master plan

EXISTING AND PROPOSED DIA-GRAMS

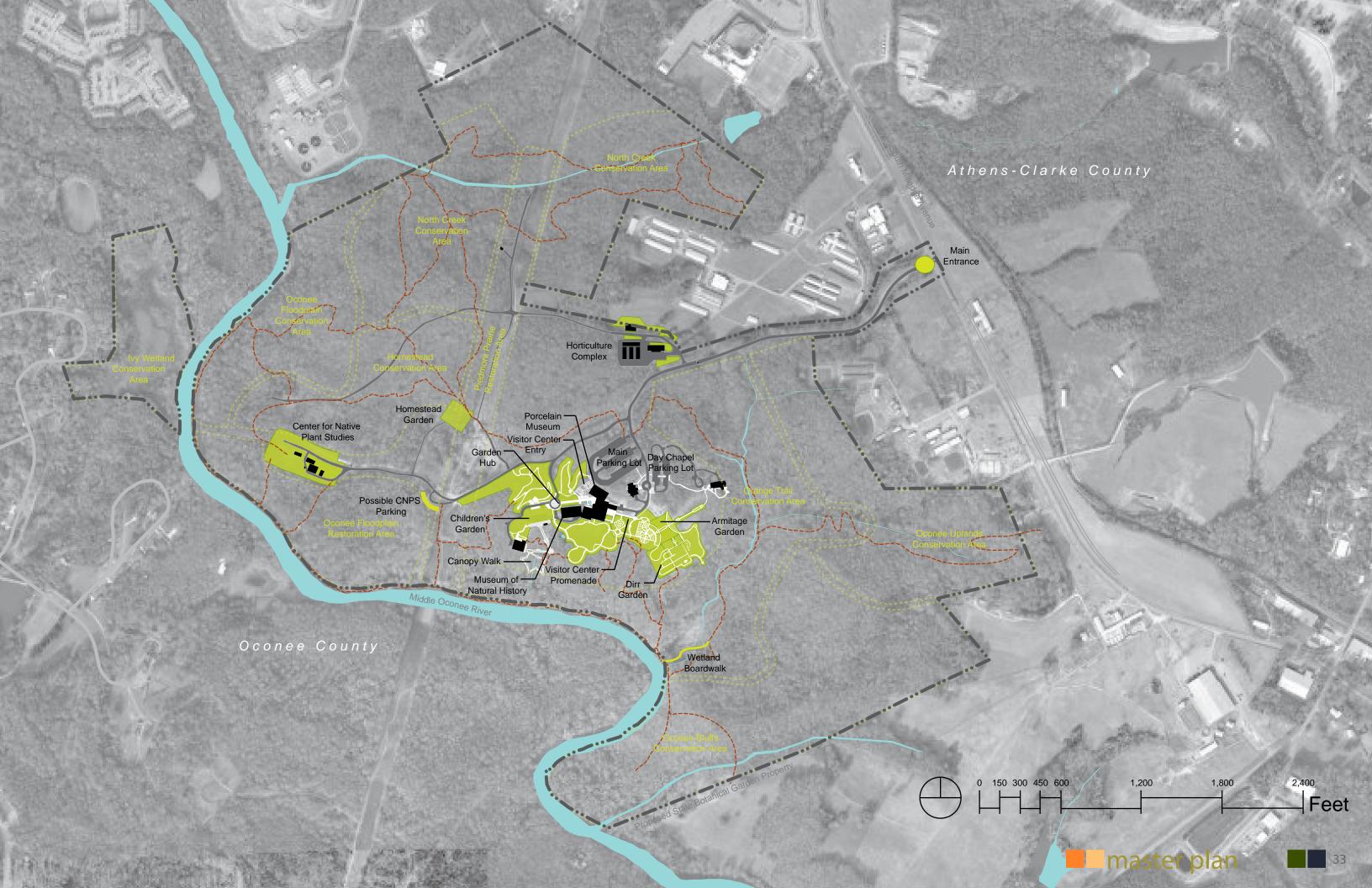
The master plan presented here is intended to address the goals that were identified at the beginning of the project:

- 1. Plan in accordance with the SBGG mission
- 2. Enhance the sustainability of existing collections
- 3. Protect the SBGG natural areas
- 4. Plan for significant new buildings and gardens
- 5. Enhance the visitor experience and wayfinding
- 6. Accommodate larger numbers of visitors
- 7. Encourage more diverse modes of transportation to the SBGG

The image on the facing page serves as a simple key map to the recommendations which are presented in more detail on the following pages.

The first series of five Existing and Proposed diagrams describe the physical improvements and additions to the SBGG. Specifically, they are organized into the following categories: property boundary, buildings, vehicular circulation, pedestrian circulation, and gardens (The other critical resource at the SBGG is the natural areas that comprise the majority of the property area and they are addressed in the next section of the document, the Management Plan). Each diagram is accompanied by written text that explains the rationale and the expected outcome of the recommended changes.

After the Existing and Proposed diagrams, several of the proposed improvements are explained in more detail and illustrated with a conceptual Site Design. It is important to note that the images and plans presented here are conceptual in nature, and the implementation of any of these improvements would require more detailed surveys and construction drawings.



PROPERTY BOUNDARY

The property boundary of the State Botanical Garden of Georgia is documented by the Office of University Architects and kept on file in the campus GIS database. The only legally described boundaries are the western boundary (Middle Oconee River) and a portion of the northern boundary bordering the A-CC Middle Oconee Water Reclamation Facility, as well as the Ivy wetland which is located on the west side of the Middle Oconee and bordered by private residential property.

The remainder of the SBGG property boundary is contiguous with additional UGA property. The recorded property line has shifted throughout the Garden's history in response to changes in programming or facilities (e.g., swapping land with A-CC to allow expansion of the Water Reclamation Facility; the construction of the new Horticulture Complex). The mapping has general been kept up to date, although there is little to no written record of these changes.

This Master Plan process affords an opportunity to examine the current property line and scrutinize its compatibility with SBGG mission and goals. As part of the master plan process, stakeholders identified several problems with the current Botanical Garden property boundary:

- Since the 1990 master plan, several land swaps between the State Botanical Garden and neighboring property owners have occurred, but not reflected in the boundary line.
- Existing marked trails extend beyond the limits of the existing property boundary
- Does not include extent of the mature forest patch that is critical to the integrity of SBGG natural areas
- Does not include the extent of the drainage basins of North Creek and South Creek which exposes them to impacts from off-site actions

The proposed property boundary line reflects these land swaps as well as other changes outlined below.

Goal: Accurately reflect current ACC Tax Assessor Data In January 2007, the Board of Regents granted the Athens-Clarke County Government a portion of portion of property adjacent to the ACC Wastewater treatment facility. This sale of land is recorded in the ACC Tax Assessors data and should be reflected on the current property boundary line for the Botanical Garden.

Goal: Include all State Botanical Garden buildings and trails into their property boundary

The new horticultural complex, completed in 2010, was built on the northern edge of the main entrance drive, outside the current State Botanical Garden property line. While this construction was mutually agreed upon by surrounding departments, the current property boundary does not reflect this new construction. The proposed boundary includes the five buildings and parking lot of the State Botanical Garden Horticulture Complex into the new boundary.

Several portions of the State Botanical Garden trail network extend outside the current property lines. This mostly includes the white trail on the northern side of the property as well as portions of the white trail within the powerline easement. The proposed boundary line incorporates these portions of State Botanical Garden trails into their property boundary for management and maintenance purposes.

Goal: Protect intact forest stands in conservation management

The master plan update includes a plan to that create special designation of forested areas for long-term conservation and stewardship. Many of the forested stands in and around Botanical Garden property are over 70 years old and in good forest health. The master plan update proposes the naming of these forested natural areas into specific conservation and restoration areas. By delineating these conservation and restoration areas on a map and giving these natural areas a distinct name, the hope is that a sense of stewardship of these unique forest lands becomes instilled. Furthermore, the conservation and restoration areas could

potentially be purchased by donors to form an endowment for their long-term management and care as natural areas. The State Botanical Garden proposes extending their boundary to include as much of these intact forest stands as possible to ensure their long-term stewardship and conservation through the conservation designation program.

Goal: Include land within the power line easement to restore a native prairie demonstration area

The State Botanical Garden is actively seeking funds to create a native prairie restoration area underneath the Georgia Power powerline easement. This prairie restoration will be a demonstration site for native prairie restoration in the Piedmont and bring new habitat to the State Botanical Garden. The current property line includes portions of the powerline easement on the northern and southern portions of the property; however, there is a section in the middle of the property that is not currently within the Botanical Garden's property. The proposed boundary extends the Botanical Garden property to include all portions of the powerline easement in order to connect these two fragmented areas.

