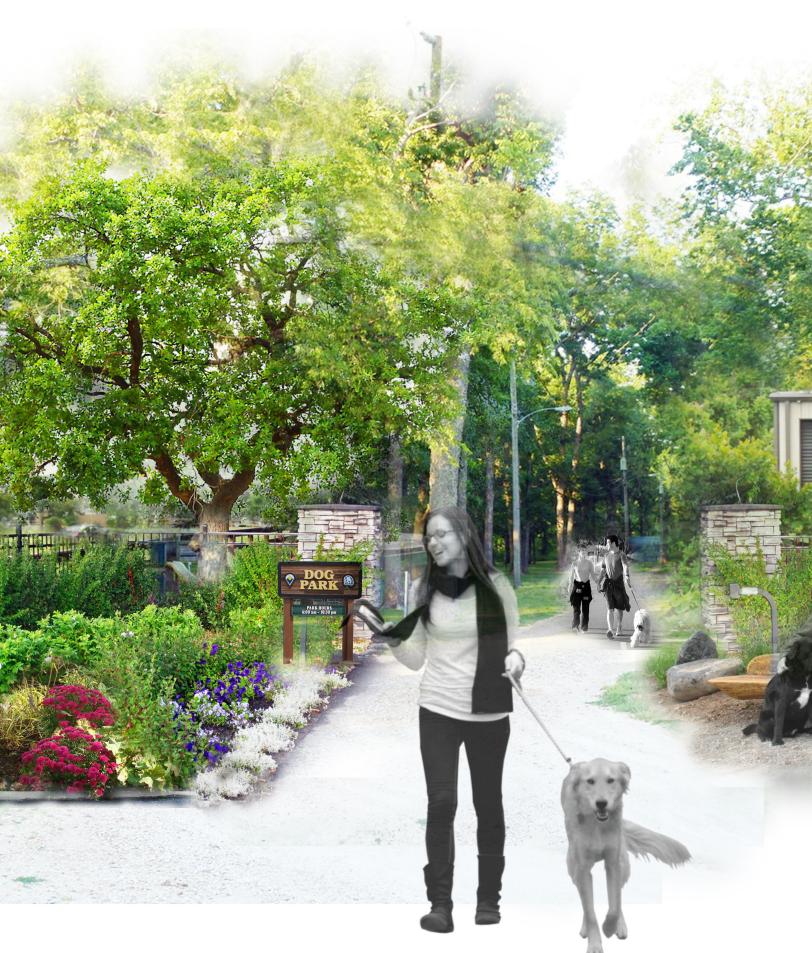
After A bridge has been added across the creek to allow for access to the dog park from the McTell Trail. Invasive plants are cleaned up. New plant species are selected according to soil and moisture conditions and are laid out along the bank elegantly.

