

SOUTHEAST DAVIDSON REGIONAL PARK

Nashville, Tennessee
December 2017

MASTER PLAN



Introduction

In 2015, the Department of Parks and Recreation of Metropolitan Nashville / Davidson County embarked on a process to update its parks and greenways master plan. They had previously completed a master plan in 2002, which was updated in 2008, but by 2015 the region was experiencing unprecedented population growth, land development impacts, and changing demographics that demanded another look. Since 2002, the park system has added over 6,300 acres of parks and 85 miles of greenways. In 2017, Metro Parks completed its new master plan, named the *Plan to Play*.

One of the initiatives arising out of *Plan to Play* was the call to build more regional parks for the people of Nashville and the surrounding area. Studies showed that the southeast portion of Davidson County is park-poor. It lacks not only open, natural areas for passive recreational opportunities such as greenways for hiking and biking, but is missing the more active recreation programming that is often a big draw for neighbors, both young and old. Southeast Davidson County became a number one priority for the leadership at Metro Parks.

In early 2017, the design team led by Nelson Byrd Woltz Landscape Architects (NBW) and including Hodgson Douglas, Collier Engineering, and landscape architect Tara Armistead, was assembled to take on the task of creating a regional park master plan for the region. The Joe C. Davis Foundation had spent years assembling parcels in this part of the County, and by 2017, they had nearly 600 acres of open land now available for a new regional park.

In May, the master planning effort kicked off with an open house at the future park site. Neighbors near and far were invited to attend and learn about the many natural attributes of the land and share their vision for the park. The design team created a 'park passport' to help orient the neighbors and community members, and a survey was handed out for people to indicate their hopes and dreams for the future park. Hikes and hayrides around the site were offered to help orient people and develop their sense of knowledge and ownership for their future park.

At the same time that the open house was being planned, the design team was hard at work with boots-on-the-

ground. A series of site visits and meetings with individuals who were familiar with the park property lead to new discoveries. Map overlays of the site's topography, hydrology, plant communities, and land use revealed the best areas for different types of programming. Stories about the occupation of the land from the time of Native Americans to the modern day were uncovered, including the often untold history of enslaved African Americans who had lived and worked on the land. These stories inspired all involved to ensure that, whatever the park became, these voices from the past were heard and acknowledged.

Upon completion of the initial site discovery phase, the design team prototyped a series of framework studies that looked at various options for access, circulation, and programming. These studies were tested on site and discussed with Metro Parks staff members in an effort to narrow down the best strategies for the park and develop the main goals for the master plan.

Because of the large scale of the parkland and its fragmentation by road, rail, and powerlines, the team determined that instead of one big park, they would approach the design of the park as a series of smaller 'parklets' - all connected via greenways and primitive trails. The demographics of the area indicate that there is a vast diversity amongst the park neighbors in age, race, and socio-economic status. The park would need to serve *all* people despite their interests and abilities. The park would also need to celebrate the legacy of its landscape, which includes the recognition of the people who lived and worked on the land over many generations, as well as the agrarian landscape that is quickly being lost to expanding infrastructure and large scale development.

The ideas for the park were explored in a series of theme diagrams that described ways to access the site, where and how to play, potential gathering places, and opportunities for environmental education, nature watching, and the restoration of various ecologies. Members of the design team, alongside Metro staff, shared the theme boards with the community members during various open houses and community workshops in the months of September

and October. Feedback from those open houses was then collected and shared with NBW to further develop the master plan. The result of this process is presented here.

Both Metro Parks and the design team recognize that a vision is only the first step in building a successful regional park – one that is loved by all and endures through the ages. The challenge of maintaining the park will be a significant factor in its long-term success. As such, this master plan presents innovative ways to address the ongoing issues of maintenance and management of large properties through partnerships and new government supported initiatives.

Likewise, the transformation of the site will be a grand undertaking that will require careful consideration dependent on circumstances beyond the scope of this document. Implementation phases will be contingent on future budgets and an overall strategy developed by Metro Parks and its partner organizations. As a catalyst to the development of the entire park, this plan proposes that Phase 1 include the festival grounds of Kimbro Station, its pavilions, a regional playground, wetlands, and a greenway through the Moore Farm Grasslands.

The Southeast Davidson Regional Park master plan is the culmination of the many years of planning first set out in the *Plan to Play*. The master plan also reflects the vision of many stakeholders and local citizens representing not just their needs but also their vision for how their park will come into being and how it will evolve into the future.

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Leah Hashinger

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Project Impetus

Why This park?

Southeast Davidson County was identified in both the 2011 Open Space Plan and *Plan To Play*, the county-wide Parks master plan completed in 2017, as the area of the County most underserved by parks – specifically a large regional park with sufficient recreational facilities for a large, growing community. The Antioch-Priest Lake population trends toward renters (60%) who typically live in apartments along major corridors and have little access to park space. In addition, the area is seeing rapid and steady growth in its demographics with immigration and racial diversity much higher than in other parts of the metropolitan area. With this transformation comes a responsibility to create opportunities for those individuals to be in nature and experience the richness that Nashville parks has to offer.

Aware of the recreational deficiencies coupled with these community trends, the Joe C. Davis Foundation committed its time and funds to the creation of a regional park. To date, private funds of over \$4 million have been committed to help Metro Parks assemble nearly 600 acres of contiguous property dedicated to serving the needs of this diverse and growing community.

Why Now?

A place for local residents, new and old, to get out in nature, exercise, and gather as a community is extremely important to the liveability of the city and health of the community. With the rapid population growth in Davidson County and ever increasing development pressure, Southeast Nashville is seeing not only an influx of new residents, but of long-time Nashvillians being priced out of in-town neighborhoods. The increasing density and rapid development of once open space create a sense of urgency to provide park services for a changing Nashville.

Plan To Play

The Parks and Greenways Master Plan, adopted in February 2017, will guide Nashville Parks for the next ten years by setting new standards for regional parks. These parks are intended to include facilities that provide a diversity of both active and passive uses numerous enough for a half day or day long experiences with trails, sports fields, picnic shelters, playgrounds, and play courts. Regional parks also have unique features like dog parks, restrooms, and often programmed facilities like nature centers. Furthermore, they often have specialty features – for instance a unique natural or ecological feature, sometimes a sports complex, a revenue generator like golf, or a historic resource. *Plan To Play* also outlines other system-wide programming, and operations and maintenance goals including natural areas management strategies, historic interpretation, and ecological enrichment to increase commitment to our community's culture and health.

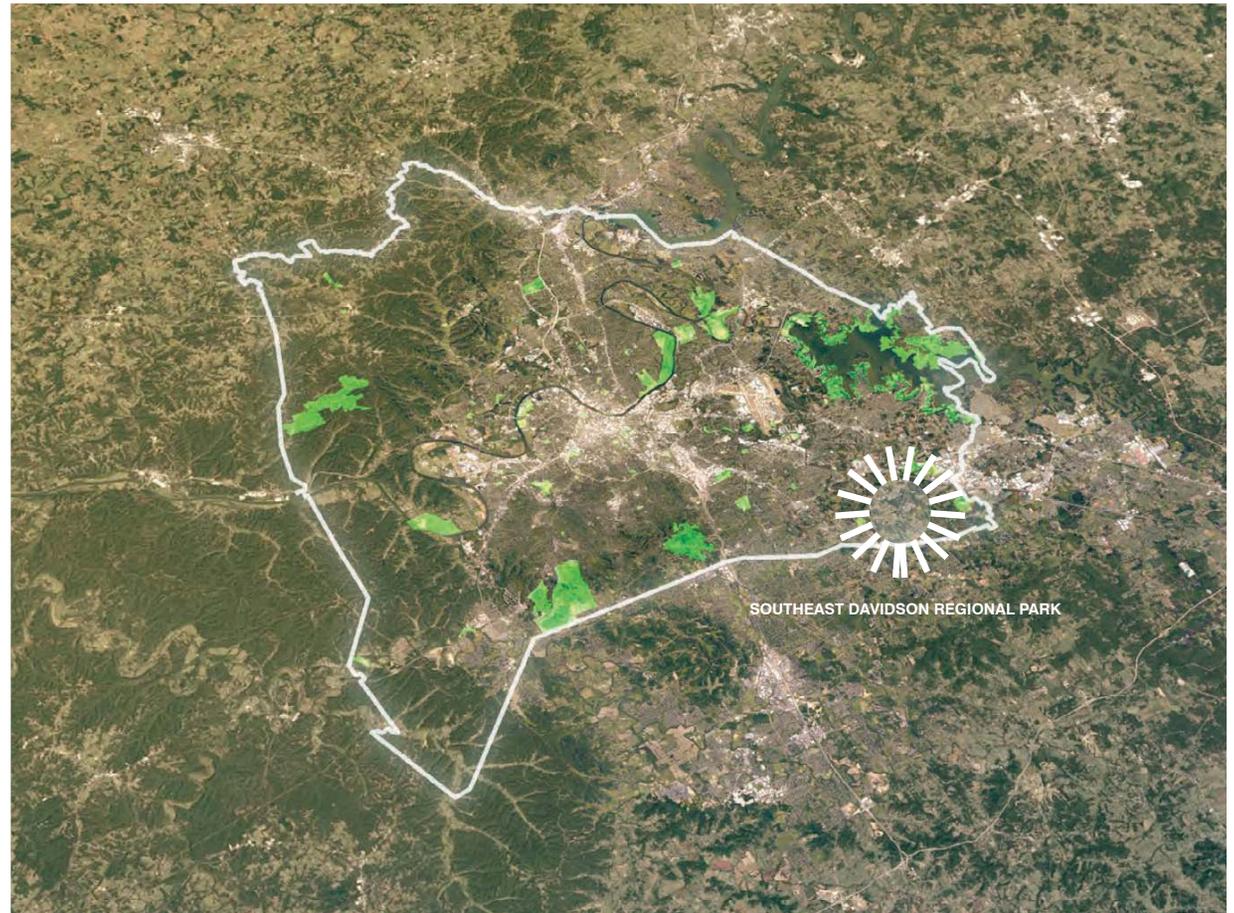


image from Nashville Metro Parks *Plan To Play*

Project Timeline



Project Team

Metro Parks | Tim Netsch, Rebecca Ratz

Tara Armistead Landscape Architecture | Tara Armistead, Margo Owen

Collier Engineering | Chad Collier, Jenny Brownlie-Carey, Amy Burch, Jean Cheveallier, Glenn Meister, Michael Pavin, Nicholas Voravong

Hodgson Douglas | Richie Jones, Chris Barkley, Chris Mantle, Ashley Braquet, Johnson Bullard, Seth Crawford, Hannah Goodgion, Lauren Patti

Nelson Byrd Woltz Landscape Architects | Thomas Woltz, Breck Gastinger, Jen Trompetter, Chloe Hawkins, Joey Hays, Pia von Barby, Mary Cadwallender, Mandi Fung



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Part 1 Community Engagement

Community Engagement | Process

Effective community engagement is the foundation for imaginative place-making. It ensures that the new space will meet the needs of those it serves.

At its best, human-centered design opens the door to public insight, and stakeholders provide new answers to sometimes difficult problems. At the very least, it is the forum by which the desires and needs of the people are expressed and documented for use in the place-making process.

For the Southeast Davidson Regional Park initiative, Metro Parks and the design team planned three open houses and a series of creative labs, inviting the community to explore the park and express the importance of this new public space.

The open houses were interactive and festive, giving an opportunity for shared dialogue rather than a presentation of ideas. The creative labs were an opportunity to collaboratively explore a vision for the park and ensure its design meets the needs of the surrounding community. Feedback from the open houses and labs provided key insights and data which were then used to inform the park design.

The initial Master Plan development is only the first step in a continued interaction with the public. In order for the park to function as a resource to build community, connecting the diverse cultural demographics of the area, people will remain at the center of the design process.

With boots-on-the-ground, the design team walked and even hiked through the steps of community engagement alongside Metro officials, local businesses, student groups, community leaders and the general public. The results were inspirational, driving the design of the park in sometimes surprising directions. Read on to discover how this process informed the park design.



COMMUNITY ENGAGEMENT TIMELINE



Hikes and Hayrides Open House

What makes this park unique?

Rich heritage in agriculture. Lets not lose the pastoral beauty. Red barn and pond and fields

Community agriculture could set it apart from other parks

Historical barns and nature should be preserved

Nature and a large tract of undeveloped land.

Great topography and connection to nature

Threatened species on site include crayfish, monarch butterfly, and long eared bat

The history of the land as a working farm



What educational opportunities do you see in the park?

Agricultural/community garden

History

Nature talks, interpretive trails

The history of the land as a working farm

Open spaces to run around.

A mascot for the park - something that gives identity and pride.



On May 21st, 2017 Metro Parks hosted a kickoff event for Southeast Davidson Regional Park titled "Hikes and Hayrides." The event introduced the park to the community by providing fun and engaging activities that would not only heighten awareness about the park, but also demonstrate the potential in the new public land.

Activity stations, such as a plant-a-seed tent and a games tent, kept children and younger community members interested, while informational hayrides and guided hikes introduced the site's interesting and complex history and natural features of the parkland.

The event also provided critical insight into the community's regional park needs. Surveys and suggestion boards at the event indicated the activities and facilities community members wanted -- or didn't want -- in the park, allowing for Southeast Davidson Regional Park to become the best possible park for the surrounding community.

The Hikes and Hayrides open house event encouraged the community to discover the park by inviting all to the new property. Over sixty participants engaged in a variety of activities and gave their input through a survey and post-it-note system.

Metro Parks worked with the Nashville Civic Design Center and the Mayor's Community in Action summer students to participate in the process and observe the event and take notes.

How do you access the park and make strong community connections?

Take each section and incorporate them as a series of separate smaller parks, each with its own purpose, yet connected with trails

Extend Crossings Boulevard but make sure it is designed as a park road, not a major thoroughfare

Park should have two entrances with two parking lots

Complete greenway connections to the park with multiple trails

Prioritize safety and security



What is needed in a regional park for this area that might be accommodated here?

Walking, jogging, biking and hiking trails

Fountains and public gardens

Community Center and restrooms.

Working farm

Dog park

Picnic shelters with activities for family nearby and options for cooking

Playgrounds-regional and community

Music events, special events

Sports fields



Listed here are the key themes of the survey and a summary of the feedback gathered during the event.

Immigrant Community Creative Labs

Over the course of the project, the design team made an extra effort to meet the community where they live and invited public input from groups that are often under-represented in the public planning process. Creative labs were held at schools, places of worship, and private homes, where immigrant and refugee communities shared their hopes for the new park.

Besides the general desire for all manner of recreational facilities, other themes rose to the top from the community input. First among them was food: growing, sharing, and cooking food as a way to celebrate community, share special occasions, and learn about different cultures.

Second was a desire for a place to spend all day with family and friends: not just a trip to the playground, but an entire afternoon or day-long outing with activities, as well as facilities that support this desire.

Third was an appreciation for and desire to preserve the rural and agrarian character of the property. It is a reflection of where the community came from and is now a shrinking landscape in this part of the County.



Dream park brainstorm:

Participants break into pairs or small groups where they have five minutes to discuss their dream park. Each group then reports back to the larger group what they discussed. The facilitator takes notes.



This is what we asked:

1. a) What are parks like where you are from?
b) How do you spend time in nature?
2. a) How do you use parks in Nashville?
b) How does your community use parks in Nashville?
3. What is missing from Nashville parks?
4. What keeps you from using the parks here?
5. What would make this a park where everyone, regardless of culture or nation of origin, feels welcome?
6. a) How do you find out about events happening at a park?
b) For what events or occasions might you visit a park?
7. a) Do members of your family or community participate in growing their own food?
b) What are some crops that you like to grow/eat?
8. How do you travel to parks in your community?

Photo survey:

Participants rank preferences for park amenities, infrastructure, and educational opportunities and programming

What do you want in your park?
Rank preferences from 1-8. 1 is favorite, 8 is least favorite.

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<input type="checkbox"/>		<input type="checkbox"/>	
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What do you do in Nature?
Rank preferences from 1-8. 1 is favorite, 8 is least favorite.

<input type="checkbox"/>		<input type="checkbox"/>	
<input type="checkbox"/>		<input type="checkbox"/>	
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This is what we heard...

- Water is life.
- Growing food is a way our community grows.
- Colorful flowers make us feel welcome.
- Walking to the park is a part of our life.
- Create a series of smaller parks linked together with trails to create a larger cohesive park.
- Provide big entrances to the park, with safe connections.
- Celebrate the rich heritage in agriculture.
- We need a big gathering place lots of people can come together and celebrate.
- Create gathering pods with activities for all ages.
- We like to go to the park to relax. Sometimes we go as a family, and sometimes we gather many families to picnic.
- Clean bathrooms!
- Learn more about nature.
- Off-brand sporting events and festival grounds.
- Places to play- sports fields , playgrounds, trails and tracks.

Framework Open House



What would make you feel welcome?

- Safety and security
- Flowers and great landscaping - especially fruit trees
- Beautiful signage, easy access to the park
- Community gathering space
- Keep the history of the barns, trees, and pastures
- Simplicity - maintain wildlife habitat, greenways, trails



In our second open house, the design team met with interested community members in small groups to explain the draft master plan and answer questions.

Children created a collage of their dream playground.

The response to the plan was very positive, as documented in the second survey, with a summary of the results shown here.

The project team will use this community feedback to refine and complete the site master plan and further refine design and pricing construction of the first phase.

At the end of 2017, a final open house is planned for the public presentation of Phase 1 of the Southeast Davidson Regional Park Master Plan.



What most excites you about this park?

- Large park in the SE area!
- Community agriculture and healthy streams
- Regional playground with water play
- Greenways, hiking
- Dog park and tennis courts

What least excites you?

- Improve the current park as well as building new
- Property in the middle of the park needs to be acquired.

What facilities will you use?

- Trails - running/walking/biking
- Picnic shelters - all sizes
- Dog park
- Community gardens
- Tennis and basketball courts
- Fitness stations







Part 2 Master Plan

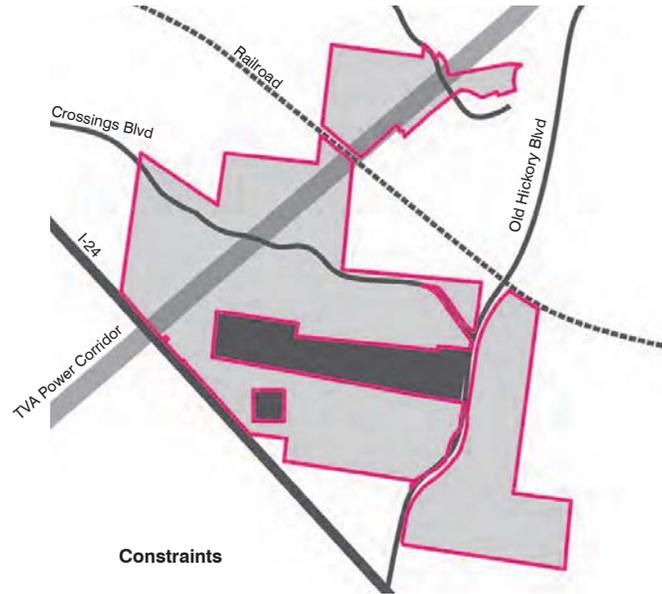
Project Narrative

The 575 acres of Southeast Davidson Regional Park were assembled from numerous parcels flanked by diverse land uses - light industrial, a major highway, residential neighborhoods, and two schools. The land is divided by existing large-scale infrastructure, including a rail corridor, roads, and a large powerline right of way.

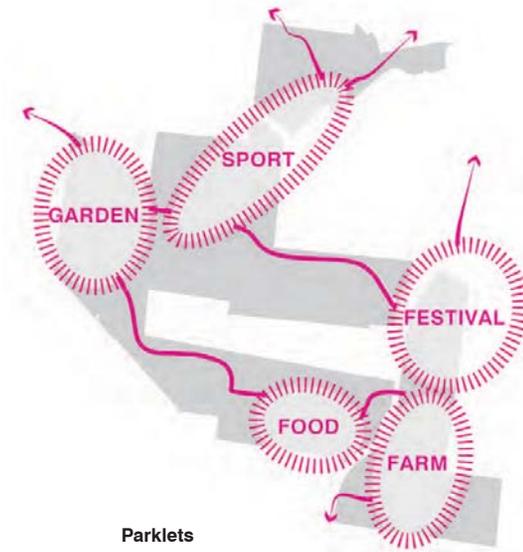
The design of the park turns these physical divisions into connective threads, linking a series of smaller 'parklets' via greenways, sport corridors, access roads, and primitive trails. Each area has a unique identity drawn from its distinctive landscape setting and offering of activities. These activities - Garden, Sport, Food, Farm and Festival - are designed to bring together the diverse communities of southeast Davidson county, residents of the wider metro Nashville area, and tourists from afar.

Each of these areas also highlights and celebrates the heritage of this landscape - the ecology of Middle Tennessee, the occupants who have lived and worked the land over generations, and the legacy of farming that is disappearing in the region - ceding ground to expanding infrastructure and development.

Central to this park's design is the diversity of ways people can come together and spend a day outdoors, welcoming all people from various cultural backgrounds and physical abilities.



Constraints



Parklets



Site Plan



Master Plan Enlargements | Kimbro Station

Kimbro Station, named after the formerly adjacent train stop, is the largest space for community gathering within the park, and is designed to host performances and festivals that will bring diverse audiences together. Set within the Gateway Gardens, the events pavilion provides a threshold to the wider park which includes a large multi-purpose lawn, regional playground, several pavilions, and access to farm trails.

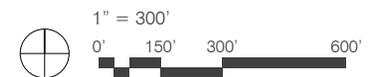
01. Crossings Boulevard
02. Old Hickory Boulevard
03. Greenway
04. Parking (120)
05. Gateway Gardens
06. Events pavilion (50' x 100')
 - large restroom
 - conditioned small office
 - storage
 - concert level electrical
07. Community lawn
08. Restroom & concession building with pavilion (30' x 60')
09. Parking (80)
10. Boardwalk and overlook
11. Small pavilions (4) (15' x 30')
12. Grassy knolls
13. Regional playground with water play (2-3 ac)
14. Grassland trails
15. Managed grasslands
16. Permanent fencing
17. Softball fields (3)
18. Parking (40)
19. Cross country trails
20. Footbridge across stream
21. Events only egress
22. Medium pavilions (2) (30' x 60')
23. Raingarden



Moore Farm Grasslands

Moore Farm Grasslands lie on the east side of Old Hickory Boulevard from the former Moore home. The rolling hills and old barn are some of the few remaining visual cues to the agricultural past that was once widespread in this area. The historic farm character is retained in this area by keeping the land open with the restoration of a native southeast grassland ecology, with grazing the pastures, and repurposing the barn. The site is also home to a two-acre cedar glade, an ecosystem globally unique to Middle Tennessee.

- 01. Events only egress
- 02. Managed grasslands
- 03. Greenway
- 04. Permanent fencing
- 05. Cedar glade
- 06. Grasslands trails
- 07. Improved farm pond
- 08. Orchards
- 09. Existing barn and trailhead
- 10. Small pavilion (15' x 30')
- 11. Old Hickory Boulevard
- 12. Farm access road



Moore Farm Gardens

Moore Farm Gardens is the food hub of the park. The cultivation gardens, community gardens and homestead strive to build community through the growing and sharing of food. The orchard introduces the food theme to visitors as they arrive along Old Hickory Boulevard.

- 01. Vehicular access from Old Hickory Blvd.
- 02. Existing farm buildings
- 03. Homestead gardens
- 04. Reconstructed farm pond & dam
- 05. Maintenance road and path
- 06. Orchard
- 07. Community gardens
- 08. Small playground (4,000 sf)
- 09. Large pavilion (50' x 100')
 - restroom
 - storage
 - outdoor teaching kitchen
- 10. Parking (50)
- 11. Central lawn
- 12. Medium pavilion (2) (30' x 60')
- 13. Small pavilions (4) (15' x 30')
- 14. Production gardens (8 ac)
- 15. Primitive trails
- 16. Existing road - shared pedestrian and maintenance access
- 17. Cell tower access only



Collins Creek

Collins Creek, the garden hub, is accessed from the west, through a Gateway Garden and from numerous points along Crossings Boulevard. It features an ecology themed botanical park along Collins Creek, a horticulture themed playground, and a regional dog park.

- 01. Crossings Boulevard
- 02. Gateway Gardens
- 03. Parking (100)
- 04. Large pavilion (50' x 100')
 - restroom
 - showers
- 05. Multi-purpose field
- 06. Neighborhood playground (0.6 ac)
- 07. Multi-use courts (2)
- 08. Kids pump track
- 09. Medium pavilion (30' x 60')
 - restroom
 - storage
- 10. Small pavilion (3) (15' x 30')
- 11. Regional dog park
- 12. Botanical park
- 13. Collins Creek
- 14. Parking (21)
- 15. Parking (35)
- 16. Cross country trails
- 17. Trailhead
- 18. Existing barn
- 19. Greenway
- 20. Restoration fencing



Sport Corridor

This area utilizes the broad swath of the TVA power easement to create a sports field corridor. The terraced complex is connected to Cane Ridge High School and to the adjacent neighborhoods via the greenway. The powerline towers dominate the views here and make an excellent opportunity for public art and sport lighting, all while bringing visibility to the park from afar.

- 01. Greenway
- 02. Parking (60)
- 03. Multi-use courts (4)
- 04. Small pavilions (5) (15' x 30')
- 05. Multi-purpose field
- 06. Parking (78)
- 07. Maintenance yard
- 08. High School connector (shared pedestrian & maintenance access)
- 09. Sand volleyball courts (3)
- 10. Parking (60)
- 11. Access drive
- 12. Crossings Boulevard
- 13. Tower gardens
- 14. Cane Ridge High School



Ridge View

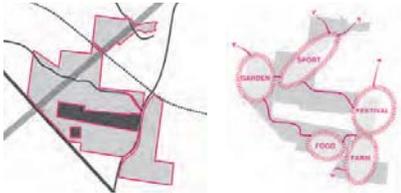
Ridge View is a neighborhood node that extends the sport corridor along the TVA easement. Its forested fitness trails and hilly greenway climb are workouts in themselves. The park connects to the surrounding neighborhoods and to the adjacent Cane Ridge Elementary School via roads and greenways.

- 01. Neighborhood playground (2500 sf)
- 02. Medium pavilion (30' x 60')
- 03. Multipurpose field
- 04. Parking (10)
- 05. New public road with on street parking (15)
- 06. Multi-use courts (2)
- 07. Crossings gardens
- 08. Greenway
- 09. Future greenway connection
- 10. Primitive walking trails with fitness stations
- 11. Neighborhood greenway
- 12. Trail access from Cane Ridge Elementary School
- 13. Small pavilion (15' x 30')
- 14. Pedestrian bridge over railway



Key Concepts

Key concepts emerged as community priorities during the public engagement process and have evolved to explain the critical components of this master plan. They are described briefly on this page and in more detail throughout the next section of the book.



Strategic Stewardship

Maintenance of regional parks is a big challenge facing Metro Parks. The Strategic Stewardship section describes a model of land maintenance based on the formation of key partnerships. This section connects land uses within the park with corresponding potential partnerships, the benefits they may provide, and outlines some first steps towards implementation.

Restore & Grow

Restore & Grow focuses on improving the health, biodiversity, and resilience of the park ecology and waterways. Some of these initiatives would benefit from the formation of community partnerships for implementation and maintenance.

Educate & Engage

Educate & Engage identifies opportunities for learning from the landscape, including stories of the enslaved workers who lived and worked on the property and the identification of invasive plants and endangered species. Locations for signage and interpretive design elements highlight and make visible the unique narratives of land, enriching the experience for visitors from near and far.

