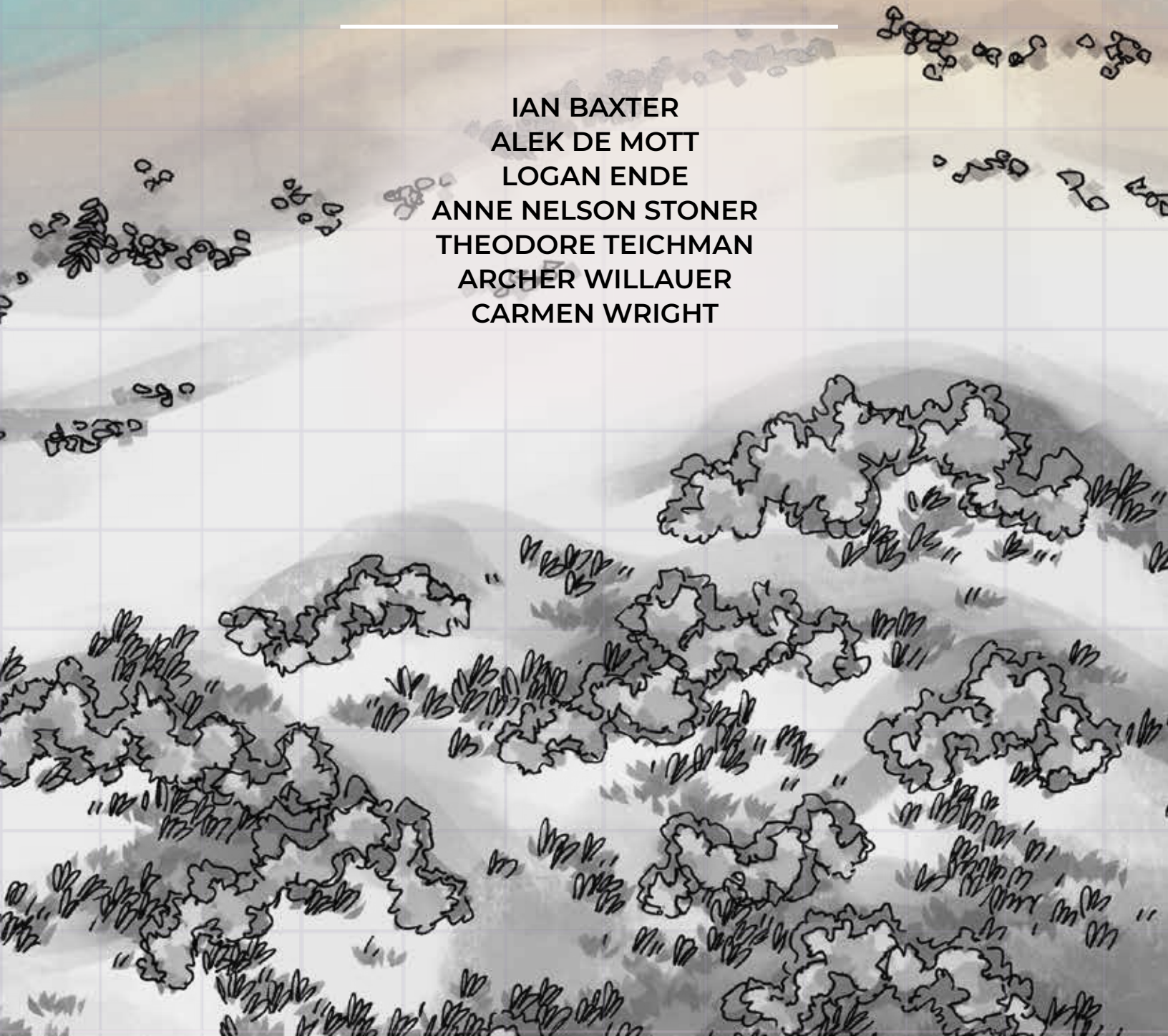


wildrock nature play park audit

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“Play is not aimless but productive; it is the way in which we learn to exist in the world. Play changes the way we see our environment, the way we understand ourselves. It creates collaborations and moments of solitude; it is dynamic; it is static.”¹

Alexandre Beaudouin-Mackay and Sarah Wagner

INTRODUCTION



background

This project is a collaborative effort between a University of Virginia graduate student team and Wildrock to audit the existing green spaces in Charlottesville as potential sites of nature play. Wildrock is a three-year old nonprofit nature play and discovery center dedicated to promoting nature play for health and happiness through educational, recreational, and therapeutic programs for children. Within the City of Charlottesville, Wildrock works with local schools, non-profits, and public housing communities to create nature play opportunities in urban green spaces.

As part of Barbara Brown Wilson's PLAN 6020 Methods of Community Research & Engagement class, 7 students began this project with the guidance of Wildrock's executive director, Carolyn Schuyler. We are graduate students at the University of Virginia in Urban and Environmental Planning, Landscape Architecture, Architecture and Public Policy programs. The project began on February 11, 2021 and was completed by May 6, 2021.

overview

Wildrock initiated this project to better understand the distribution and quality of nature play spaces for children in Charlottesville and its urban ring. This research required mapping green spaces suitable for nature play in relation to children living in low-income areas. Analysis of this data is intended to illuminate the historical context of how systemic racism in housing discrimination perpetuates barriers to nature play access.

Wildrock tasked our team to create maps indicating the quality of different green

spaces for nature play and the access to these spaces for children living in different parts of Charlottesville. This research will inform Wildrock's urban outreach work for a project engaging local high schoolers in investigating people's perceptions of green spaces near their home.

Wildrock is interested in understanding how people use these spaces (or not) and what they feel would be most beneficial in creating more opportunities to access quality green spaces for children's play.

project deliverables

The following goals and outputs were outlined and agreed upon between Wildrock and the research team

Map of Green Spaces

A map showing the location of public green spaces in a defined urban ring highlighting the theme(s) of nature play most suitable for that space. This map will include information regarding other factors such as accessibility, safety, risk opportunity, and natural vulnerabilities to be aware of at each site. Included with this map will be suggestions for text boxes about being caretakers of nature, the importance of risk play, and Leave No Trace principles. This map will be used by the local graphic design firm, CONVOY, to create a user friendly and distributable version to be used by groups such as Pediatric Associates, ReadyKids, JMRL, and others as a part of Wildrock's Everyday Outdoor Play Park Prescription Program.

Supplemental Map Materials

Included on the map of green spaces will be suggestions for text boxes about being caretakers of nature, the importance of risk play, and Leave No Trace principles.

Equity Map

An easy to read and understandable one-page Equity Map that provides an overview of the most relevant equity information. Wildrock will use this map to give stakeholders a clear understanding

of disparities in access to nature play.

A more detailed and in-depth series of Equity Maps may also be created to be used for Wildrock's internal program planning.

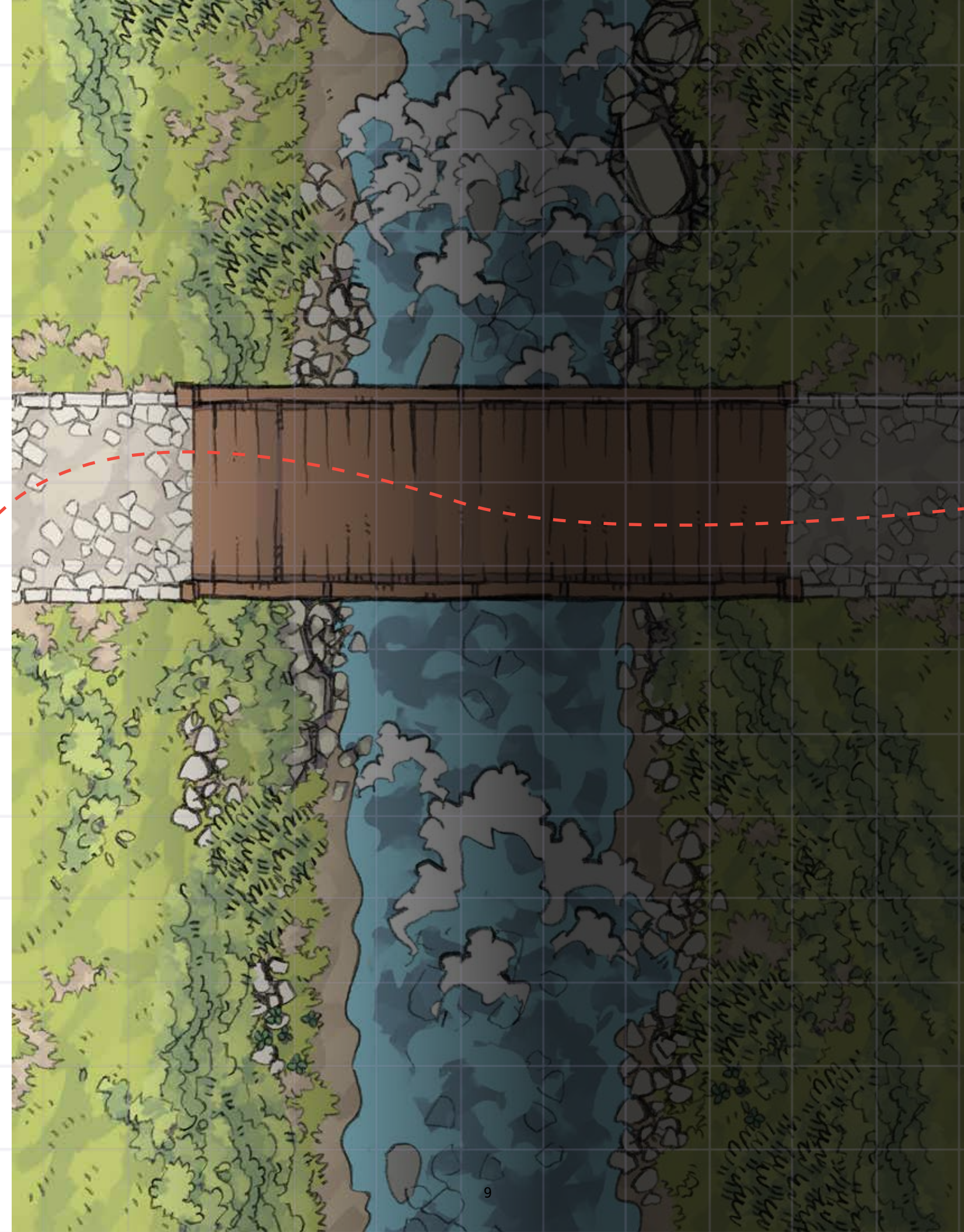
Final Report

A final report contextualizing the above maps within research on the historical and social context of nature play, the benefits of nature play for children (ie. green space as a social determinant of health), the importance of risk play in nature, and the barriers people face in accessing nature play spaces.

Play Themes

A list of play themes related to the 10-12 nature play activities used to code green spaces. These ideas will then be used to create story cards to prompt care-based nature play that will be included in the Nature Play Backpacks provided through the public libraries.

The information provided by this project, alongside results from a community survey created by local high school students, aims to inform a clear picture of the needs of children within the community. If effective, this project will help both Wildrock and the community make informed choices about where to prioritize energy and resources for improved nature play.



RESEARCH

definitions

Green Space

Green space was defined as a vegetated space accessible to the public that is large enough to be used for nature play.

Nature Play

Nature play is self-directed, imaginative play in outside spaces that includes elements of the natural world.²

Urban Ring

In determining which green spaces to include in this project, we defined the urban ring as the zone around the City of Charlottesville that still feels like the city itself and is accessible to those who live in the city and by public transportation.

benefits of nature play

Nature play is when children are provided with the opportunity to engage in unstructured play activities in an outdoor setting where natural elements feature, such as logs, rocks, and water as opposed to manufactured play equipment.

Nature play experiences can range from digging holes, catching fireflies and frogs, exploring creeks and ponds, climbing trees, building stick forts or tree houses, daydreaming in a secret spot, or just exploring the woods. Using features from the natural environment, children are able to create their own play, learning how to be imaginative and creative while exploring the natural world.

The benefits of nature play on children have been well-documented. The evolutionary psychologist, Peter Gray, is most famously known for his research on the human interdependence on nature, underscoring a long list of psychological, physical, and social benefits of free and spontaneous play. The Natural Learning Initiative, founded in 2000 to create high-quality environments for healthy childhood development in vulnerable communities, outlines many of these benefits on its website.³



Increased physical activity

Children who experience play areas with diverse natural settings are more physically active, more aware of nutrition, more civil to one another, and more creative. Children engage in more vigorous activity outdoors than indoors.