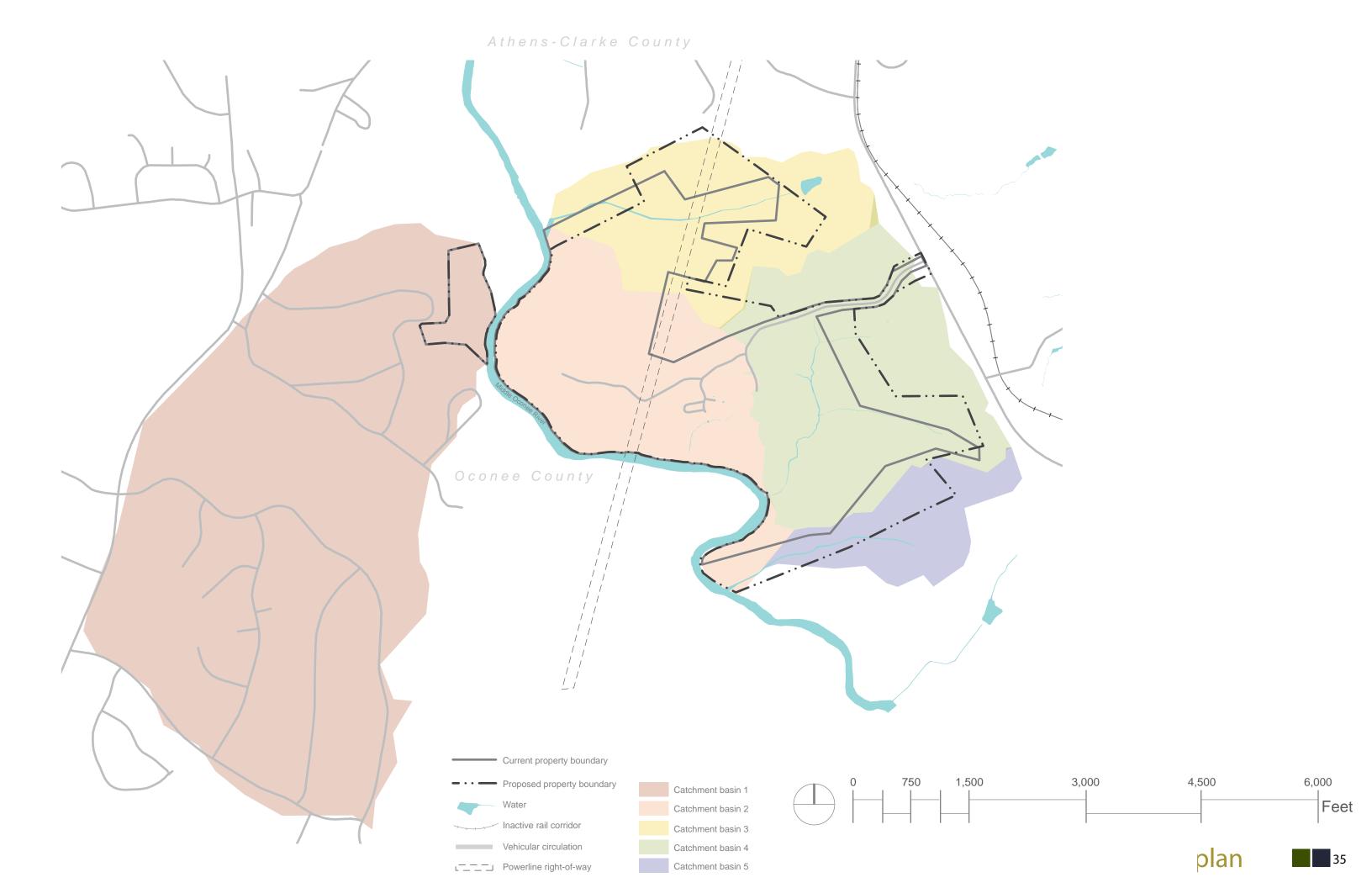
Goal: Do not include the existing hazardous waste site on Botanical Garden property.

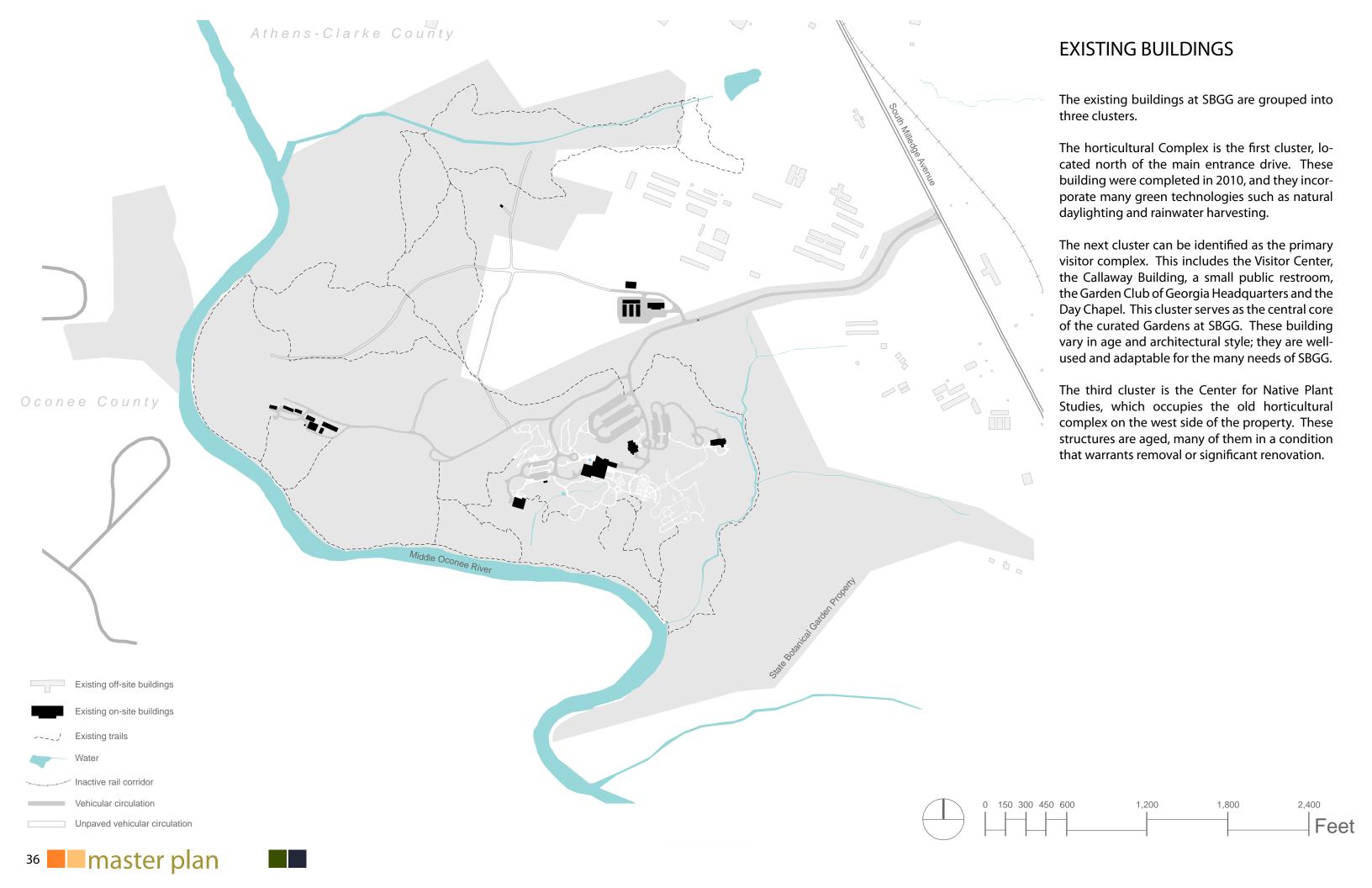
There is a hazardous waste site located near the powerline easement that is currently on Board of Regent's land outside the Botanical Garden boundary. Since the hazardous waste was not produced by the Botanical Garden, the garden does not wish to acquire this portion of land.