Access

Access describes the circulation to and within the park, highlighting how the master plan provides connections via many modes of transportation. This ensures access for people of all physical abilities and from every corner of the Nashville Metro area.

Gather

Gather describes the places designed for people to congregate. Each parklet has several scales of pavilions and adaptable outdoor spaces to support a diversity of group activities from music festivals to picnic lunches.

Play

This section addresses the need for recreation and playgrounds in Southeast Davidson as highlighted in the *Plan to Play* master plan, and describes the locations for suggested types of play.



Strategic Stewardship: *Land Uses and Potential Partners*

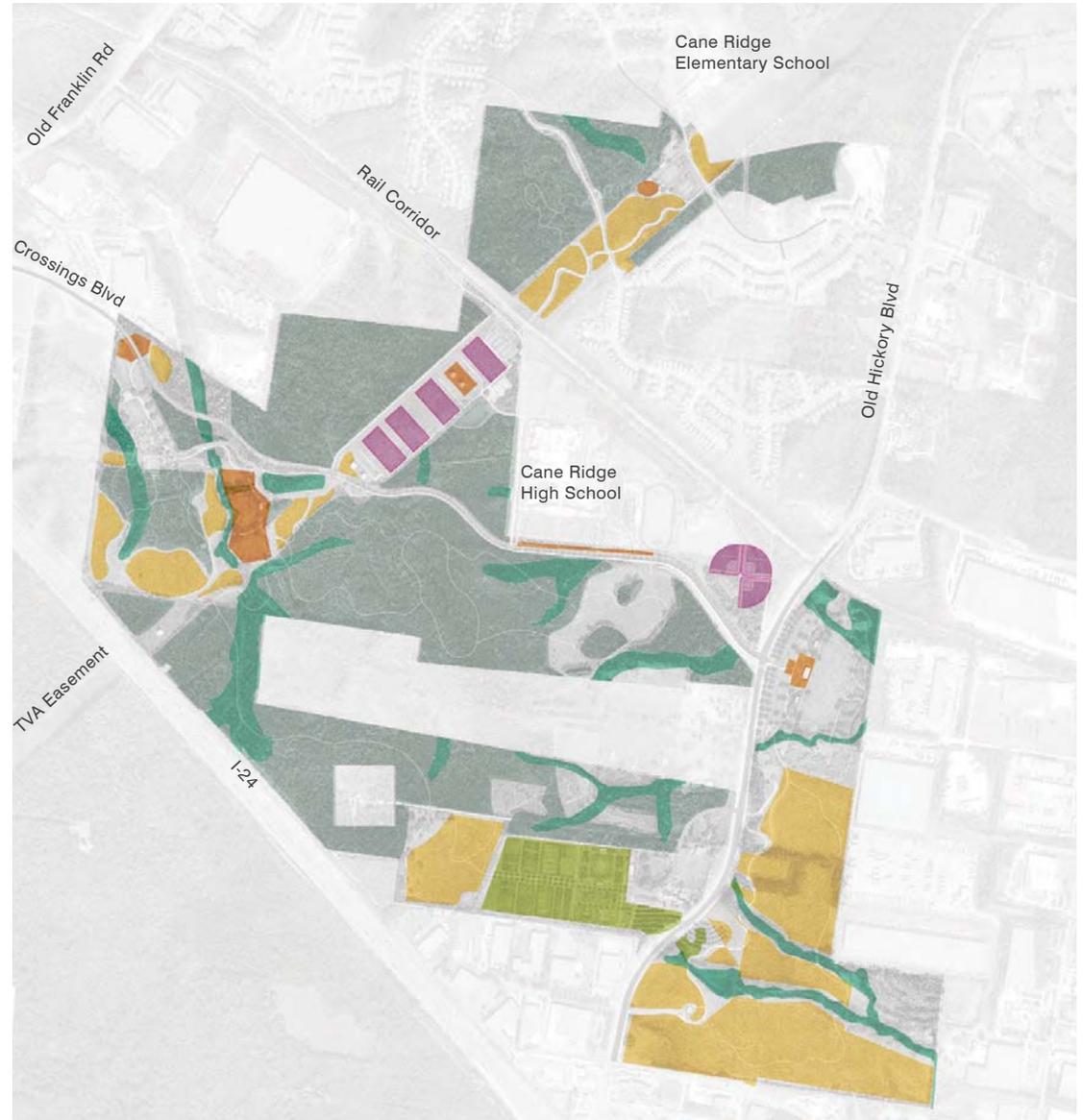
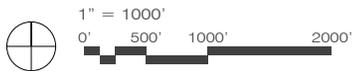
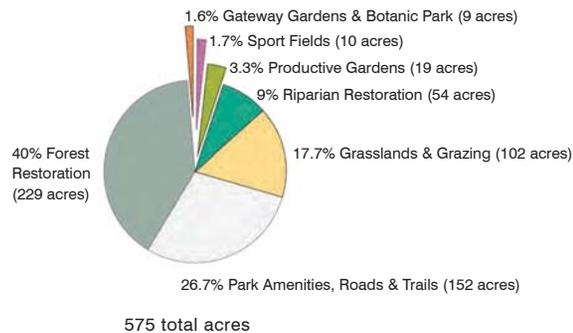
How will this park be maintained?

The ongoing maintenance of a park of this size - 575 acres - will require resources beyond what Metro Parks has available. The master plan calls for strategic partnerships to help care for this land and ensure that it serves the public good for years to come.

These pages highlight the different land uses that require a distinct maintenance strategy and identifies potential partnerships to help with the initial costs and long term stewardship. Each land use is broken out in the pie chart below to show the relative acreage within the park.

Each partnership would require an approval process that matches the partners' mission with the principles and goals of Metro Parks as well as adhering to the rules and regulations of Davidson County.

Once validated as a partner, the relationship would need to be monitored over time to verify the partner's mission continues to align with Metro Parks, so that time and money are spent appropriately, and their assistance with maintenance meets or exceeds Metro Parks' standards of care.



Grasslands & Grazing



The Grasslands & Grazing partner is envisioned in coordination with a **new maintenance management position** created at Metro Parks. The **Lands Resource Specialist** would coordinate farmers and ecologists to maintain the grasslands through ecological restoration and rotational grazing. This partnership is envisioned as a long-term solution to manage open parkland, not only at Southeast Davidson Regional Park, but also in other parks of Davidson County.

Productive Gardens



Potential partnerships within the Productive Gardens framework would look to the Nashville Food Project as an exemplar operational model - they manage a variety of scales of production, including plots for farmers and community gardens, all united by a mission to bring people together to grow, cook, and share nourishing food while cultivating community and alleviating hunger.

School & Corporate Sponsorship



The adjacent neighbors with direct access to the parks will be important partners. These include industrial corporations, Cane Ridge High School, and Cane Ridge Elementary School. Engaging volunteers and students would provide an enduring model for stewardship while corporate partners could provide funding for discrete elements such as the sport fields or accessible trails.

Forest & Riparian Restoration



The ecological integrity of the landscape at the future Southeast Davidson Regional Park has been compromised and fragmented by transportation and power infrastructure. The restoration of forest and riparian ecologies will require a significant effort, and entail the replanting of large areas, monitoring during the early establishment period, and ongoing oversight and control of invasive species. Partnering with neighborhood garden clubs and conservation groups with teams of volunteers could provide a boost to the resources that Metro Parks has on hand.

Garden Maintenance



The Botanic Park and Gateway Gardens are prime candidates for 'Friends of' partnerships. One such group, the **Friends of Parks at Kimbro Station**, has formed with goals to be an effective support organization for the new parks at Southeast. Such partnerships could connect the park to other community organizations and provide volunteer or paid positions to help maintain the gardens and associated programs.

Metro Parks Maintenance



Metro Parks Consolidated Maintenance works hard to provide parks that are clean, safe, and in good repair - a complex and time consuming task. When asked, "What would make the park more welcoming?" recurring answers from the public included references to cleanliness. Phased operational funding increases for personnel and equipment are essential to meeting the expectations of the public and making the park a success.

Maintenance Costs

Maintenance and mowing of the more developed and designed areas will require more frequent and more specialized work. By far the highest cost associated with maintenance is mowing, including bush-hogging hundreds of acres. Maintenance costs are directly related to the management strategy for any parkland. The use of fossil fuel powered mowers has environmental implications to air quality, noise pollution, biodiversity, transport and extraction of fuel. The grassland's restoration, rotational grazing and agricultural uses are both programmatic elements and a management strategy that will help reduce the cost burden on Metro Parks. They provide environmental, educational, and recreational opportunities, all while helping the bottom line. To this end, it is extremely important that these programs and partnerships get off the ground.

Lands Resources Specialist Staff

Recognizing the importance of these natural areas management practices and the goals of *Plan To Play* to implement management plans across the Metro Parks system, this plan recommends a new Land Resources Specialist staffing position is created within Metro Parks.

In addition to providing oversight and management of the Grasslands & Grazing partnership, major duties would include:

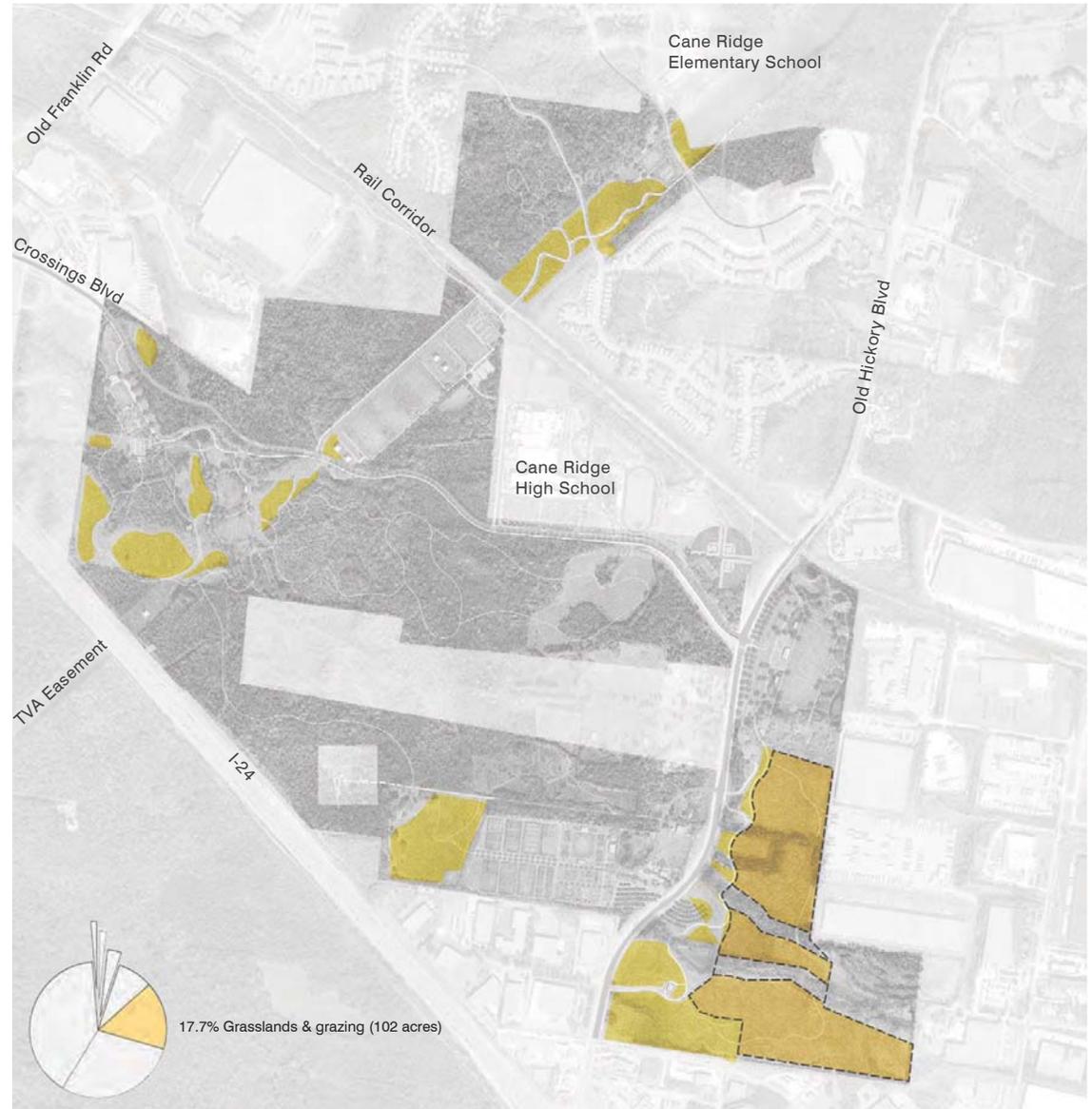
- Develop and promote management plans for agricultural and natural areas to ensure the protection of these properties
- Manage department projects to maintain natural areas
- Recruit and manage partnerships
- Represent the department to community groups which use the properties
- Train and direct volunteers
- Develop and present educational programs highlighting the use and maintenance of natural areas

Restore & Grow: *Grazing & Grasslands Management*

In a number of Metro Parks' existing regional parks, park staff have been confronted with maintenance challenges, that result in the loss of many acres of open land to woody growth and colonization by invasive plants. To ensure the open spaces of the Southeast Davidson Regional Park are preserved, and the agricultural character retained, an achievable long-term plan is needed for their ongoing maintenance.

This master plan envisions instituting a management position within Metro Parks to coordinate with a farmer and an ecologist to maintain pasture land through rotational grazing. A Maintenance Grazing plan, designed in coordination with an ecological restoration plan, would reveal and celebrate the cultural and ecological heritage of this park, restore biodiversity, and become a novel public attraction. In addition to entertainment, this new management plan brings new recreational and educational opportunities to support Nashville's public interest in sustainable agriculture.

To support this vision, a farm framework of access roads, fencing, water sources, and animal shelters would need to be established, all designed to allow for continued public engagement. Additionally, a grasslands expert to monitor the growth and assist with the rotational schedules can enable the park to become a seed source for the rare and endangered grasses that once covered much of the southeastern United States.



Grasslands & Grazing Implementation Steps

Commission Ecological Survey

In order to create an ecological restoration plan specific to this site, there is a need to more accurately understand the existing ecology at Southeast Davidson, including specific plant communities, existing species diversity, and the presence and extent of invasive plants.

Establish Partnerships

This maintenance strategy relies on new types of closely coordinated partnerships with Metro Parks:

- Farmers to manage the rotational grazing
- Conservation organizations to help develop, monitor, and implement the ecological restoration component
- Volunteers

Create a New Position within Metro Parks

Understanding the importance of these natural areas management practices and the goals of *Plan To Play* to implement management plans across the Metro Parks system, this plan recommends a new Land Resources Specialist staffing position within Metro Parks. They would help develop, and provide oversight and management of natural areas within the Metro Parks system. The Lands Resource Specialist would be responsible for establishing and managing the partnerships with farmers and conservation organizations associated with the Maintenance Grazing program.

Develop Restoration / Farm Implementation Plan

With an ecological survey completed and farm and conservation partnerships established, a specific long-term implementation plan can be designed to achieve the restoration and landscape maintenance vision. A pilot site would be envisioned as the first phase of this implementation plan.

Designate Pilot Site

A pilot site should be chosen as the first place to implement, monitor, test, and perfect this maintenance approach. At this site, the physical framework of access roads, permanent fencing and water sources would be built along with shelter for the grazing animals.

Ongoing Public Engagement and Access

This maintenance approach is a new type of experience on public parks that could become a novel attraction, creating opportunities to engage with local cultural history, and understand the connection between maintenance, biodiversity, and soil health. Programming and technology could help integrate this maintenance program with public life such as an app to track the movements of the Metro Grazers and a seasonal celebration of the Grazers' release to pasture.



ecological survey



cattle grazing in native grasslands



monitoring species



public engagement in landscape restoration



species-rich native grassland

Restore & Grow: *Cultivation Gardens*

The public engagement events revealed strong interest in community gardens and places to share and prepare food. The community reflected on the rapid loss of agricultural land in the area as suburbanization continues to expand. An orchard spanning both sides of Old Hickory Boulevard introduces this productive area of the park. Arranged around the historic Moore farmhouse, these production gardens connect the history of the agricultural homestead with initiatives to build community through the production and sharing of locally grown food, creating a place where food brings people together. Across this 19-acre site, three types of production gardens are envisioned with three corresponding cultivation partners.





Cultivation Gardens & Orchards

The Cultivation Gardens and Orchards would offer local gardeners and farmers the chance to grow at higher quantity to be able to sell at farmer's markets and to restaurants. The Orchard announces the entrance to the food hub and welcomes visitors to pick their own fruit. These partners would care for and maintain the majority of this acreage. Revising rules that permit Metro Parks to sell food grown at the park is critical to making this possible.

Potential Partner:
 Refugee farmer organizations such as the Nashville Food Project grant growing opportunities to New Americans who arrive from other countries with farming skills.



Community Gardens

At the Community Gardens, plots would be scaled to support individuals and families. A commons garden and small playground are integrated into this space, including a pavilion to host gatherings, vegetable sorting, and workshops that support the cross-pollination of community members. This is a space where the gardeners and farms could share knowledge of gardening and learn about food preservation and preparation.

Potential Partner:
 Community garden organization(s)



Homestead Gardens

At the Homestead Gardens, a selection of animals could be housed that reflect the makeup of the region's historic homesteads. Educational workshops and demonstrations for best practices can be held to link the historic site to the latest trends in sustainable backyard gardening.

Potential Partner:
 Community garden organization(s)

Restore & Grow: Gateway Gardens & Botanic Park

Gateway Gardens

At the entrances and edges of the park, the Gateway Gardens welcome visitors with vibrant and diverse horticultural displays, reflective of the cultural diversity in the Southeast Davidson county. Each garden could include designated areas sponsored by a 'Friends Of' group, who would help tend the garden and fund its construction and maintenance. These gardens are intended to celebrate the diversity of the surrounding areas and bring many different cultures together through the plant selections and garden stewardship.

Botanic Park

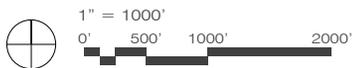
Building on the commitment to enhancing habitat quality throughout the park - the botanic park goes a step further to highlight the unique ecology of Middle Tennessee within the gathering spaces of Collins Creek - in the meadows, forest edges, and riparian corridor around the community pavilions.

These spaces will be unique within Southeast Davidson Regional Park in that they will provide a dramatic seasonal display of color created by combinations of trees, shrubs, and flowering forbs including pollinator species. Emphasis will be in highlighting the diversity of this ecology - in the species, beauty, and habitat value of the plants selected. Seasonal displays of colorful native plants could become public events within the botanic park, and interpretation of ecology integrated into the Collins Creek path network. The Botanic Park also provides a discrete fundraising opportunity for corporate or private donors.



Legend

- Botanic Park (5 acres)
- Gateway Gardens (4 acres)



Gateway Gardens



Cultural Diversity at Cane Ridge High School's International Day



Gateway Gardens at Kimbro Station Park



Botanic Park



Section through Botanic Park



Collins Creek

Restore & Grow: *Reforestation & Restoration*

With nearly half of the site currently covered in forests of varying character and health, an ecological survey is imperative. The survey will provide greater detail regarding the biodiversity and health of existing upland and riparian forest communities. It will also map the existing plant communities including native, invasive, and rare or threatened species.

The proposed reforestation extends the existing tree canopy along valleys and drainage ways to improve existing streams and ponds, creating contiguous habitat corridors to support animal movement.

In addition, restoration of existing forests and reforestation can provide a buffer between the park and the industrial areas just beyond the site's boundaries.



Reforestation



The remnant forest patches at the site, from riparian to upland forest, provide a vast laboratory for urban ecology. Citizen science surveys of the existing conditions could be conducted by students and resource groups. A more professional ecological survey of the site could provide a list of species and communities that will need to either be planted and protected, or those species that are restricting biodiversity and need to be removed.

Restoration



Partnered with an ecologist or parks employee, volunteers, friends groups, and garden clubs could mobilize to both reforest and restore areas on site that are in most need of improvement. Corporate neighbors could provide additional planting around the perimeter of the park to help buffer it from the adjacent industrial activity. School groups could help monitor their growth over time as part of their curriculum.

Together, park visitors, students, neighbors, and stakeholders could all provide the many eyes and hands necessary to plant and maintain such a large area.



Restore & Grow: *Hydrology*

This master plan provides an opportunity to expand standard stormwater management practices, improving water quality and habitat for riparian species. Many of the streams are piped into and from the surrounding light industrial areas. Despite the degraded quality of these streams, they are home to the Nashville Crayfish, a federally endangered species.

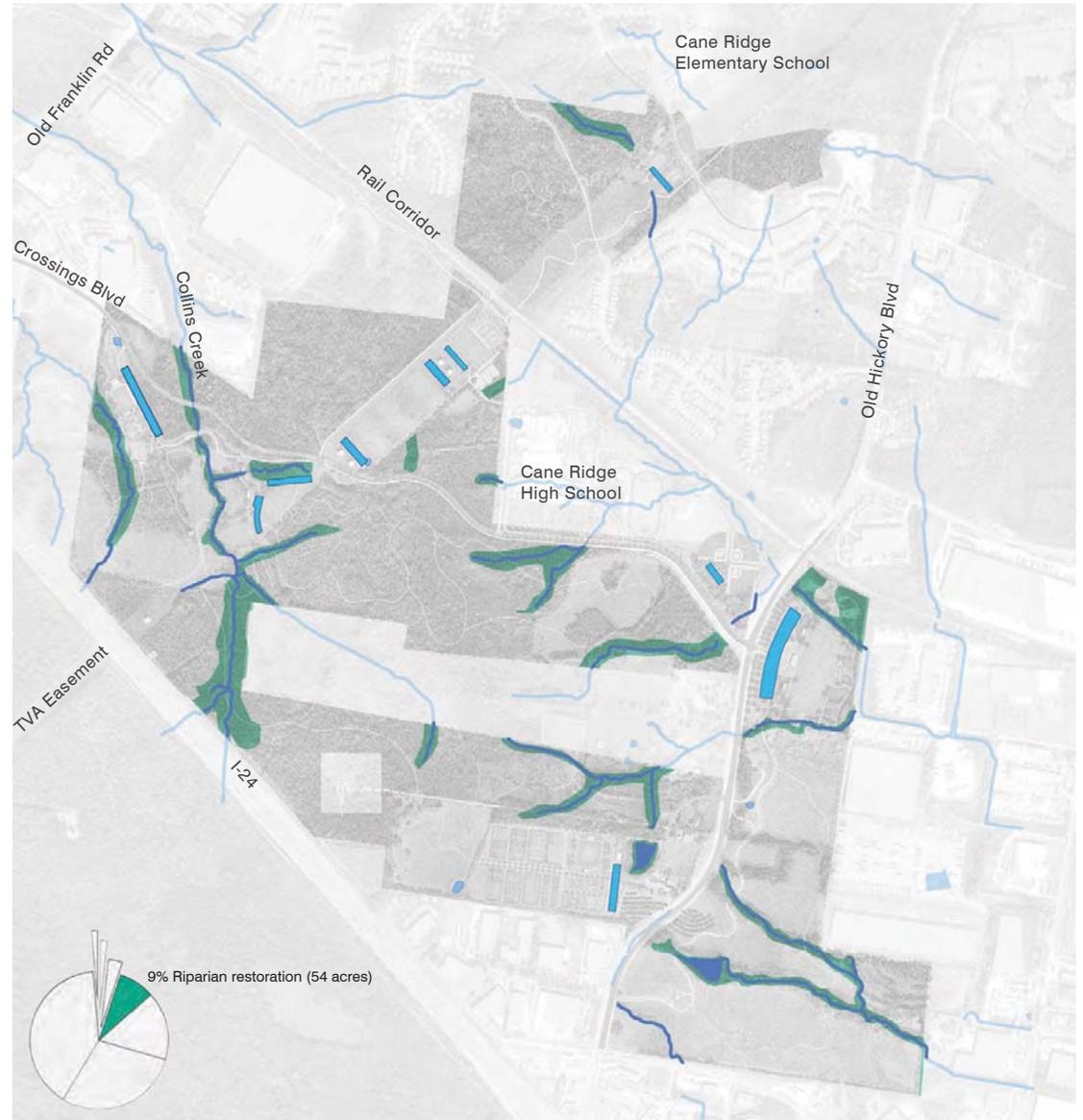
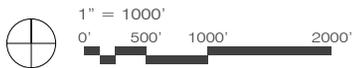
Historically, the ponds surrounding the farming fields were used to water the animals and have since become overgrown with algae due to an excess of nutrients.

Both conditions call for the restoration of these water bodies with bioswales and riparian plantings capable of providing the necessary filtration and shade to improve water quality and biodiversity.

Increasing storage capacity is also a goal - to store water for irrigation use in targeted areas around the gardens, reducing the amount of potable water needed in the gardens and agricultural areas. This can be achieved by enlarging or dredging existing ponds.

Legend

-  Existing Natural Drainage Way (on-site)
-  Existing Natural Drainage Way (off-site)
-  Expanded Ponds with Potential Storage for Agriculture
-  Proposed New or Enhanced Riparian Planting
-  Proposed Bio-swale BMP Network



Riparian Plantings



Monitoring



Nashville Crayfish



Bioswales



Agricultural Ponds



Riparian plantings comprised of water-loving tree species or wetland plants filter site run-off and stabilize the banks of creeks and ponds to decrease overall sediment deposition and improve habitat for the federally endangered Nashville Crayfish. Regular monitoring for water quality, quantity, and habitat will help the park to target problematic areas and develop a maintenance strategy.

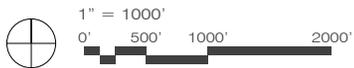
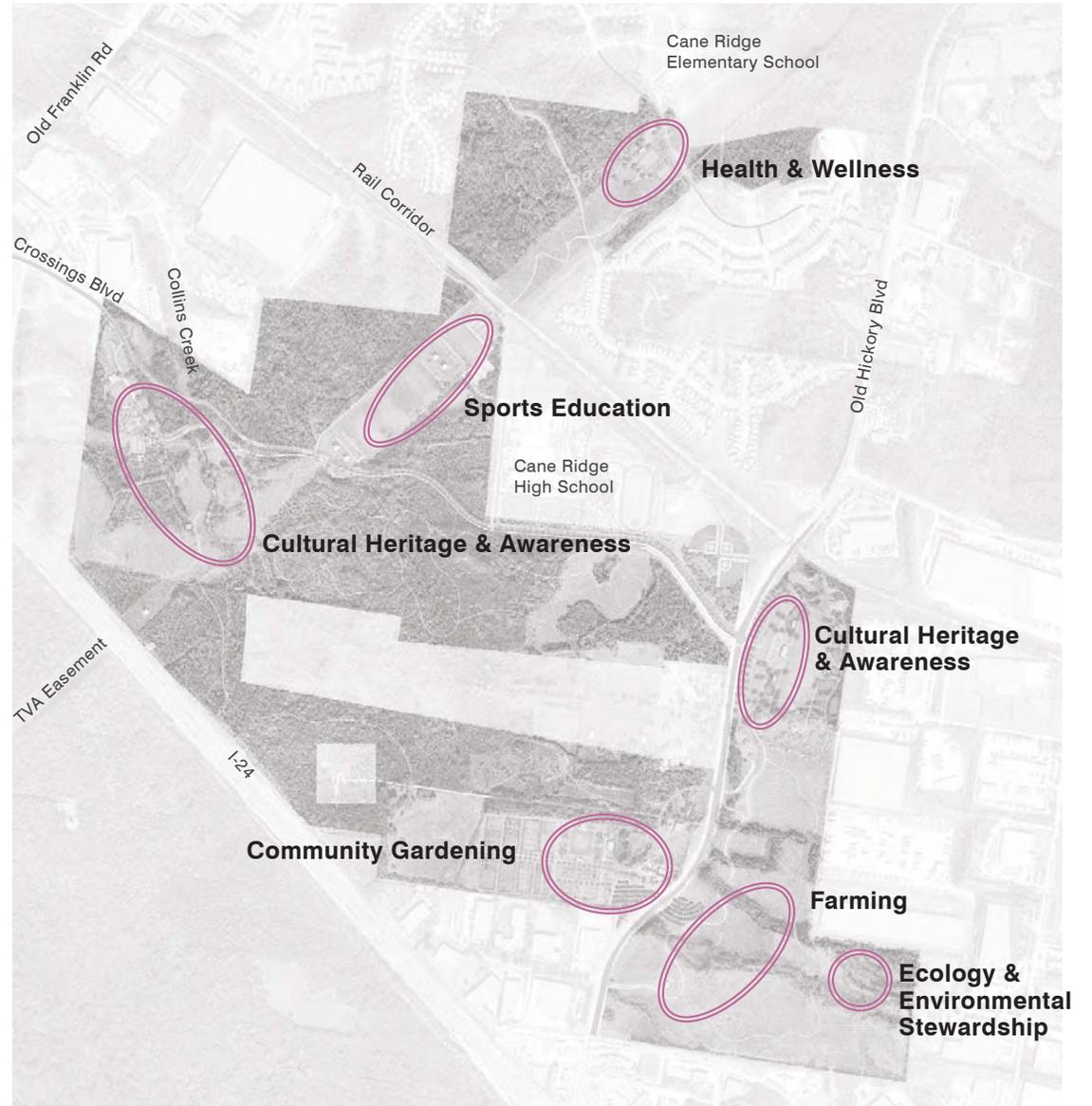
Planting edges of the agricultural ponds and fencing out the grazing animals serve as best practices to keep the drinking and irrigation water healthy. Bioswales capture and detain the first flush runoff from impermeable surfaces, improving the overall water quality downstream.