Improved nutrition

Children who grow their own food are more likely to eat fruits and vegetables. Improves eyesight: Increased time outdoors is related to reduced rates of nearsightedness (myopia) in children and adolescents.

Reduces the risk of asthma and other allergies

Increasing biodiversity and contact with diverse living organisms from all sources of nature (plants, animals, insects, bacteria) is associated with the balance of individual microbiota, boosting the immune system, which may reduce allergies including asthma.

Improves social relations

Children will be smarter, better able to get along with others, healthier, and happier when they have regular opportunities for free and unstructured play in the out-of-doors.

Improves self-discipline

Access to green spaces, and even a view of green settings, enhances a peaceful behavior, self-control, and self-discipline for inner-city youth, particularly in girls.

Reduces stress

Green plants and vistas reduce stress among children living under difficult circumstances. Locations with greater number of plants, greener views, and access to natural play areas show more significant effects.

Impacts positive behavior

After the outdoor renovation, 68% of center directors reported positive changes in children's behavior and 40% mentioned edible plant installations as the greatest success.

Increases cooperation

School studies found children played more cooperatively.

Supports creativity and problem-solving

Children engage in more creative forms of play in green areas. Play in nature is especially important for developing creativity, problem-solving, and intellectual developmental skills.

Enhances cognitive abilities

Increased children's ability to focus and enhances cognitive abilities.

Improves academic performance

Studies in the US show that schools using outdoor classrooms and other forms of

nature-based experiential education report significant student gains in social studies, science, language arts, and math.

Reduces ADD symptoms

Contact with the natural world can significantly reduce symptoms of ADD in children as young as 5 years old. The greener their environment, the more manageable are their ADD symptoms.

Supports pro-environment attitudes and behavior in adulthood

Childhood participation with nature was positively associated with pro-environmental attitudes and marginally related to environmental behaviors.

Supports environmental protection behaviors

Positive direct experience in the out-of-doors and being taken outdoors by a trusted adult are the two factors that most contribute to individuals choosing to take action to benefit the environment as adults.

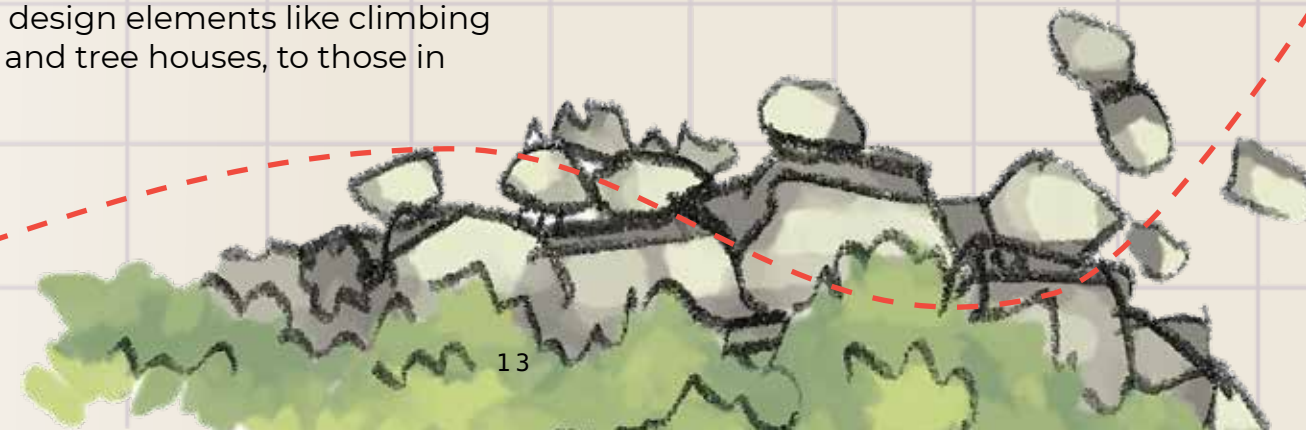
Unfortunately, nature play among children has become far less common leading to serious disparities in health. In his book, *Last Child in the Woods*, Richard Louv calls out the "nature-deficit" disorder phenomenon, diving into the historic beneficial effects of nature. Barriers such as changes in contemporary family life, increased screen time, and overly structured lives now limit children's experience of nature. Busy schedules have led to families eating more processed, high-calories foods, reducing opportunities for family time and sit-down meals, which has resulted in unprecedented rates of childhood

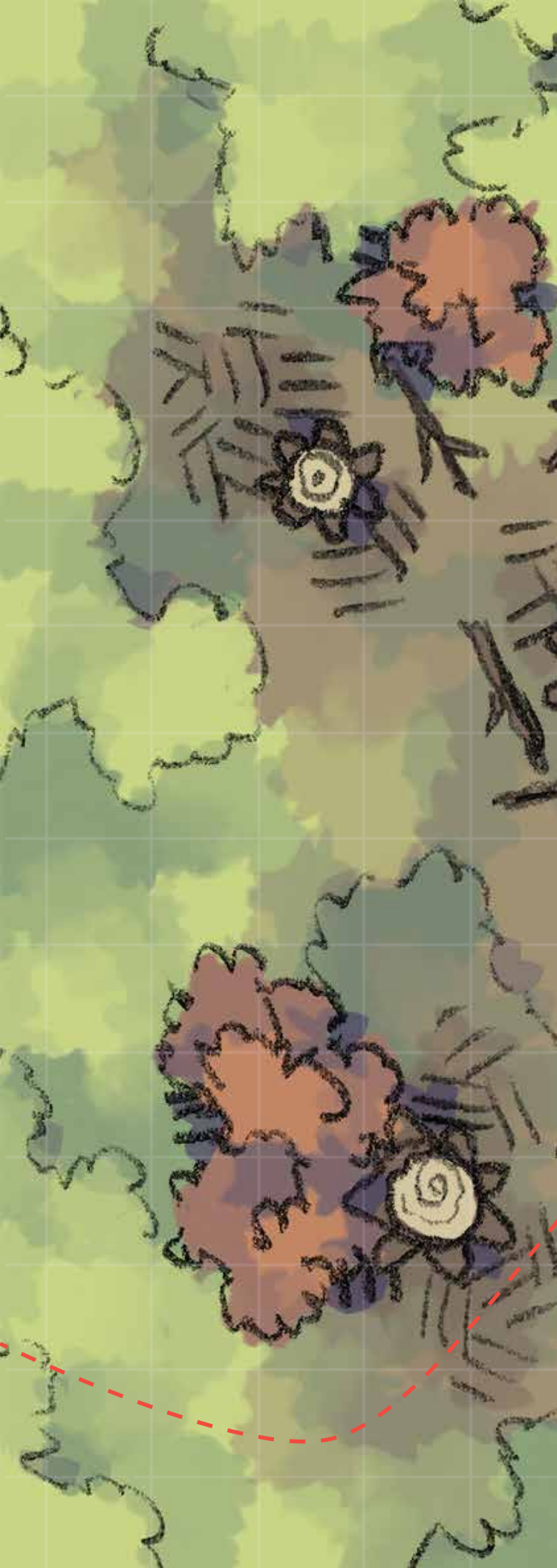
obesity. According to a 2018 CDC study, the prevalence of obesity was 19.3%, affecting about 14.4 million children and adolescents between the ages of 2 and 19.⁴ Further, obesity rates are even higher among minority communities: 25.6% among Hispanic children and 24.2% among non-Hispanic Black children. Childhood obesity presents additional serious health threats for children including heart disease, diabetes, sleep apnea, and social and psychological problems.

Another, perhaps more common, deterrent from nature is its inherent risk. While risk is necessary in play, risky forms of play are becoming less common as more areas of children's lives are structured by and under the watchful eyes of adults. Despite shying away from risky play, associating it with danger, risky play is actually essential to preventing injuries. Through free and unsupervised play, children are able to learn how their bodies work and how the world works: skills that will ultimately protect them. Research shows it is actually more likely for children to get injured playing organized sports or in organized play environments than from playing outside. Recent estimates show that children would need to spend three hours per day playing every day for ten years before they are likely to get an injury that needed treatment (and would, even then, still likely be minor).⁵ Meghan Talarowski, the founder of a playground research and design organization, Studio Ludo, conducted a study comparing London playgrounds, which tend to have less fixed equipment and more seemingly hazardous design elements like climbing structures and tree houses, to those in

US cities. She found that not only were children far more active in the British playgrounds, but there were also fewer injuries.⁶ Ellen Sandester, a professor in early childhood education, puts it succinctly: "children are highly motivated to play in risky ways, but they are also very good at knowing their own capacities and avoiding risks they are not ready to take, either physically or emotionally. Our children know far better than we do what they are ready for."⁷

Incorporating more risk into children's play began to gain traction in 1943, when the Danish landscape architect Carl Theodor Sorenson developed what he called "junk playgrounds" in Nazi-dominated Copenhagen after realizing that kids were opting to play in construction sites over his playgrounds. So, in areas with little access to nature play, he designed "junk playgrounds." Lady Marjory Allen of Hurtwood, a British Landscape Architect and children's advocate, dismayed by the "asphalt square" playgrounds with adult-manufactured rigid mechanical equipment that didn't allow kids to act on their environment or fully express creative ideas, set out to design similar sites under the now more common name of "adventure playgrounds." In an interview with her, she states "if they are so overprotected that they are never able to meet these challenges and able to take these risks, I think they will be the poorer for it when they grow up. When they set their heart on doing something which may be beyond their capabilities, they'll stay at it and stick at it until





they've achieved it, and this builds up a tremendous sense of self-confidence."

Risky play can take on many different forms, but always involves the thrill and excitement of children testing themselves and finding out what happens. Some examples of risky play include playing at heights, such as climbing a tree, playing at speed, such as running really fast, playing with tools, such as sticks and stones, playing with dangerous elements, such as water, playing where there's a chance of getting lost, and playing roughly, such as tumbling and rolling. These experiences help them develop abilities to make their own decisions, manage risk, solve problems, develop social skills, regulate emotions, build resilience, promote self-esteem, and experience joy.⁸ The American Academy of Pediatrics (AAP) recently published in a report that "undirected play allows children to learn self-advocacy skills. When play is allowed to be child driven, children practice decision making skills, move at their own pace, discover their own areas of interest, and ultimately engage fully in the passions they wish to pursue."⁹ Parental worries and desires to protect kids can result in setting too many limits, which can interfere with health development.

disparities in nature access

The benefits of nature play may be somewhat universal, but access to green spaces is not. Neighborhoods with the most poverty are often those with the fewest parks and the least green space. African American, Hispanic and low-income children are also more likely to be exposed to toxins both at home and at school due to less-affluent communities and their institutions placed on cheaper land next to highways, factories, or contaminated sites. Not only is this manifest in the higher rates of asthma associated with a racially inequitable distribution of green infrastructure, but also contributes to an increased fear associated with the outdoors.¹⁰

Not only are there fewer green spaces in less affluent areas, but it's also been found that low-income residents underutilize parks, are less likely to perceive parks as places providing health benefits and face greater barriers to park use than other groups. These barriers include not feeling welcome, cultural and language restrictions, program scheduling and pricing concerns and a lack of free time¹¹. A 2016 study found that barriers to outside play among Hispanic children were most frequently safety concerns, their parents' work schedules, and a lack of green space.¹² A similar study around African American youth park use found that both poor and non-poor African American children are more likely to live in high-poverty neighborhoods and frequently cite fear, anxiety, and feelings of helplessness in the face of crime as barriers to park use.¹³

While access to green areas might mitigate the effects of economic inequalities on mental and emotional wellbeing, improving resources for coping, these inequities also prevent acceptance of such nature based play opportunities.¹⁴ Socio-economic status plays a key role in shaping children's experiences and perceptions of the natural world.

Research has found that socioeconomic standing in which children live predicts their experiences in and perceptions of natural spaces. While children from middle-income neighborhoods tend to view nature as a space of solitude and sanctuary, children from low-income communities tend to perceive nature as a threatening place.¹⁵ Moreover, most green spaces are subject to racialization of how people may congregate and what activities are acceptable or questionable, further limiting access to nature based play activities and especially for working families of color.¹⁶

Children with disabilities often face additional challenges in accessing green spaces. Parents identified attitudes of other people, bullying behaviors, material obstacles, and limited experience of park staff in working with children with disabilities as significant barriers to their uses of outdoor playscapes.¹⁷

Anne Nelson Stoner and Theodore Teichman



AUDIT METHODS



green spaces selection

Our first step in conducting this project was identifying locations to audit. Audit areas were selected by team members in collaboration with Carolyn Schuyler. The team desired to audit Charlottesville city parks, while also considering areas suitable for nature play that currently do not fit within the official designation of a park.