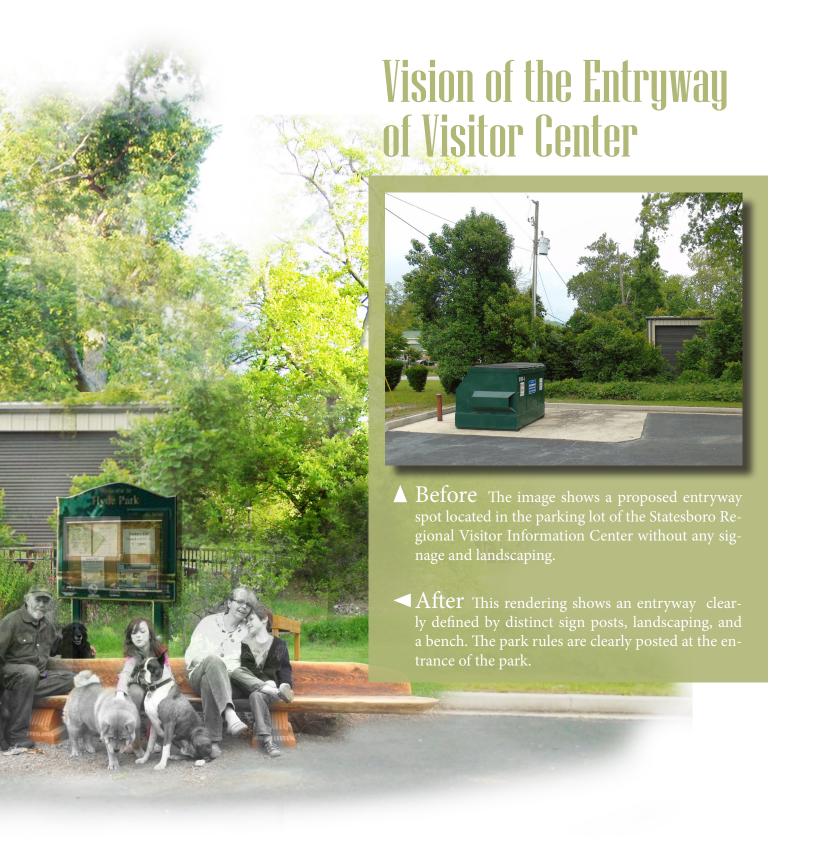
















## Thornless Honey-locust/Gleditsia triacanthos

- ► 30'-70' height, a spread of 30'-70'
- ► Very easy to plant and grow
- ► Showy yellow color in the fall
- ▶ Wide range of soils
- ► Full sun

## **2** Eastern Red Cedar / Juniperus virginiana

- ▶ 40'-50' height, a spread of 8-20'
- ► Evergreen tree
- ► Wide range of soils
- ► Full sun

#### River Birch / Betula nigra

- ► 40'-70' height, a spread of 40'-60'
- ➤ Tolerates moderate flooding/ drought
- ► Medium to fast growth rate

## 4 Sugarberry / Celtis laevigata

- ► 60'-80' height, a spread of 60'-80'
- ► Low maintenance
- ► Tolerates medium to wet water

## 5 Red Maple / Acer rubrum

- ► 40'-70' height, a spread of 30'-50'
- ► Low maintenance
- ► Tolerates medium to wet water
- ► Tolerates wet soils

## 6 American Hornbeam/Carpinus caroliniana

- ▶ 20'-35' height, a spread of 20'-35'
- ► Low maintenance
- ► Tolerates clay soils
- ▶ Part shade to full sun
- ► Medium water



The site already has several trees, including sycamore (Platanus occidentalis), pecan (Carya illinoinensis), sweet gum (Liquidambar styraciflua), and maple species. Removing the sweet gums from the site is optimal because the trees drop seed balls about 2 inches in diameter that can be quite painful on a dog's paws. When planting new trees, avoid installing caliper trees smaller than 3' because they are at risk of physical damage from public activities, site maintenance activities, and dog urination. Also, due to the stressful growing environment in a dog park, tough indigenous plants are recommended to ensure successful establishment and longevity. A mix of evergreen and deciduous, medium and large trees is recommended. Ground cover in most of the dog park will be a vegetated surface which could effectively reduce soil erosion.

# Poisonous To Dogs

The following should definitely be avoid ed in a dog park : hydrangea, Japanese andromeda (Pieris japonica), rhododendron, heavenly bamboo (Nandina domestica), yew (Taxus), foxglove (Digitalis), morning glory (Ipomoeanil), holly (Ilex), yucca, daffodil (Narcissus), clematis, English ivy (Hedera helix), lilies (Lilaceae), daylily(Hemerocallis), Lily of the Valley (Convallaria majalis), tulip (Tulipa), and iris (Iridaceae), to name a few.