Section Through Riparian Edge



Educate & Engage: *Landscapes of Learning*

Beyond promoting physical benefits such as fitness and access to the outdoors, the new park in Southeast Davidson County seeks to teach and enlighten visitors. Throughout the site, there will be places where the history of the landscape and stories about how it functions will come alive. Strategies for communicating these multiple layers may include trailhead waysides with interpretive signage, exhibits in the various pavilions or programming that occurs by Metro Parks staff or volunteers, such as nature walks and outdoor demonstrations. A few of the locations where educational programming could occur are identified on the map with examples of potential programs highlighted on the opposite page.



Ecology & Environmental Stewardship



- Protecting Middle Tennessee Species – the Nashville Crayfish and Tennessee Milk Vetch
- Identifying Invasive Species and Preserving a Healthy Forest Ecosystem
- River Cane – How Your Community Got It's Name (Cane Ridge)
- Southern Grasslands and Cedar Glades
- Hedgerows and Habitat

Farming



- Cows at Work – Maintaining Grasslands with Grazers
- What is Conservation Ecology?
- Grassland Farming
- The Moore Farm Evolution: From General Farming to Cattle Farming
- Agrarian Landscape Preservation

Sports Education



- Court & Pump Track/Biking, Hiking, Cross-Country, Fitness Track
- The Value of Team Work
- Gaining and Building Confidence

Cultural Heritage & Awareness



- Gateway Gardening - Flowers of the World
- Farm Life – the Holloways and the Moore Families
- African Americans in Southeast Davidson – a Tale of Community
- Music and Art from Different Cultures
- Learning from the Landscape - How the Site Reveals its History

Community Gardening



- Gateway Gardening - Flowers of the World
- Grow your Own Food
- Growing Together – Learning about Other Cultures through Food

Health & Wellness



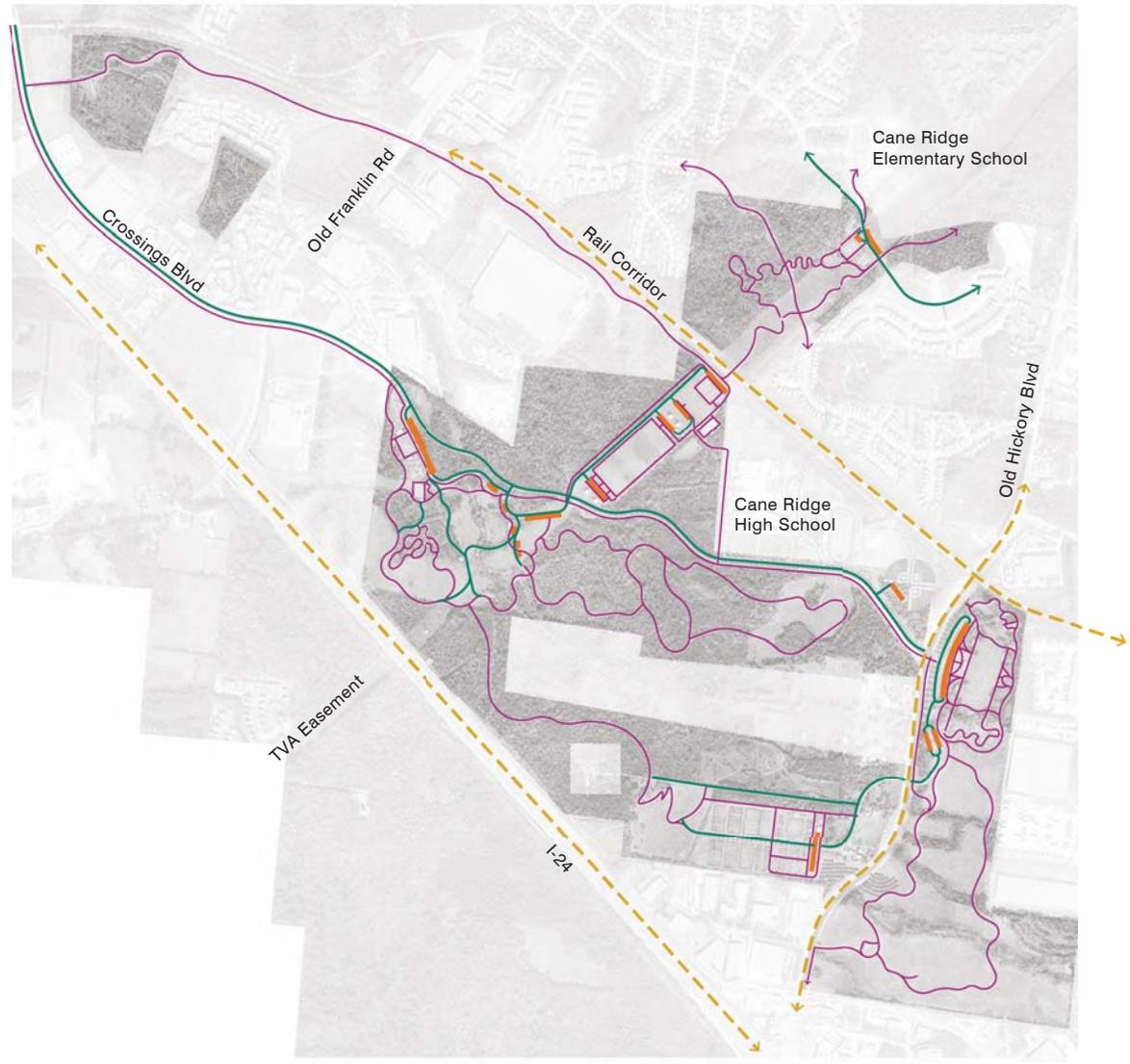
- Yoga and Meditation
- Fitness Stations
- Hiking and Biking
- Communing with Nature
- Community Building

Access: Roads, Transit & Parking

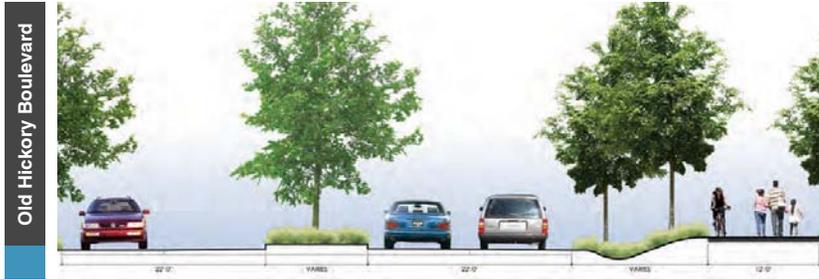
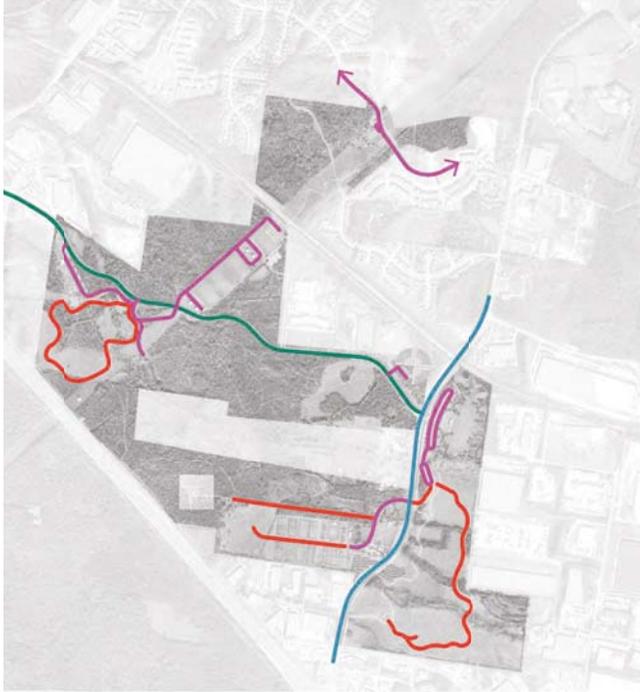
The layout of new roads and paths are critical to expand access to the park, to link existing parcels, and provide entrances where none currently exist. Crossings Boulevard connects the park east and west and a greenway across the railroad tracks connects the park north to south. Each type of trail and road are described further in the pages that follow.

Legend

-  Roads
-  Parking
-  Trails
-  Existing Roads & Railroad



Roads



Crossings Boulevard

Identified in the City's Major and Collector Street Plan, Crossings Boulevard will provide vehicular connectivity and circulation to the park activity nodes. The planned cross-section of the new street is intended to accommodate multi-modal users to, from, and through the park along a low-speed, scenic route. As shown, the planned street section includes one vehicular travel lane in each direction with protected bike lanes and an adjacent greenway path to serve pedestrian and bicyclist mobility. The greenway path is separated from the vehicular traffic by a landscaped buffer. Turn lanes may be needed at park access points. Traffic calming treatments such as raised crosswalks and roundabouts should be considered.

Old Hickory Boulevard

As southeast Nashville-Davidson County continues to experience residential and commercial growth, traffic volumes on Old Hickory Boulevard can be expected to increase, necessitating additional capacity. The long-term vision for Old Hickory Boulevard along Southeast Davidson Park includes two vehicular travel lanes in each direction, with a landscaped median that can accommodate left turn lanes at intersections and driveways, as appropriate. Pedestrian facilities should be planned on both sides of the street. However, it may be accomplished by a greenway path through the park property, or a traditional sidewalk – both should be separated from the vehicular traffic by a landscaped buffer zone.

Access: Path Types

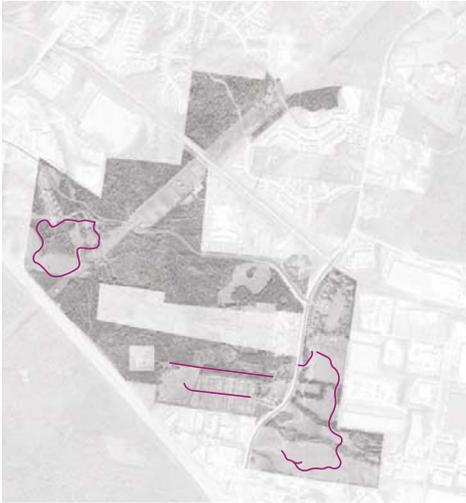
Greenway & Multi-use

designed use



Maintenance Road / Path

designed use



Primary



designed use



Primitive (Secondary)



designed use



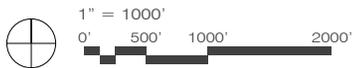
Gather: Pavilions, Overlooks, Shelters & Trailheads

The variety of scales for gathering allow for a diversity of activities to take place at each park node from musical festivals to a picnic lunch. Whether pavilions, overlooks, shelters, or trailheads, each element is intended to provide for long-term durability. The structures should have careful consideration for the materials, with a simple, timeless aesthetic, and be sized to accommodate future uses.



Legend

-  Collins Creek Gatehouse
-  Kimbro Station Gatehouse
-  Overlook
-  Medium pavilion
-  Small pavilion
-  Garden shed
-  Trailhead



Collins Creek Gatehouse



The Collins Creek Gatehouse greets visitors as they arrive at the western entry to the park. It can accommodate large picnic groups and be rented for private parties.

Kimbro Station Gatehouse



The gatehouse at Kimbro Station can accommodate musical performances, annual festivals, large picnic groups, and private parties.

Overlook



Overlooks are designed with simple low walls and graded areas to sit, rest, and enjoy the views.

Garden shed



Approximately 10' x 20' storage shed for community gardeners

Medium Pavilion



Medium pavilions are approximately 30' x 60' and can accommodate multiple families and be rented for private parties.

Trailhead



Trailheads provide orientation and points of interpretation of site history and ecology.

Small Pavilion



Small pavilions are approximately 15' x 30' and provide intimate shelter for individuals and small groups.

Play: Courts, Fields, Tracks, Playgrounds & Dog Park

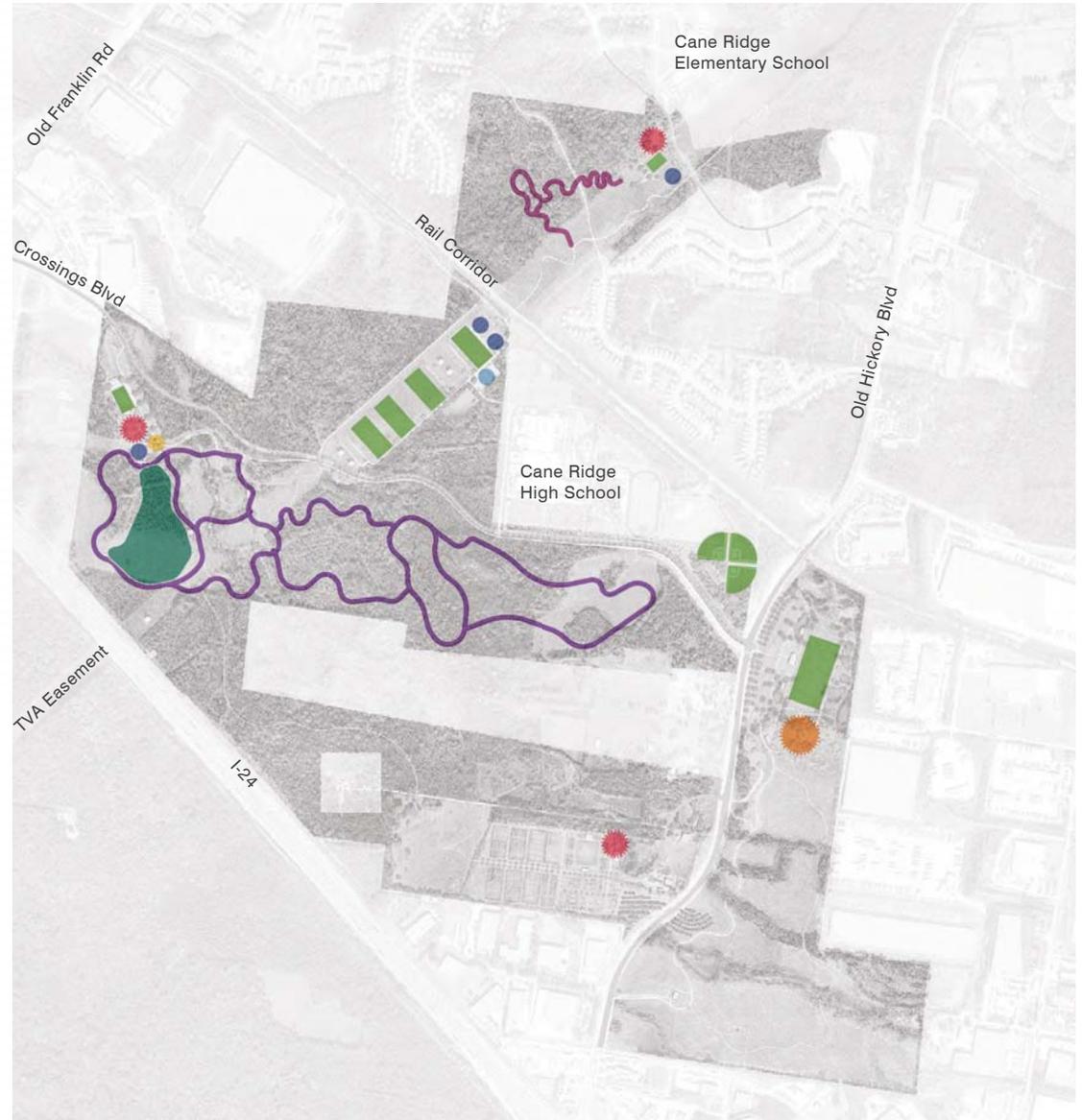
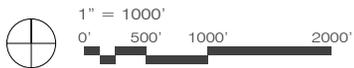
The need for areas to engage in sports and other types of recreation was prioritized by *Plan to Play* and reiterated during the community input sessions for the park master plan. In order to accommodate this request, play zones have been incorporated into each park hub, centrally placed to bring the community together.

Courts and fields are multipurpose to avoid single use and hierarchical sport communities. The playgrounds are sited near pavilions, parking, and restrooms for convenience and accessibility.

The playgrounds celebrate local materials to engage children with the oak hickory forests, bluffs, limestone outcroppings, and cedar glades of the Nashville basin. The regional playground will include a water play area and engage children with the adjacent stream and plantings.

Legend

-  Sand volleyball courts (3)
-  Multi-purpose courts (8)
-  Kiddie pump track
-  Sports fields (14.5 acres)
-  Destination dog park (9 acres)
-  Fitness loop (5 miles)
-  Cross country trails (3.2 miles)
-  Regional playground
-  Neighborhood playground



Regional Playground



Cross Country Course



Destination Dog Park



Neighborhood Playground



Fitness Track



Multi-purpose Courts



Little League Softball



Pump Track



Multi-purpose Fields



Material Palette

The materials selected for Southeast Davidson Regional Park reflect the geological and agricultural history of Nashville, as well as the vibrancy of the community inhabiting Southeast Nashville today. Applying these materials across the park will tie together the diverse site experiences from cultural events to sports games and urban farming. The combination of rustic wood, native limestone, and bright play surfaces create a unique identity for the park, attracting neighbors and visitors from across the city and County.

Nashville Limestone—Site Wall Veneers, Boulders



The city of Nashville sits in a basin with thin top soil that often exposes the iconic gray Nashville Limestone used in buildings throughout the region.

Recycled Barn Wood—Site Structures



The wood barns existing on-site preserve the memory of the agrarian landscape. Updates to those buildings where appropriate and re-use of the barn wood help recall the agricultural legacy.

Fencing—Sports Fields, Urban Farm Edge, Natural Areas, Play Area, Dog Park



A combination of practical chainlink fencing and painted steel and wood fences delineate formal and functional aspects of the park.

Play Surface—Playground, Sports Field, Dog Park



Poured-in-place rubber surfaces come in vibrant colors and provide a soft landing for play areas. Artificial turf allows for low maintenance and high-performance athletics.

Permeable Paving—Paths, Parking Areas



Increasing hard-surfaces on-site affects the quantity and quality of run-off into local waterways. Permeable pavement allows water to infiltrate and can blend more seamlessly into planted areas.

Interpretive Signage & Wayfinding



Signage – Site Guidance, Interpretation, Wayfinding

Signs provide park visitors with information on activities, wildlife, and park procedures. Interpretive signage tells the story of the site’s past and present, teaching visitors about stream health, urban farming, and culturally significant plants. Simple techniques like color-coded sign posts assist visitors in wayfinding. Signage can also play a role in monitoring the park with simple instructions for citizen science.



Branding – Unified Park Identity

A well-designed branding package provides consistency in signage, and wayfinding to create a cohesive aesthetic experience.



Entrance – Distinctive Gateway

The branding begins with an impactful entrance. A distinctive sign or welcome pavilion draws visitors and provides a memorable gateway into the park.

Phasing

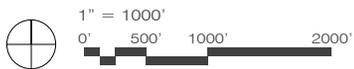
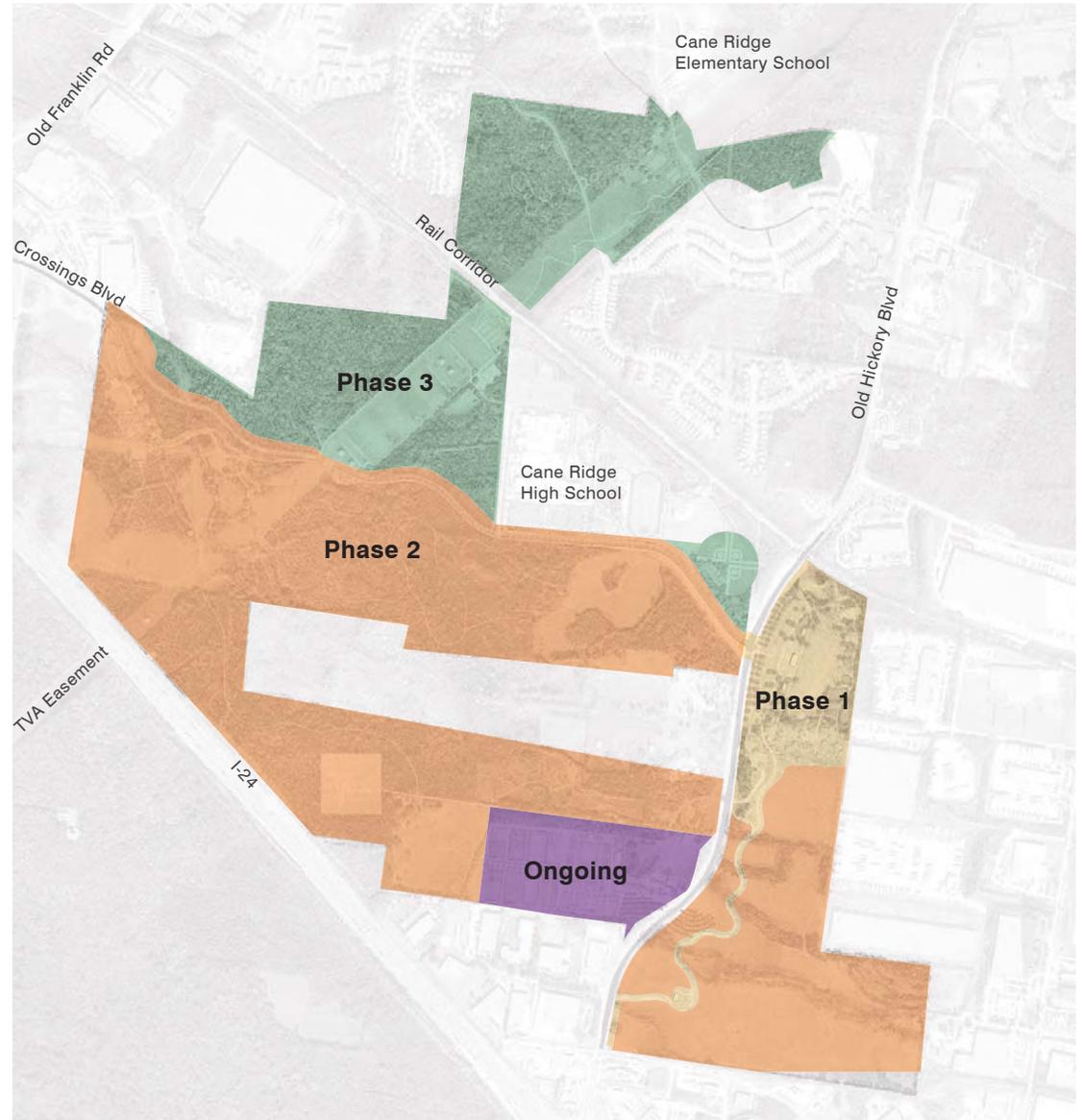
Transforming 575 acres is a grand undertaking that will require careful consideration dependent on circumstances beyond the scope of this document. All of these phases will be contingent on future budgets and the direction of Metro Parks. Each phase will likely be divided into sub phases to be determined as funds become available.

Phase 1 includes the festival grounds of Kimbro Station Park, its pavilions, the regional playground, the wetland to the north, and the greenway south through the Moore Farm Grasslands.

Phase 2 covers the Moore Homestead and surrounding gardens, Collins Creek Park, and the trails and forested areas in between.

The Moore Farm Cultivation Gardens will be developed throughout all phases in an ongoing process.

Phase 3 includes the sport corridor, the softball fields adjacent to Cane Ridge High School, and Crossings Park to the north.



Cultural History | Indigenous People of the Cumberland River Valley

Native People of the Region

Humans have inhabited the Cumberland River Valley for more than 10,000 years. The area has been occupied by Paleo-Indigenous people (12,000 BCE), Archaic Indigenous people (8000 BCE -1000 BCE), followed by Woodland (1000 BCE -1000 CE) and Mississippian Indigenous people (1000 CE - 1600 CE). Although an archeological study has not been conducted at this site, it is likely that there is evidence of Native American occupation here dating back 10,000 years.

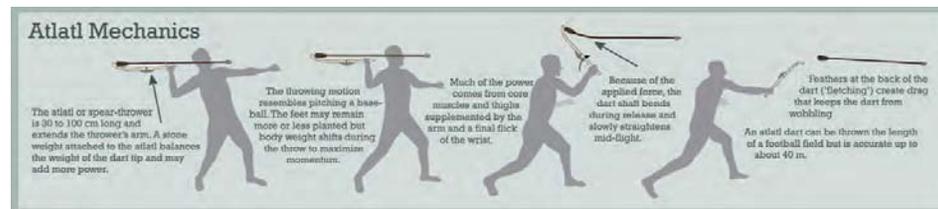
The Paleo-Indigenous people were hunter-gatherers known for their dependence on large animals that thrived during the Ice Age, such as the mammoth and mastodon, which became extinct around 7000 - 8000 BCE.¹ The Archaic Period is largely defined by adaptations to a post-glacial climate, with a shift in vegetation from conifer to modern deciduous forests. With the die-off of larger game, Archaic Indigenous people were dependent on hunting smaller game, such as bear, elk, and white-tailed deer, as well as smaller mammals, fish, and mussels. During this period, innovations included the atlatl, or an Archaic spear thrower, ground stone tools, the first cloth made of vegetable fibers, fishing weirs, and houses/shelters with compacted clay floors. By the end of this period, basic agricultural practices appear.²

The Woodland Period signaled a shift from the hunter-gatherer to a more 'sedentary' lifestyle with the cultivation of crops and plant domestication. Woodland Indigenous people replaced the spear thrower with the bow and arrow, and began making pottery, as well as elaborate burial mounds. Most of the Woodland sites within the Cumberland Region were located along lower alluvial terraces and floodplains, which would have been suitable to cultivation or village construction.³ It was not uncommon, however, that upland sites, like the landscape of the Southeast Regional Park, were used as hunting grounds during this same period.

1 Jack Schock, "A Cultural Reconnaissance of Approximately 530 Acres for the Proposed Gateway Project at Donelson, In Davidson County, Tennessee," Archaeological (Bowling Green, Kentucky: Arrow Enterprises, March 1989), 5-6.