The City of Charlottesville open data portal (<https://opendata.charlottesville.org/pages/download-gis-data-shp-cad>) was used to identify city-owned parkland, while Google MyMaps was utilized collectively by the team to identify additional areas of interest that could serve as potential sites for nature play.

The finalized list of areas to audit was organized under three categories:

- Charlottesville City public parks
- public spaces that are not city-owned parks, and
- parks that are private, but accessible to the public.

Charlottesville City Parks

Azalea Park
Belmont Park
Biscuit Run State Park
Booker T. Washington Park
Court Square Park
Darden Towe Park
Fifeville Park
Forest Hills Park
Greenbrier Park
Greenleaf Park
Jordan Park
Jackson-Via Elementary
Market Street Park
McGuffey Park
McIntire Park
Meade Park
Meadow Creek Valley
Moore's Creek Trail
Northeast Park & Davis Field
Pen Park
Pollock's Branch
Quarry Park
Riverview Park
Rives Park
Schenk's Greenway & J W Parkway
Starr Hill Park
Tonsler Park

Public, not city-owned

Biscuit Run Trail
Botanical Garden of the Piedmont
Charlotte Yancey Humphris Park
(Albemarle County)
Dam Trail around Swan Lake
Field at Grove St. E and Valley Road Ext
McIntire Trail behind CHS
Meadow by Rivanna Trail
Monticello United Soccer Club
Morey Creek Trail
Piedmont Housing Area

Accessible private space

IX Art Park
Clark Elementary School

nature play themes

The next step in the process was developing the list of nature play themes that would serve as the primary focus in the audit. The team gathered relevant literature that discussed some of the most important themes and looked for themes that were repeated through multiple sources. One of the best examples was David Sobel's list of 7 *Design Principles for Children & Nature Adventure*.¹⁸

"Environmental education needs to be kinesthetic, in the body. Children should stalk, balance, jump and scamper through the natural world. Activity with a physical challenge component speaks directly to children via the mind body link."

Fantasy and Imagination

"Young children live in their imaginations. Stories, plays, puppets, and dreams are preferred media for early childhood."

Animal Allies

"the first talk is to become animals, to understand them from the inside out, before asking children to study or save them."

Maps and Paths

"finding shortcuts, figuring out what's around the next bend, following a map to a secret event. Children have an inborn desire to explore local geographies. Developing a local sense of place leads organically to a bioregional sense of place and hopefully a biospheric consciousness."

Special Places

"Almost everyone remembers a fort, den, treehouse, or hidden corner in the back of a closet. Children like to find and create places where they can hideaway and retreat into their own found or constructed spaces."

Small Worlds

"From sandboxes to dollhouses to model train sets, children love to create miniature worlds that they can play inside of. Through creating miniature representations of ecosystems, or neighborhoods, we help children conceptually grasp the big picture. The creation of small worlds provides a concrete vehicle for understanding abstract ideas."

Hunting and Gathering

"Gathering and collecting anything compels us; searching for hidden treasure or the Holy Grail is a recurrent mythic form. Look at the success of 'Where's Waldo'."



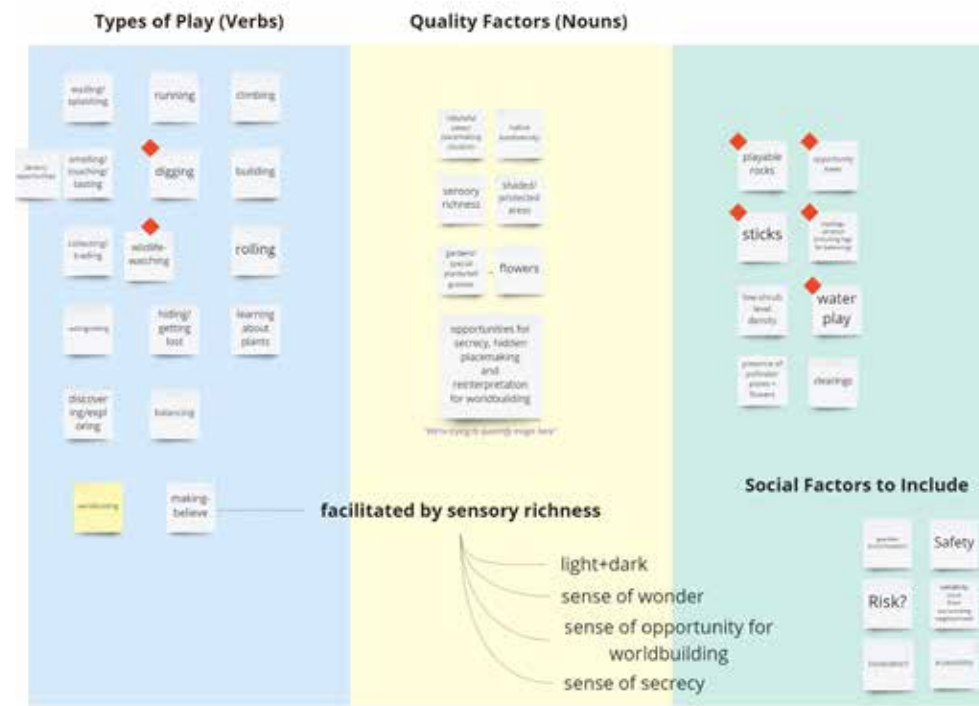
brainstorming process

In this workshop we created bubbles to represent themes of nature play that we would look for in the parks we audited. Then we listed the types of activities that were possible within each theme, alternative names for the theme, potential benefits, and notes/concerns. We used this brainstorm as the basis for our survey formulation.

Next, we extracted the strongest themes from the first part of the exercise and worked on grouping them in a manner that would make the most sense. We decided that for the sake of consistency, we would primarily utilize gerunds like running and climbing for the types of nature play and then other factors like flowers and sensory richness as supporting factors.

Then we split the new list of themes up again to determine what supporting factors we should be taking into consideration while addressing each theme.

We also noted that other factors like safety should be included in the survey, even if they aren't necessarily nature play themes.



1. CATALOG EXISTING ASSETS "How much nature?"
2. CATALOG POTENTIAL FOR PLAY "How much play potential?"

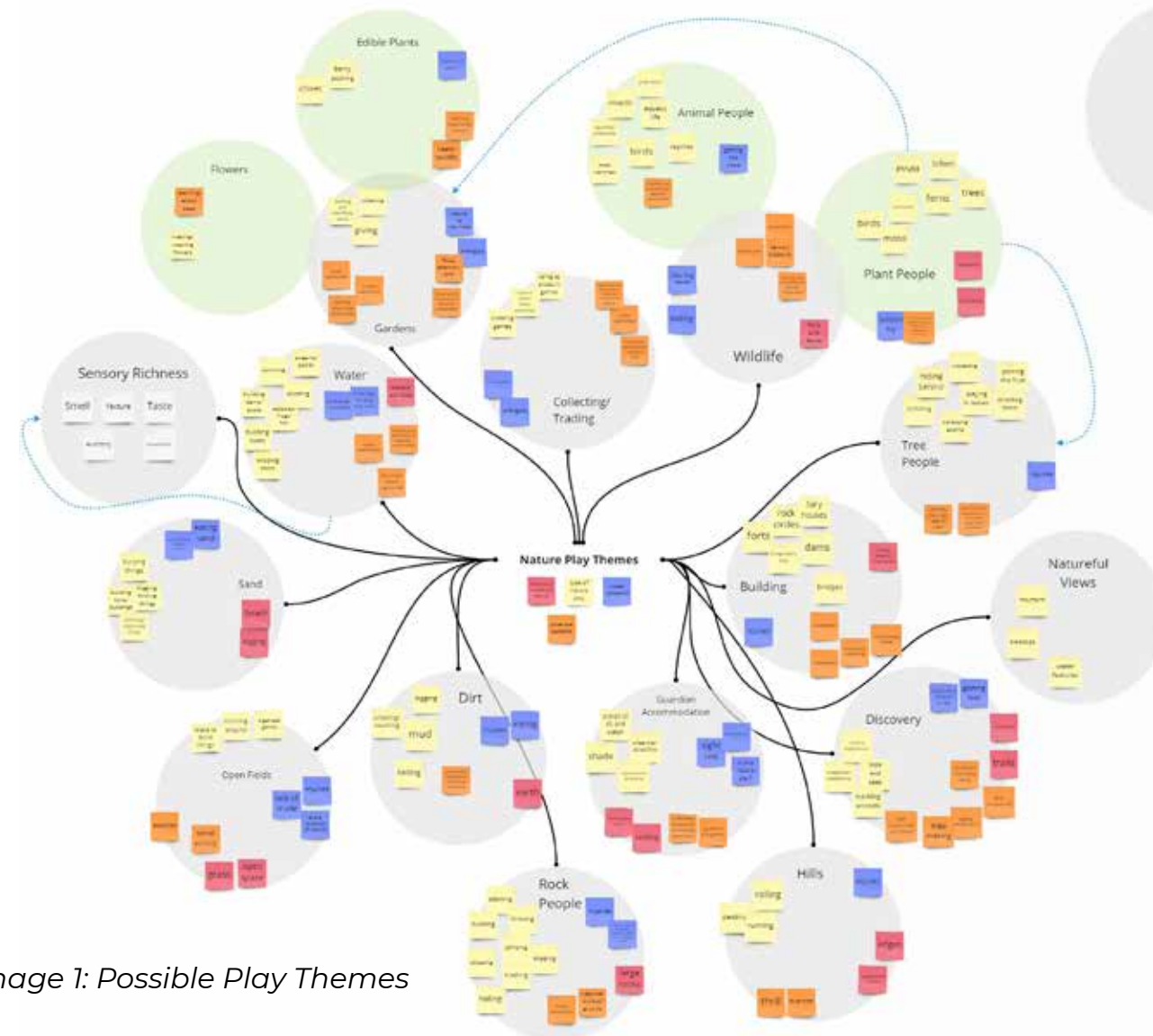
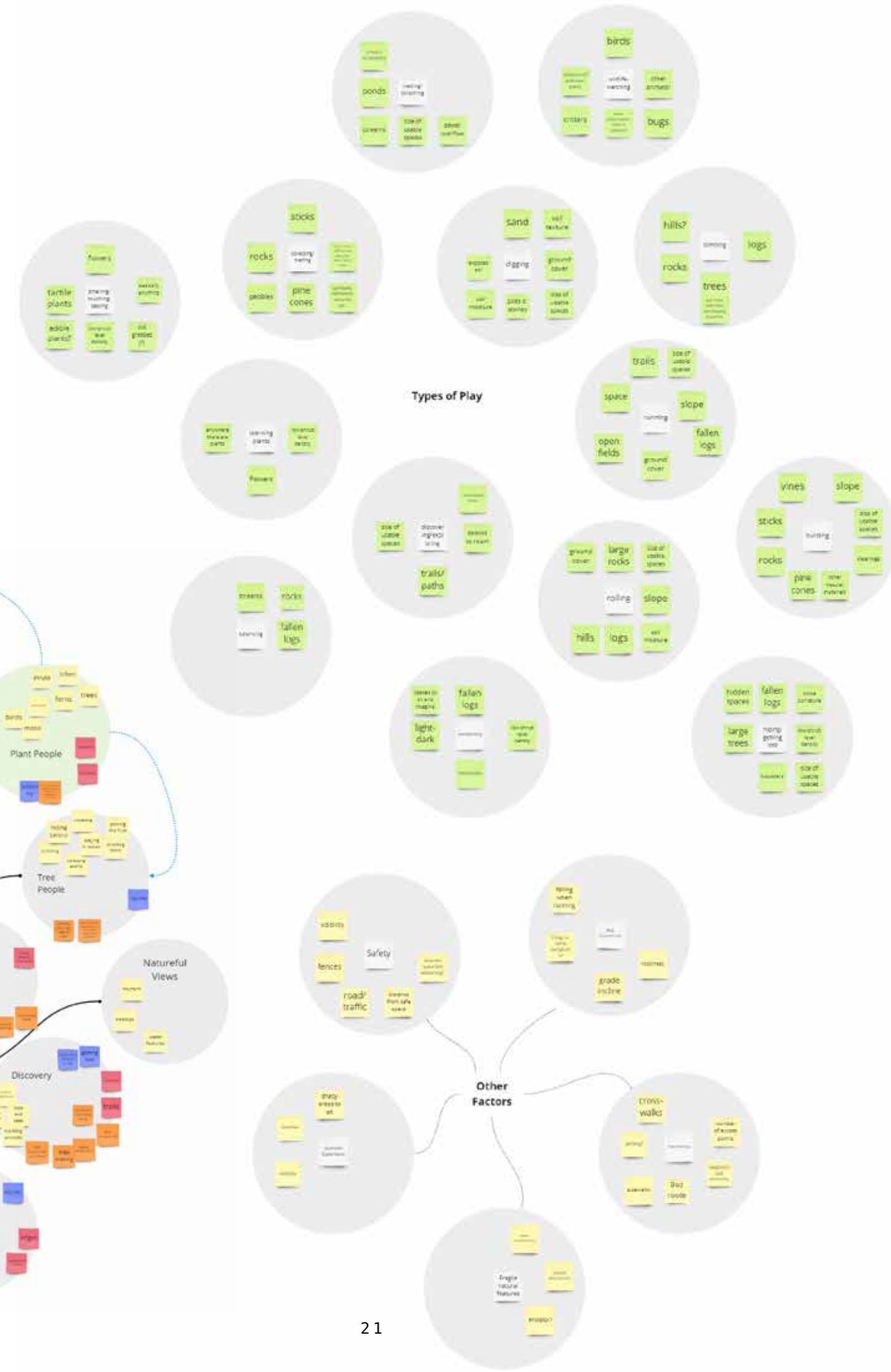