Acreage Estimates

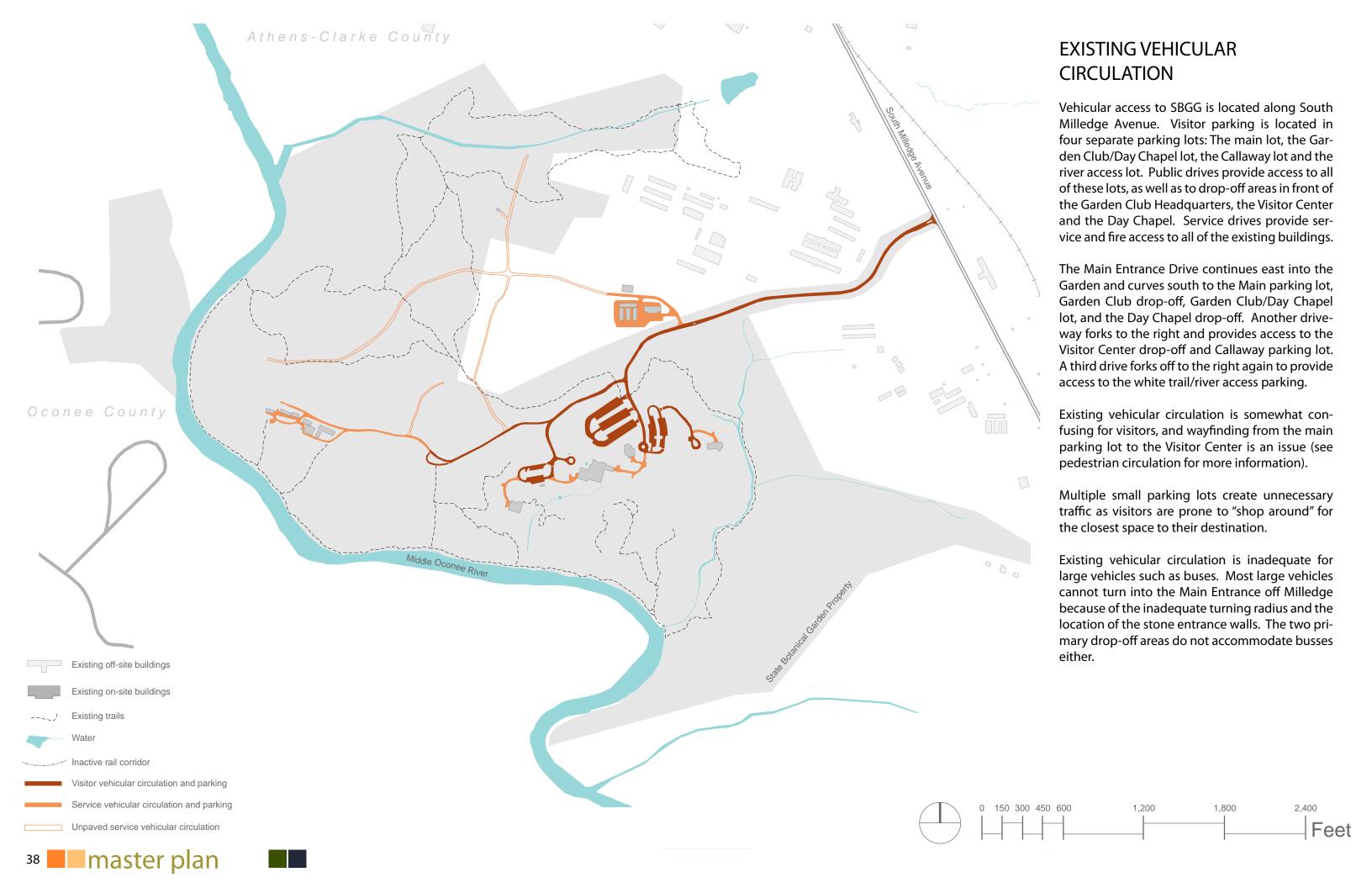
Current State Botanical Garden property: 301 acres Proposed State Botanical Garden property: 406 acres