2 Ibid, 7-8.

3 Ibid, 8-10.



Early Spear Thrower: Atlatl

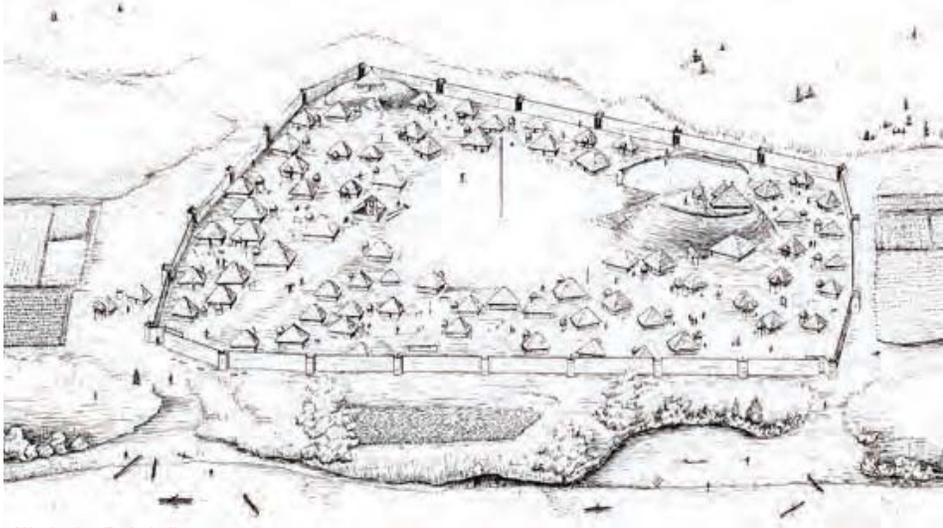
Image: <https://albertashistoricplaces.wordpress.com/2015/10/07/albertas-ancient-darts-and-atlatl-hunting/>



Middle Woodland pottery from the Southern Coastal Plain

Image: http://rla.unc.edu/archaeonc/time/wood_Coast_MWood.htm

Indigenous People of the Cumberland River Valley



Missippian Period site

Image: <http://mcclungmuseum.utk.edu/2009/01/01/prehistoric-american-indians/>



Mounds and the Missippian Culture

Painted by Herbert Roe, (no changes made) https://commons.wikimedia.org/wiki/File:Chromesun_kincaid_site_01.jpg

The Missippian Indian culture, which thrived from about 900 BCE to 1450 CE, is defined by the construction of earthen mounds for temples, council buildings, and elite residences, as well as the dependence on horticulture, which prompted territoriality to control land, and thus, increased warfare.¹

This culture had more stabilized settlements, and a more complex society with elite classes tied to chiefdoms, as well as well-developed religious beliefs and rituals. They developed an economy largely centered around corn production in the abundant alluvial soils found throughout the Nashville Basin. This culture created an extensive network of agricultural communities that spanned the area from Florida to Missouri. They are often referred to as the “mound builders” due to the large ceremonial mounds that they constructed throughout Tennessee and the southeast.²

Missippian Period practices included intercropping of beans, corn, and squash, often referred to as the “three sisters,” which allowed the expansion of the population.³ These tribes also utilized native tree orchards of fruits and nuts, including red and white mulberries, persimmons, walnuts, chestnuts, plums, dwarf chinquapins and plums (*Prunus chicasa*) as a mainstay of their diets. Excess food produced in these plots was often served at large communal gatherings.



Archaic Hunters Using Atlatls

Image: <https://www.texasbeyondhistory.net/ceremonial/images/hafted-about.html>
Painting by Nola Davis, courtesy Lubbock Lake Landmark



Woodland Hunter with Bow and Arrow

Image: <http://associations.missouristate.edu/mas/macquest/ArchOverview/WeaponChange.html>



Illustration of Early Woodland Period Village

Image: <http://www.nativehistoryassociation.org/woodland.php>

¹ Jack Schock, “A Cultural Reconnaissance of Approximately 530 Acres for the Proposed Gateway Project at Donelson, In Davidson County, Tennessee,” Archeological (Bowling Green, Kentucky: Arrow Enterprises, March 1989) 10-11

² Metro Parks Nashville, “Two Rivers Mansion Master Plan”. Report (Nashville, TN: Metro Parks, November 2016). 22-25.

³ “Middle Tennessee’s Native American History: The Mississippian Period”. <<http://www.nativehistoryassociation.org/mississippian.php>> Access date: 12 May 2017.

Settlement in the Nashville Basin

Nashville's Natural Advantages

The geological substrate in the Nashville Basin created special conditions that made the site an attractive place to both animals and people. The underlying limestone dissolves easily allowing ground to interact with water in unusual ways, creating natural springs and salt licks.

The city of Nashville was the site of the Great Salt Lick, (French Lick, later Nashville) an area directly West of the Cumberland River, where mineral deposits attracted game in search of minerals missing from their regular diets. These herds of buffalo, elk, and deer in turn attracted people to hunt them. Numerous locations along the game paths throughout Davidson County show signs of early human habitation in the area by the Mississippian mound-building culture that vanished before European settlement.

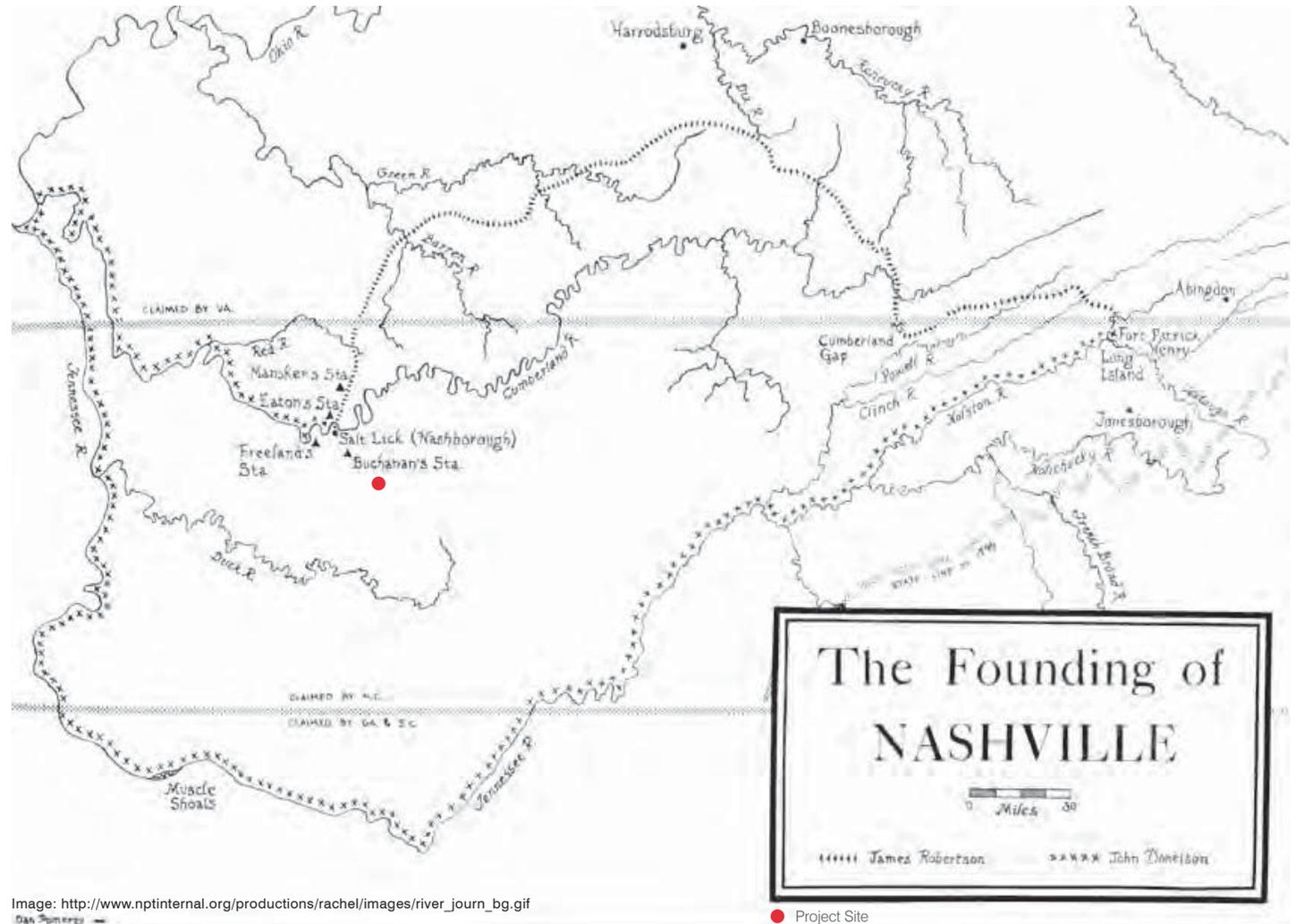


Image: http://www.nptinternal.org/productions/rachel/images/river_journ_bg.gif

● Project Site

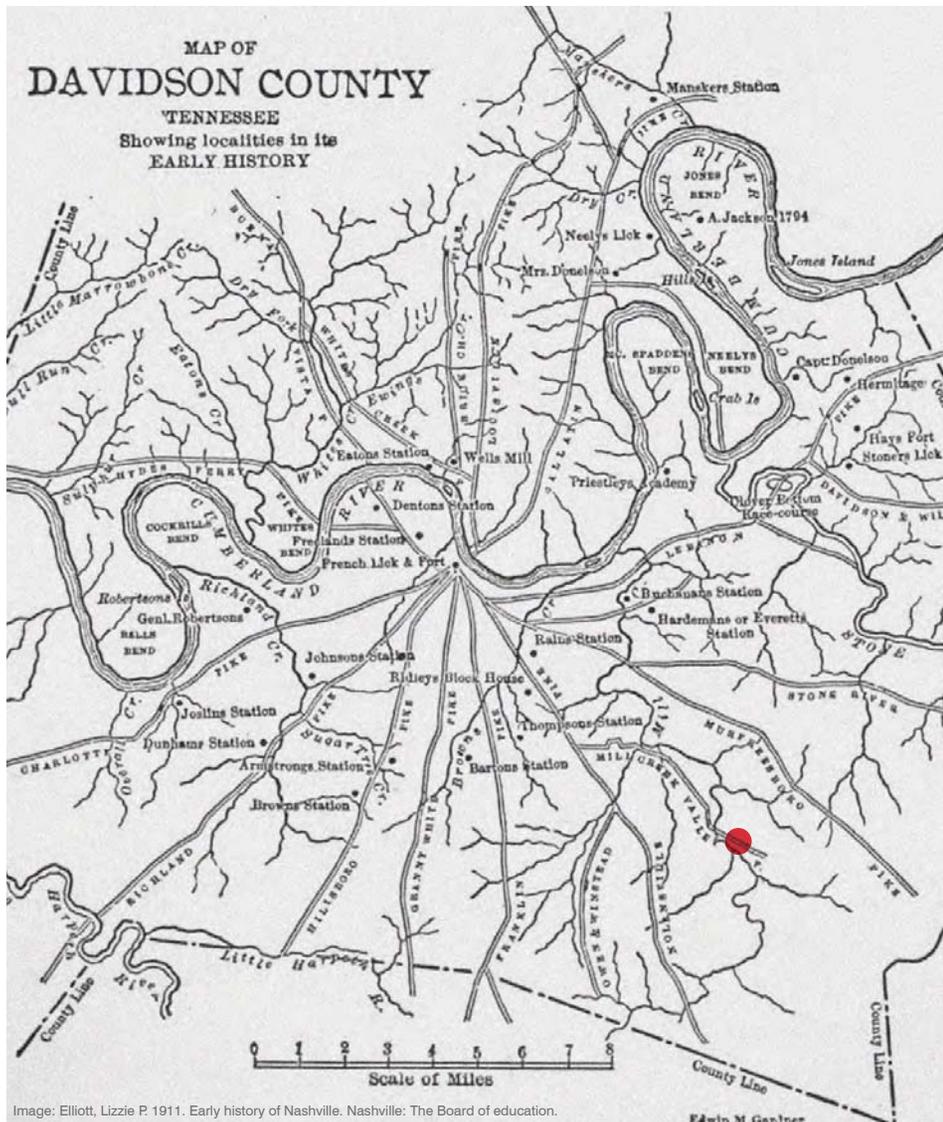


Image: Elliott, Lizzie P. 1911. Early history of Nashville. Nashville: The Board of education.

Settlement Patterns of Nashville

● Project Site



Range of the American Buffalo in 1600 CE

Map Jeffrey L. Ward, 2008

As the first white settlers began to populate the area, they recorded the types of vegetation and game they encountered. One account from A. W. Putnam (circa 1780) describes a Sulfur Spring at Freeland's Station (just north of French Lick) stating that it was "open-- freed from trees and underbrush by the innumerable buffalo and deer and elk that came to these waters."¹

In early land warrants for the area the terms 'buffalo trace,' 'buffalo path,' 'buffalo run,' 'buffalo road,' or 'buffalo trail' are used frequently to describe the locations and thoroughfares created by passing herds of buffalo.² The settlers continued to use historic game paths to travel throughout the region, and today major transportation routes lie along these same paths.

Located twelve miles southeast of Nashville, one of these game paths led south along Mill Creek to the Antioch area, then called Mill Creek Valley, and eventually it became known as Antioch Pike. The name for the town originated from the name of a church located near Mill Creek in 1810.³

1 Clements, Paul. Chronicles of the Cumberland settlements, 1779-1796. Place of publication not identified: P. Clements, 2012. Print. 146. 543.
 2 *Ibid.*, 543.
 3 Nashville Next: Antioch/Priest Lake Community Plan. Rep. Metropolitan Nashville-Davidson County Planning Commission, 22 June 2015. Web. 10 Mar. 2017. 10.

Evolving Agricultural Practices

Pre-Colonial Grass Farmers

Native peoples of the Cumberland River Valley were known to grow some indigenous grains, like Chenopod, Maygrass, and Little Barley. Grasses which grew well in the mineral laden limestone soils of the Nashville basin, including Andropogon, Erianthus, Panicum, and Sporobolus supported the grazing of wild ruminants that enabled hunting.

Prior to the arrival of Europeans, native grassland communities were prominent largely due to thousands of years of using fire as a land management technique by Native American peoples. The use of fire helped to promote diversity of plant life within the Native American savannas.¹

One native plant that was common to the community was river cane (*Arundinaria gigantea*), which is a wetland plant that tolerates wildfire, and can be maintained by a normal fire regime. Within the Southeast United States, cane breaks were once a common feature in the landscape, but are now an endangered ecosystem.² In numerous accounts from early settlers, cane breaks are mentioned. These were often used to hide within, both by Indigenous people and settlers. The Cane Ridge Community within Antioch is named for the cane breaks that existed. Cane breaks have been found within interior portions of the Southeast Davidson park site.

Post European settlement, use of fire to maintain open lands was drastically reduced, and forests infilled the open areas, although, some settlers did adopt similar practices of burning and clearing land for agricultural use. The combined activities of Indigenous people and Europeans created a series of open habitats, including savannas, barrens, and prairies.³

¹ The Tennessee Wildlife Resources Agency Strategic Plan 2014-2020. Rep. N.p.: TWRA, 2014. Print.9.

² "Arundinaria gigantea." https://en.wikipedia.org/wiki/Arundinaria_gigantea. Accessed 5/25/2017.

³ *Ibid.*, 9-13.

Native Grasses



Andropogon



Erianthus



Panicum



Sporobolus

Indigenous Grains



Chenopod



Maygrass



Little Barley

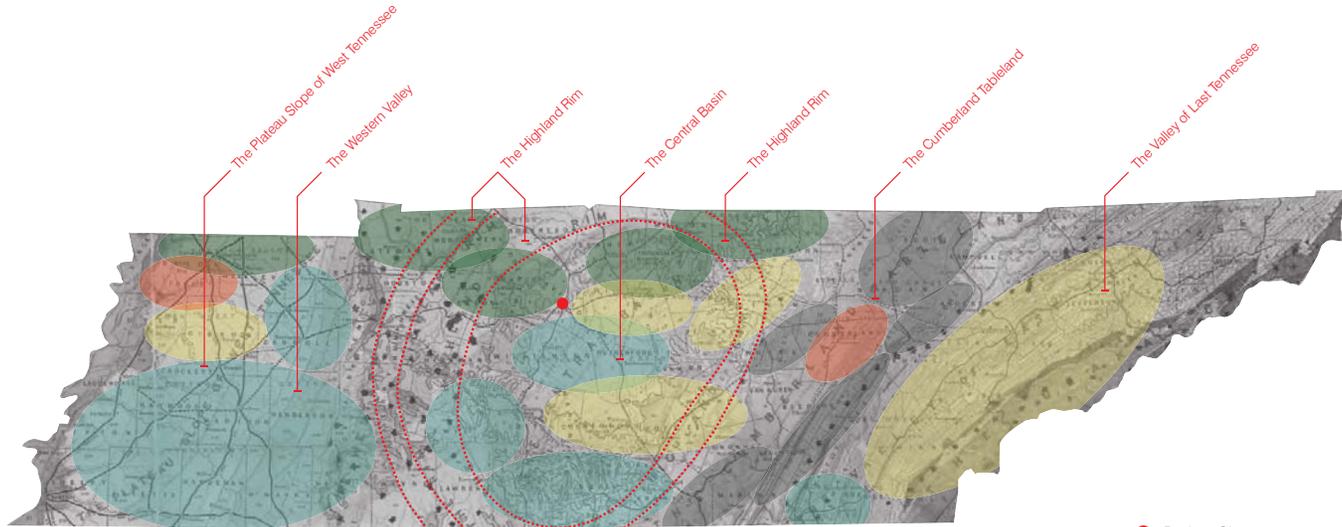


River cane



Grass fire being started

Painted by Frederic Remington, (no changes made) https://commons.wikimedia.org/wiki/File:Frederic_Remington_The_Grass_Fire.jpg



- cotton
- coal
- fruit
- tobacco
- corn, wheat, and cereals

Agricultural and Geological Map of Tennessee, 1877
 from "Tennessee: Its Agricultural and Mineral Wealth"
 by Joseph B. Killebrew, Tennessee Commissioner of Agriculture

Agricultural and Geological Map of Tennessee, 1877
Agricultural and Geological Map of Tennessee, 1877 with crop types color-coded

Settlement Brings New Ways to Farm

As European settlers began to enter the Nashville area around 1780, they brought agricultural practices with them and continued to use historic game paths leading through the hills surrounding the city to the Great Salt Lick.

Settlers in the Nashville area often arrived to partially wooded lots, and commenced clearing these sites by removing small trees and girdling larger trees. These settlers often grew grains like corn and later wheat, and brought animals like hogs, horses and cattle with them to support farm operations.

As the Nashville area became more settled and connected to the outside world first via water and later via rail networks, larger scale agriculture of cotton, tobacco, and cereals became more prevalent. In the Southern Nashville basin, soils over blue-fossil limestone deposits proved suitable for large-scale cotton production. Alluvial soils around rivers supported the production of corn, wheat, and other cereal crops. Tobacco became a major crop in the northern part of the basin along the Highland Rim.



"Three Sisters", Beans, Corn and Squash grown in unison



Fruit and Nut Trees



Typical forest clearing Farmstead

Otto, J. S. "The Decline of Forest Farming in Southern Appalachia." *Forest & Conservation History* 27, no. 1 (January 1, 1983): 18-27. doi:10.2307/4004858.

Antioch and Holloway Farm

The land along Mill Creek became known as Antioch around 1820, when a large land owner, Charles Hays, donated the land to build a church located at the modern-day convergence of Antioch Pike, Hickory Hollow Parkway, Blue Hole Road, and Mt. View Road.¹

Antioch's large expanses of farmland did not see much development until construction began on Old Hickory Road (Antioch Pike) in the 1840s. Soon after, construction began on the Nashville & Chattanooga Railroad, which first passed through the town in 1851.²

It was around this time that James and Martha Gray Holloway purchased a parcel of property along Old Hickory Road. According to the Agricultural Census of 1850, James Holloway owned 400 acres of land in the area. As a 'general farmer' he produced several commodities, which included crops such as corn, wheat, and potatoes. The livestock on the farm included swine, sheep, as well as a few cows and horses.³

When the Holloways settled here in 1850, they had two young children and owned 32 slaves. Their daughter, Sara Jane "Sally" Holloway (Baker), is pictured on the right. One of the enslaved women living there at the time was a house servant by the name of Angeline Holloway (Battle). Shortly after the Civil War ended in 1878, Angeline married Henry Battle, a former slave from the Henry Battle Farm. One of their children was Janie Battle (Gooch) who married Ike (Isaac) Gooch in 1904.

Over the next three decades, the Holloway family would remain as general farmers, growing similar crops and livestock. Mr. Holloway died at the age of 80 in 1898, but the Holloway Farm was not sold to the Moore Family until 1919. A graveyard for the Holloway family exists near the Moore homesite. Evidence of burial sites for other landowners as well as their enslaved workers can be found at various locations throughout the park site property.

¹ Nashville Next: Antioch/Priest Lake Community Plan. Rep. Metropolitan Nashville-Davidson County Planning Commission, 22 June 2015. Web. 10 Mar. 2017. 10.

² Marshall, Christine Cole., and Joy Marshall. With good will and affection-- for Antioch: reminiscences of Antioch, Tennessee. Franklin, TN: Hillsboro Press, 2002. Print. 1-6.

³ Agricultural Censuses of 1850, 1860,1870, 1880 and Slave Censuses of 1850, 1860. Ancestry.com.

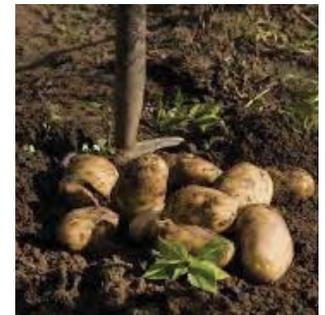
**The information provided has been extracted from student thesis research by Jenny Andrews, a student of the Middle Tennessee State University Center for Historic Preservation.*



Martha Gray Holloway (1824-1885)

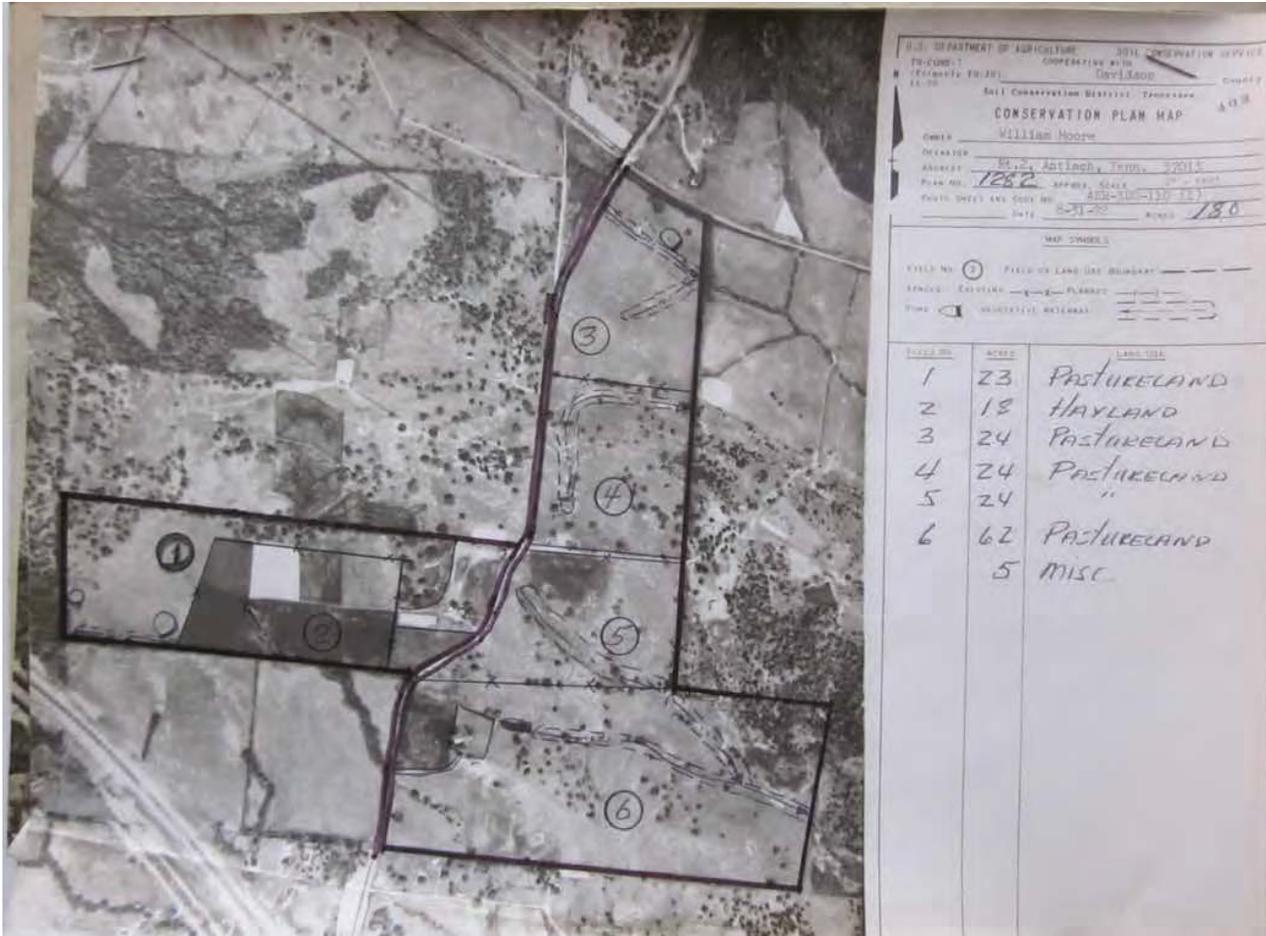


Sara "Sally" Jane HOLLOWAY (Mrs. Andrew J. BAKER) 1853 -



Moore Barn and Milk House with Sheep and Chickens

Moore Farm



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE
 COUNTY: Davidson
 SOIL CONSERVATION DISTRICT: TROTSBAND
 CONSERVATION PLAN MAP
 OWNER: William Moore
 ADDRESS: Rt. 2, Antioch, Tenn. 37013
 PLAN NO.: 1282 APPROVED SCALE: 1" = 400'
 DATE: 8-31-72 ACRES: 180

FIELD NO. ① FIELD TO LAND USE BOUNDARY
 RENCE: EXISTING PLANNED
 TYPE: A UNDESIRABLE MATERIAL

FIELD NO.	ACRES	LAND USE
1	23	PASTURELAND
2	18	HAYLAND
3	24	PASTURELAND
4	24	PASTURELAND
5	24	"
6	62	PASTURELAND
	5	MISC.

Aerial of Moore Farm 1972

In 1919, John Henry Moore (1889-1964) and his wife Audrey Williams Moore (1895-1975), purchased the Holloway Property. They had four children: Evelyn Moore Sanford (1919-2011), who married and became a school teacher at Donelson Elementary; Aileen More Williamson (b. 1921), who became a homemaker; Mary Moore (b. 1924), who had a career with an insurance corporation; and William "Billie" Moore (1931-2008), who took over the family farm.

Initially the Moores were general farmers, similar to the Holloways, and they grew various crops and raised several types of livestock (sheep, hogs, cows, horses, mules, chickens). They also had a large vegetable garden near the Holloway Cemetery. Their neighbors recalled that it was a big garden, and it can be seen in old aerial photos.

By 1930 the farm was identified as a "dairy farm" in the Agricultural Census. There was a general shift in the state to dairy farming because it was a more profitable business model, and it became less profitable to grow crops unless you owned several hundred acres of land. But they also continued to raise livestock like sheep, hogs, and cattle (as shown in photos and farm ledgers). John Henry Moore also bred Tennessee Walking Horses as a hobby.