Image 1: Possible Play Themes



distilled play themes

Using the examples from other literature as a starting point, the team used Miro to brainstorm what nature play elements should be included in the audit. Figure 1 shows the progression of nature play themes and the thought behind the selection process. There are notes for each theme about alternative names, possible concerns, and potential benefits. After a thorough discussion, some themes were combined and others were divided. The following is the final list of nature play themes:

Birding or Wildlife Watching

Presence of pollinator plants, presence of plants with berries, woody enclosure, large woody debris

Building

Slope, sticks, vines, rocks, clearings for construction

Collecting / Trading

Sticks, pebbles, rocks, pine cones, gumballs, milkweeds, samaras, seed pods

Digging / Sand / Mud Play

Soil texture, type of ground cover, presence of exposed soil, soil moisture, piles of stones

Discovery / Exploration

Trails, spaces to roam, open vegetative layer, hidden spaces, sense of enclosure, sense of not knowing the boundaries of the space

Forest Fragment and Magical Thresholds

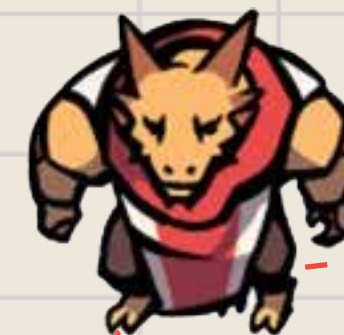
Large old trees, diverse tree community, threshold of light and shadow, sense of enclosure, leaf texture of canopy, many colors of trees

Hiding

Fallen logs, microtopography, large trees, woody debris, vine/shrub structures, boulders, low points of topography with opening that let one see and touch dirt closer than one would normally

Hill Rolling

Pleasant slope, type of ground cover, soil moisture, no large rocks, large room



Home-Base

Shade trees, seating or logs and rocks (12"-18" tall), close but not too close, close enough to get into the dirt with the children, sense of centrality, a meeting point for people and community members

Experience Plantlife

Edible plants, flowers, tactile plants (within reach), gardens, young saplings, pollinator plants, meadows, medicinal plants

Picnicking

Clearing, sense of small (dining) room, place to look out, quietness, logs or rocks about 10"-18" in height), off trail, circular layout

Prospect and Refuge

Open on one side, closed on three, higher up, sightlines of other rooms or landmarks within the park, not too close to path or to other people

Running

Open field, pleasant slope, large room, trail, groundcover type

Scrambling / Balancing

Logs, rocks, stepping stones on creek

Surveying

Vistas, high points of topography with openings that let one see farther than one could at a lower elevation

Tree climbing

Multistem trees, low branched trees, old trees

Tool Play / Making

Sticks, vines, grasses

Water Play

Presence of creek or stream, access points, slope of banks, stones or logs across

supplemental questions included in audit

Access Infrastructure

A survey of the infrastructure surrounding and in the parks was critical in determining how likely it was that families and individuals were able to easily access nature play. Team members highlighted sidewalks, bus stops, parking lots, bike lanes, and paths as the most common ways in which parks were accessed. A list was included in the survey to provide an inventory for what the access infrastructure for each park was.

Accessibility

A scale determining park accessibility was included in order to provide insight on how easy or difficult each park's use would be for individuals with mobility issues. Significant environmental features in each park, like topography, erosion, and material, were described and synthesized into a determination of how usable the park and its audited sections would be to persons and children with disabilities.

Risk Play

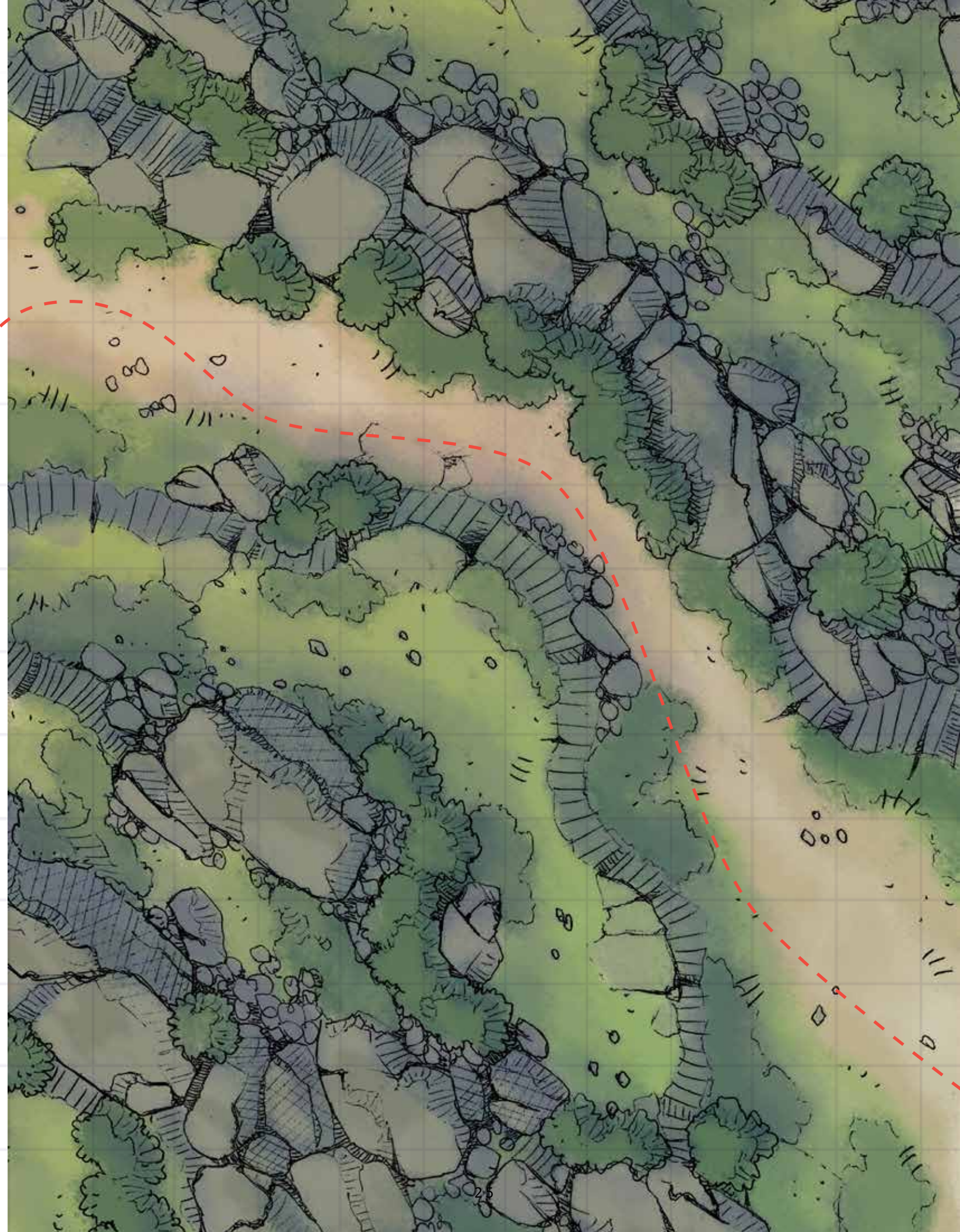
Risk play was determined to be a significant feature of the nature play survey. Using the previously defined framework of nature play, the survey included a scale to measure opportunities for risk and adventure play. A qualitative description of the area suited for nature play was included in order to provide an opportunity for the auditor to describe potential risk play activities.

Safety Perception

A description of the atmosphere or features of the space and how safe it feels was determined in the audit. Auditors used a scale to determine how safe an area felt, and to describe the associated features that made it feel safe or unsafe. This could include visibility, types of litter, lighting, and other features that would be useful for families to have as they plan nature play.

Natural Features & Educational Opportunities

Drawing on the knowledge of the auditors, as well as research about the audited parks, a question asking about natural, cultural, or historical features was included in order to add additional richness to the overall assessment of the space. This question was designed to be broad, and could include fragile natural features or historical landmarks that could provide insight to a place's natural and cultural history.





AUDIT METHODS

Although the audit team was not tasked with creating a map distributable to the public, the team used ArcGIS Pro to create maps as a way to present the data collected during this survey project. Outputs of this work include a map of Charlottesville showcasing the location of each survey taken, 18 theme maps, each representing one nature play theme (i.e. a birding map, a water play map), as well as three gradient maps that describe the levels of safety and accessibility, and the availability of risk play as identified at each location.

Additionally, survey results are presented in a table, which delineates what play themes were identified for each park and highlights the main themes most applicable to that location.

Following this summary information are sheets that present specific results for each park, including a park map with survey locations, photos taken during the survey, and descriptive text created during the survey.