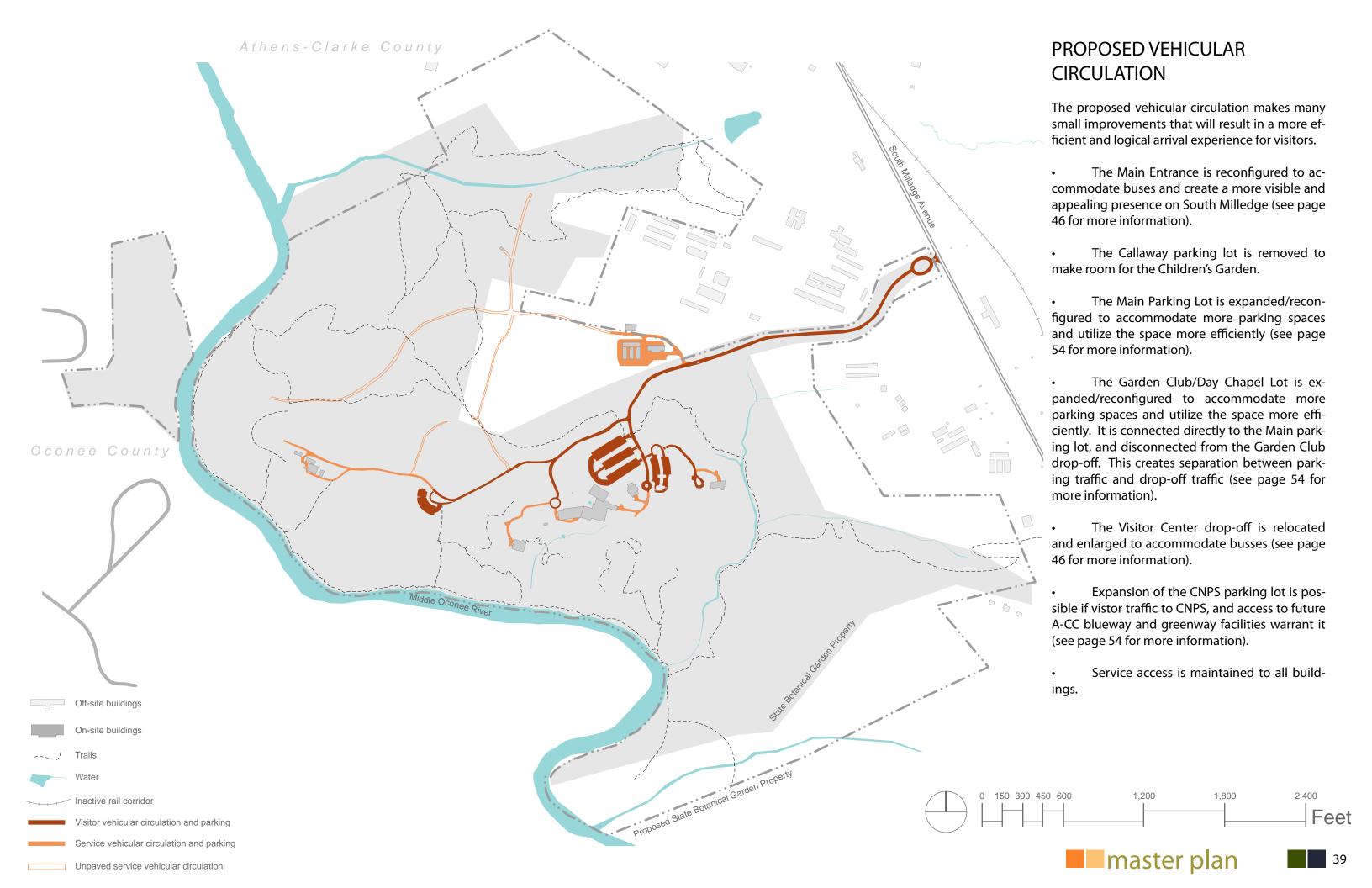
Acreage Increase (estimate): 105 acres

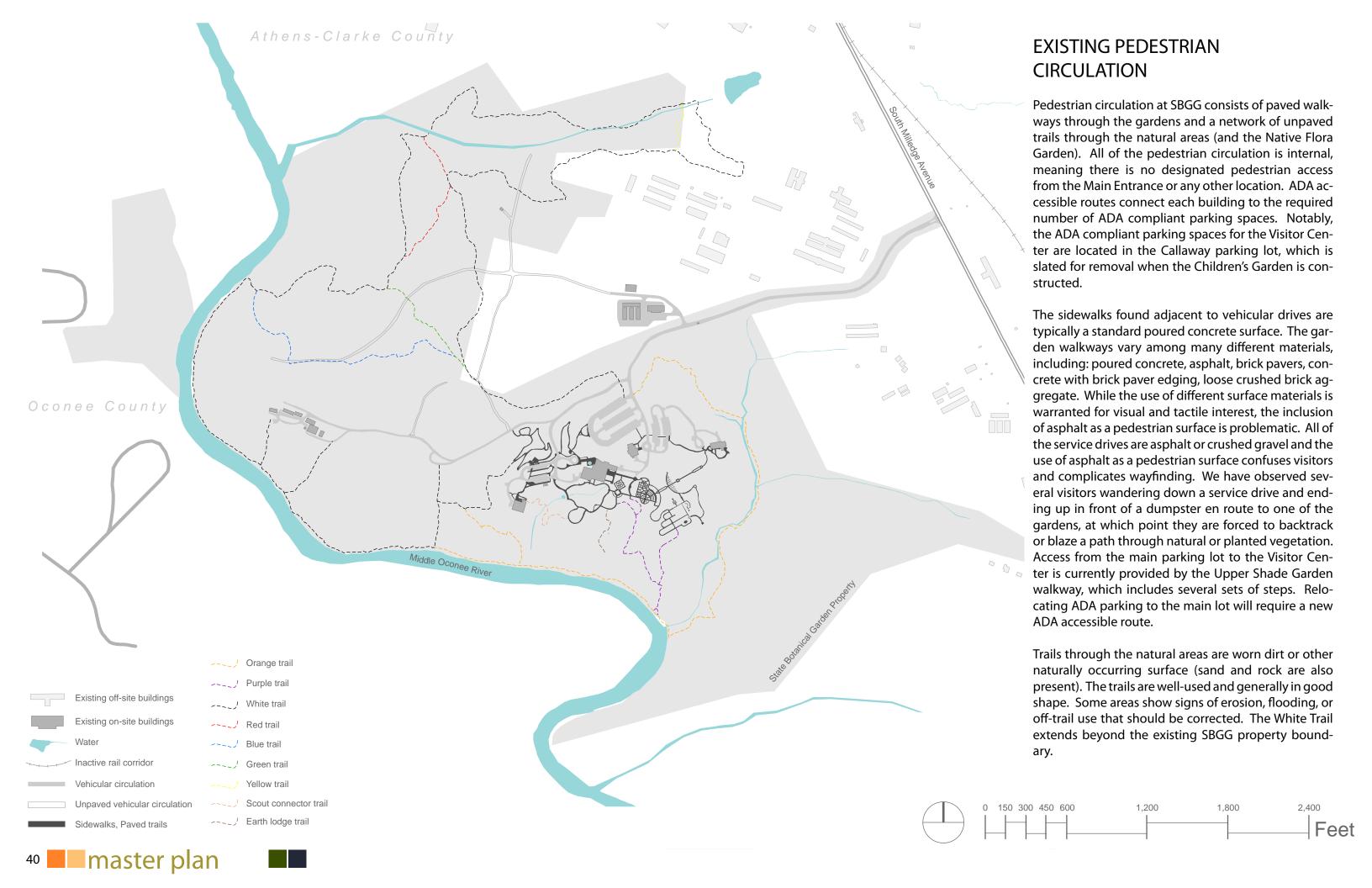




Athens-Clarke County PROPOSED BUILDINGS Two new buildings are proposed as a part of this master plan, shown in brown in this diagram. A generous donor has willed the SBGG a large collection of botanically-themed porcelain along with a new museum building to house the collection. Architectural programming for this building has not yet occurred, and the footprint in this diagram is schematic only. The proposed location establishes an architectural presence at the elevation of the main parking lot, affords an opportunity to create elevator access from parking to the garden level, and allows for direct access to and from the Visitor Center. The second new building is the Georgia Museum of Natural History. A long-needed permanent home for these nationally significant natural history collections is a perfect fit for the SBGG. The fourteen collections include: anthropology, arthropods, botany, geology, herpetology, ichthyology, invertebrate, mammalogy, mycology, ornithology, and zooarchaeology. Existing cooperative programs between the SBGG and Museum of Natural History, such as the annual Insectival, are some of the most popular and well-attended events at the Garden. A capital campaign underway by the Museum of Natural History will begin the fundraising Oconee County efforts necessary to create a permanent home for this amazing resource at the SBGG. One major renovation is proposed, shown in a salmon color in this diagram. The Callaway Building currently contains administrative offices and conference space. The adjacent parking lot is slated for removal with that entire portion of the site planned to accommodate the new Children's Garden (see page 44 for more information). With the Children's Garden in place as the central hub of children's activities and outdoor education, the Callaway Building will be perfectly situated for a renovation as a new Center for Environmental Education. Administrative offices will be relocated into the Visitor Center, a logical location that will allow for more accessibility to visitors when necessary. Several buildings in the Center for Native Plant Studies are planned for removal due to safety concerns. These structures are shown as hollow footprints in this diagram. The remaining buildings will be renovated as necessary to meet the needs of CNPS. Proposed State Botanical Garden Property Existing building removal Existing building renovation 150 300 450 600 uture building Inactive rail corrido Existing off-site buildings Vehicular circulation master plan Unpaved vehicular circulation Existing on-site buildings







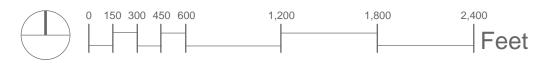
Athens-Clarke County Oconee County Proposed State Botanical Garden Property On-site buildings --- Native plants trail Proposed pedestrian connection Heath bluff trail Vehicular circulation Renovated pedestrian connection UGArden connector trail Existing pedestrian sidewalks Unpaved vehicular circulation --- / Existing trails