In 1931, the Moores commissioned the draftsman, Claud Allen Woodall, from the George D. Waller Architectural Firm (the architects of the historic Stone Hall Mansion in Donelson, TN) to build a home. At the time, the Moores would have been considered very modern, as the bungalow style was cutting edge, and most of their neighbors did not have running water or indoor bathrooms. Even after building this modern house, the Moores continued use of their outhouse and water well.

*The information provided has been extracted from student thesis research by Jenny Andrews, a student of the Middle Tennessee State University Center for Historic Preservation.

Moore Farm

Laura Gooch Wilson (1853-1936) lived around the same time as Ike Gooch, and they may have been siblings, (although the 1870 Census record lists two Isaac Gooches). Laura Gooch married James Joseph Wilson (1853-1894), however he eventually died and left her widowed with twelve children. Despite this fact, the 1900 Census states that Laura owned her house, could read and write, and had five school-aged children living at home.

The 1910 Census confirms that Laura owned her farm and that many of her children and extended family lived with her. Eight of them were recorded as laborers working on a 'home farm.' On the right is a photo of one of Laura's sons, Otis, working on the farm.¹

Around 1940, Janie Battle Gooch (1882-1956) operated a laundry business from her home, while her husband Ike Gooch worked as a farm laborer on the Moore Farm. It was common for African-Americans in the region to work as farm laborers, and this trend spurred the Great Migration, which was a period when many African-Americans moved to cities for work. In 1947, Ike and Janie moved their family to Nashville, where she became a house keeper and Ike was a laborer.²

When John Henry Moore's son, Billie, took over farm operations, it became a "cattle farm." It is likely that this occurred in the 1950s, as new standards for pasteurization of milk required the purchase of expensive equipment. His father remained involved in the day to day operations. There are accounts of his clover fields being spectacular, and they were used to feed the cows and sheep. Harry Burkitt, who grew up on a farm near the Moores remembers that Billie Moore primarily kept his cattle on the south side of Old Hickory, and grew crops like hay, and clover on the north side of the road near the Moore Bungalow House.

¹ Research from MTSU Student Thesis Work by Jenny Andrews.

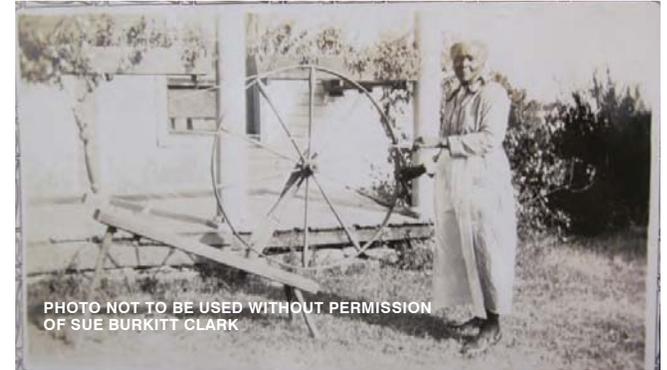
² *Ibid*



Moore Bungalow House Built in 1931



Billie on a Pony at Moore House, circa 1940



Laura Gooch Wilson with Spinning Wheel



Laura's Son Otis Wilson, circa 1915

Cane Ridge's African American Community

Page No. 9
 Section 1. Inhabitants in 6th District in the County of Davidson
 enumerated by me on the 21 day of June, 1870.
 Post Office: North Thomas

No.	Name	Sex	Age	Color	Profession, Occupation, or Trade	Place of Birth	Value of Real Estate		Value of Personal Estate		Whether deaf and dumb, blind, insane, or idiotic
							Land	Improvements	Real Estate	Personal Estate	
12	Beth Lee	F	54	W	Domestic	Moore	500	500			
13	John Lee	M	50	W	Domestic	Moore	500	500			
14	John Lee	M	45	W	Domestic	Moore	500	500			
15	John Lee	M	40	W	Domestic	Moore	500	500			
16	John Lee	M	35	W	Domestic	Moore	500	500			
17	John Lee	M	30	W	Domestic	Moore	500	500			
18	John Lee	M	25	W	Domestic	Moore	500	500			
19	John Lee	M	20	W	Domestic	Moore	500	500			
20	John Lee	M	15	W	Domestic	Moore	500	500			
21	John Lee	M	10	W	Domestic	Moore	500	500			
22	John Lee	M	5	W	Domestic	Moore	500	500			

Census records from 19th and 20th centuries show a racially diverse neighborhood



Students at the African American school in Cane Ridge

African Americans have been a stronghold of the Cane Ridge community since its settlement in the early 1800s. The 1850 slave census lists 47 African Americans living on the properties of three white landowners.¹ Several enslaved people were buried in the Austin Cemetery and it is likely that other African American gravesites exist on park property. Enslaved people were integral to agricultural production on the site of Southeast Regional Park and their descendants continued to rent homes, work on the white-owned farms, and establish their own businesses in the area.

In 1871, one acre of land was purchased by Common School Commissioners for an African American school. This land also became the site of Olive Branch Church, which was destroyed by arson in 1968 during the Civil Rights Movement. The congregation held services at Cane Ridge School until a new church was completed in 1972. As the Cane Ridge neighborhood has urbanized, the African American community has remained strongly rooted and has helped integrate an even more diverse group of neighbors into Southeast Nashville.

Research from MTSU Student Thesis Work by Jenny Andrews' "Moore Farm and Southeast Park Heritage Development Report"



Gravestone at a family cemetery on site



Community members at Olive Branch Church



Olive Branch Church in the 1970s

The Legacy of Land Use

One side effect of centuries of farming in Tennessee was the drastic reduction of upland forested areas. The combination of converting of forests to agricultural fields and pastures, lumber production, and clearing forests for strip mining over-exploited the state's forest resources.

Throughout the 1950s, Antioch went through a period of infrastructure building and suburbanization that began to change the landscape. In the 1990s and 2000s, the community experienced a housing boom. Antioch was desirable because of the agricultural landscape and rolling hills, as well as easy access to downtown Nashville and commercial shopping. During this period, many 'big-box' retailers found homes in Antioch, which further altered the rural farm landscape.¹

In 2015, Metro Parks of Nashville purchased the Moore Farm and several adjacent properties as a result of the Nashville Next planning effort. The department has been working for several years on land acquisition to create a park for the southeast portion of Davidson County. The Moore Farm and properties will be central to this effort.

Additional information pertaining to the cultural and natural history of the land that will become the Southeast Davidson Regional Park can be found within the Heritage Development Report written by Jenny Andrews and presented by the Center for Historic Preservation at the Middle Tennessee State University, Spring 2017 (http://www.mtsuhistpres.org/wp-content/uploads/2017/09/Moore-Farm-Heritage-Dev-Report_Web.pdf)



Moore Bungalow House, present day

¹ Nashville Next: Antioch/Priest Lake Community Plan. Rep. Metropolitan Nashville-Davidson County Planning Commission, 22 June 2015. Web. 10 Mar. 2017. 10.

Site Analysis | Hydrology



Small perennial and ephemeral creeks run throughout the site. The most significant is Collins Creek, which runs north/south and crosses the TVA easement. Other smaller creeks exist east of Old Hickory Boulevard and divide the future park into distinct landscape rooms.

Small natural and man-made ponds are found throughout the site, particularly in the areas where farm activities have occurred. While most of the ponds appear to be fairly stagnant, there are several that appear healthy, including the large pond east of Old Hickory Boulevard near the red barn. A thorough stream assessment for the site is highly recommended.

Hydrology

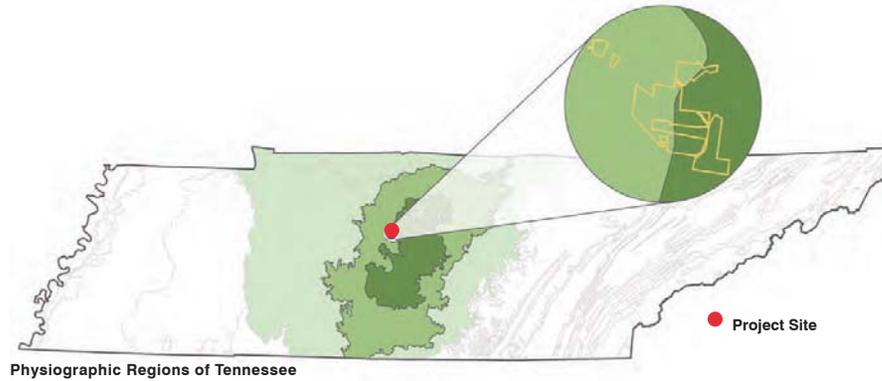
- Ponds
- ▨ 100 yr floodplain
- Streams
- Surface flow
- Watershed Divide

0' 600' 1200' 2400'



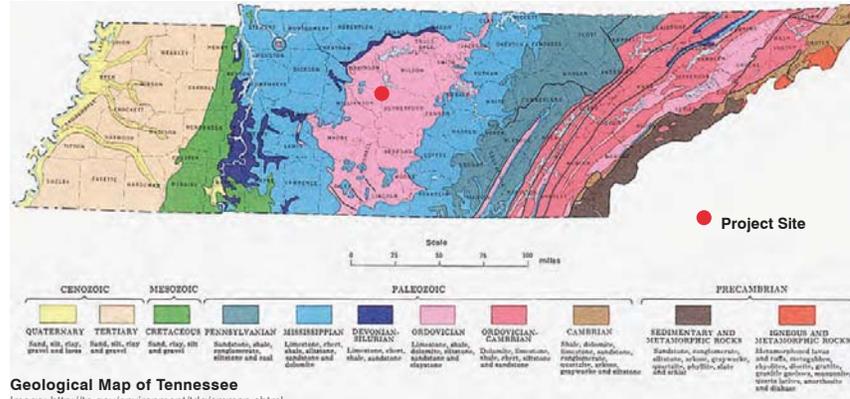
Geology and Soils

The land in Davidson County was formed around 400 million years ago. The accumulation of sea life created the fossil-rich limestone the city sits upon. As the sea retreated, newer layers were deposited on the land. As the area sat on a shallow continental shelf, deposits of algae formed shale. Later, as rivers covered that layer with silt and clay, silt stone was formed. Three hundred and thirty million years ago, the three layers folded into a broad up warp called the Nashville Dome, which eroded away, exposing the limestone substrate below. Landforms on and around Nashville reflect this underlying geological structure.



Physiographic Regions of Tennessee

The Southeast Davidson Regional Park site lies on the edge of the Outer Nashville Basin, bordering the Inner Nashville Basin. The whole of the basin is underlain primarily by limestones from the Geologic Ordovician Period. The geologic deposits found within the site are Ordovician Age and include limestone/shale, limestone/bentonite, calcarenite/limestone, and shale/limestone. It is derived from the Bigby-Cannon formation that is common in the area. Today, limestone outcrops can still be found in various areas of the site.

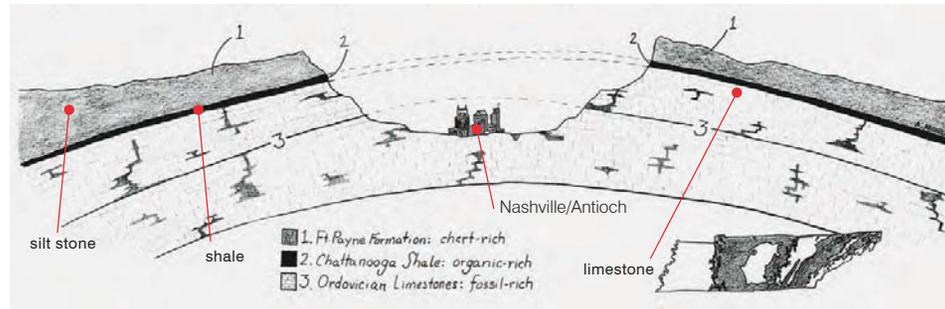


Geological Map of Tennessee

Image: <http://tn.gov/environment/tdg/smmmap.shtml>

Geologically the site is made up of limestone or limestone mixtures which is consistent with the region. The presence of outcroppings and sinkholes are typical to areas with a rock outcrop complex noted in dark purple. These outcrops correlate with the ridges and high points on the site.

The areas noted in orange are silty loams and have the description of prime farm land. Many of these areas are along low lying waterways.



Conceptual Section of Nashville's Geology

Image: <http://www.vanderbilt.edu/ees/geologywalk.php>



Bigby-Cannon formation on Cumberland River



Limestone formation on site



Limestone Outcropping on site



NRCS Soil Survey (2015)

- | | |
|------|-----|
| AmB | LoB |
| AmC3 | MmC |
| Ar | MrD |
| BbD | RtC |
| BvB | StC |
| ByB | StD |
| GdC | TbC |
| HmC | TrC |
| HmD | MrE |



Soil Types

- Prime farmland
- Silty loam but not prime farmland
- Rock outcrop complex



Topography

Within the boundaries of the site, the change in elevation is from 533 feet to 840 feet above sea level. The higher elevations at the site are predominately within the interior portions running north to south. As one travels to the center of the site, distant views beyond the site can be seen. The more level areas of the site are to the east which have largely been associated with farming over time.

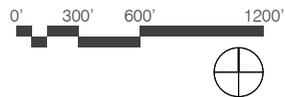
The areas noted in orange on the opposite page are silty loams and have the description of prime farm land. Many of these areas are along low lying waterways.

Topographic features

-  Ridgeline
-  Highpoints
-  Lowpoints

Elevation (ft)

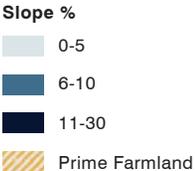
	533-540
	541-560
	561-580
	581-600
	601-620
	621-640
	641-660
	661-680
	681-700
	701-720
	721-740
	741-760
	761-780
	781-800
	801-820
	821-840



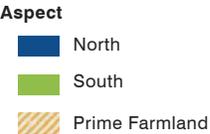
Prime Farmland, Aspect & Accessible Slopes



Slope Analysis Overlay



Solar Aspect Overlay



A slope analysis done at the site shows a prevalence for gently sloping areas throughout. Steeply sloped areas are isolated to the ridge in the center of the site and the outparcel adjacent to Cane Ridge Elementary School.

Overlays of the soils and the slope analysis reveal two large gently sloping areas that may provide ideal soil conditions for growing row crops.

Another overlay of the solar aspect analysis confirms the potential suitability for productive gardens.



Plant Communities

Tennessee's Native Plant Communities

Due to its geology of exposed limestone, the land within The Southeast Davidson Regional Park site is host to the unique Cedar Glade plant community, which includes sedum and prickly pear, as well as several other plants adapted to these conditions, such as river cane (cane break ecosystem) and milkweed.

Ecologists in the 1860s described the Nashville Basin Cedar Glades as open exposed bedrock openings surrounded by dense forests of large red cedar. To modern ecologists, these descriptions are evidence that red cedar forests are a natural part of the glade ecosystem.¹

The Ridge and Valley Grassland consists of parallel valleys separated by long straight ridges. This plant community stretches from Alabama to New England. Savannahs found on deep soils have largely disappeared, however, savannas on rocky soils, such as the limestone glades and barrens found in Middle Tennessee, have survived as they were simply too rocky to plow.²

Native peoples burned some forests to create and maintain grasslands and open woodlands for game animals and 'food producing plants.' These grasslands served as important migration routes—the savannah highway—during the early European settlement of Middle Tennessee. As farming became mechanized, land became more intensively farmed and this eliminated many areas of native grasslands. Gradually, these historic grassland plant communities in Tennessee have become forested or open pasture for hay and cropland.³

The limestone glades of central Tennessee support more than 20 endemic plants. These glades were once embedded in oak savannas that are now nearly extinct.⁴

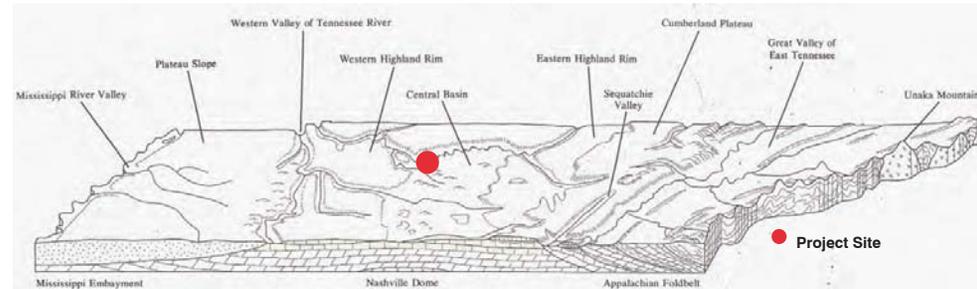
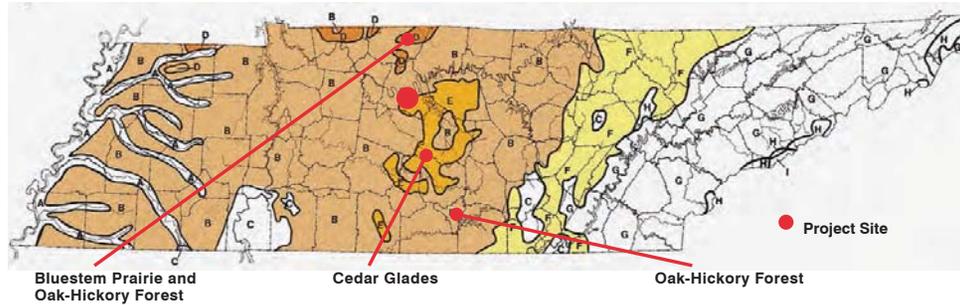


Image: Gallant, Roy A., and Anne Canevari Green. 1986. *Our restless earth*. New York: F. Watts. preface



Milkweed (native species)



River Cane (native species)



Prickly Pear and Sedum (invasive species)



Glade/Barren Plant Community: Mature Cedar Glade on site



Mixed Hardwood Forest on site

1 Southeastern Grasslands Initiative. Austin Peay State University, 2017. Print. 14-15.

2 *Ibid.*, 14-15.

3 The Tennessee Wildlife Resources Agency Strategic Plan 2014-2020. Rep. N.p.: TWRA, 2014. Print.9.

4 Southeastern Grasslands Initiative. Austin Peay State University, 2017. Print. 14-15.



Plant Communities on Site

Due to the fragmented nature of the Southeast Davidson Regional Park site, there are few cohesive and robust ecological communities to be found. Furthermore, the extensive reach of Nashville's metropolitan area has had a major impact on the region's agricultural landscapes and wild areas that are home to many numerous plant and animal species. Creating healthy habitat and improving wildlife corridors is an essential goal of the site's master plan. Preservation of these areas and resources presents opportunities to highlight unique aspects of the Middle Tennessee landscape.

The primary plant communities found on site include fragmented woodlands within the center of the site, former farm fields which have largely become meadows and remnant hedgerows from past agricultural land uses. A few streams and ponds with wetland plant species are found throughout the site. The site contains examples of mixed hardwood forest, as well as groves of eastern red cedar.

The most significant plant communities that were visible to the design team during initial site investigation included cedar glades along the eastern parcel and cane breaks within the central portion of the site. Additionally, during the site reconnaissance phase, the design team discovered various locations where daffodils were present. According to Jenny Andrews, a student of history with the MTSU Historic Preservation program, these daffodils serve as cultural traces of former homesteads where men and women once lived. A more thorough investigation of the existing natural resources on site is highly recommended.

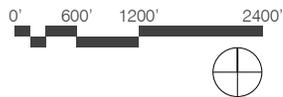
Existing Structures & Land Use

Land use at the site is largely defined by its cultural resources. Most of the existing structures that remain relay the farming legacy of the Moore family including the 1931 bungalow home, the 1945 ranch home of Evelyn Moore and her husband Joe Burns Sanford, a range of extant farm buildings, ruins of earlier homesteads, cemeteries, fields, fences, old roadways, and remnants of nineteenth-century railroad construction.

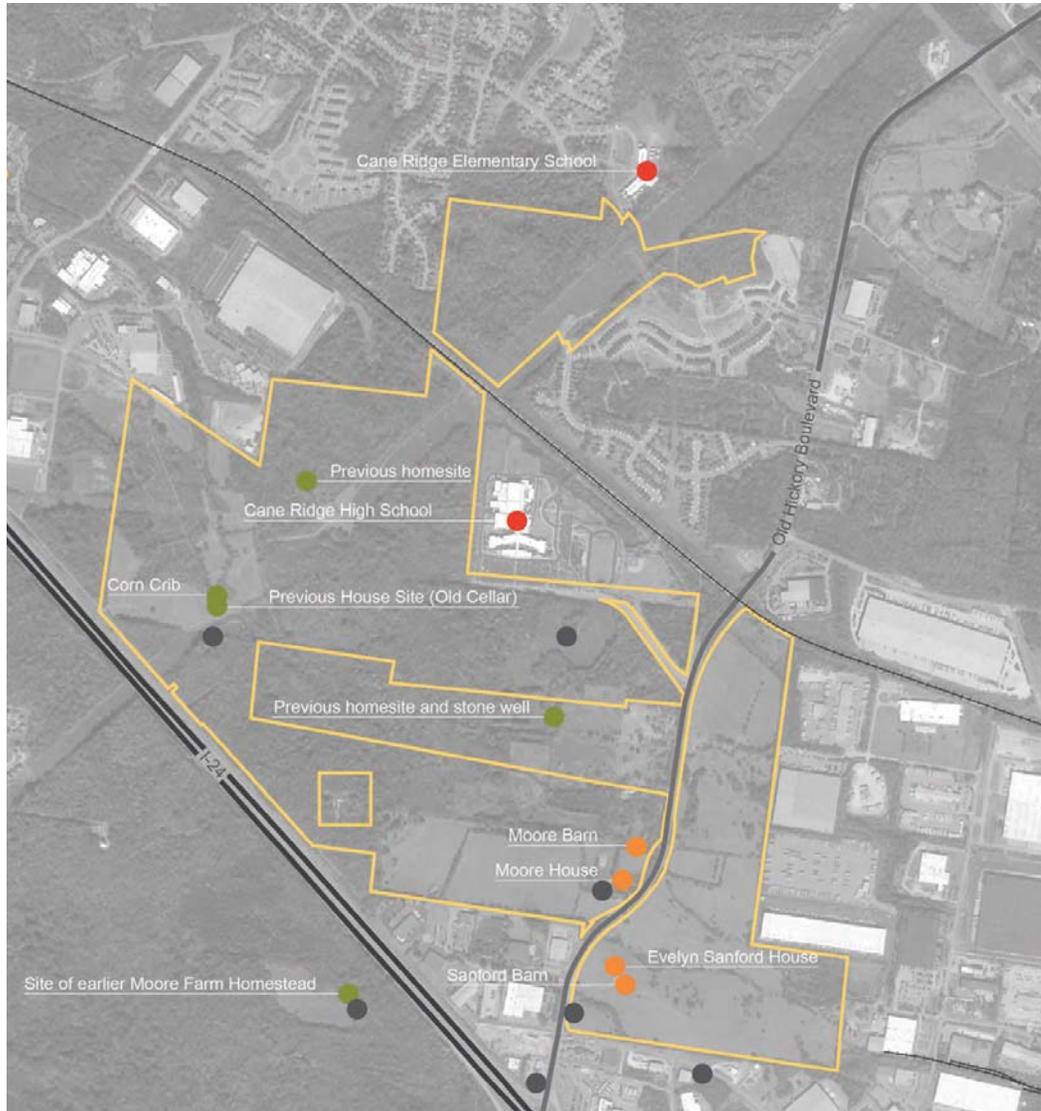
In addition to structures, the landscapes at both the Moore and Sanford homes include evidence of former gardens where daylilies, heirloom irises and other bulb species bloom.¹ Shrubs, trees, and vines can be found at both homes, lining the sidewalk to the Moore's front porch, and at the Sanford home still demarcating the drive that once led to the front of the antebellum Gambill house. Two large trees beside the Sanford home are potentially more than 100 years old.

The context beyond the former farming areas of the site are defined by infrastructure, utility, and transportation systems. A large TVA power corridor running southwest-northeast serves to connect the disparate parcels of the site. An engineered storm water management network is the defining feature of the northwest outparcels. Interstate 24 and a rail corridor define the northeast and southeast sides of the park.

¹ Heritage Development Report, Moore Farm and Southeast Park, Nashville, Tennessee. Presented by the Center for Historic Preservation Middle Tennessee State University, Spring 2017



Heritage Sites & Traces



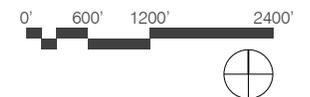
Legend

- I-24
- Railroad
- Cemeteries
- Moore family buildings
- Building sites
- Schools

In addition to the Moore Family, numerous other families lived and farmed on the site of the park, dating back to early settlement of the region.¹ The foundations of the Moore and Sanford homes reveal traces of previous antebellum houses belonging to former landowners. Further site reconnaissance has thus far uncovered evidence of at least six other locations of early dwellings. Several of those families are represented by cemeteries that exist within the park boundaries. Slave census records also suggest that the park contains additional gravesites of the enslaved.

Additional information pertaining to the cultural heritage of the land that will become the Southeast Davidson Regional Park and the broader community can be found within the Heritage Development Report written by Jenny Andrews and presented by the Center for Historic Preservation at the Middle Tennessee State University, Spring 2017 (http://www.mtsuhistpres.org/wp-content/uploads/2017/09/Moore-Farm-Heritage-Dev-Report_Web.pdf)

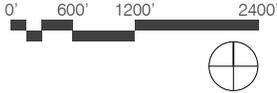
¹ Heritage Development Report, Moore Farm and Southeast Park, Nashville, Tennessee. Presented by the Center for Historic Preservation Middle Tennessee State University, Spring 2017



Key Viewsheds

Impressive interior views are abundant in the meadows of the eastern portion of the site. Long views are offered toward the rolling hills to the southeast and throughout the power easement corridors.

- Legend**
-  Interior view
 -  Exterior view
 -  Forest
 -  Cedar glade





1. VIEW THROUGH THE TVA POWER CORRIDOR



2. VIEW FROM THE BASE OF CELL TOWER HILL



3. VIEW TOWARD CELL TOWER HILL



4. VIEW NORTH WEST FROM THE MOORE PROPERTY



5. VIEW OF THE POND IN THE SOUTHEASTERN PARCEL



6. VIEW LOOKING SOUTH FROM THE NORTHERN END OF THE SOUTHEAST PARCEL

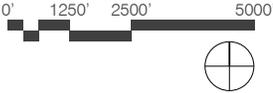
Circulation & Utilities | Existing Roads and Parking

Interstate 24 defines the southwest border of the site while Old Hickory Boulevard splits the eastern section of the site. Currently no roads provide access to interior portions of the site. Vehicular parking at the site is very limited if non-existent.