## **Material Selection**

Fescus Grass

Pea Gravel

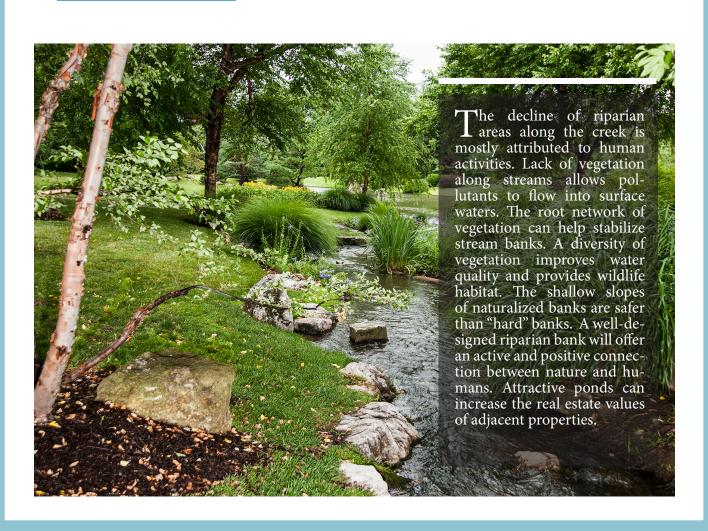
Crushed Stone

Decomposed Granite



The dog park fences could be chain link, which is inexpensive, easy to install, and very durable. Chicken wire frame in wood would have a more countryside feel. Fescus grass is usually used in dog activity area. To avoid mud, high traffic areas (such as space around benches and entrance areas) could be paved with decomposed granite, which is made up of granite aggregates 1/4" or smaller and is the least expensive way to pave a patio, walkway, or driveway. Pea gravel and crushed stones are also recommended.

# BANK RESTORATION



# Site Summary

Tpper Little Lotts Creek is located near the intersection of East Grady Street and Highway I73 within the Statesboro downtown development area. This section of the creek is about 420 feet long from north to south. Several portions are contained in sterile culverts to act as storm sewers. The banks of the channel are eroding, and sediment from the adjacent land is building up. Invasive species and weeds are rampant along the banks, and the water quality of the lower part of the creek is problematic. Approximately 30 feet of the banks on each side are within the 1% annu-

al flood plain area, according to data from Federal Emergency Management Agency. The creek runs through a vacant property and currently functions mainly to catch the runoff from parking lots and impermeable pavements of the surrounding residential areas. The creek runs alongside the proposed dog park and next to McTell Trail, which offers the potential to become a natural and recreational public space. McTell Trail has been underutilized since it was built in 2005. The renovation of the creek area will help to revitalize the surrounding neighborhoods.

Water quality degradation & exotics pertubation



Soil erosion







Little hydrology information about the creek is available, such as flood frequency, flood intensity, and flow velocity. Thus, the design recommendations are based on general principles of bank stabilization and riparian area restoration as well as case studies. A site inventory assessment is highly recommended before implementing any of these design ideas. The assessment could be completed with the help of local departments, such as the local Natural Resource Conservation Service Agency, the Soil and Water District, and so forth. The assessment could include a site history, habitat documentation, a field assessment of topographic features, and a vegetation inventory.

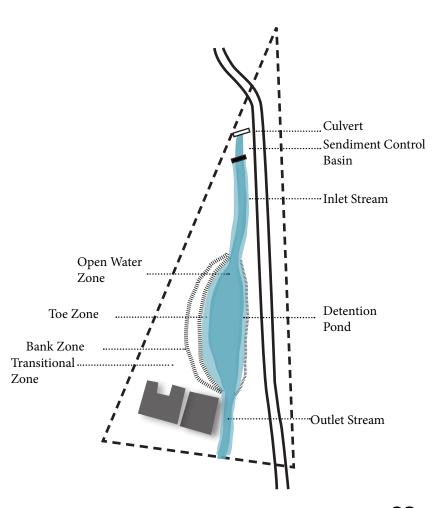
The proposed design basically divides the channel into three parts from north to south: an inlet and sediment control basin, a vegetated detention pond area, and an outlet area. The entire area will feature a 10–15' buffer between the creek and the railroad, trail, and property lines.