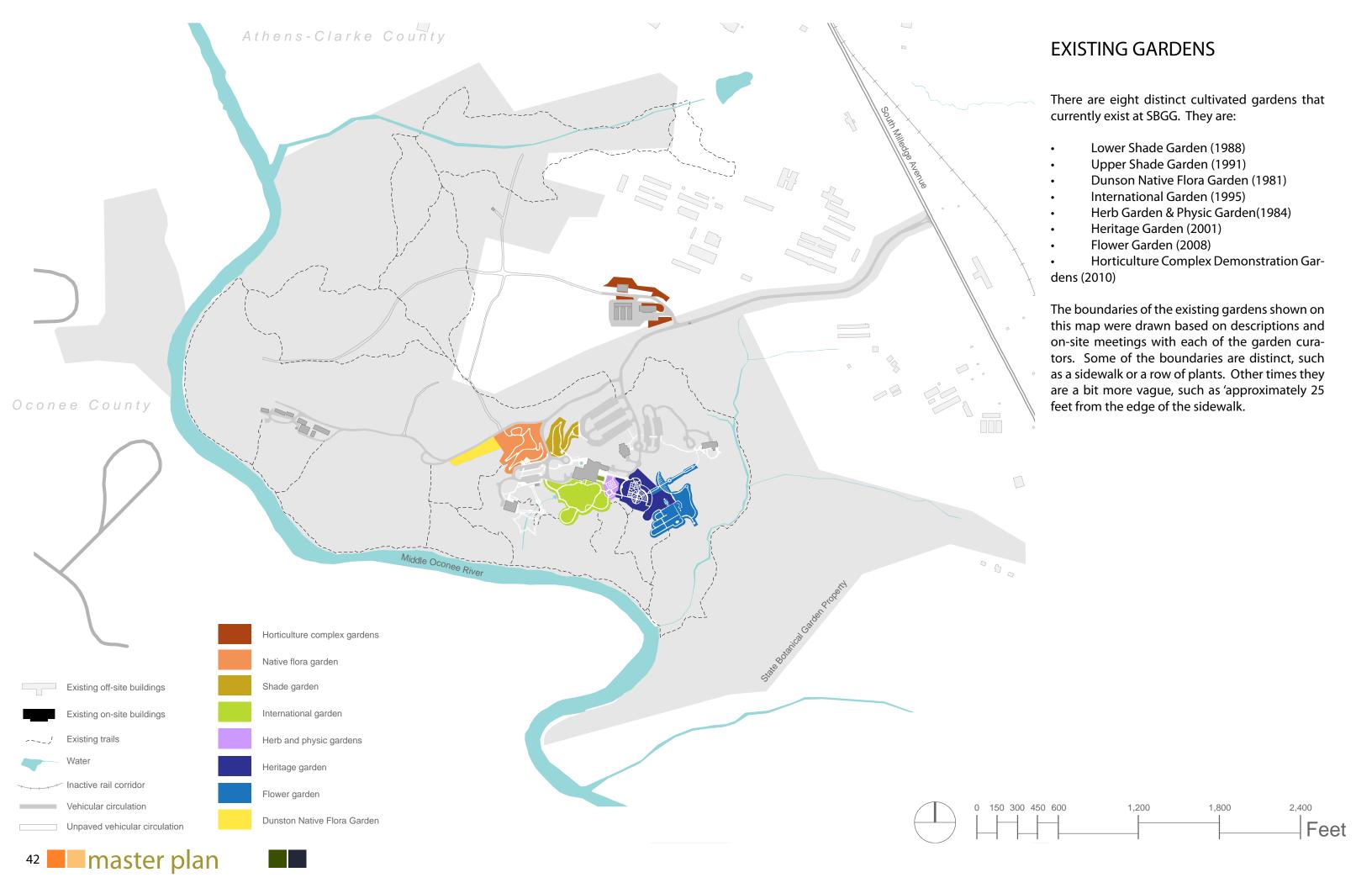
PROPOSED PEDESTRIAN CIRCULATION

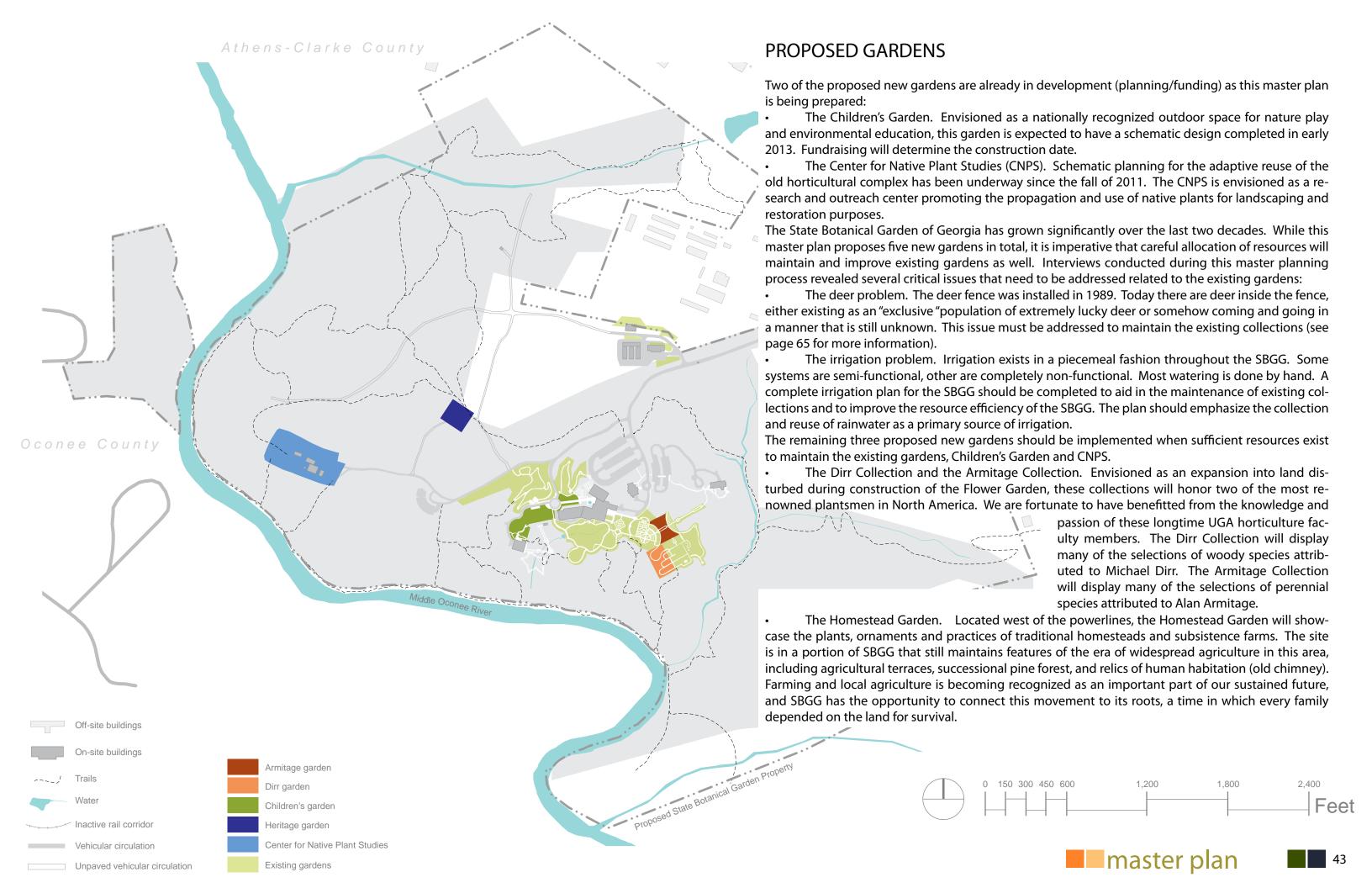
The proposed pedestrian circulation is designed to create clear wayfinding and develop a more experiential and logical arrival sequence for visitors. The pedestrian circulation plan responds directly to the proposed changes to the vehicular circulation described on the previous pages. The most relevant improvement to vehicular circulation is that all visitors to SBGG that arrive by automobile should go directly to the Main Parking Lot and park their car. The only exceptions to this are for those vehicles that will be dropping passengers off at one of the three drop-off areas, or those vehicles that will be continuing on to the CNPS Parking Area.

From the Main Parking Lot, the following changes to pedestrian circulation will be experienced:

- New sidewalks in the Main Parking Lot and the Garden Club/Day Chapel Lot clearly lead pedestrian from their vehicles to a new Overlook and Visitor Center Entrance (see page 54 for more details).
- A new Visitor Center Entrance provides both stairs and ADA compliant ramps that bring visitors directly to the Visitor Center Plaza (see page 48 for more details).
- The Visitor Center Plaza is expanded to respond to the proposed change to the Visitor Center drop-off. The existing "Field Trip" sculpture is relocated and helps to create an extended Plaza (see page 44 for more details).
- After entering the Visitor Center, visitors will access the curated gardens by exiting the rear of the Visitor Center. A proposed Garden Promenade replaces the existing old service drive to create a coherent and experiential connection to the International, Herb, Physic, Heritage and Flower Gardens (see page 50 for more details).
- A sidewalk is added to connect the Garden Club drop-off area to the curated gardens. This is a intended as a secondary entrance to the gardens to be used primarily for access to special events and other circumstances when passing through the Visitor Center is not desired (see page 50 for more details).
- The Visitor Center front plaza is extended out to meet the relocated drop-off area. This extension creates a strong axis into the Children's Garden (see page 44 for more details).
- The garden path that enters the west side of the International Garden will be reoriented to be visually distinct from the adjacent service drive and to connect with the Children's Garden (see page 44 for more details).
- A canopy walk is added that connect the Children's Garden with back porch of the Callaway Building.
- A new trail is added (in part restored from a previously used trail) along Amphibolite Creek that eventually will connect to UGArden on the east side of SBGG. The connection to UGArden should not be completed until it is warranted by programming needs. Amphibolite Creek is described in detail in the Wharton Report (1998).
- A new trail segment is added to the Blue Trail in order to create a loop that provides access to the CNPS. Additional trail segments and pedestrian circulation will be developed internally at the CNPS site as it evolves.xxx for more details).
- The unofficial, yet heavily used, Heath Bluff spur will be marked and maintained.







master plan

SITE DESIGN

GARDEN HUB

The core of the visitor experience at SBGG is centered in front of the Visitor Center, an area we refer to as the Garden Hub. In planning for the future of this space, the following considerations were paramount:

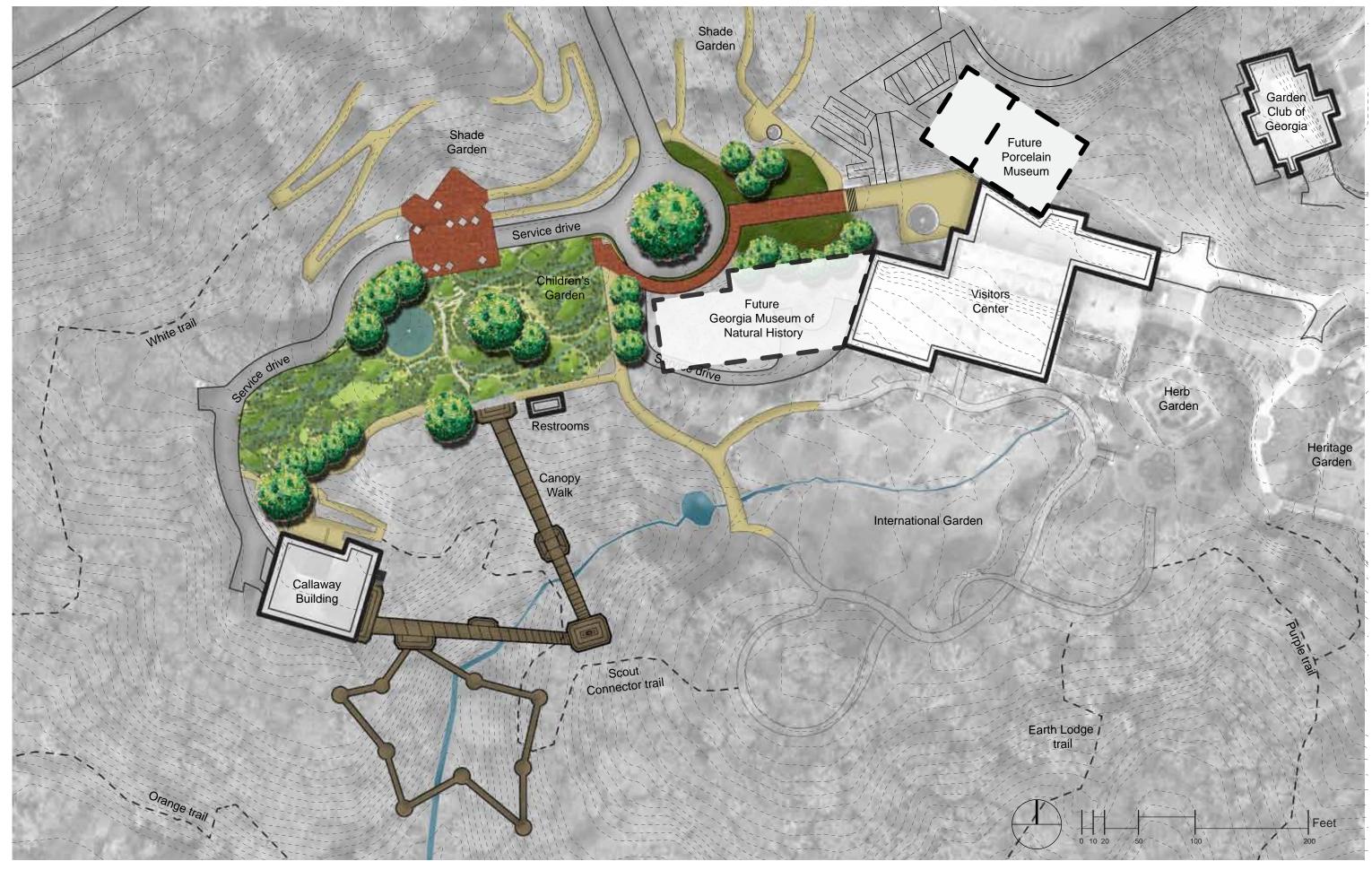
- The Garden Hub is a point of arrival and orientation for visitors who parked in the Main Parking Lot or were dropped off at the Visitor Center Dropoff.
- The Garden Hub is anchored by the two most heavily used buildings on the site the Visitor Center and the Callaway Building.
- The Garden Hub is also anchored by the most significant projects that the SBGG will build in the near future the Children's Garden, the Porcelain Museum and the Georgia Museum of Natural History.
- The Garden Hub provides direct access to the Shade Garden, International Garden and Children's Garden as well as access through the Visitor Center to several other cultivated Gardens.