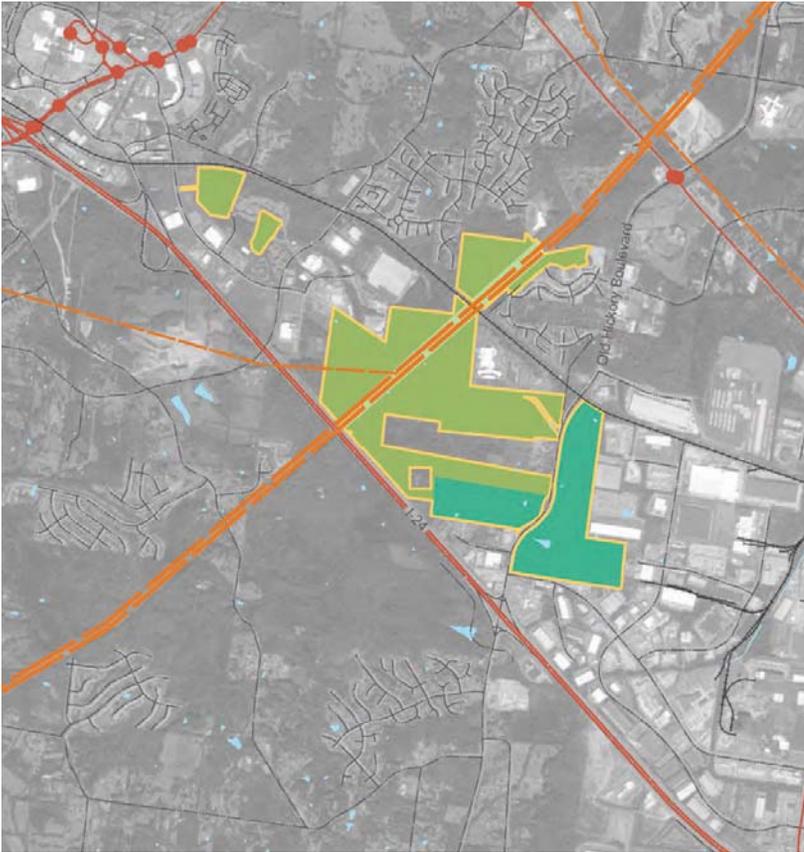
Refer to the Traffic Report within the appendix for further information on existing conditions.

Legend

- Existing vehicular access point
- Arterial boulevard
- Collector - avenue
- Neighborhood street
- Parking
- Buildings



Utility and Transportation Corridors



Public transportation to the site is limited with the closet MTA bus stop approximately 7 miles away. A TVA power easement commands a 300' right of way that cuts through the site in the southwest-northeast direction.

There is a lack of a regional trails in this section of Davidson County. The residential neighborhoods adjacent to the site to the north have sidewalks and are fairly walkable.

Transit system and ROWs

Conservation easement

Existing trails, sidewalks & bikeways

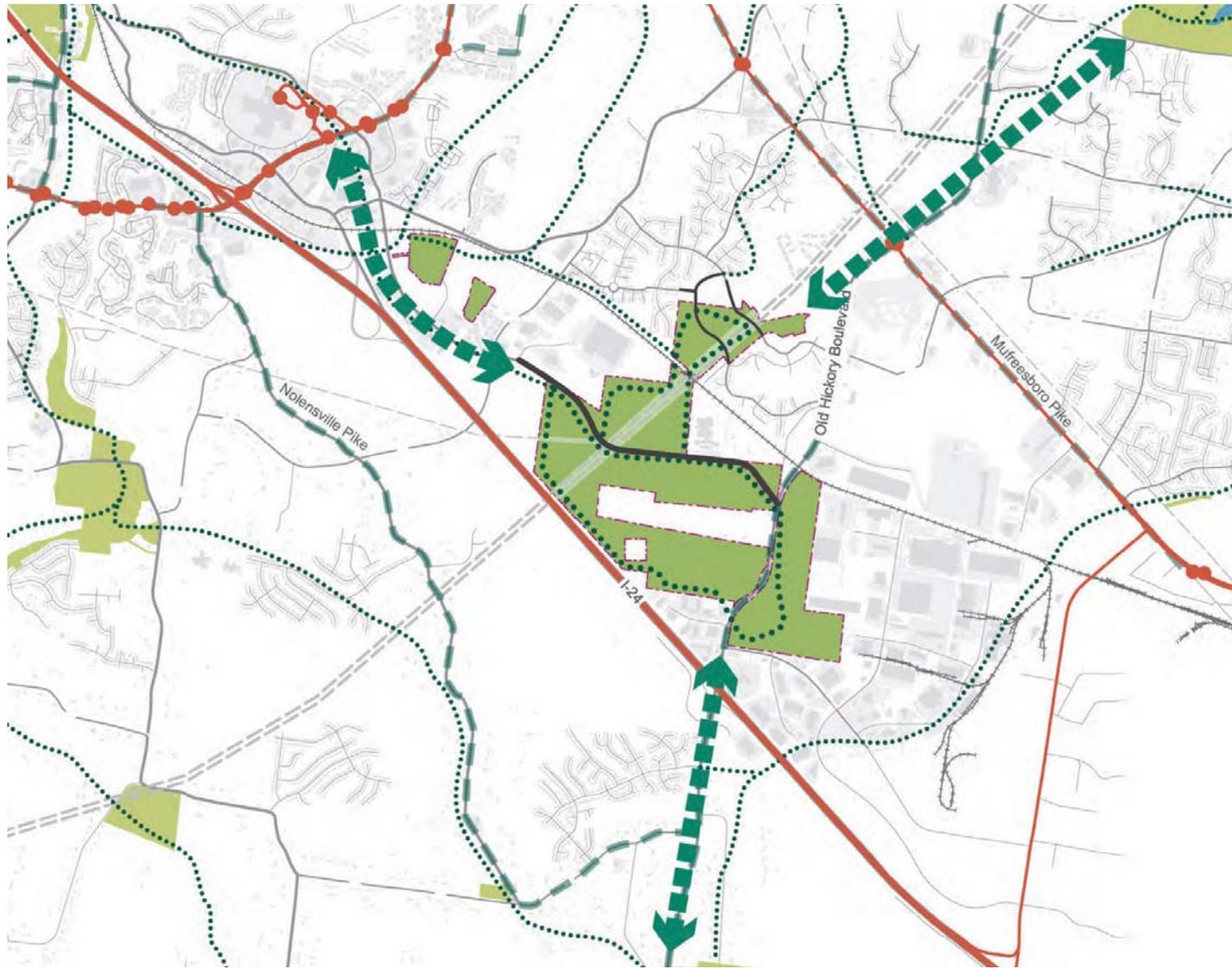
Bikeway

Trail network

Streets with a sidewalk

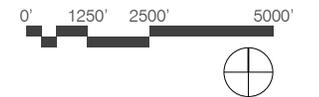
Stream

Planned Circulation



Legend

- MTA route
- MTA stops
- Proposed arterial boulevard (Crossings boulevard)
- Proposed collector avenue
- ⋯ Greenway Priority (Plan to Play)
- ⋯ Greenway Long Term Vision (Plan to Play)
- - - Long term bikeway connections
- Parkland
- TVA easement

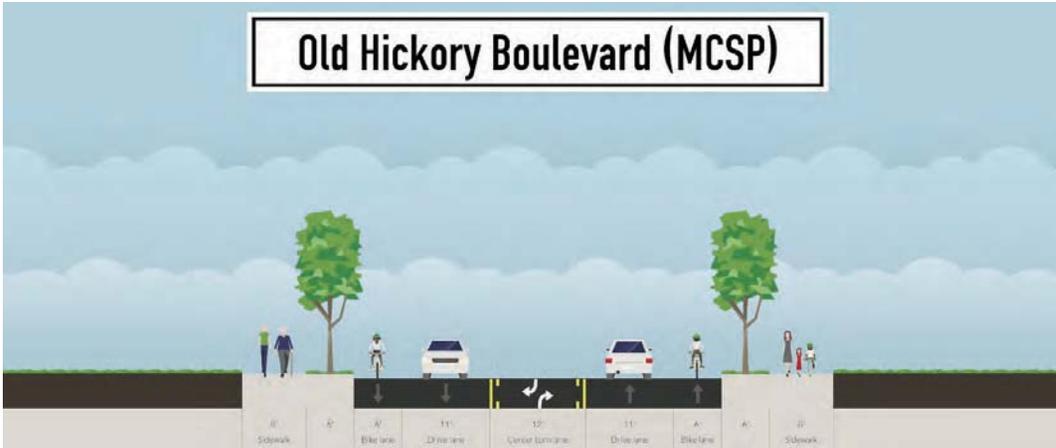




(diagram provided by Collier Engineering)

Crossings Boulevard Connection

The City's Major and Collector Street Plan (MCSP) identifies an extension of Crossings Boulevard through the Southeast Park site from its current terminus to the west at Old Franklin Road to the terminus of the Cane Ridge High School access, and connecting to Old Hickory Boulevard to the east. The MCSP calls for a 109-foot standard right-of-way for the Crossings Boulevard Extension with a designation T3-M-PAB4. Under the MCSP, the Crossing Boulevard Extension future cross-section would include two 11-foot travel lanes in each direction; a 24-foot landscaped median; and a 6-foot bike lane, 6-foot planting strip, and 8-foot sidewalk on each side.



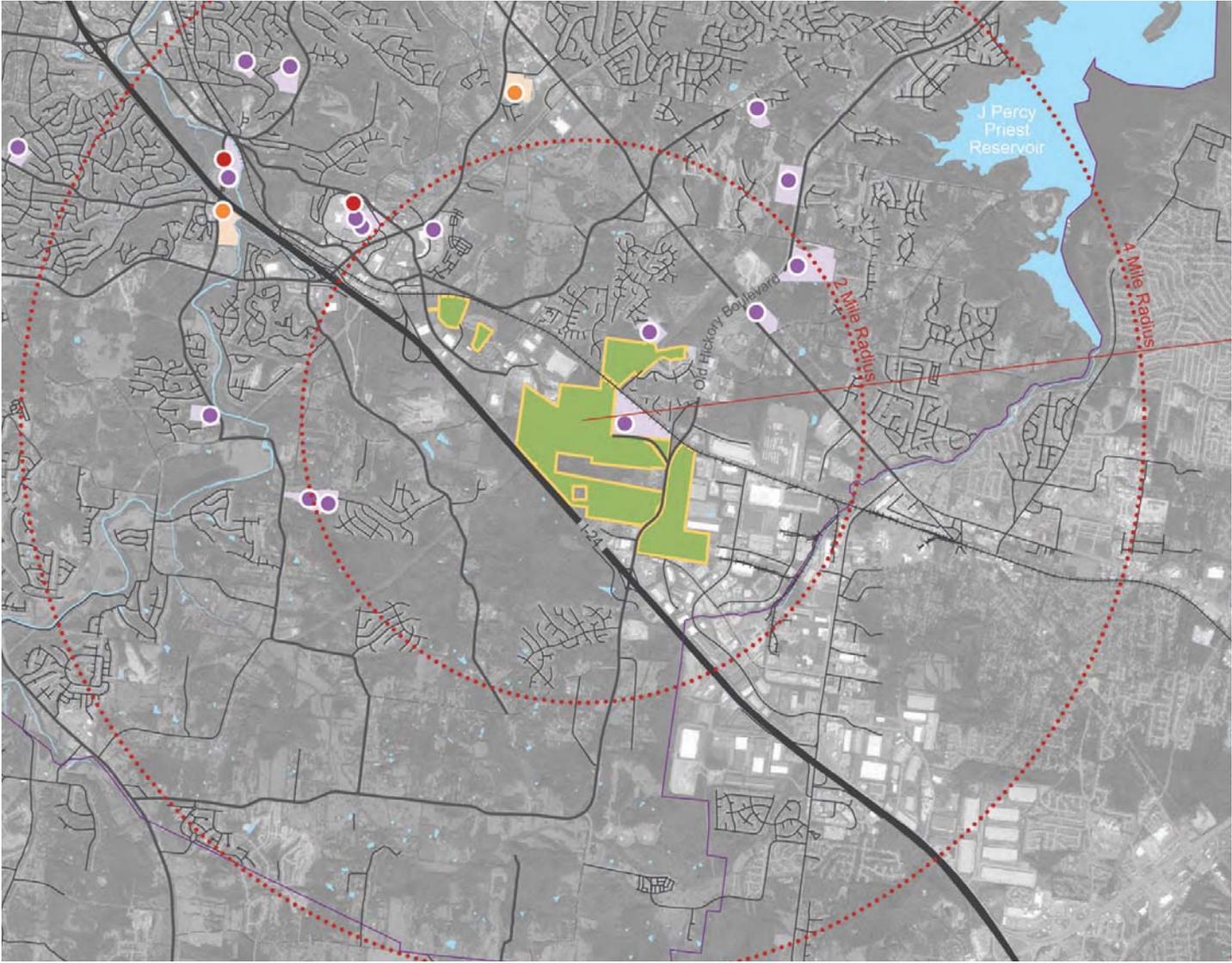
(diagram provided by Collier Engineering)

Old Hickory Boulevard

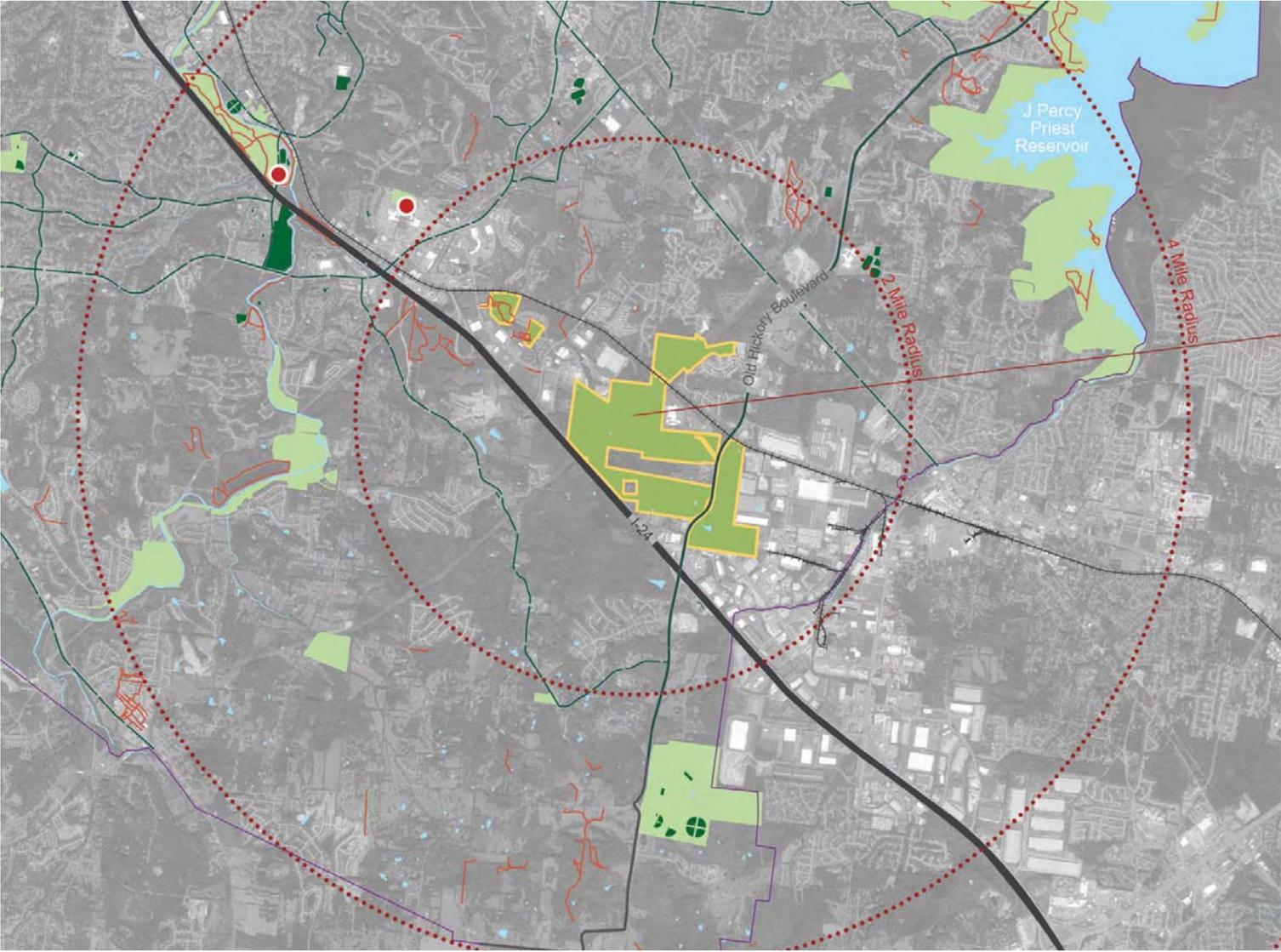
The City's Major and Collector Street Plan (MCSP) designates Old Hickory Boulevard as a T3-M-AB3-S with a standard cross-section of 74 feet. Under the MCSP, the future cross-section of Old Hickory Boulevard in the vicinity of the Southeast Park site would include one 11-foot travel lane in each direction; a center two-way left-turn lane; and a 6-foot bike lane, 6-foot planting strip, and 8-foot sidewalk on each side.

Community | Adjacent Schools and Education Centers

There are five schools within a 2-mile radius of the center of the site. Cane Ridge Elementary and High School are directly adjacent to the site.

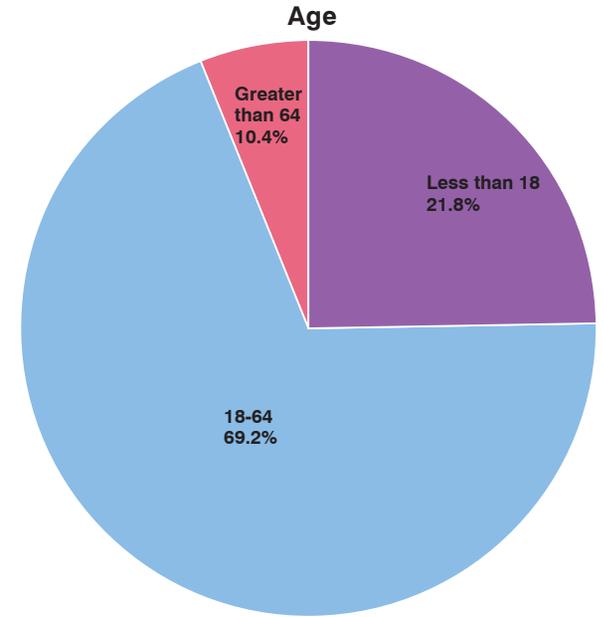
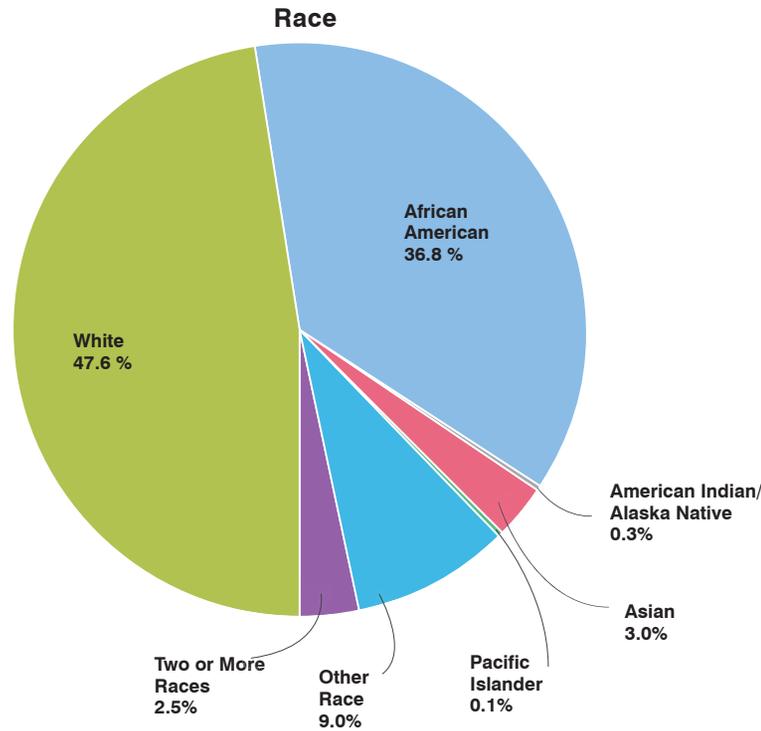


Adjacent Parks and Sports Fields



Demographics

The community surrounding the Southeast Davidson Regional Park is considered to have a large minority population within the Nashville metropolitan area. In addition, this area of the county has seen a large influx of New American communities who have come to live and work in the region. The racial and cultural diversification of this portion of Davidson County is expected to continue to grow as the migration to suburban communities continues.



Population change
1990-2000
37.2%

Population change
2000-2010
22.2%

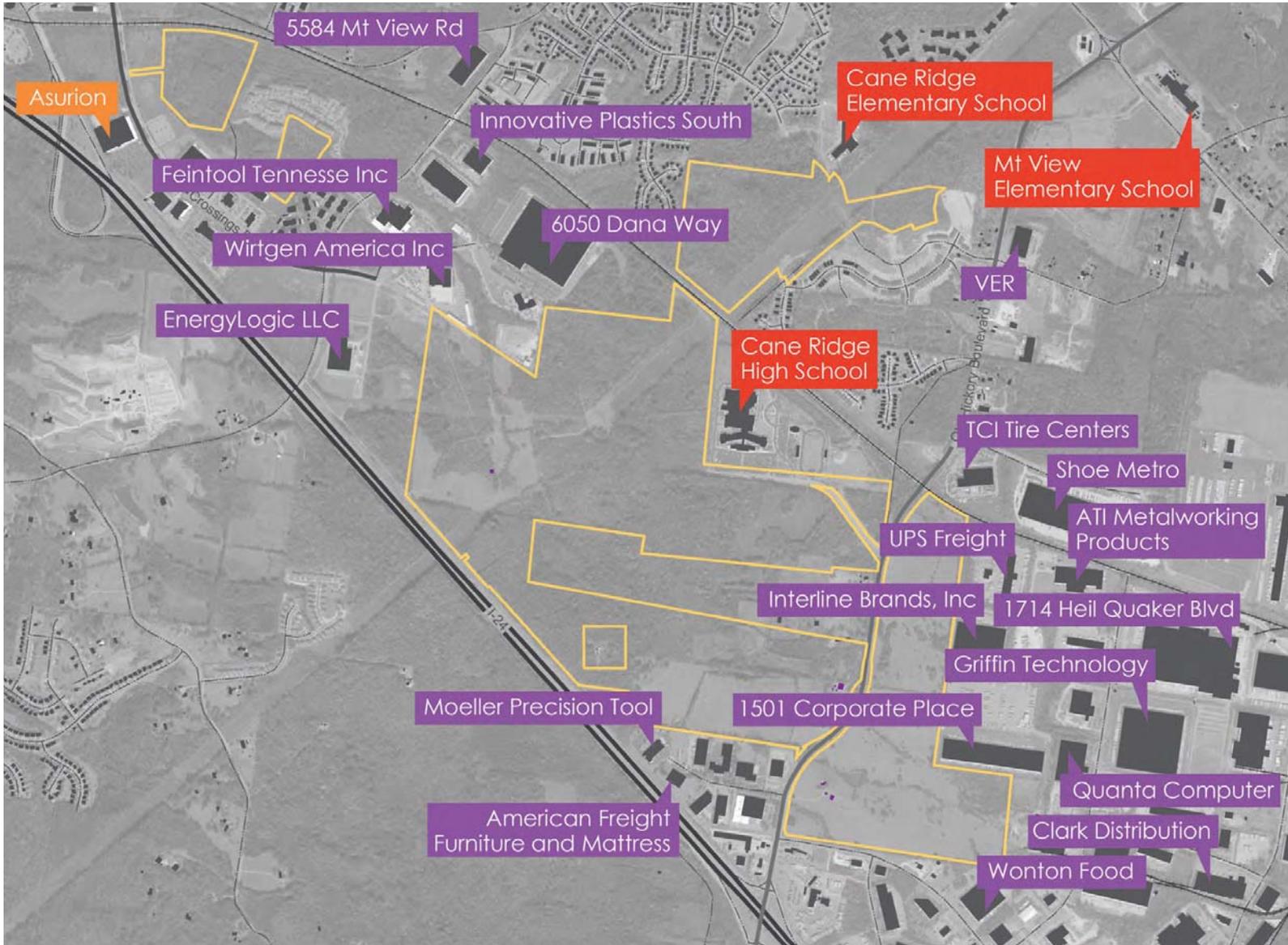
2010 Total Population

Davidson County	626,681
Southeast	100,569

Population % of Davidson County by year

1990	2000	2010
8.6%	10.6%	12.4%

*All information comes from Nashville Next.

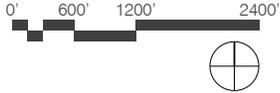


Corporate Neighbors

To the areas northwest and southeast the park site the vast majority of land use is made up of industry and large corporations. Dotted within that larger matrix are some commercial areas and a few smaller subdivisions as well as a two elementary schools and a high school. On the other side of I-24 there is a great deal of anticipated development which will inevitably have an impact on who uses the future park.

Corporate neighbors

- Manufacturing
- Schools
- Office







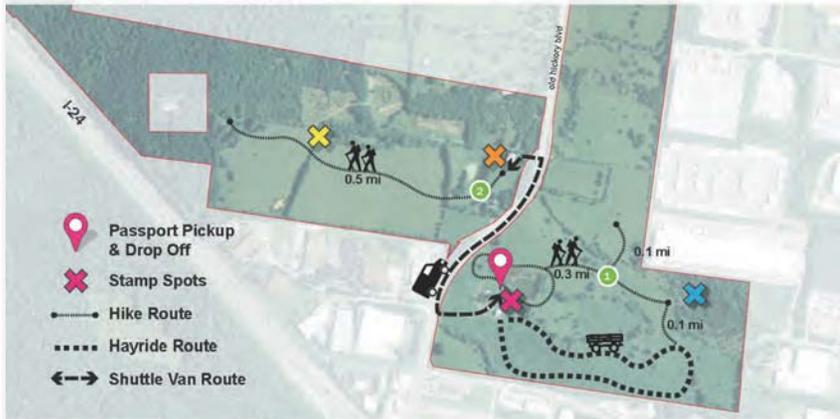
Part 3 Appendix

Metro Parks Presents

Southeast Davidson Regional Park

Hikes and Hayrides

Welcome to Nashville's new 600-acre property in southeast Davidson County. This fun afternoon of activities and tours will help introduce the community to a unique property with amazing potential as a future regional park. Visitors are encouraged to learn about the site's history and ecology as well as provide input on the future regional park plans.



Scavenger Hunt

The scavenger hunt will guide you to some exciting discoveries about this place. Collect stamps in the boxes to the right (you'll find guides with stamps at the "X" locations on the map). Fill out the questions on the back. At the end of the day, hand in your stamps to see if you won a prize!

- 1 Cedar Glade Hike* 2 Woodland Overlook hike* (take SHUTTLE VAN*)

Hikes
*all hikes are guided hikes and leave at 15 after the hour.

- Shuttle Van**
Departs from Pickup & Drop Off locations every 1/2 hour
- Hayrides**
Departs from Pickup & Drop Off locations every 1/2 hour

Overview

Metro Parks developed the Plan to Play Master Plan to provide a 10-year vision to meet the community's need for parks. In it, Metro Parks designated the Southeast Davidson land assemblage as a new regional park. Master planning for the park has just begun and will continue into early December. Take part in the process by letting us know your thoughts on the other side of this passport. Even better, come tell us your thoughts in person at the Passport table.

Special thanks to Friends of Parks at Kimbro Station for sponsoring today's music, Greenways for Nashville and Jenny Andrews.



Scavenger Hunt

Crossroads

This area has historically been a crossroads for many different people and cultures - and continues to be to this day. The CSX Railroad to the north, runs near the historic Trail of Tears, a route used during a forced removal of Native American people from lands east of the Mississippi to present-day Oklahoma. Soon thereafter, the railway was constructed which provided jobs and encouraged settlement within Davidson County. Find the large maps and get a stamp by putting a star on the map indicating where you are from. Get another stamp by finding the railroad on the other map near where the Kimbro Rail Station once stood.

Cedar Glades

Cedar glades are unique ecosystems within middle Tennessee. They are defined by grassy openings with exposed limestone bedrock and are home to endangered species. Get a stamp by walking down to the glades to learn more about the ecology and geology of middle Tennessee from a Metro Naturalist.