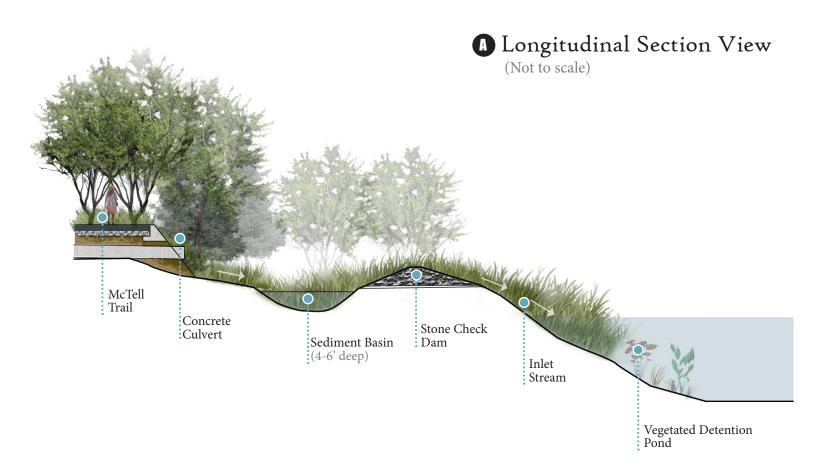
## Plan View

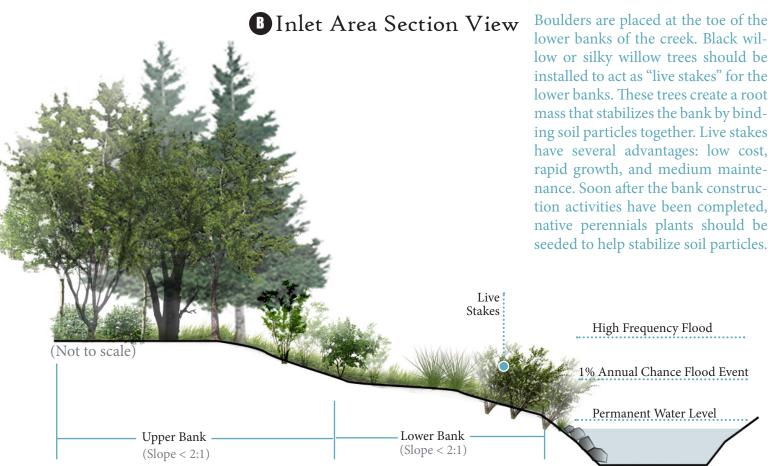
## Description and Legend

- 1. Existing Buildings
- 2. McTell Trail
- 3. Check Dam
- 4. Vegetated Detention Pond
- 5. Railway

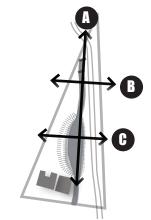








Tater flows through culverts and into a sediment control basin(4-6' deep). The basin is designed to dissipate the energy of incoming runoff and detain the coarse particles from the runoff before the water moves to the detention pond. The sediment in the control basin should be removed periodically, as needed. A small, stone check dam is installed after the control basin. In high-flow situations, runoff moves over the top of the stone check dam and forms an inlet stream before flowing into a detention pond. The naturalized detention pond is extended based on the existing channel while maintaining the current flow on normal days. Generally, naturalized detention basins are stormwater control measures constructed to mitigate stormwater flows and pollutant loads. The detention pond has three functions: water storage, water quality improvement, and wildlife habitat. Pollutants including suspended sediment, total suspended solids, nutrients, metals, and oxygen- demanding substances are partially removed in naturalized detention basins. This basin is designed to match peak flow for 10-, 25-, and 100-year events.