The schematic design of the Garden Hub creates a coherent space that welcoming, diverse, and beautiful. Specific improvements are*:

• An expanded Visitor Center Plaza receives visitors from the new stairs and ramp from the Main Parking Lot. It also connects to the ground floor of the future Porcelain Museum.

- The Visitor Center drop-off is shifted west and enlarged to accommodate larger vehicles such as busses and fire trucks. The "Field Trip" sculpture is relocated to the grassy area adjacent to the walkway extending from the Visitor Center Plaza.
- The walkway from the International Garden is realigned to connect to the Children's Garden entrance. It is recommended that the paving material is NOT asphalt in order to improve wayfinding and minimize confusion with the service drive.
- The Visitor Center Service Drive is left in place but clearly limited access by the installation of bollards or a gate.
- The Callaway Building service Drive is left in place but clearly limited access by the installation of bollards or a gate.
- A Canopy Walk is installed in the wooded ravine east of the Callaway Building, creating a link between the Callaway Building back porch and the Children's Garden.

*Note that it is imperative to protect, and if necessary to relocate, the memorial trees located throughout this area. This entire area will be designed in greater detail by a Design Consultant selected by SBGG/OUA. The design should be complete in early 2013.



MAIN ENTRANCE

The existing Main Entrance is located on South Milledge Avenue. It was constructed in 1993, and it is an attractive yet somewhat obscure presence on the street. There is also a severe functional issue related to the turning radius and the location of the stone walls – busses and other large vehicles cannot negotiate the entrance without having to stop and back up into traffic on South Milledge. This creates a dangerous situation and is an impediment to future bus service to SBGG. The proposed redesign of the Main Entrance includes the following:

- Enlarged turning radii to accommodate large trucks and busses.
- Retain the central stone entrance sign, flagpole and wrought iron gates from the existing main entrance.

- serves as a possible bus stop as bus service is introduced to South Milledge; eventually the bus stop should be located at the Main Parking Lot or Visitor Center Drop-off. It also serves as a means for vehicles to return safely to South Milledge if the SBGG is closed and the gates are shut.
- Relocate and rebuild the flanking stone walls as shown and incorporate "State Botanical Garden of Georgia" name and possibly logo into the wall to create a more visible identifier for people traveling by automobile.
- Enlarge and enhance the plantings to create more of a "Wow Factor". Seasonal plantings, framed by perennials, grasses and woody species should be integrated into the planting in a way that does not obscure the

Incorporate an optional turnaround in front of the gates. This entrance. Along these lines, the two existing Southern magnolias framing the existing entrance should be removed – they visually obscure the entrance and limit the options for additional landscaping.

- Incorporate raingardens into the landscape, as shown. These will treat stormwater runoff from the road and drive, as well as provide an aesthetically pleasing statement of the SBGG's environmental stewardship.
 - Incorporate dark-sky compliant lighting into the Main Entrance.





VISITOR CENTER ENTRY

Creating a beautiful, experiential and accessible route from the Main Parking Lot to the Visitor Center is the most critical element of this Master Plan. Currently, wayfinding is difficult from the Main Parking Lot and visitors are often observed lost/confused or wandering down the back service drive to find the curated gardens. Additionally, the creation of the Children's Garden will displace ADA compliant parking from the Callaway Parking Lot and require that an ADA compliant accessible route be constructed between relocated ADA parking and the Visitor Center. The primary elements of this schematic design include:

- A new overlook/gathering spot at the southwest edge of the Main Parking Lot. Functionally, this is a meeting spot, an assembly area for large groups, and an orientation area with clear views down to the Garden Hub and Visitor Center Plaza. Signage, sculpture, architecture and plantings should reinforce that this is the destination for all visitors after they exit their vehicles. This level is equal to the third floor elevation of the future Porcelain Museum.
- A grand stairway and ADA compliant ramp lead first to a large landing/overlook, and then down to the Visitor Center Plaza. The elevation of the landing/overlook is equal to the second floor elevation of the future Porcelain Museum, and also provides views to the Garden Hub, Children's Garden and Visitor Center Plaza. Existing trees shall be preserved to the greatest extent possible, and new plantings are integrated throughout the ramps.
- The hardscape and landscape design should be treated as a curated garden, this is the first exposure that visitors will have of the SBGG landscape on foot, and attention to detail is critical. Many visitors will be families on their way to the Children's Garden and the experience here should be a relevant precursor for that garden as well as the other curated gardens.
- The Visitor Center Entrance is designed to integrate with the future Porcelain Museum by providing direct access at all three floors of the proposed structure. Note that the Porcelain Museum is not yet designed, these renderings serve only as a general representation of the scale and mass of the building. Once constructed, it is envisioned to include an elevator which could transport visitors from the parking lot level to the plaza level if they so choose.





VISITOR CENTER PROMENADE AND ACCESS FROM DAY CHAPEL LOT

Exiting the Visitor Center from the east side of the conservatory takes visitors out to an exisiting courtyard and access to the International Garden, Herb and Physic Garden, Heritage Garden and Flower Garden. The walkway that leads to these gardens is a former asphalt service drive, no longer used as such since a newer one was constructed a few years ago. Now, it is time to give this prominent and heavily-used path the attention it deserves. The Garden Promenade will include:

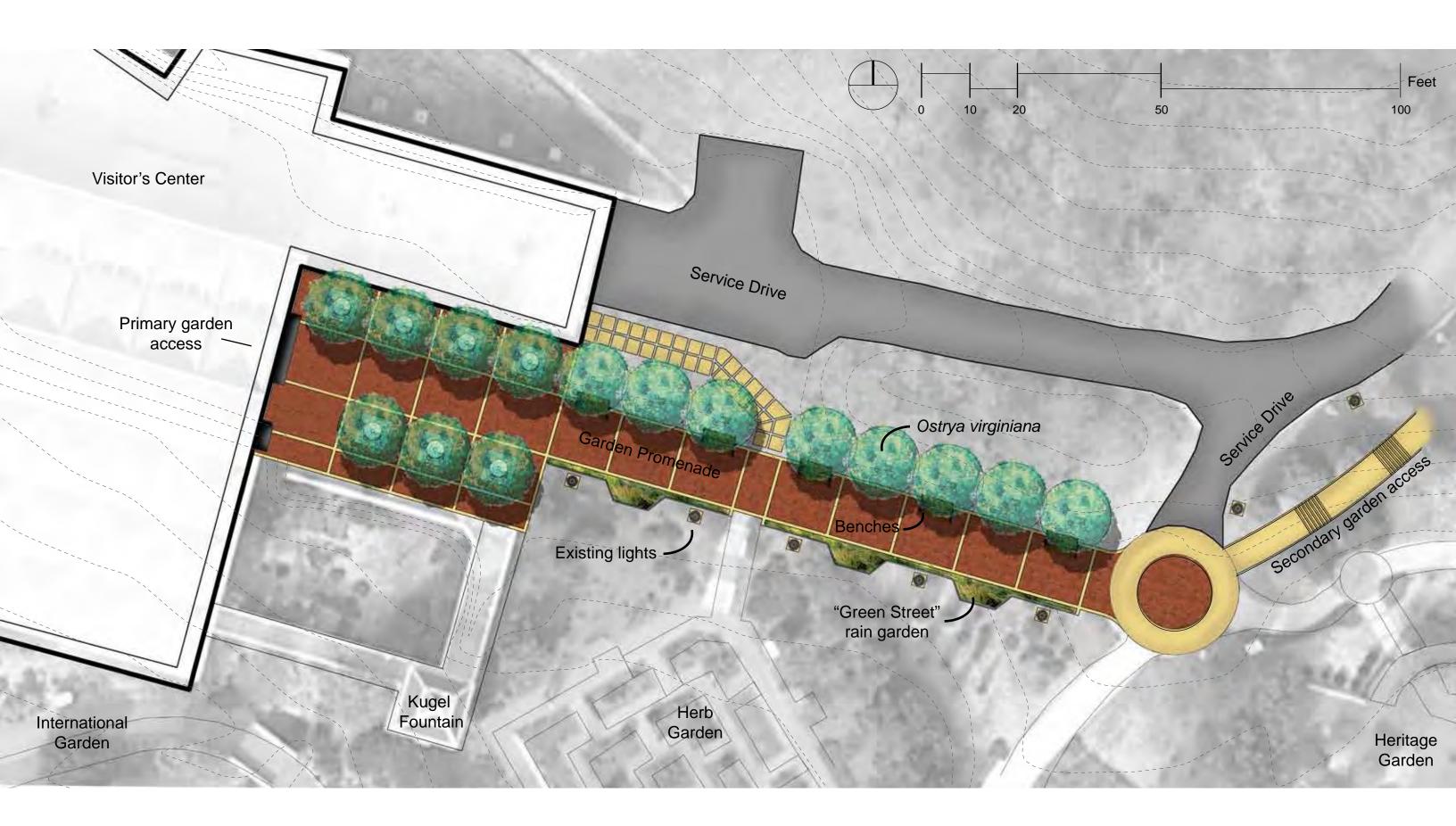
- A renovated courtyard featuring medium-sized shade trees in planters and a contiguous allee of trees along the promenade. Brick paving with concrete edging creates a human scale and rich detail on the ground plane.
- Raingardens are situated along the Garden Promenade to capture and treat stormwater runoff, inspired by the Green Streets first implemented in Portland and Seattle.
- Benches are located under the allee and bistro seating situated throughout the courtyard, creating a useable space for lingering, working, socializing or relaxing. It also will help to blur the boundary between inside and outside by unifying the presence of vegetation and brick on either side of the glass curtainwall.
- Existing pedestrian lighting is retained and integrated into this promenade.
- New architectural louvered sunshades are installed over the swinging door and the large sliding door on the back of the Visitor Center, drawing attention to those access points and reinforcing the desired circulation pattern.
- Enhanced signage and/or entrance features will clearly identify the entrances to the Herb Garden, the Heritage Garden and the Flower Garden which are all directly connected to the Garden Promenade. Signage should indicate where the International and Physic Gardens are located and how to access them.
- A concrete paver walkway provides access to staff only door on the Visitor Center, but also passes through an area that could receive a plant collection, perhaps the collection that is currently located in front of the Callaway Building?