Hedgerows & Habitats

Hedgerows are rows of trees or shrubs typically bordering a road or field. They are important wildlife corridors connecting woodland fragments and animal habitats and can serve as wind breaks on farms. Get a stamp when you take the shuttle to the other side of the road and hike through a hedgerow to the woodland overlook with a Metro staff member.

Farm Life

Many European settlers moved to this area for its rich farmland. This future park site is one of the few remaining farm sites where livestock including horses, mules, hogs, sheep, and cows were once raised. Get a stamp by learning about farm life from a Metro staff member and planting your own seeds in a pot to take home.

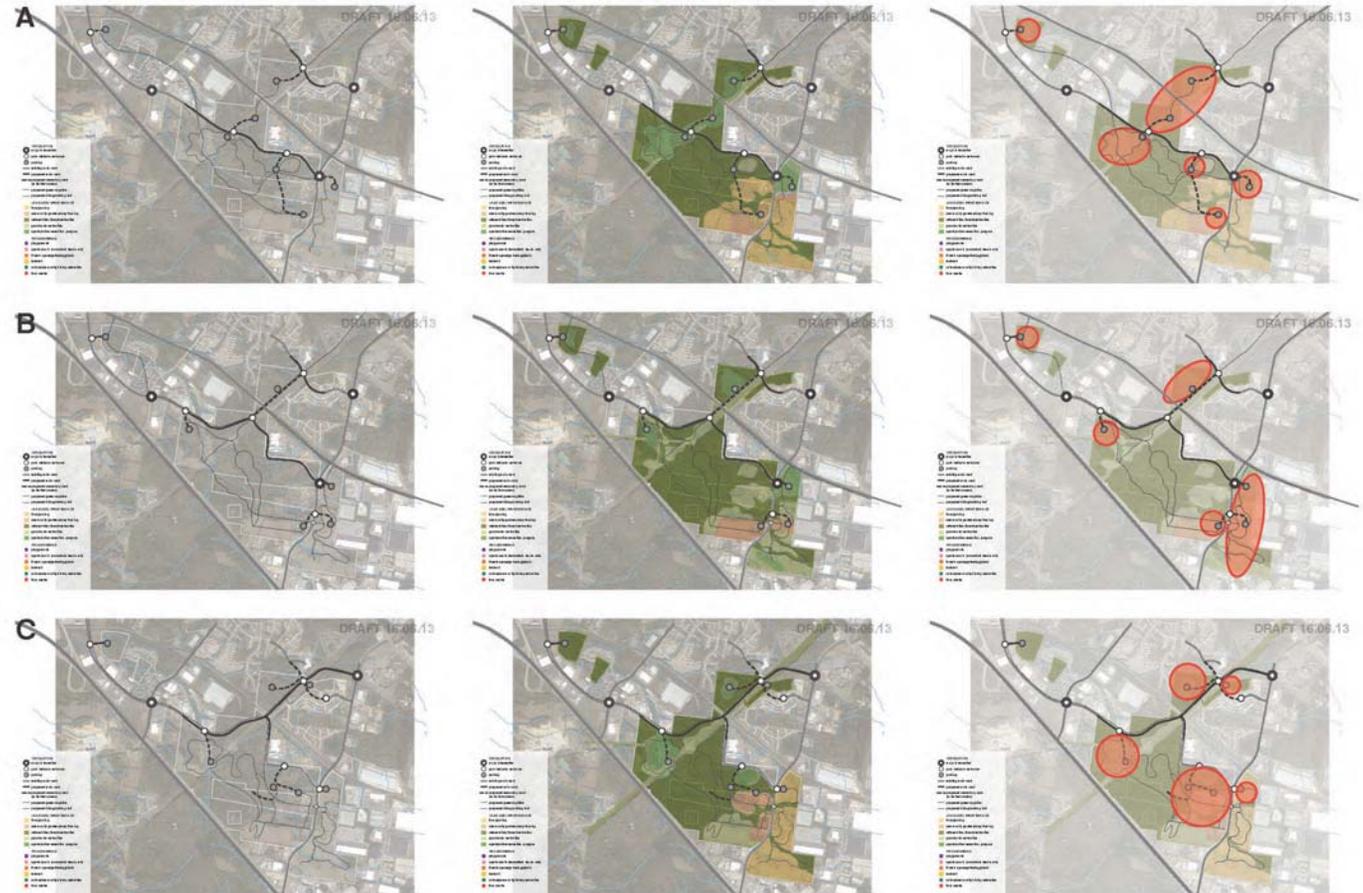
Homesteads

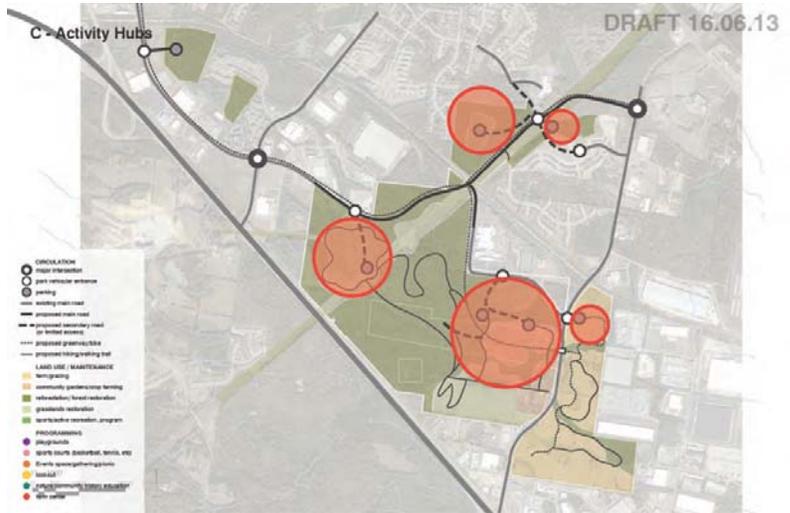
This 600-acre property has been home to many families who have traveled from near and far to live and work on this land, as evidenced by the cemeteries that have been discovered throughout the site. Get two stamps when you take the shuttle to the other side of the road and talk to the historian to learn more about the stories of people who once lived here.

Master Plan Studies | Option Matrix



During the early process of master plan design, the design team developed a matrix of various circulation options to test strategies for improved circulation and potential programming of the park site.





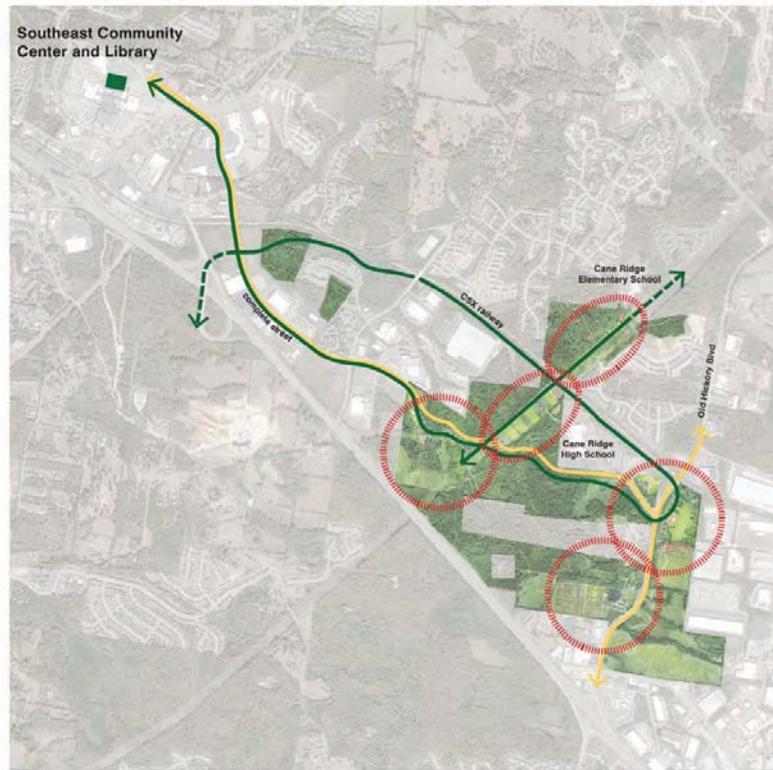
Master Plan Themes



Midway through the master plan process, the design team developed a series of master plan draft theme boards to be presented to the community by the Metro Park staff and other members of the design team. Feedback on these various themes was solicited, collected, analyzed and summarized by the team members present. The feedback was then incorporated into the final master plan document presented here.

Framework

Southeast Davidson Regional Park Master Planning



-  PARK NODES
-  GREENWAY CONNECTIONS
-  FUTURE GREENWAY CONNECTIONS
-  VEHICULAR ROUTES

SEPTEMBER 2017 COMMUNITY WORKSHOP

Access

Southeast Davidson Regional Park Master Planning



SEPTEMBER 2017 COMMUNITY WORKSHOP

Play

Southeast Davidson Regional Park Master Planning



Draft Plan

SEPTEMBER 2017 COMMUNITY WORKSHOP

Gather

Southeast Davidson Regional Park Master Planning



Draft Plan

SEPTEMBER 2017 COMMUNITY WORKSHOP

Educate

Southeast Davidson Regional Park Master Planning



SEPTEMBER 2017 COMMUNITY WORKSHOP

Draft Plan

Restore & Grow

Southeast Davidson Regional Park Master Planning



Draft Plan

SEPTEMBER 2017 COMMUNITY WORKSHOP

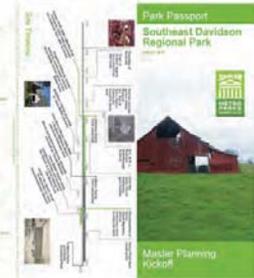
Engage

Southeast Davidson Regional Park Master Planning



Hikes & Hayrides Greater Community

Metro Parks hosted Hikes & Hayrides, an event to bring community members to the site to explore, learn and share their hopes for the future spaces.



Putting the people we serve at the center of the design process...



Focus Groups

Ethnic Minority

Ethnic minorities gathered in participants' homes, community centers, and places of worship to discuss their use of parks and open space.

Community Outreach

Community leaders and Metro officials gathered to explore stakeholders' vision for the future of the park.



...and this is what we heard:

- Water is life.*
- Growing food is a way our community grows.*
- Colorful flowers make us feel welcome.*
- Walking to the park is a part of our life.*
- Smaller parks linked together with trails create a larger cohesive park.*
- Provide big entrances to the park, with safe connections.*
- Celebrate the rich agricultural heritage.*
- Make big gathering spaces so lots of people can come together and celebrate.*
- Create gathering pods with activities for all ages.*
- Clean bathrooms!*
- Learn more about nature.*
- Places to play - sports fields, playgrounds, trails and tracks.*

Master Plan Timeline

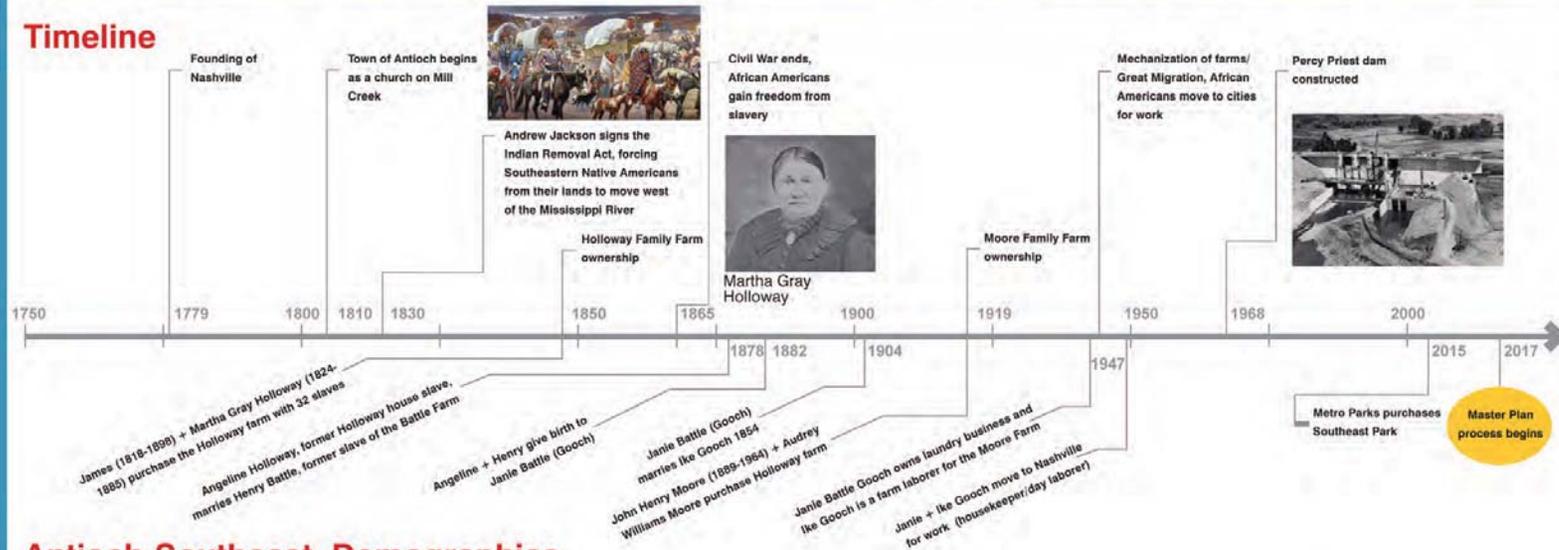


SEPTEMBER 2017 COMMUNITY WORKSHOP

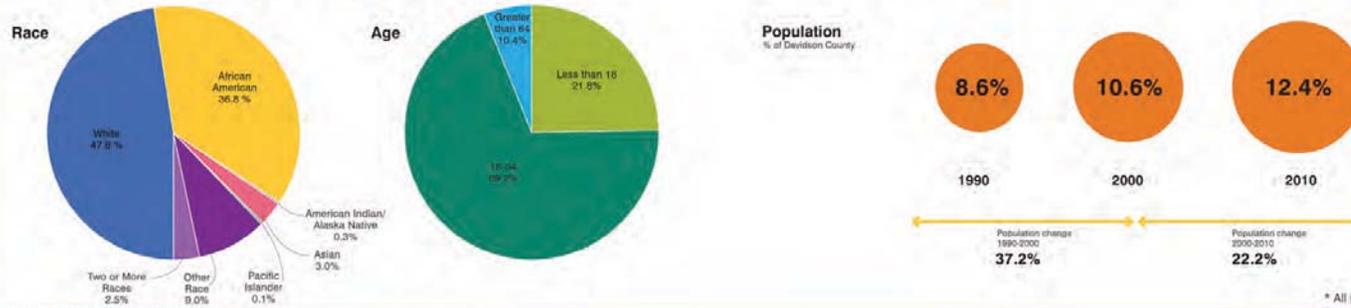
Past & Present

Southeast Davidson Regional Park Master Planning

Timeline



Antioch-Southeast Demographics



SEPTEMBER 2017 COMMUNITY WORKSHOP

* All information from Nashville Next.

Analysis

Southeast Davidson Regional Park Master Planning

Plant Community Site Observations

Rare Species within 1.5 Miles
(Source: Metro Parks)



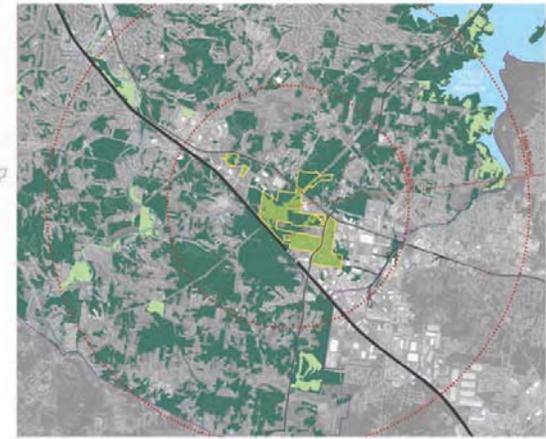
Ecology and Geology

The site lies within the migratory flight paths of the monarch butterfly, the sandhill crane and the whooping crane. The TVA easement running southwest-northeast through the site with its low-growth vegetation can become a great habitat for native wildlife.

The site lies within the Outer Nashville Basin near the border of the Inner Nashville Basin. The Nashville Basin is underlain primarily by limestone from the Ordovician Period.



- Middle Tennessee landscape
- Inner plateau
 - Outer Nashville basin
 - Inner Nashville basin
 - Site
- Regional habitat
- Forest canopy
 - Parkland
- *Note: Forest canopy and parkland for Davidson County only.



Hydrology

Small creeks are scattered throughout the site with many only holding water during wet weather events. A ridge or long stretches of creeks are defining elements within each area. Small seepage ponds are found throughout the site. The ponds range in water quality. Both the creeks and ponds lack a healthy buffer of riparian planting.

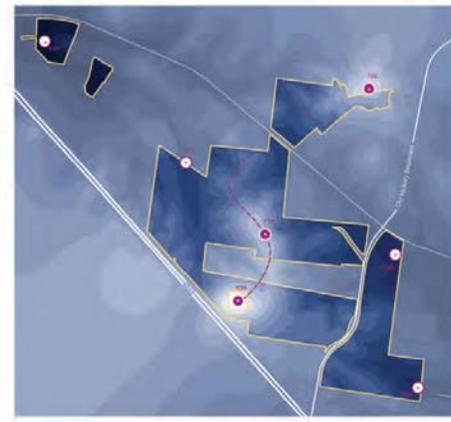
- Hydrology
- Ponds
 - 100 ft floodplain
 - Streams
 - Surface flow
 - Watershed divide



Topography

There are over 240' of grade change at Southeast Davidson Regional Park. The majority of the property is divided by a North-South running ridge of forested hills. The landscape character varies throughout the property from flatlands with subtle exposed limestone soils to the east and rising plateaus under the positive assessments to the west.

- Elevation (ft)
- 533-542
 - 543-545
 - 546-548
 - 549-550
 - 551-552
 - 553-554
 - 555-556
 - 557-558
 - 559-560
 - 561-562
 - 563-564
 - 565-566
 - 567-568
 - 569-570
 - 571-572
 - 573-574
 - 575-576
 - 577-578
 - 579-580
 - 581-582
 - 583-584
- Topographic features
- Ridge/line
 - Highpoints
 - Lowpoints



SEPTEMBER 2017 COMMUNITY WORKSHOP

Existing Site Features

Southeast Davidson Regional Park Master Planning



Pasture and view to hilltop



Meadow view



View from top of pasture



Pasture and view to hilltop



Farm pond



Trails through forested hillside



View at TVA easement



Barn



TVA power structures



Long view through TVA easement



Open meadow



Former dairy fields and structures



Open rolling pasture



Pond and barn in distance



Former pastures near barn



Barn



View across fields to the south



Farm road entrance



Farm house



Pond near farm house

SEPTEMBER 2017 COMMUNITY WORKSHOP

Traffic | Existing Conditions

(Provided by Collier Engineering)

SOUTHEAST - ANTIOCH PARK

STUDY AREA ROADWAYS

Old Hickory Boulevard is a two-way roadway that generally travels in a north-south direction within the study area. Between the I-24 Eastbound ramps and Firestone Parkway, Old Hickory Boulevard includes a five-lane cross-section with two travel lanes in each direction. North of Firestone Parkway and south of the I-24 Eastbound ramps, Old Hickory Boulevard includes one travel lane in each direction in the vicinity of the project site. Within the study area, Old Hickory Boulevard provides connection between Burkitt Road to the south and Murfreesboro Pike to the north. According to the *Metro Nashville Major and Collector Street Plan*, Old Hickory Boulevard is categorized as an arterial-boulevard scenic (T3-M-AB3-S) in the vicinity of the project site. The posted speed limit on Old Hickory Boulevard within the study area is 50 mph, which designates the future cross-section to be three (3) travel lanes. Generally, sidewalk is not provided on either side of Old Hickory Boulevard in the vicinity of the project site; however, a 0.17-mile segment of sidewalk is provided on the west side of Old Hickory Boulevard between Owen Drive and the I-24 Westbound ramps. No transit services or bike facilities are provided on Old Hickory Boulevard in the vicinity of the project site.



*Looking Northbound on Old Hickory Boulevard
North of the Cane Ridge High School Driveway*

Firestone Parkway is a two-way roadway that generally travels in an east-west direction with two travel lanes in each direction in the vicinity of the project site. Firestone Parkway provides connection between Waldron Road in LaVergne to the east and Old Hickory Boulevard to the west. It should be noted that Firestone Parkway is generally aligned with the Thornton's driveway at Old Hickory Boulevard. According to the *Metro Nashville Major and Collector Street Plan*, Firestone Parkway is categorized as a collector-avenue (D-I-CA4) in the vicinity of the project site. The posted speed limit on Firestone Parkway within the study area is 40 mph. Generally, sidewalk is not provided on either side of Firestone Parkway in the vicinity of the project site. No transit services or bike facilities are provided on Firestone Parkway.



*Looking Eastbound on Firestone Parkway
East of Old Hickory Boulevard*

-1 of 13-

SOUTHEAST - ANTIOCH PARK

Cane Ridge High School Driveway is a two-way roadway that generally travels in an east-west direction with two travel lanes in the westbound direction and one travel lane in the eastbound direction. The Cane Ridge High School driveway provides access to Cane Ridge High School on Old Hickory Boulevard. According to the *Metro Nashville Major and Collector Street Plan* (MCSP), the Cane Ridge High School driveway is categorized as an arterial-boulevard (T3-M-AB3) in the vicinity of the project site. It should be noted that the MCSP indicates a planned future connection between Crossings Boulevard to the north and the Cane Ridge High School driveway. A posted speed limit was not observed on the Cane Ridge High School driveway; however, it is assumed to be 30 mph. Sidewalk is provided on the north side of the Cane Ridge High School driveway. No transit services or bike facilities are provided on the Cane Ridge High School driveway in the vicinity of the project site.



*Looking Westbound on the Cane Ridge High School
Driveway West of Old Hickory Boulevard*

Old Franklin Road is a two-way roadway that generally travels in a north-south direction with one travel lane in each direction in the vicinity of the project site. Old Franklin Road provides connection between Mt. View Road to the northeast and Preston Road to the southwest. It should be noted that south of Crossings Boulevard, Old Franklin Road bridges over I-24. According to the *Metro Nashville Major and Collector Street Plan*, Old Franklin Road is categorized as a collector-avenue (T3-M-CA3) in the vicinity of the project site. The posted speed limit on Old Franklin Road within the study area is 40 mph. Generally, sidewalk is not provided on either side of Old Franklin Road in the vicinity of the project site. No transit services or bike facilities are provided on Old Franklin Road in the vicinity of the project site.



*Looking Southbound on Old Franklin Road
South of Crossings Boulevard*

-2 of 13-

SOUTHEAST – ANTIOCH PARK

Mt. View Road is a two-way roadway that generally travels in an east-west direction east of Crossings Boulevard and in a north-south direction north of Crossings Boulevard within the study area. East of Crossings Boulevard, Mt. View Road includes one travel lane in each direction. North of Crossings Boulevard, Mt. View Road includes two travel lanes in each direction and a center two-way left-turn lane in the vicinity of the project site. Within the study area, Mt. View Road provides connection between Hickory Hollow Parkway to the west and Murfreesboro Pike and the Four Corners area to the east. According to the *Metro Nashville Major and Collector Street Plan*, Mt. View Road is categorized as an arterial-boulevard (T3-M-AB5) north of Crossings Boulevard and as an arterial-boulevard (T3-M-AB3) east of Crossings Boulevard in the vicinity of the project site. The posted speed limit on Mt. View Road within the study area is 35 mph. Sidewalk is provided on the north side of Mt. View Road between Bell Road and Bell Forge Parkway. No transit services or bike facilities are provided on Old Hickory Boulevard in the vicinity of the project site.



*Looking Eastbound on Mt. View Road
East of Crossings Boulevard*



*Looking Northbound on Mt. View Road
North of Crossings Boulevard*

SOUTHEAST – ANTIOCH PARK

Crossings Boulevard is a two-way roadway that generally travels in a north-south direction south of Mt. View Road and in an east-west direction west of Mt. View Road. South of Mt. View Road, Crossings Boulevard makes a 90-degree turn toward the east and then travels in an east-west direction. West of Mt. View Road, Crossings Boulevard includes three travel lanes in the eastbound direction, two travel lanes in the westbound direction, and a center two-way left-turn lane. South of Mt. View Road, Crossings Boulevard includes a 50 foot wide median and two travel lanes in each direction. Within the study area, Crossings Boulevard provides connection between Hickory Hollow Parkway and Bell Road to the north-east as well as Old Franklin Road to the south-east. According to the *Metro Nashville Major and Collector Street Plan*, Crossings Boulevard is categorized as an arterial-boulevard (T3-M-AB4) south of Mt. View Road and as an arterial-boulevard (T3-M-AB5) west of Mt. View Road. The posted speed limit on Crossings Boulevard within the study area is 40 mph. Sidewalk is not provided on either side of Crossings Boulevard west of Mt. View Road. South of Mt. View Road, sidewalk is generally provided on the west side of Crossings Boulevard and on segments of the east side of the roadway. No transit services or bike facilities are provided on Crossings Boulevard. Crossings Boulevard terminates just south of Old Franklin Road, but is planned to be extended to the Cane Ridge High School Drive according to the MCSP.



*Looking Westbound on Crossings Boulevard
West of Old Franklin Road*



*Looking Westbound on Crossings Boulevard
West of Mt. View Road*

SOUTHEAST - ANTIOCH PARK

STUDY AREA INTERSECTIONS

Old Hickory Boulevard and the I-24 Eastbound Ramps is a signalized intersection with three approaches. The southbound approach of Old Hickory Boulevard includes one left turn lane with approximately 225 feet of storage and two through lanes. The northbound approach of Old Hickory Boulevard includes one through lane and one shared through/right turn lane with channelized, yield-controlled right turns. The eastbound approach of the Interstate 24 Eastbound exit ramp includes two left turn lanes with approximately 475 feet of storage and a channelized, yield-controlled right turn lane. Protective/permissive left turn signal phasing is provided for the southbound approach of Old Hickory Boulevard. No pedestrian facilities are provided for the intersection. As shown in the picture to the right, the existing traffic signal is a span wire design.



Looking Southbound on Old Hickory Boulevard at the Interstate 24 Eastbound Ramps

Old Hickory Boulevard and the I-24 Westbound Ramps is a signalized intersection with three approaches. The southbound approach of Old Hickory Boulevard includes one through lane and one shared through/right turn lane with channelized, yield-controlled right turns. The northbound approach of Old Hickory Boulevard includes one left turn lane with approximately 170 feet of storage and two through lanes. The westbound approach of the Interstate 24 westbound exit ramp includes a shared through/left turn lane with approximately 190 feet of storage and one channelized, yield-controlled right turn lane. Protective/permissive left turn signal phasing is provided for the northbound approach of Old Hickory Boulevard. No pedestrian facilities are provided for at the intersection. As shown in the picture to the right, the existing traffic signal is a span wire design.



Looking Southbound on Old Hickory Boulevard at the Interstate 24 Westbound Ramps

SOUTHEAST - ANTIOCH PARK

Old Hickory Boulevard and Firestone Parkway/Thornton's Driveway is a signalized intersection with four approaches. The southbound approach of Old Hickory Boulevard includes one left turn lane and one shared through/right turn lane. The northbound approach of Old Hickory Boulevard includes one left turn lane with approximately 90 feet of dedicated storage within the center two-way left-turn lane, one through lane, and one right turn lane. The westbound approach of Firestone Parkway includes one left turn lane and one shared through/right turn lane. The eastbound approach of the Thornton's driveway includes one shared through/left turn lane and one right turn lane. Protective/permissive left turn signal phasing is provided for the northbound and southbound approaches of Old Hickory Boulevard as well as for the westbound approach of Firestone Parkway. Permissive left turn signal phasing is provided for the eastbound approach of the Thornton's driveway. An ADA-compliant pedestrian crosswalk, curb ramps, and signals are provided for crossing the west leg of the intersection. The intersection includes span wire signal design.