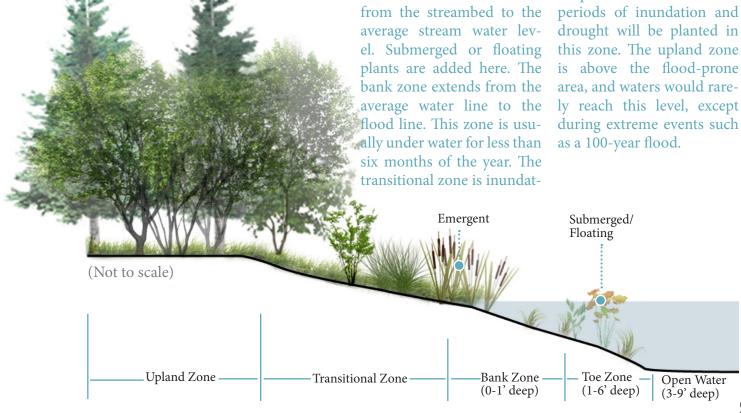
Section View Cutting Line

# Bank Restoration Strategy

## Naturalized Detention Pond Section View

Banks on this portion of the creek are flatter, smaller than 4:1. The lowest zone, called the toe zone, extends

ed for a short period of time during higher flood events. Trees and shrubs that are adapted to occasional short drought will be planted in this zone. The upland zone area, and waters would rareduring extreme events such



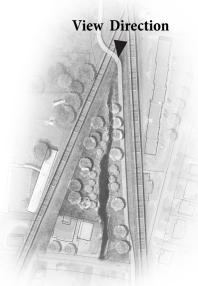


# Section Perspective View

This perspective shows the views from south to north. The three bank zones are represented in the section view. All invasive species and weeds are removed from the banks, and the banks are shaped appropriately. Boulders are put at the toe area of the bank to add more aesthetic appeal. Trees (like water oaks) could be planted along the banks to provide shade to McTell Trail users. Vegetation is selected based on adaptability to water inundation, with a focus on utilizing native plants. Different layers and types of plants are grown to create a diversity of bank habitats. Docks extend into the water, giving people access to the waterfront.







## South View

This rendering shows the view from north to south. Careful selection of vegetation and long-term management transform this area into a natural and attractive wetland, which is friendly to both humans and wildlife.

# **Maintenance**

A fter construction is completed and vegetation is established, regular maintenance will be needed. Typically, an experienced pond or stormwater control measure maintenance company can handle the upkeep. Mowing of perennials and grasses several times a year, removing litter, and eradicating unwanted weeds and aquatic plants under the guidance of a plant expert will all be necessary. Volunteers can sometimes participate in the maintenance work, which increases community involvement.

# **Vegetation Guide**



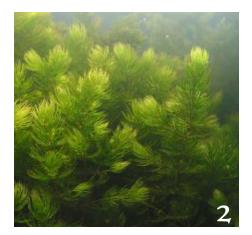




Submerged/ Floating Plants



I Waterlily Brasenia schreberi



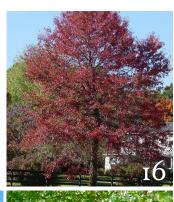
**2** Coontail *Ceratophyllum demersum*An oxygen plant for aquatic gardens



- 3 Cattail Typha latifolia
- **4** Broom Sedge Andropogon virginicus
- 5 Bulrush Scirpus californicus
- 6 Rush Juncus effusus
- 7 Umbrella Palms *Cyperus alternifolius* Winter hardy, effective filters to wastewater
- 8 Iris Iris spp
  Stays green in winter and reduces nutrient loads
- 9 Pickerelweed Pontederia cordata











- IO Botton Bush Cephalanthus Occidentalis
- II Joy-Pye Weed Eupatorium purpureum
- **I2** Silky Dogwood Cornus amomum Live stakes
- **I3** Swamp Aster Symphyotrichum puniceum puniceum
- I4 Black Willow Salix nigra Live stakes
- **15** Switchgrass *Panicum virgatum*Fine root network protects the soil on the streambank toe from scour

- 16 Black Gum Nyssa sylvatica
- 17 Water Oak Quercus Nigra
- 18 River Birch Betula nigra
- 19 Bald Cypress Taxodium distichum
- **20** Bottlebrush Buckeye Aesculus parviflora
- **2I** Dwarf Fothergilla Fothergilla gardenii
- **22** False Indigo *Amorpha fruticosa*



#### CARL VINSON INSTITUTE OF GOVERNMENT UNIVERSITY OF GEORGIA

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