The curated gardens are the destination of many visitors to SBGG, and for almost all occasions the visitor should access them by passing through the Visitor Center and then from the Garden Promenade. However, there are occasions when direct access from the Day Chapel Parking Lot to the Flower Garden is warranted, attending an outdoor concert at the Flower Garden amphitheater for example. Currently, visitors use the existing service drive which is hazardous and unappealing. A new secondary garden access is proposed, parallel to the service drive, and will include:

- A concrete walkway and steps follow a gently curving path, roughly parallel to the service drive.
- Existing pedestrian lighting and existing plantings create a buffer between the walkway and the service drive.
- A bollard or gate and signage clearly direct pedestrians from the Day Chapel Lot to the walkway, NOT the service drive.







WETLAND BOARDWALK

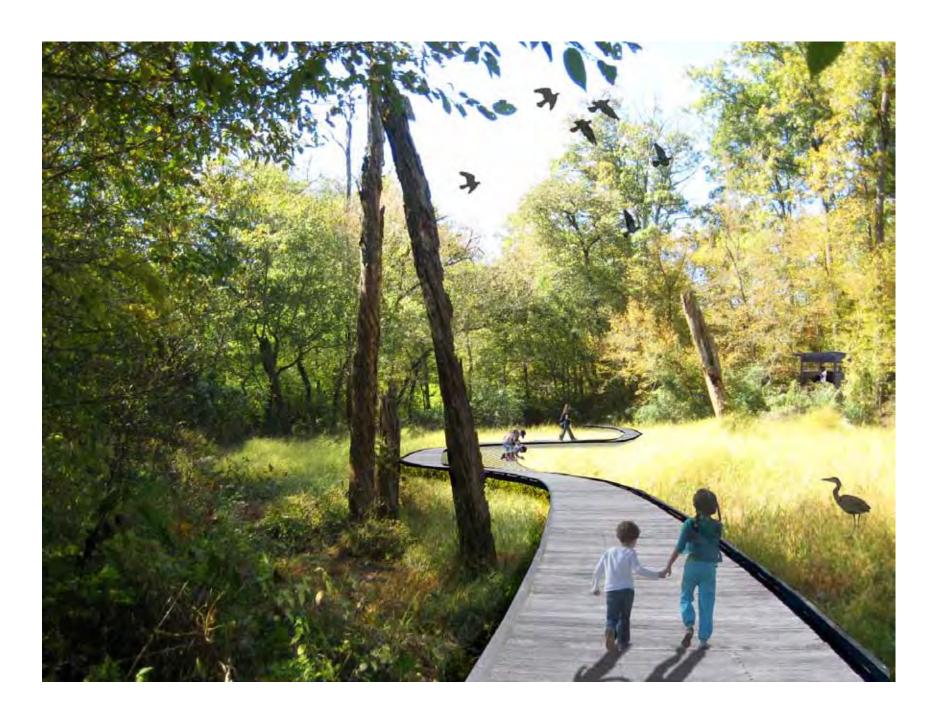
The trails through the SBGG natural areas are a treasured resource among Garden users, and arguably, the Orange Trail is the most popular of all of them. Following South Creek for most of its route, the Orange Trail is a cross-section of piedmont plant communities and stages of succession. As the trail enters the floodplain of the Middle Oconee River, one encounters the old Beaver Pond Wetland and then the sandy levee of the River.

There are several concerns with the condition of this area:

- The beaver dam was replaced with a stacked concrete sack dam with overflow structure a few years ago. This dam is failing, water flow has eroded around the dam and the water level of the wetland has dropped 1-2' below the overflow structure.
- The dropping water level has altered the characteristics of the vegetation in the wetland, shifting to more grasses than emergent aquatic vegetation.
- Portions of the Orange Trail along the east side of the wetland are perpetually muddy and somewhat hazardous.
- Views of the wetland are beautiful yet very limited.

A wetland enhancement and boardwalk is proposed, with the following benefits:

- A wetland enhancement will replace the failing dam with a more durable solution, such as an earthen dam. Zones of different depth are established in the wetland, creating more diverse habitat and also creating refuge areas during dry times of the year.
- A boardwalk will traverse the wetland, affording views of the entire wetland and allowing the muddiest portion of the Orange Trail to be closed and restored to natural vegetation cover.
- Observation decks along the boardwalk create opportunities for lingering, or collecting water samples or other educational activities.
- A new Purple Trail Spur will access to a Raised Viewing Platform situated just above the 100-year floodplain elevation. This platform will provide a protected location with expansive views of the wetland, perfect for birdwatching.





PARKING LOT RECONFIGURATIONS

Due to location and existing transportation infrastructure, nearly all visitors to the SBGG currently arrive by personal automobile. Some groups arrive by bus, and occasionally a visitor may arrive by bicycle or foot. It is anticipated that alternate forms of transportation will become more available and appealing in the future. However, adequate parking facilities are, and will remain, critical to ongoing success of the SBGG.

The chart on this page summarizes the existing and proposed parking capacity at SBGG. The construction of the Children's Garden will result in the removal of the Callaway Building Parking Lot, including the ADA compliant spaces serving the Visitor Center. Renovation of the Main Parking Lot and the Day Chapel Parking Lot can absorb those displaced spaces to maintain the overall parking capacity.

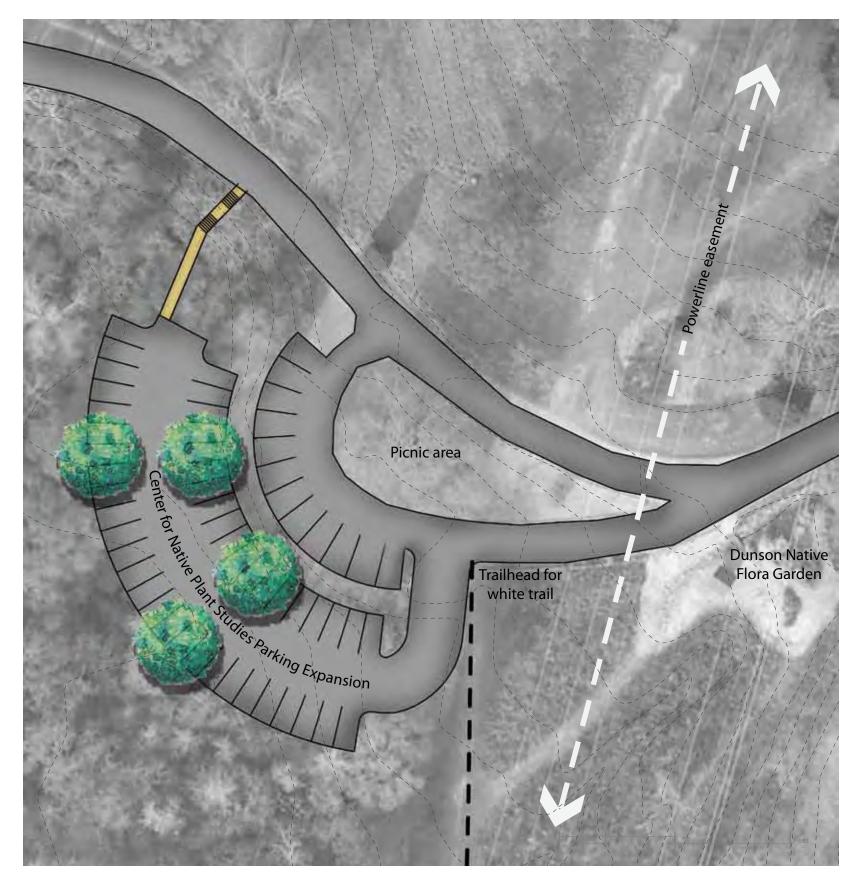
It is the intent of this Master Plan to emphasize that all visitor parking should be directed to the Main Parking Lot. The only exceptions to this rule are:

- The CNPS/River Access Lot will remain open to visitors who wish to visit the CNPS, directly access the western natural areas via the White Trail, or to portage personal boats to the Middle Oconee River.
- The Day Chapel ADA parking will remain open at the end of the Day Chapel Service Drive.