Looking Westbound on Firestone Parkway at Old Hickory Boulevard

Old Hickory Boulevard and the Cane Ridge High School Driveway is a signalized intersection with three approaches. The southbound approach of Old Hickory Boulevard includes one through lane and one right turn lane with approximately 150 feet of storage. The northbound approach of Old Hickory Boulevard includes two left turn lanes with approximately 300 feet of storage and one through lane. The eastbound approach of the Cane Ridge High School driveway includes one left turn lane and one right turn lane with approximately 280 feet of storage. No pedestrian crosswalks are provided for the intersection; however, sidewalk is provided on the north side of the school driveway along the entire school frontage and a curb ramp is provided on the northwest corner of the intersection. Protected-only left turn signal phasing is provided for the northbound approach of Old Hickory Boulevard. The eastbound approach of the school driveway and the southbound approach of Old Hickory Boulevard include right-turn overlap phases. This intersection includes span wire but not pedestrian signals.



Looking Eastbound on the Cane Ridge High School Driveway at Old Hickory Boulevard

SOUTHEAST - ANTIOCH PARK

Crossings Boulevard and Old Franklin Road is an all-way stop-controlled intersection with four approaches. The southbound approach of Old Franklin Road includes one shared through/left turn lane and one right turn lane with approximately 125 feet of storage. The northbound approach of Old Franklin Road includes one lane for all turning movements. The eastbound and westbound approaches of Crossings Boulevard include one shared left turn/through lane and one shared through/right turn lane. No pedestrian crosswalks are provided for the intersection; however, curb ramps are provided on the northeast, northwest, and southwest corners of the intersection.



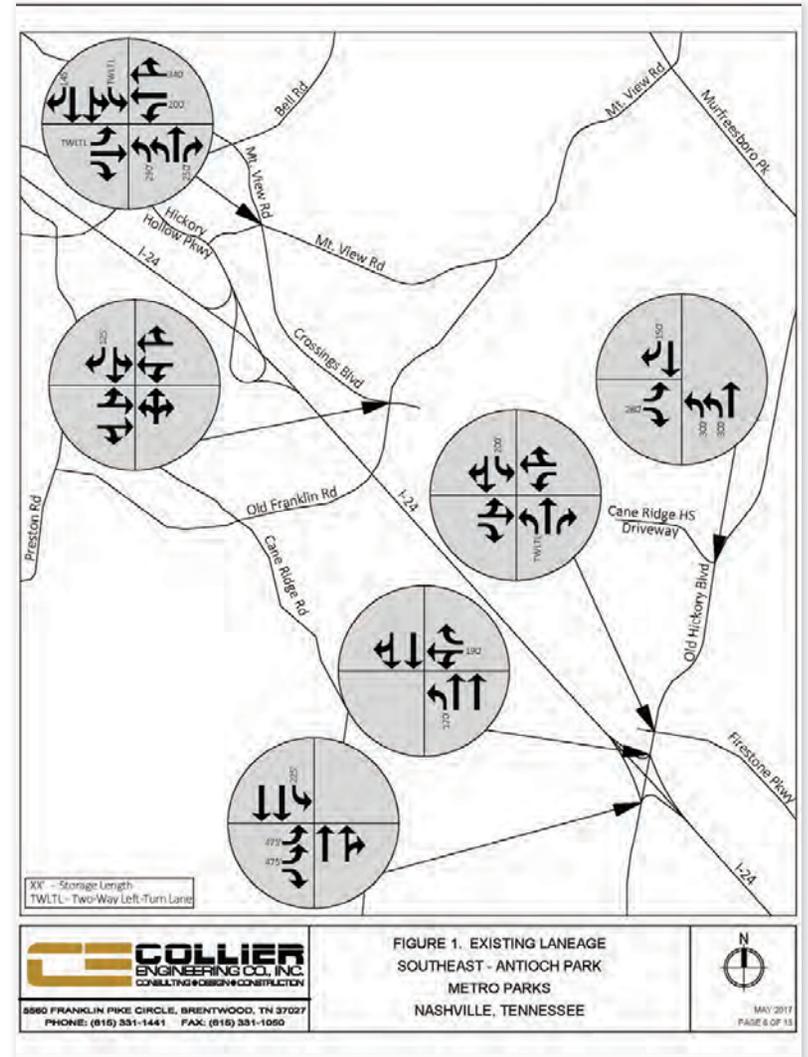
Looking Southbound on Old Franklin Road at Crossings Boulevard

Crossings Boulevard and Mt. View Road is a signalized intersection with four approaches. The southbound approach of Mt. View Road includes one left turn lane with approximately 170 feet of dedicated storage within the center two-way left-turn lane, one shared through/left turn lane, one through lane, and one channelized, yield-controlled right turn lane with approximately 145 feet of storage. The northbound approach of Crossings Boulevard includes one left turn lane with approximately 290 feet of storage, one left turn lane, one through lane, and one channelized, yield-controlled right turn lane with approximately 250 feet of storage. The westbound approach of Mt. View Road includes one left turn lane with approximately 200 feet of storage, one through lane, and one shared through/right turn lane. The eastbound approach of Crossings Boulevard includes one left turn lane with approximately 190 feet of dedicated storage within the center two-way left-turn lane, one through lane, and two channelized, yield-controlled right turn lanes. Split signal phasing is provided for the northbound approach of Crossings Boulevard and for the southbound approach of Mt. View Road. Protective/permissive left turn signal phasing is provided for the westbound approach of Mt. View Road and for the eastbound approach of Crossings Boulevard. No pedestrian facilities are provided for the intersection; however, pedestrian curb ramps are provided on the northeast, northwest, and southwest corners of the intersection.



Looking Eastbound on Crossings Boulevard at Mt. View Road

The existing laneage of the study intersections are presented in Figure 1.



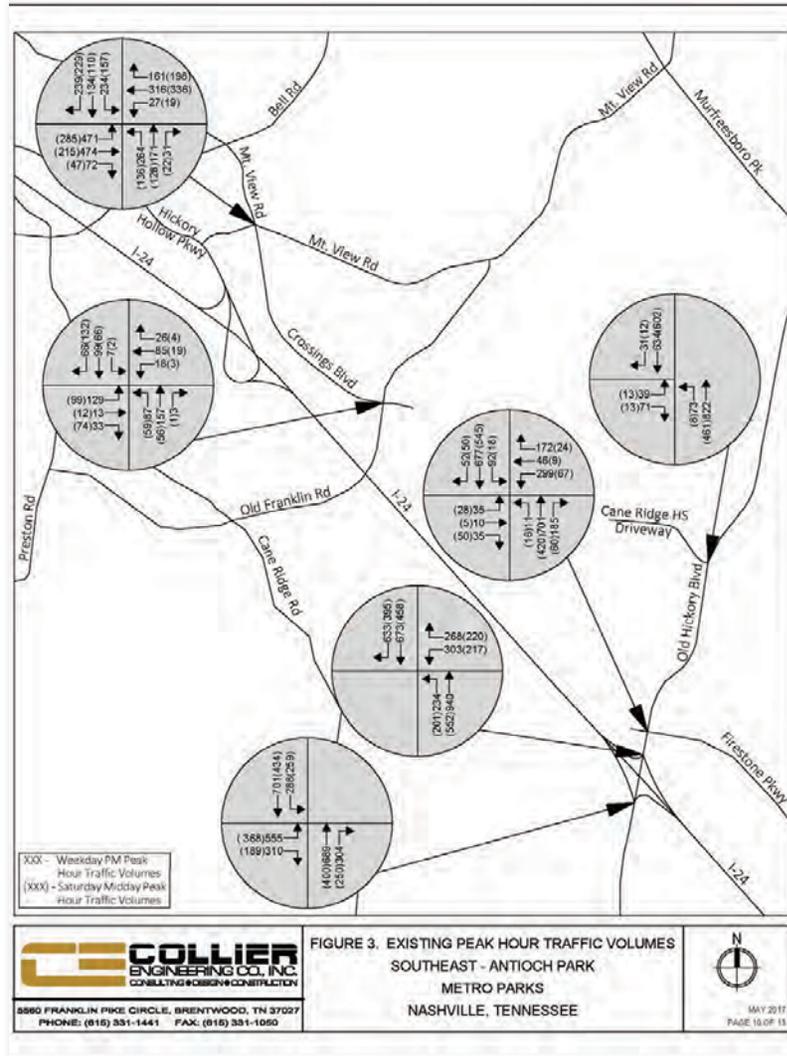
SOUTHEAST - ANTIOCH PARK

EXISTING TRAFFIC VOLUMES

To provide data for the capacity analysis, manual turning movement counts were conducted by Collier Engineering Company, Inc., at the study intersections from 4:00 – 7:00 PM on a typical weekday and from 10:00 AM – 12:00 PM on a typical Saturday in April 2017 while Metro Nashville Public Schools were in session. From the counts, it was determined that the weekday PM peak hour occurs from 4:45 – 5:45 PM and the Saturday midday peak hour occurs from 11:00 AM – 12:00 PM. In addition, the TDOT count station data was referenced for the roadways in the vicinity of the project site. Figure 2 presents the 2015 AADT available for the study roadways in the vicinity of the project site. The existing weekday PM peak hour and Saturday midday peak hour turning movement volumes are presented in Figure 3.



Figure 2. 2015 AADT



SOUTHEAST – ANTIOCH PARK

EXISTING CAPACITY ANALYSIS

To evaluate the existing operation of the study intersections during the weekday PM peak hour and Saturday midday peak hour, capacity analysis were conducted for the study intersections under existing conditions. The capacity analysis were based on the methodology presented in the Transportation Research Board's fifth edition of the *Highway Capacity Manual* (HCM 2010). The capacity analysis determine the intersections' existing level-of-service (LOS). The current signal timing and phasing plans were obtained from Metro Public works and utilized for the capacity analysis. The results of the existing capacity analysis for the study intersections are presented in Table 1. As shown, the study intersections currently operate at LOS C or better during both weekday PM and Saturday midday peak hours, with one exception. During the weekday PM peak hour, the signalized intersection of Old Hickory Boulevard and Firestone Parkway/Thornton's Driveway operates at LOS D. Capacity analysis worksheets are attached.

Table 1. Existing Peak Hour Capacity Analysis

INTERSECTION	TURNING MOVEMENT	WEEKDAY PM PEAK HOUR	SATURDAY MIDDAY PEAK HOUR
		LOS (Average Control Delay in sec/veh)	LOS (Average Control Delay in sec/veh)
Old Hickory Boulevard and I-24 Eastbound Ramps	Overall Intersection	C (23.5)	B (15.1)
Old Hickory Boulevard and I-24 Westbound Ramps	Overall Intersection	B (15.0)	B (11.7)
Old Hickory Boulevard and Firestone Parkway/Thornton's Driveway	Overall Intersection	D (41.6)	B (19.6)
Old Hickory Boulevard and Cane Ridge High School Driveway	Overall Intersection	B (12.9)	A (6.7)
Crossings Boulevard and Old Franklin Road	Overall Intersection	B (14.9)	A (9.6)
Crossings Boulevard and Mt. View Road	Overall Intersection	C (34.9)	C (26.0)

Note: For signalized and all-way stop-controlled intersections, an overall LOS is presented.

Although the overall intersections operate at acceptable levels of service, field observations revealed that congestion occurs during the weekday PM peak hour on Old Hickory Boulevard along the park property frontage.

BIKE, PEDESTRIAN, AND TRANSIT FACILITIES

In general, sidewalk is not provided on either side of Old Hickory Boulevard within the study area; however, sidewalk is provided on the west side of Old Hickory Boulevard between the I-24 Westbound ramps and Owen Drive. Sidewalk is not generally provided on either side of Firestone Parkway or Old Franklin Road. Sidewalk is provided on the north side of the Cane Ridge High School driveway. South of Mt. View Road, sidewalk is generally provided on the west/south side of Crossings Boulevard and along segments of the north/east side of Crossings Boulevard. Sidewalk is provided on the east side of Mt. View Road north of Crossings Boulevard and on the north side of Mt. View Road for approximately 400 feet extending east from Crossings Boulevard. The existing pedestrian facilities provided at the study intersections are presented in Table 2. No bike facilities are currently provided on any of the study roadways.

SOUTHEAST – ANTIOCH PARK

Table 2. Study Intersection Pedestrian Facilities

INTERSECTION	TRAFFIC CONTROL	CROSSWALK(S)	CURB RAMP(S)	PEDESTRIAN SIGNAL(S)	PUSH-BUTTON(S)
Old Hickory Boulevard and I-24 EB Ramps	Signalized	---	--	--	--
Old Hickory Boulevard and I-24 WB Ramps	Signalized	--	--	--	--
Old Hickory Boulevard and Firestone Parkway/Thornton's Driveway	Signalized	West Leg	NW and SW Corners	West Leg	--
Old Hickory Boulevard and Cane Ridge High School Driveway	Signalized	---	NW Corner	--	--
Crossings Boulevard and Old Franklin Road	All-Way Stop-Controlled	--	NE, NW, and SW Corners	N/A	N/A
Crossings Boulevard and Mt. View Road	Signalized	---	NE, NW, and SW Corners	--	--

Note: For signalized and all-way stop-controlled intersections, an overall LOS is presented.

No transit facilities are provided along any of the study roadways in the vicinity of the project site. However, three MTA bus routes provide transit service along Bell Road, which intersects Mt. View Road approximately 0.3 miles north of the intersection of Mt. View Road and Crossings Boulevard. Specifically, the #15 Murfreesboro Pike bus route provides local service along Bell Road with stops every 40 minutes on weekdays and Sundays and hourly on Saturdays. The #15 provides connection between the Antioch and Downtown areas via Bell Road, Murfreesboro Pike, Lafayette Street, and 2nd Avenue. The #55 Murfreesboro Pike BRT Lite bus route provides express service along Bell Road with stops every 10-15 minutes on weekdays, every 10-30 minutes on Saturdays, and every 40 minutes on Sundays. The #55 travels the same route as the #15 but with limited stops. In addition, the #33 Hickory Hollow-Lenox Express bus route provides express service along Bell Road with limited stops during the AM and PM peak periods. The #33 provides connection between Lenox Village, the Global Mall at the Crossings, and Downtown via Nolensville Pike, Bell Road, I-24, and I-40.

The nearest stops to the project site for the #15 and #55 bus routes are located on Bell Road midblock between Mt. View Road and Bell Forge Lane East, which are located approximately 0.4 miles from the intersection of Crossings Boulevard and Mt. View Road. Both bus stops include benches and route displays for the #15 and #55 bus routes. The nearest stop for the #33 is located on the northwest corner of the intersection of Bell Road and Hickory Hollow Lane, which is located approximately 0.5 miles northwest of the intersection of Crossings Boulevard and Mt. Road and includes a bench.

SOUTHEAST – ANTIOCH PARK

OPPORTUNITIES AND CONSTRAINTS

Opportunities:

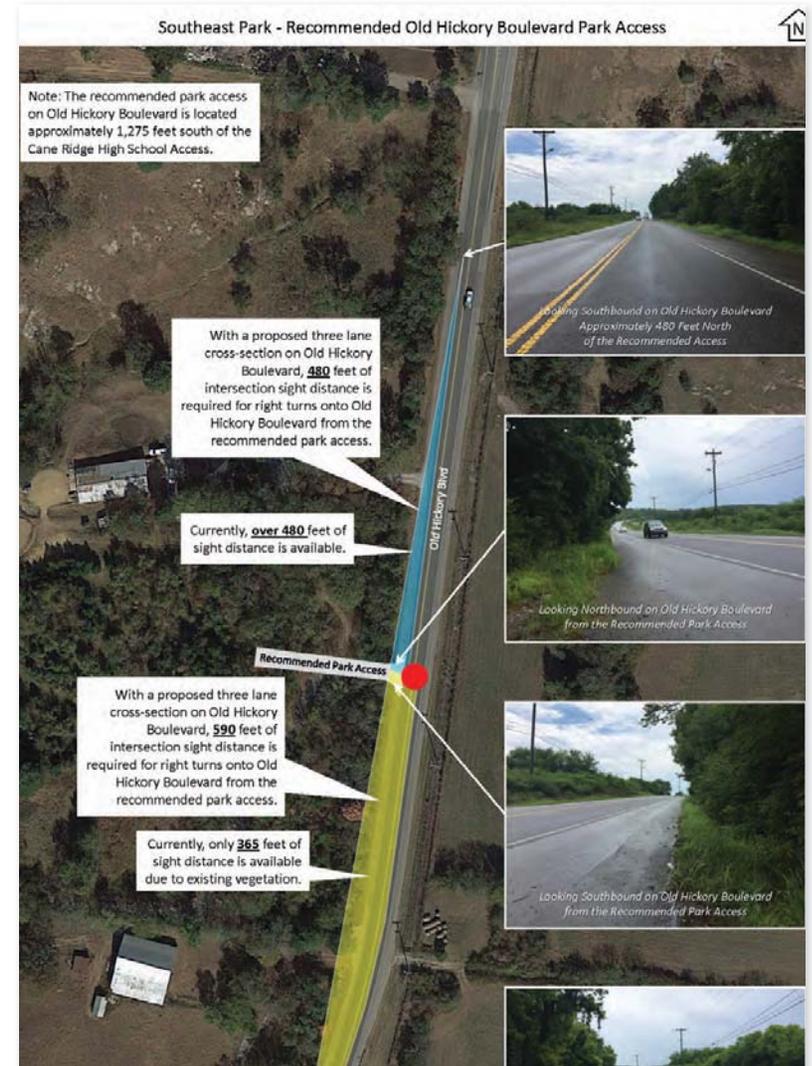
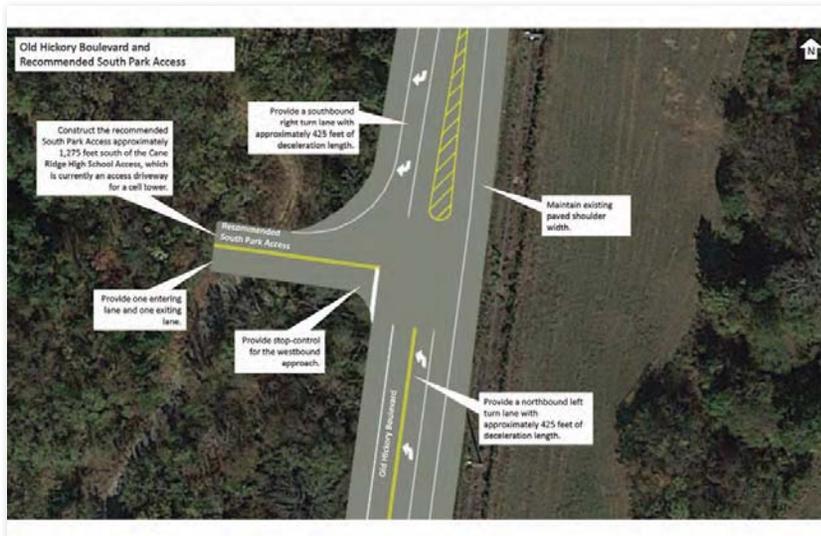
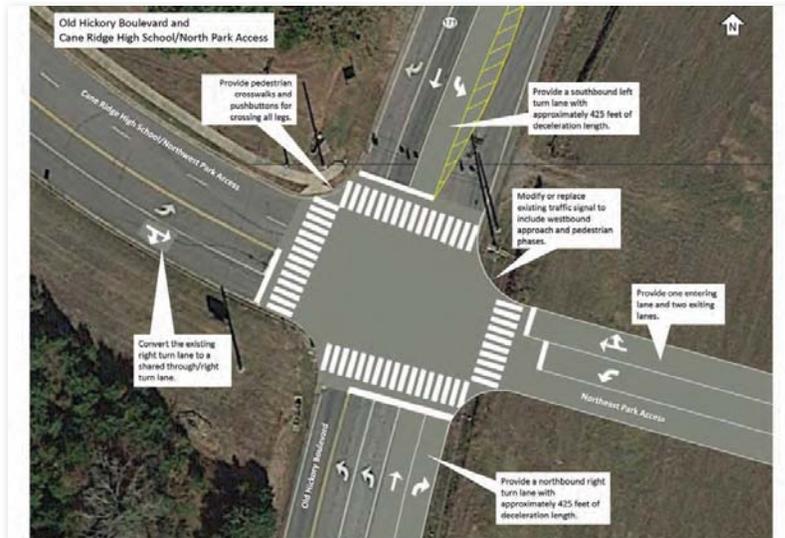
- Connectivity – currently the park property and other undeveloped property creates a void in the street network. There is opportunity to provide connectivity between Old Hickory Boulevard and Bell Road and adjacent neighborhoods as called out in the *Major and Collector Street Plan*; however, the park master plan could inform the alignment and design of these planned street connections.
- Bikeways – potential B-cycle station at Southeast Community Center and the Southeast Park with facility connectivity between.
- The signalized access at the school drive could provide secondary or primary access to and through the park.
- Alignment of Crossings Boulevard Extension could align along I-24 and intersect Old Hickory Boulevard between Firestone Parkway and Cane Ridge High School. New traffic signals at Old Hickory Boulevard and Old Franklin Road.
- Potential Crossings Boulevard Extension cross-section – two lanes with buffered bike lanes and sidewalk on one side or two lanes with multi-use path and green buffer.
- Shared parking potential for the Park using the Cane Ridge High School parking areas.
- Use of multi-use path instead of sidewalk on Old Hickory Boulevard.
- The streetscape and design of new street connectivity through the park property could incorporate traffic calming techniques.
- Multi-use trail connectivity through a new tunnel under Old Hickory Boulevard near railroad.
- Potential partnership with Metro Public Works for street network construction.
- Old Franklin Road provides east/west connectivity to the north side of the park property.

Constraints:

- Relocation of the Southeast Corridor, which has been on the long-range plan and may be desirable by regional stakeholders.
- Widened cross-section for Old Hickory Boulevard requires significant right-of-way along park property and adjacent properties.
- Lack of existing connectivity and facilities for vehicular, walking, biking, and transit modes.
- Long-range transportation plan identifies connectivity that may not be desirable for park master plan.
- Future cross-section of Old Hickory Boulevard not defined by Metro Planning Department if Southeast Corridor is realigned. Potential for four lanes with wide median and multi-use path with green buffer.
- Expectations for big/wide roads to carry increased residential and commercial density in this area.
- Large mixed-use development planned on the west side of I-24 at Hickory Hollow Parkway with new interstate connectivity to the west.
- Old Franklin Road improvements may be needed.
- Neighborhood street connectivity – gap parcel. Potential to reduce the planned number of collector-avenue connections from two to one.

Traffic & Parking | Recommendations

(Provided by Collier Engineering)



MEMORANDUM

To: Jen Trompetter, Nelson Byrd Woltz Landscape Architects
 From: Amy Burch, P.E.
 Date: October 31, 2017
 Re: Parking Analysis and Recommendations
 Subject: Southeast Davidson Regional Park Master Plan Draft

Collier Engineering Co., Inc., has analyzed the proposed master plan draft for the Southeast Davidson Regional Park. Per our previous review, the access and circulation plan is acceptable and we have no further recommendations for this aspect of the master plan. We have reviewed the proposed site features and the number and location of proposed parking spaces within the park, and as a result have recommended changes to the master plan. This memo provides a summary of our parking analysis and our recommendations.

PARKING ANALYSIS

The Southeast Davidson Regional Park Master Plan Draft includes six primary nodes, which include the following:

- Crossings Park
- The Fields at Southeast
- Collins Creek Park
- Moore Farm Gardens
- Kimbro Station Park
- Moore Farm Grasslands

Collier identified which site features within each segment would generate parking demand and estimated the peak parking demand of these features. Since the peak parking demand of each feature is not likely to occur at the same time and some of the spaces will be shared between features, a 25% reduction factor was applied to the recommended parking supply. Tables 1-6 present the site features, planned parking supply per the current plan, and recommended parking for each segment of the park.

Date: October 31, 2017

 Re: Southeast Davidson Regional Park Master Plan Draft –
 Parking Analysis and Recommendations


Table 1. Parking Analysis – Crossings Park

Site Feature	Size	Quantity	Recommended Parking
Playground	2,500 s.f.	1	13
Medium pavilion	1,800 s.f.	1	16
Multi-purpose field	--	1	40
Multi-use court	--	2	6
Greenways/Trails	--	--	35
Small pavilion	450 s.f.	1	4
Planned Parking Supply	--	25	--
SUBTOTAL			114
TOTAL (with 25% reduction factor)			86
Additional Parking Recommended			61

Table 2. Parking Analysis – The Fields at Southeast

Site Feature	Size	Quantity	Recommended Parking
Greenways/Trails	--	--	35
Multi-use court	--	4	12
Small pavilion	450 s.f.	5	20
Multi-purpose field	--	4	160
Sand volleyball court	--	3	24
Planned Parking Supply	--	198	--
SUBTOTAL			251
TOTAL (with 25% reduction factor)			188
Additional Parking Recommended			-10

Table 3. Parking Analysis – Collins Creek Park

Site Feature	Size	Quantity	Recommended Parking
Large pavilion	5,000 s.f.	1	46
Multi-purpose field	--	1	40
Playground	0.6 acre	1	13
Multi-use court	--	2	6
Kids pump track	--	1	15
Medium pavilion	1,800 s.f.	1	16
Small pavilion	450 s.f.	3	12
Regional dog park	--	1	30
Greenways/Trails	--	--	35
Planned Parking Supply	--	156	--
SUBTOTAL			213
TOTAL (with 25% reduction factor)			160
Additional Parking Recommended			4



Table 4. Parking Analysis - Moore Farm Gardens

Site Feature	Size	Quantity	Recommended Parking
Community gardens	--	--	4
Playground	4,000 s.f.	1	20
Large pavilion	5,000 s.f.	1	46
Central lawn	--	1	10
Medium pavilion	1,800 s.f.	2	32
Small pavilion	450 s.f.	4	16
Production gardens	8 acres	--	16
Greenways/Trails	--	--	35
Planned Parking Supply	--	50	--
SUBTOTAL			179
TOTAL (with 25% reduction factor)			134
Additional Parking Recommended			84

Table 5. Parking Analysis - Kimbro Station Park

Site Feature	Size	Quantity	Recommended Parking
Greenways/Trails	--	--	35
Events pavilion	5,000 s.f.	1	46
Community lawn	--	1	30
Small pavilion	450 s.f.	4	16
Regional playground with water play	2-3 acre	1	60
Softball fields	--	3	60
Medium pavilion	1,800 s.f.	2	32
Planned Parking Supply	--	240	--
SUBTOTAL			279
TOTAL (with 25% reduction factor)			209
Additional Parking Recommended			-31

Table 6. Parking Analysis - Moore Farm Grasslands

Site Feature	Size	Quantity	Recommended Parking
Greenways/Trails	--	--	35
Planned Parking Supply	--	0	--
SUBTOTAL			35
TOTAL (with 25% reduction factor)			26
Additional Parking Recommended			26

Note: Add to node to the north where vehicular access is planned.



RECOMMENDATIONS

Table 7 presents a summary of our parking analysis. As shown in Table 7, we recommend the master plan include approximately 134 additional parking spaces, which should be provided within Crossings Park and Moore Farm Gardens.

Table 7. Parking Analysis Summary

Total Parking Provided	Total Recommended Parking (with 25% reduction factor)	Additional Parking Recommended
669	803	134

Note: The additional parking should be provided within Crossings Park and Moore Farm Gardens

In addition, since there is potential for the peak parking demand to occur for the individual site features at the same time, overflow parking should be available.

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