survey creation & data collection

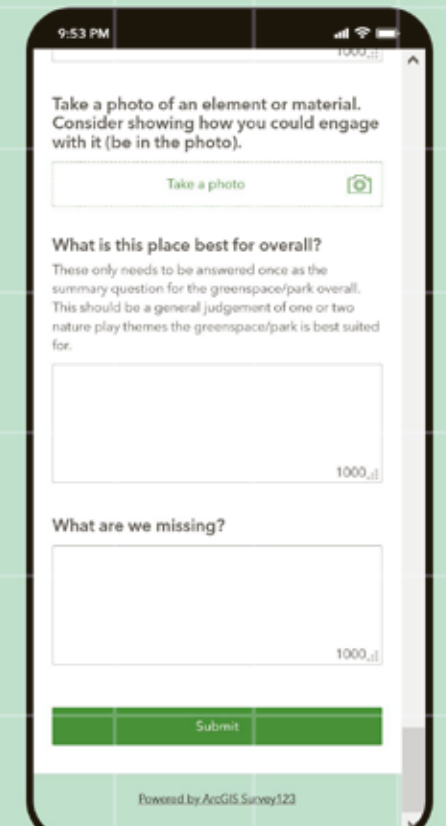
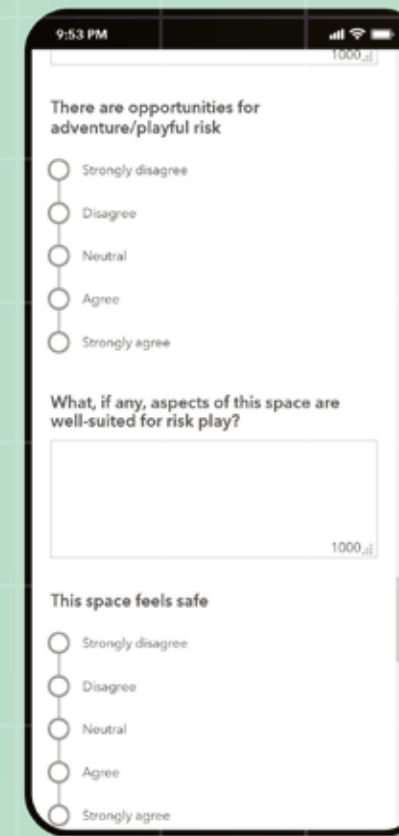
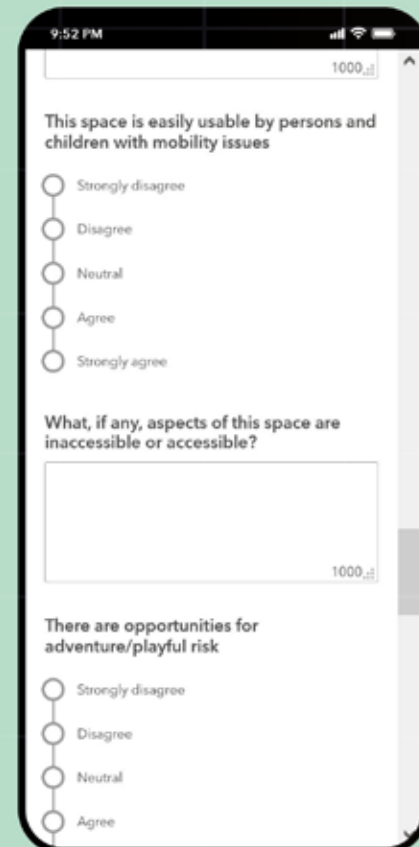
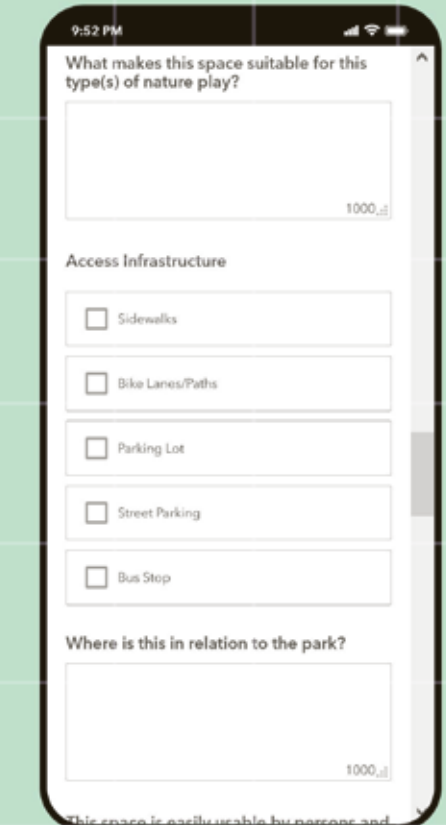
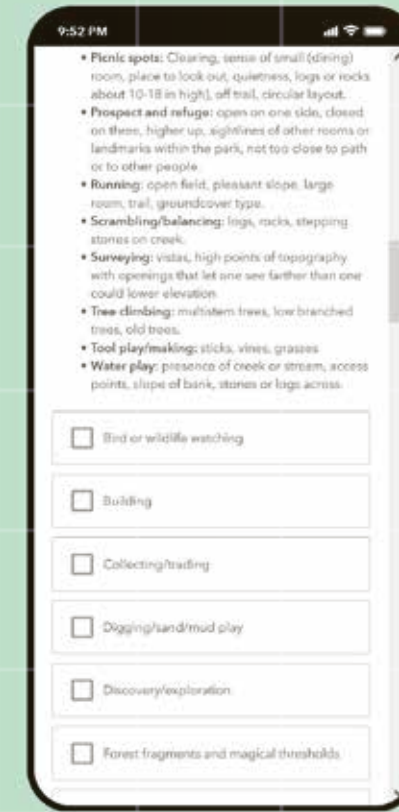
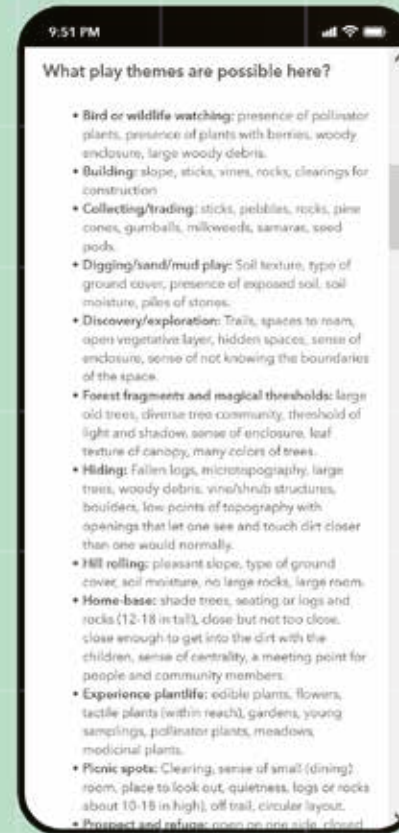
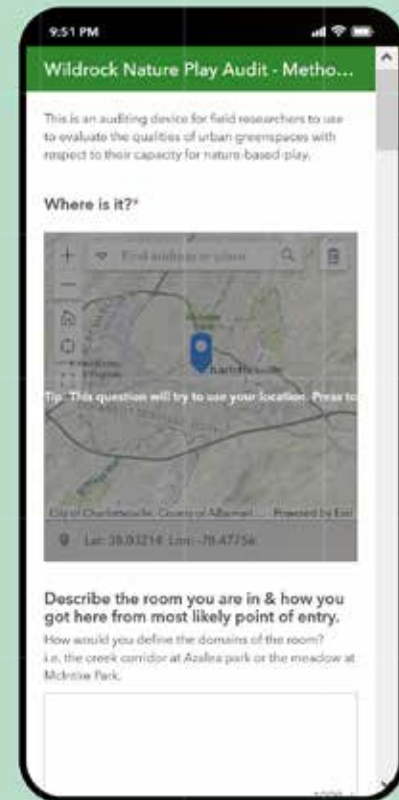
Audits of the parks were conducted over a four week period, with team members working individually or in pairs. As parks or greenspaces can be fairly large and heterogeneous, they were audited in sections. Team members used their discretion to identify 'rooms' within each park that could be described as a fairly uniform space (for example a stream corridor, a meadow, a patch of forest, etc.). Each room identified within the park was then audited by conducting a dedicated survey. A final one-question survey was conducted at the end of the audit process and was used to summarize the information gathered and identify the main nature play themes for the entire park.

The team used ArcGis Survey123, a platform that allows one to conduct fieldwork through entering information into a mobile device, to set up and conduct surveys. ArcGis Survey123 allowed the team to geolocate rooms that were being audited, to answer a list of survey questions, to document the room through photography, and to then compile all the information gathered.

Full Survey

1. Where is the room you are auditing?
Geolocate the location of the survey on a map.
2. Describe the room you are in and how you got here from the most likely point of entry. How would you define the domains of the room (i.e. the creek corridor at Azalea park or the meadow at McIntire Park)?
3. Select the play themes that are possible here
4. What makes this space suitable for this type(s) of nature play?
5. Select the access infrastructure:
 - Sidewalks
 - Bike Lanes / Paths
 - Parking Lot
 - Street Parking
 - Bus Stop
6. Where is this access infrastructure in relation to the park?
7. This space easily usable by persons and children with mobility issues:
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree

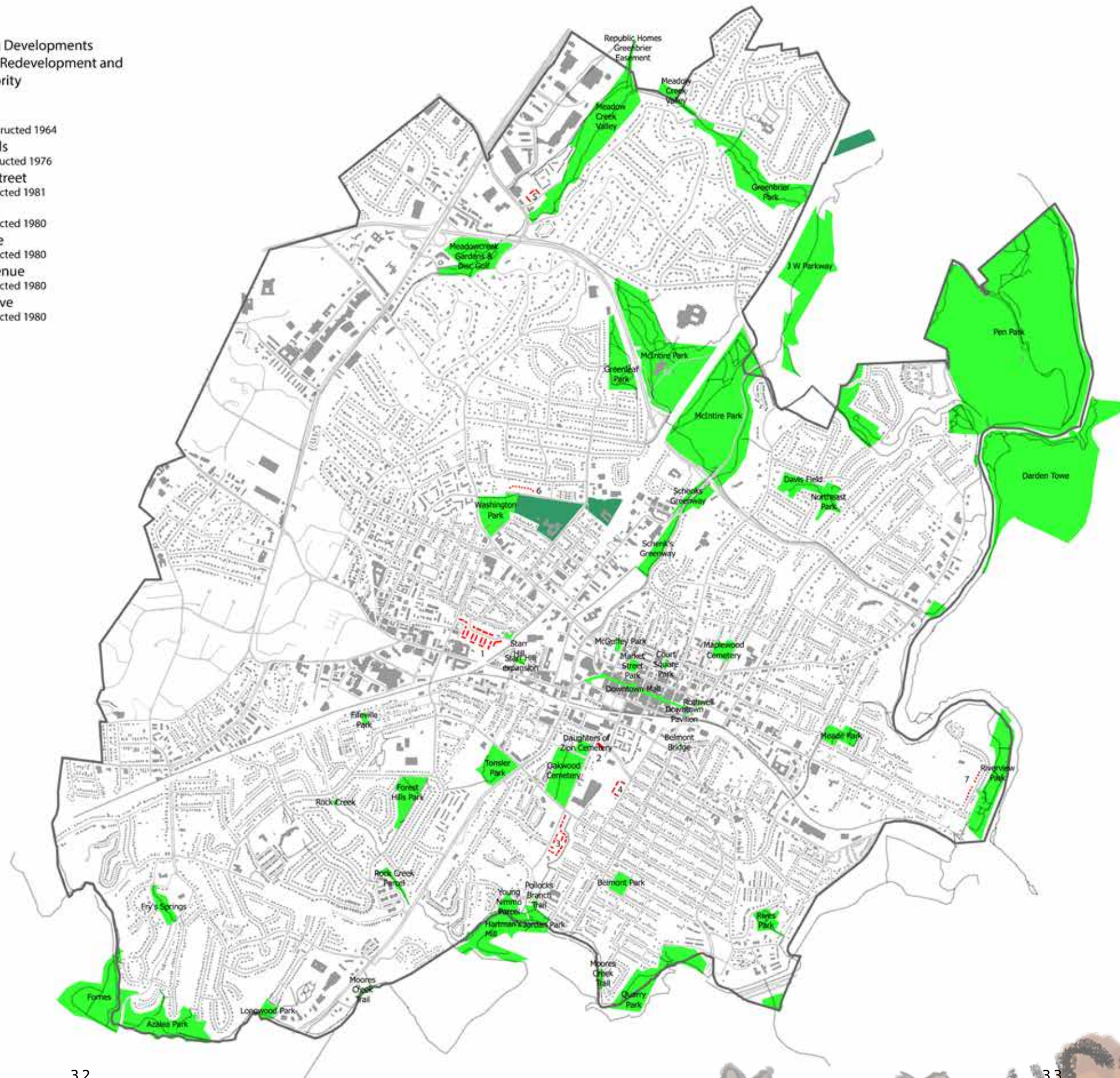
8. What, if any, aspects of this space are inaccessible or accessible?
9. There are opportunities for adventure / playful risk:
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
10. What, if any, aspects of this space are well-suited for risk play?
11. This space feels safe:
 - Strongly Disagree
 - Disagree
 - Neutral
 - Agree
 - Strongly Agree
12. What, if any, aspects of this space feel safe or unsafe?
13. Are there fragile or damaged natural features that need to be cared for / protected and/or are there significant ecological, historical, or cultural features that could offer educational opportunities?
14. Take a photo of an element or material. Consider showing how you could engage with it.
15. What is this place best for overall?
This only needs to be answered once as the summary question for the greenspace / park overall. This should be a general judgement of one or two nature play themes the greenspace / park is best suited for.