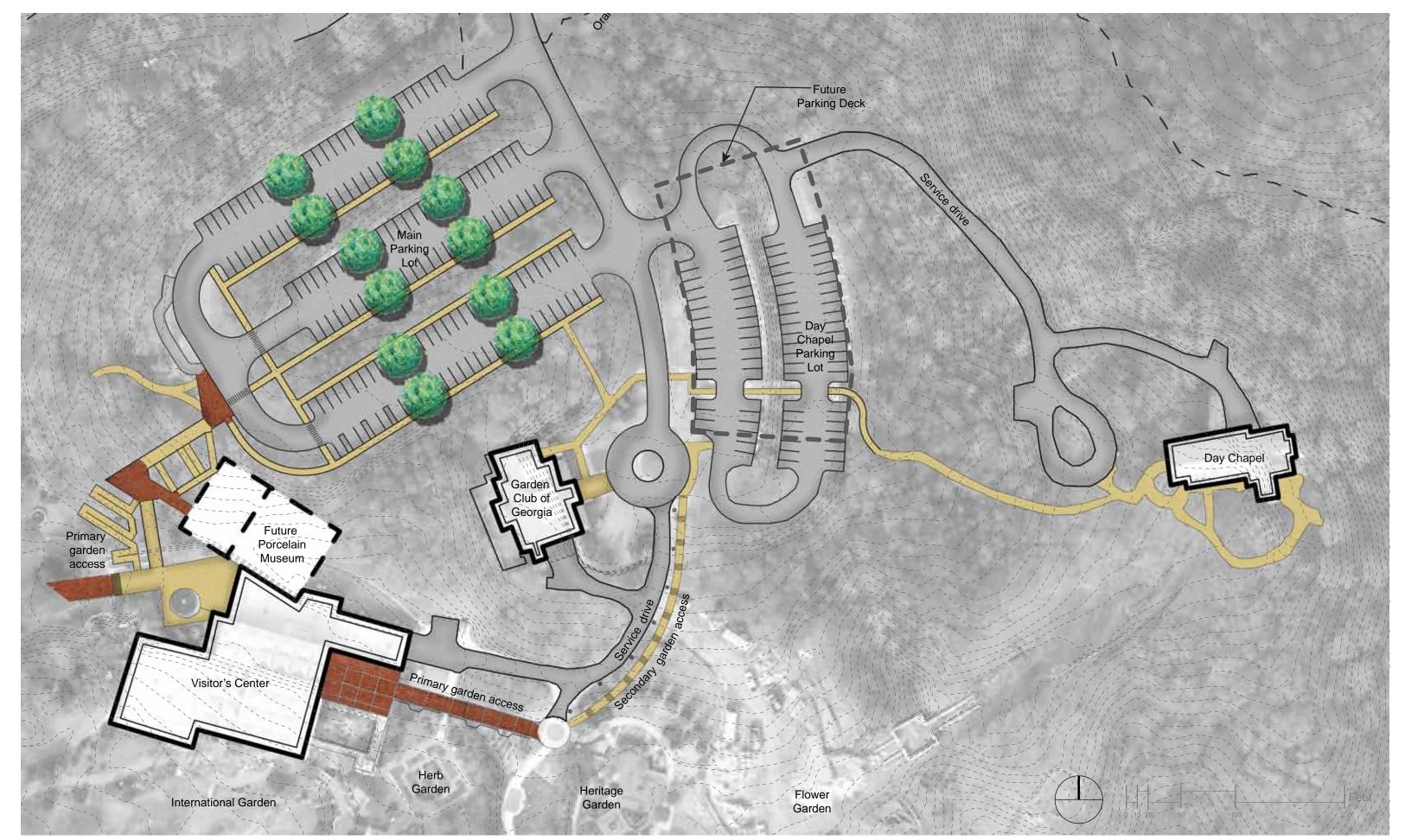
Additional parking can be added to the CNPS/River Access Lot, as shown in Figure xxx. Other than that, there are not any other locations that are desirable for additional surface parking. Efforts should be made now to increase alternative transportation options so that increased visitors does not equal increased automobiles. By no means should any additional natural areas be sacrificed to accommodate new surface parking. Parking capacity at the Main Parking Lot can be increased beyond the amount proposed in this Master Plan by constructing a parking deck. The northern 2/3 of the Garden Club/Day Chapel Lot is an ideal location for an unobtrusive parking deck (see figure xxx).

The major components of this proposed reconfiguration area as follows:

- The capacity of the Main Parking Lot is increased by making slight modifications to the layout and restriping. Designated bus parking is eliminated, although it can still be accommodated on-site or staged off-site on adjacent UGA property.
- ADA compliant parking is relocated to the Main Parking Lot from the Callaway Lot.
- Sidewalks are added throughout the Main Parking Lot. The primary purposes are public safety and wayfinding. All sidewalks direct visitors to the Visitor Center Entrance.
- New parking lot islands introduce shade trees to the parking lot. These should be designed as raingardens to capture and treat runoff from the parking lot.
- Raingardens can also be strategically located in the existing parking lot islands.
- A new driveway connects the Main Parking Lot and the Day Chapel Lot. This will improve wayfinding and connectivity of the two lots, as well as facilitate a few more parking spaces in the Day Chapel Lot.
- The Garden Club turnaround is disconnected from the Day Chapel Lot. Again, this will help to clarify the function of these different facilities and improve wayfinding. The message is that the turnarounds are for drop-off and pick-up only, and all visitors parking in the lots should proceed to the Visitor Center (unless they have a different specific destination).
- A secondary pedestrian garden access connects to the Day Chapel Lot, intended for use as access to special events held in the Flower Garden.



Center for Native Plant Studies Parking Lot Reconfiguration



Main Parking Lot and Day Chapel Parking Lot Reconfiguration

THE MIMSIE LANIER CENTER FOR NATIVE PLANT STUDIES

Begun in 2011, the Mimsie Lanier Center for Native Plant Studies establishes a prominent new epicenter for native plant research, education and outreach at the SBGG. The following description is excerpted from the SBGG website:

The Mimsie Lanier Center for Native Plant Studies is the Garden's headquarters for native plant restoration, conservation, education, production and safeguarding. The Mimsie Lanier Center is undergoing upgrades to greenhouses and the Headhouse, but the workshop-style teaching space is available to UGA courses and plant professionals for holding horticulture, restoration and seed biology classes. Future additions to the Mimsie Lanier Center will include an indoor teaching classroom with a full seed lab and an open-air classroom for restoration workshops and environmental education programs. The natural areas offer a chance to teach and demonstrate land management and restoration techniques. The planting spaces and native plant collections can be used to teach many scientific disciplines including botany, pollination ecology, environmental design and horticulture.

Within the Mimsie Lanier Center's 2.5 fenced-in acres, graduate students, interns, volunteers, and one full-time staff member propagates Georgia native plants for habitat restoration, endangered species recovery and the introduction of plants into the gardening community. We promote the incorporation of Georgia natives into Garden displays and right-of-way restoration projects in order to better reset the land for diversity and share great plants.

Mimsie Lanier, for whom the Center is named, is an active board member who has worked alongside the Plant Conservation Program since 1995. She promotes the Conservation efforts of the Garden by raising funds for projects and sharing her vision for plant conservation and native plant programs in Georgia. She is Conservation's mentor, friend and matriarch, so it is only fitting that her name be placed on the Center for Native Plant Studies.

The plan shown here is conceptual in nature, as the scope and timeline for this Center are still being developed.



Figure ___. A hard-working volunteer removes privet durng he 2012 Bluestems and Bluejeans: Native Plant Sale & Family Day at the Mimsie Lanier Center for Native Plant Studies.



Figure ___. Visitors perusing the large selection of native plants for sale during the during the 2012 Bluestems and Bluejeans: Native Plant Sale & Family Day.