green space distribution

Public Housing Developments Charlottesville Redevelopment and Housing Authority

1. Westhaven
(126 units) – constructed 1964
2. Crescent Halls
(105 units) – constructed 1976
3. South First Street
(58 units) – constructed 1981
4. Sixth Street
(25 units) – constructed 1980
5. Mitchie Drive
(23 units) – constructed 1980
6. Madison Avenue
(18 units) – constructed 1980
7. Riverside Drive
(16 units) – constructed 1980



points surveyed



Heyward Community Forest
Heyward Community Forest
Heyward Community Forest
Heyward Community Forest
Heyward Community Forest
Heyward Community Forest

park assets for nature-based play

Legend



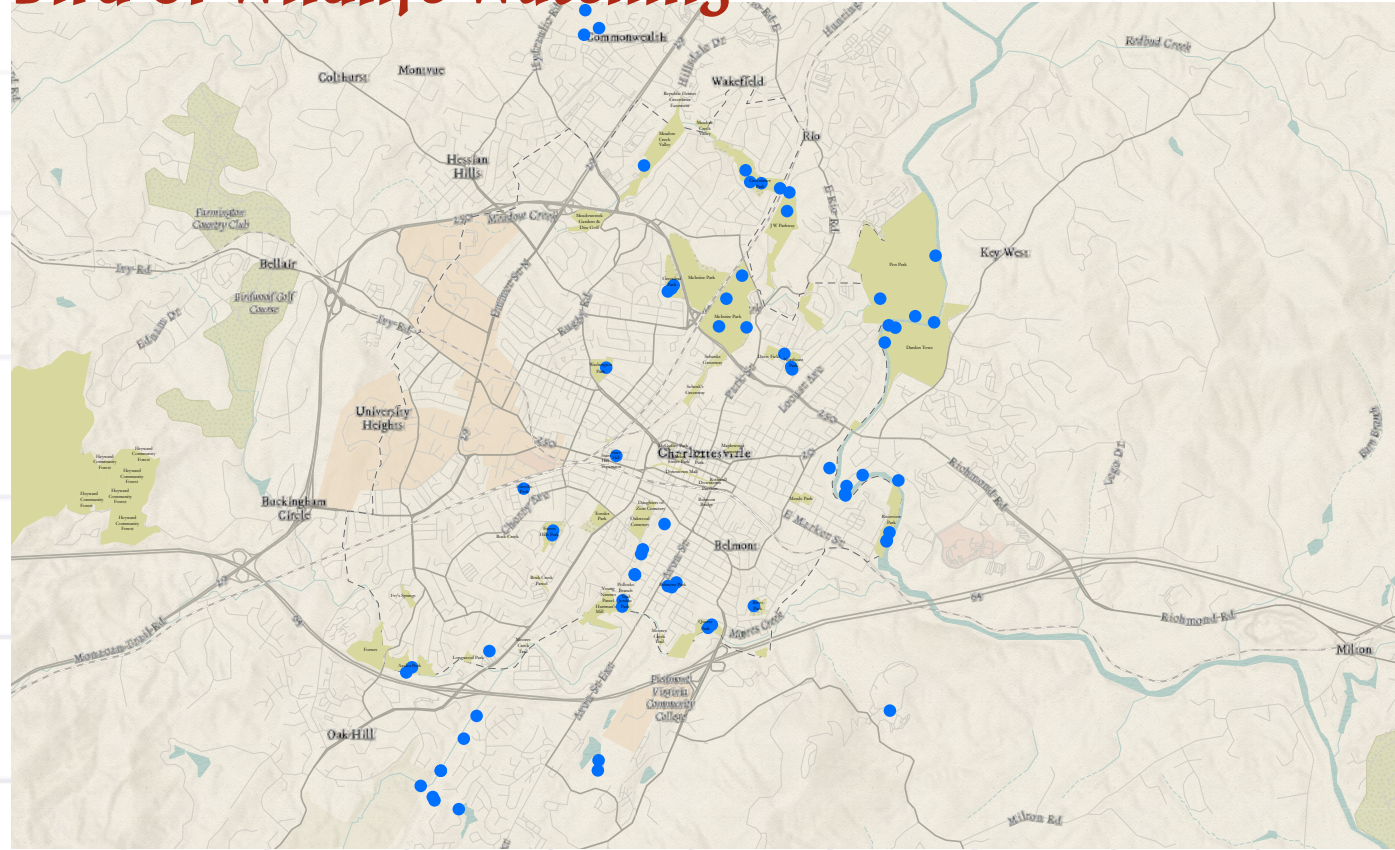
 Tree-climbing	 Exploration & Discovery	 Prospect & refuge
 Picknicking	 Water play	 Running
 Hiding	 Building	 Balancing & scrambling
 Hill-rolling	 Magical forest thresholds	 Surveying
 Wildlife watching	 Home base	 Tool play, making
 Digging, sand, mud play	 Experience plantlife	 Collecting & trading

Park																		Total Play Themes	
Azalea Park	x	x		X	x	x	X		x		x		x	x		x		X	12
Belmont Park	x		x				X		x	x	x		X		x	X			9
Biscuit Run Trail	x	x	x	x	x	X	x	x		x				x	x	x	x	X	14
Booker T. Washington Park	x	x	x			x		X	x	x	X		X		x				10
Botanical Garden of the Piedmont	x	X	x		X	x	x		x	X	x	x		x	x	x	x		14
Charlotte Yancey Humphris	x	x	x	x	x	X	X		x				X	x			x	x	12
Clark Elementary School			x						X		x		X	X					5
Dam Trail around Swan Lake	x	x	x	x	X	X	x			x		X			x	x	x	x	13
Darden Towe	x	x	x	X	x	x	x	x	x	x	x	x	x	X	x	x	x	X	18
Fifeville Park	x		X						x	x	X						x		5
Forest Hills Park	x	x	x	x				x	X	x	x	X	x	x		x		X	13
Greenbrier Park	x		x	x	X	X		x		x	x	x	x		x	x	x	X	14
Greenleaf Park	x		x	X	x		x	x	x	x	x	x	x	x	x	x	X	X	16
IX Art Park	x		x	X	x	x		x	X	x	x		X	x					11
Jackson-Via Elementary	x	x	x	x	X	x	x	X		X			x	x		x	x		13
Jordan Park	x	x	x	x	x	x	x			X	x			X		x	x	X	13
Market St Park																X			1
McGuffey Park			X						x		X					X			4
McIntire Park	x	X	x	x	x	x	x	x	x	x	X		x	x	x	x	x	X	17
Meade Park				x		x		x	x		X		x		x	x		x	9
Meadow Creek Valley	x			X						X								X	4
Meadow by Rivanna Trail	X				x		x		x	X	x		x			x			8
Monticello Trail	x				x					X	X				X				5
Northeast Park	x		x	X	x	X	x	x	x	x	x		x	x	x		x	X	15
Pen Park	X	x	x	x	X	x	x		x	X	x	x		x		x	x		14
Pollocks Branch	X	X	x	x	x	X	x		x						x		x	x	11
Quarry Park	x		x		x	X	X		x	x	x	x	x	x	x		x	X	14
Riverview Park	x		x	x	x		x		X		X		x	x	x		x	X	12
Rives Park	x								x		X		x			X			5
Schenk's Greenway & JW Parkway	x	x	x		X	X	x			x				x				X	9
Starr Hill Park	x								X			X		x		x			4
Tonsler Park									X	x		X		X					4

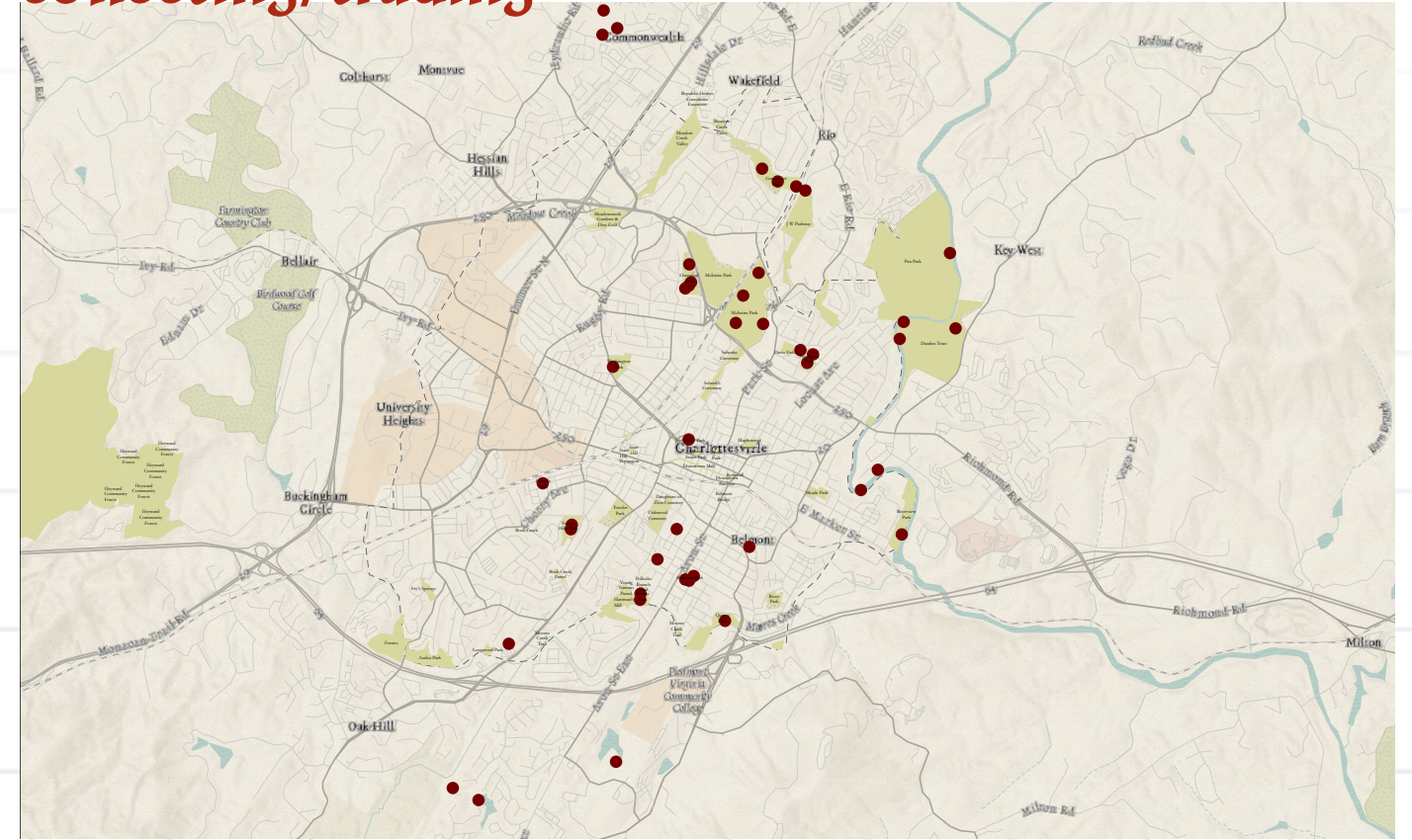
A hand-drawn map with a grid overlay. The map features several large, irregularly shaped regions in shades of brown, orange, and purple. These regions are separated by thin, dark lines. In the center of the map, there are several circular symbols, each containing a spiral pattern. The background of the map is a light green color with a subtle, wavy pattern. The overall style is artistic and sketchy.

PLAY THEME MAPS

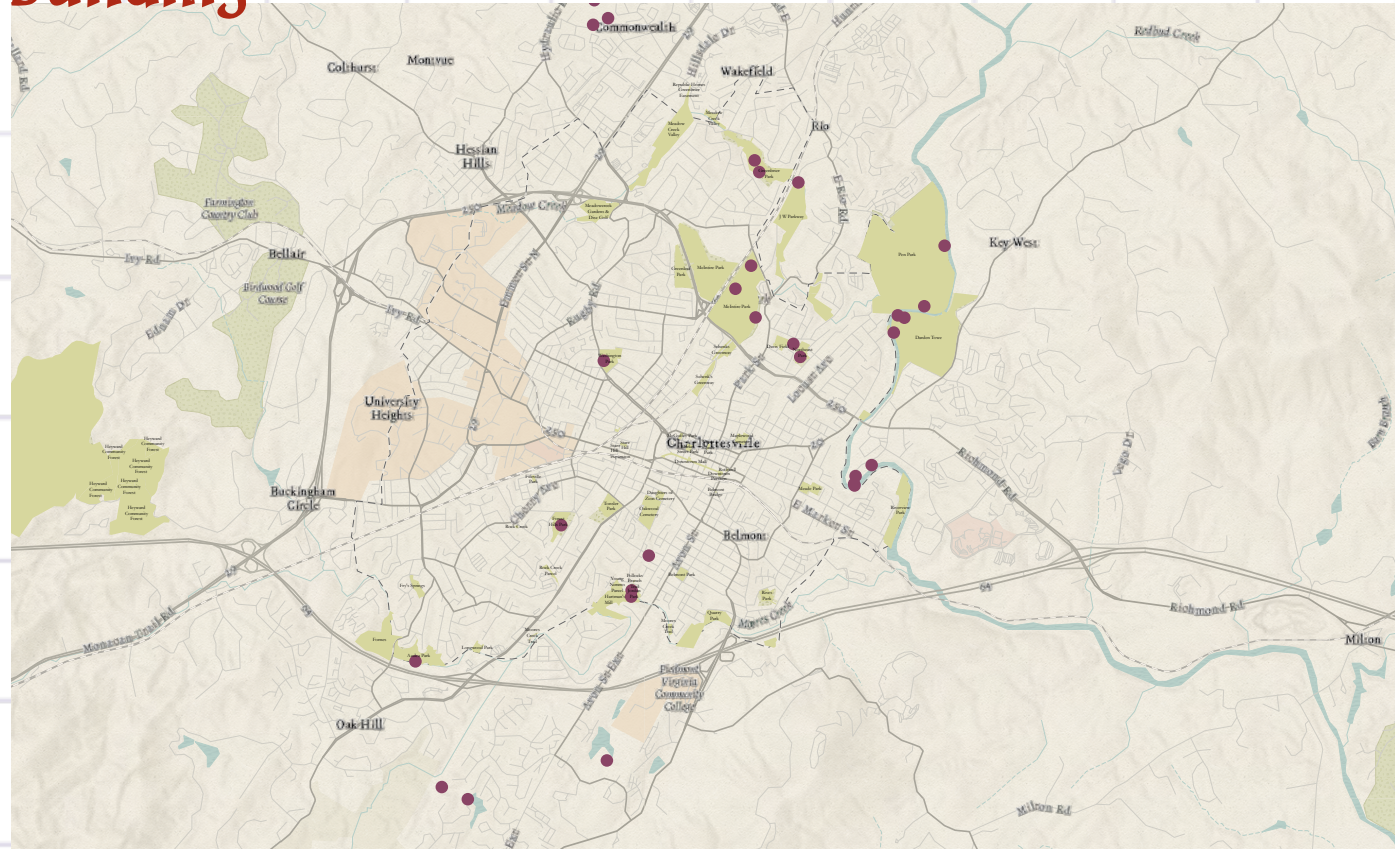
bird or wildlife watching



collecting/trading



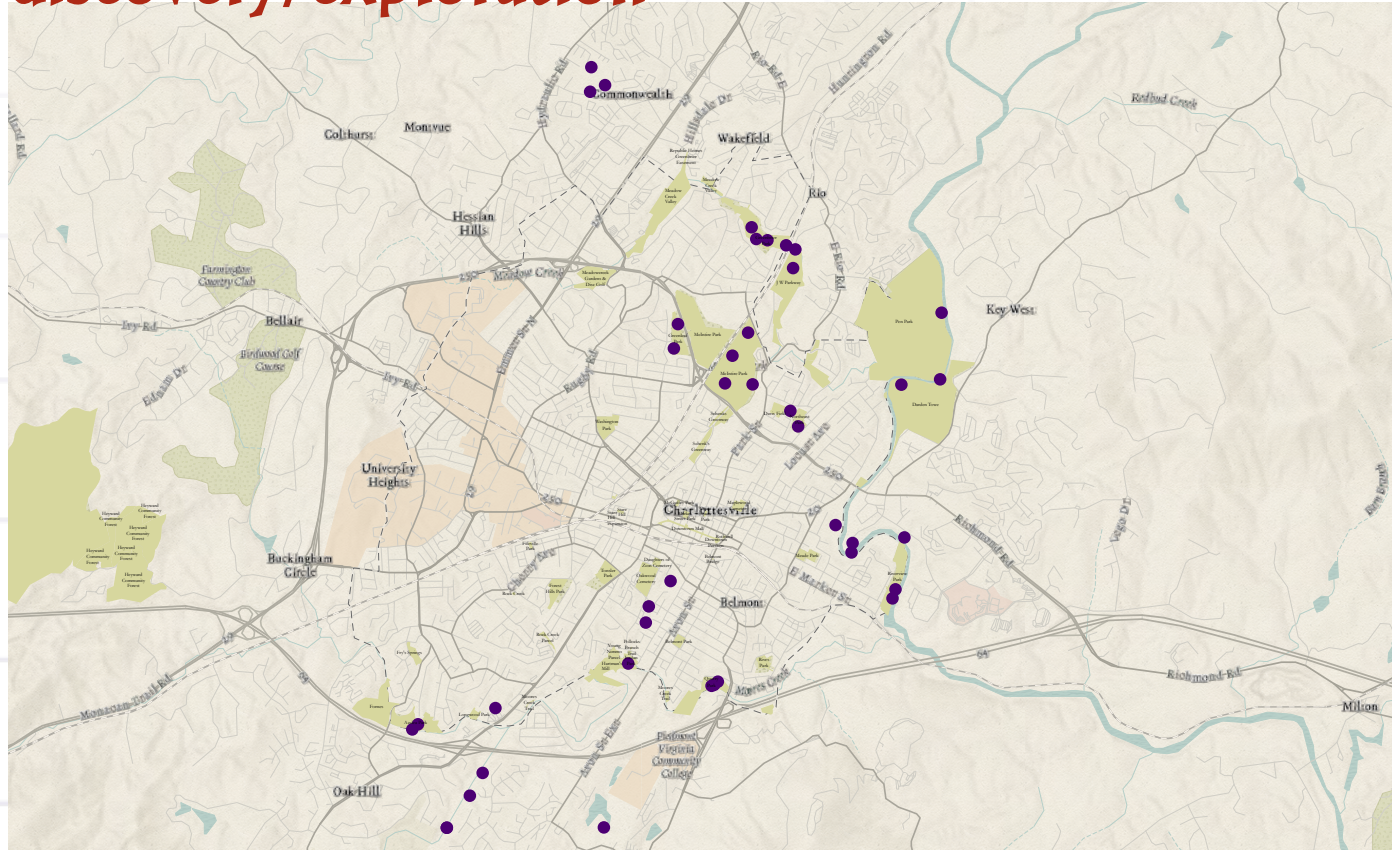
building



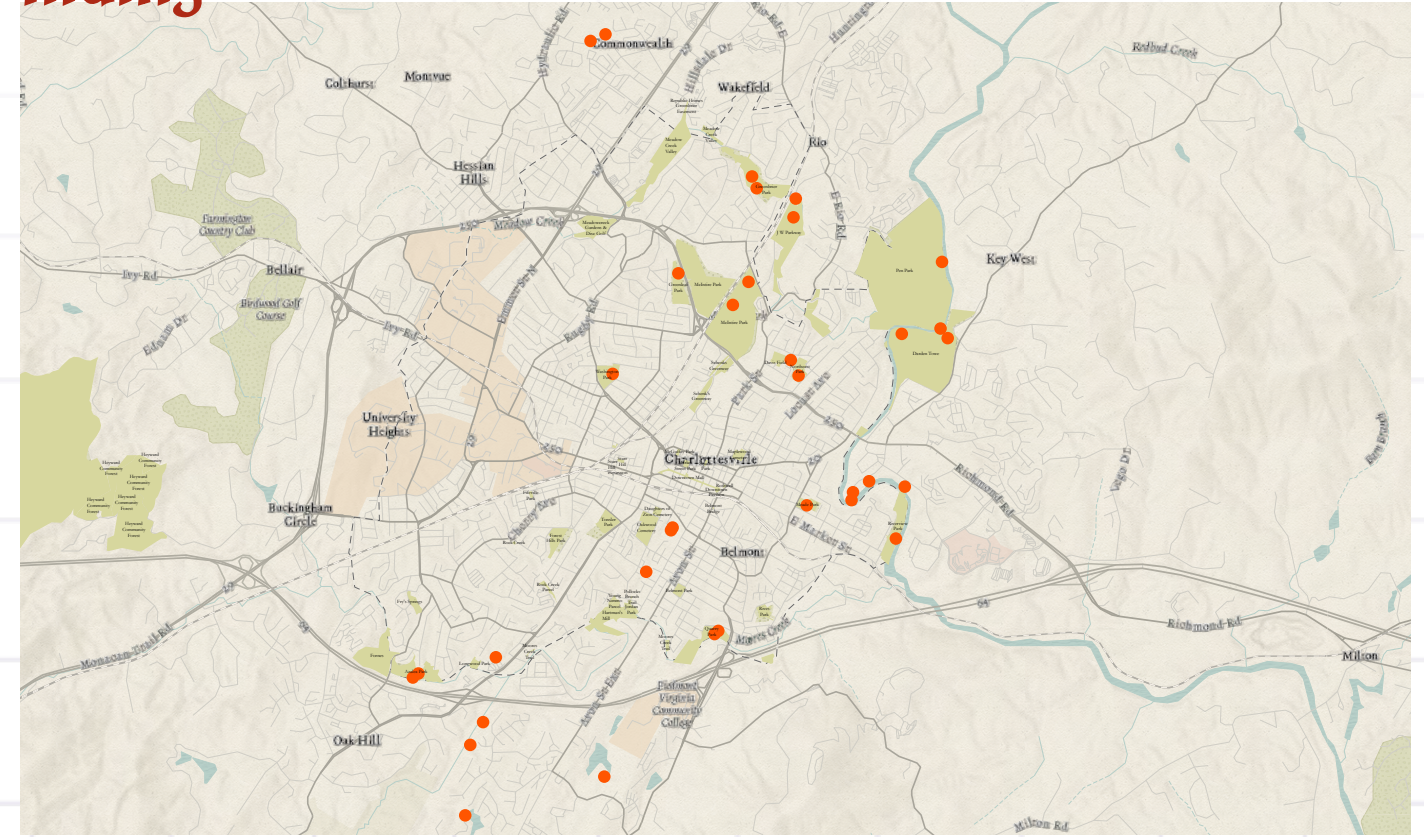
digging/sand/mud play



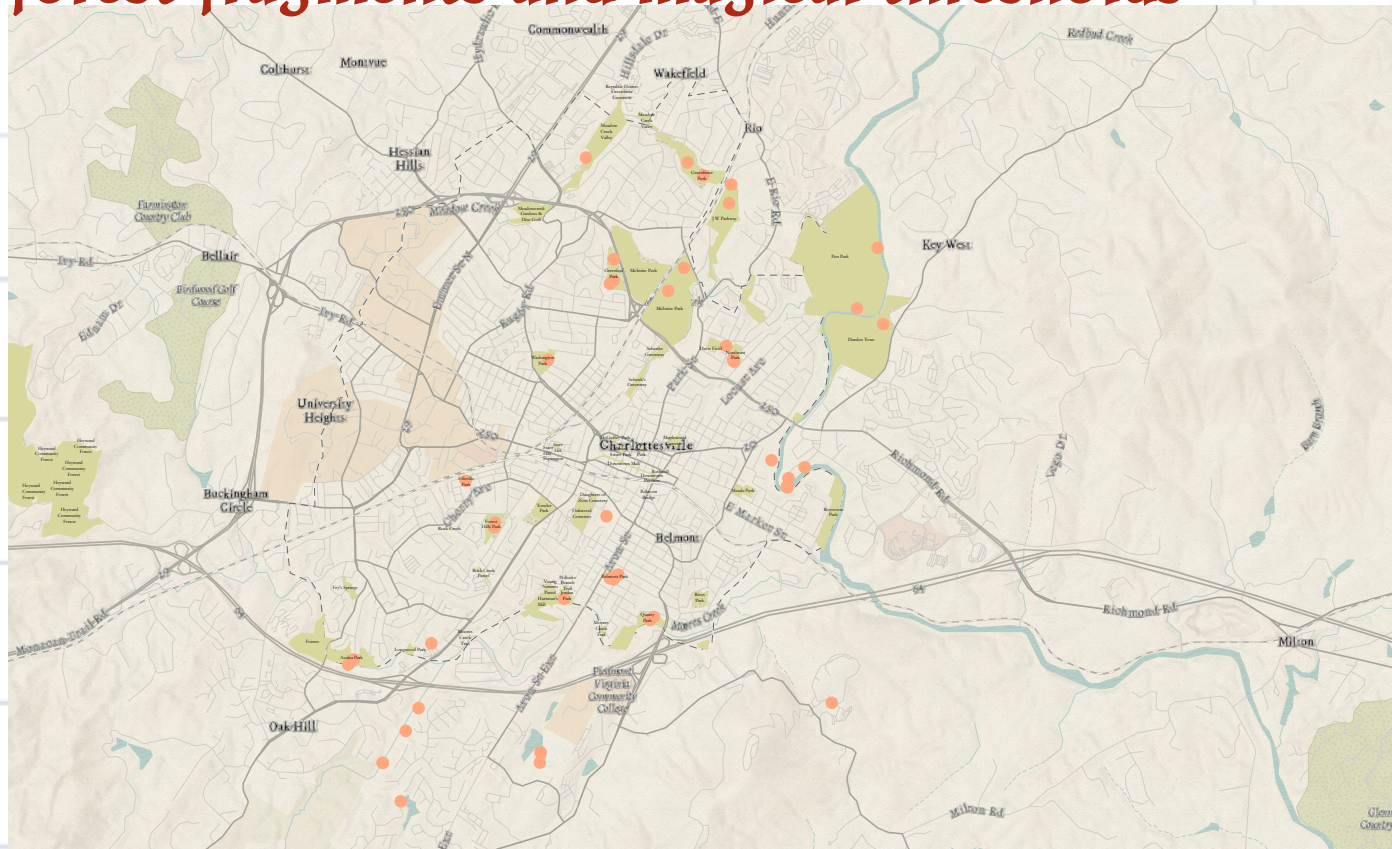
discovery/exploration



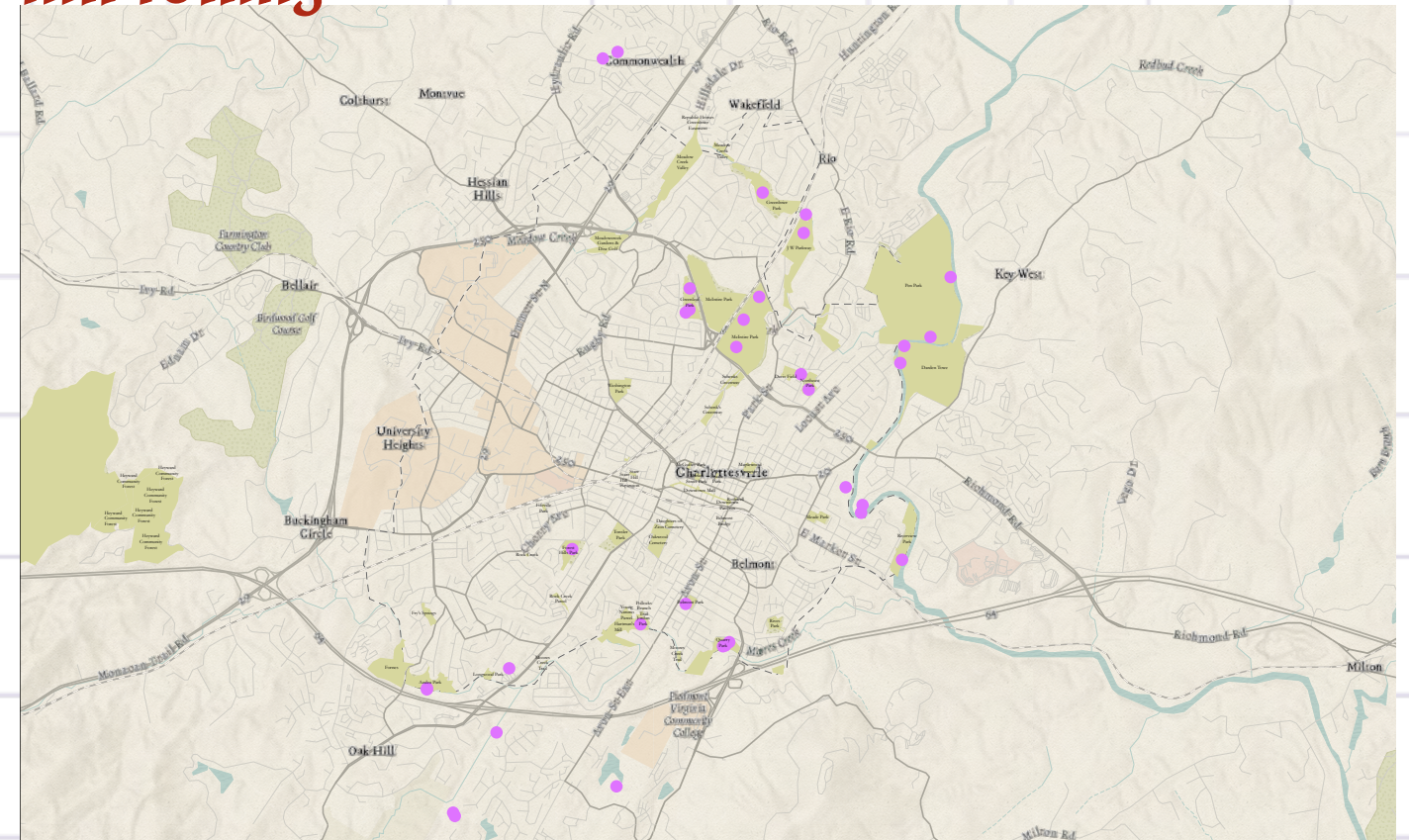
hiding



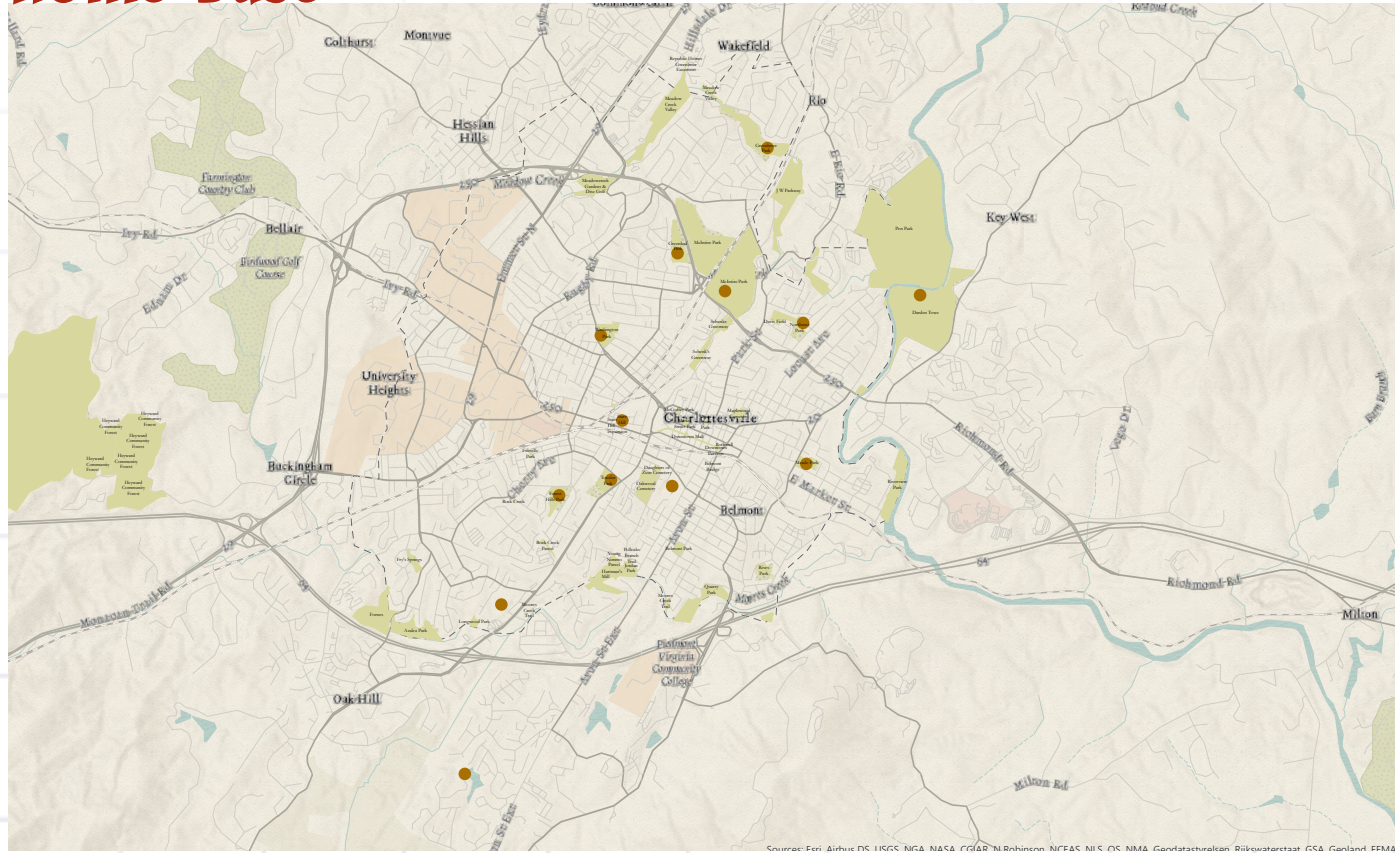
forest fragments and magical thresholds



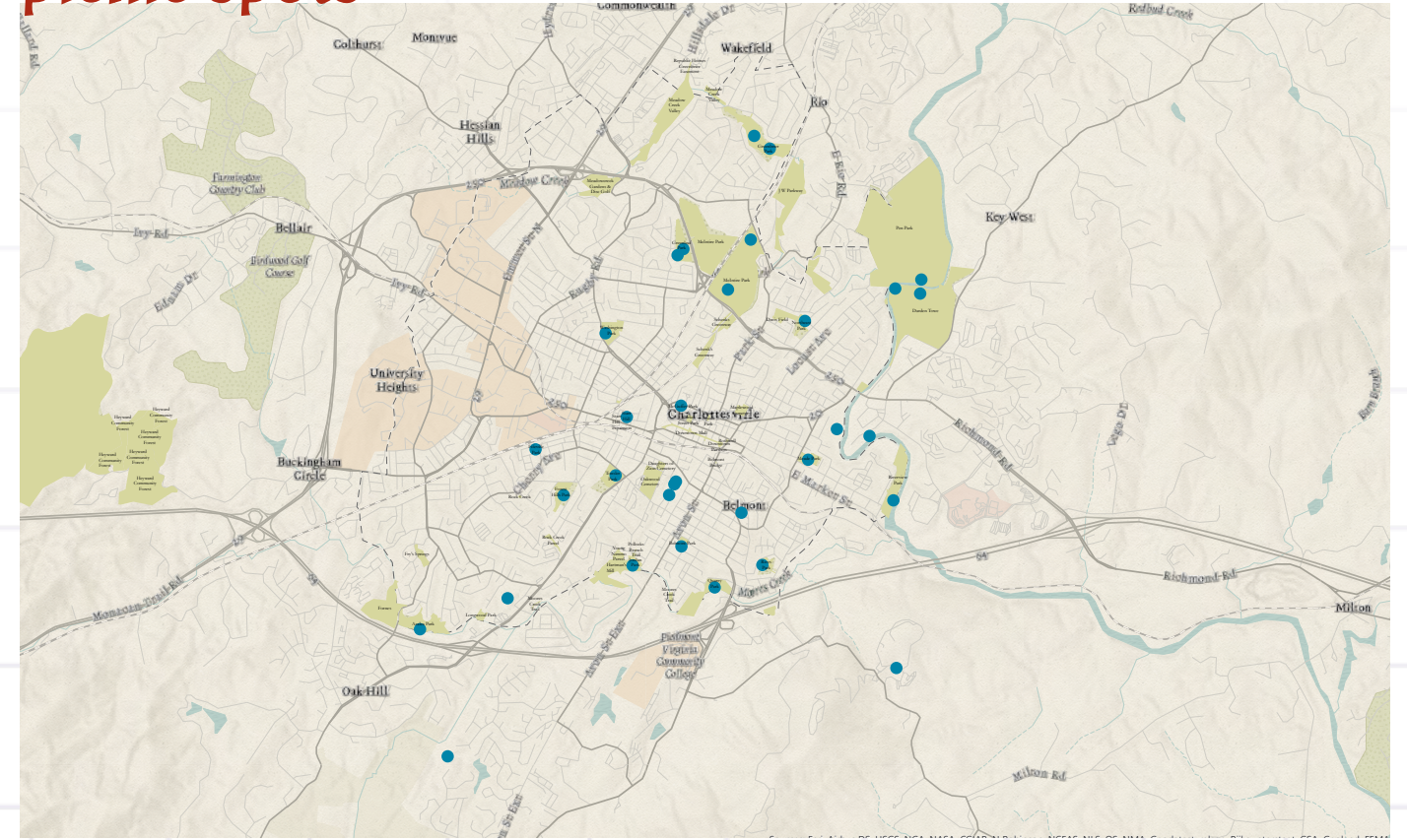
hill rolling



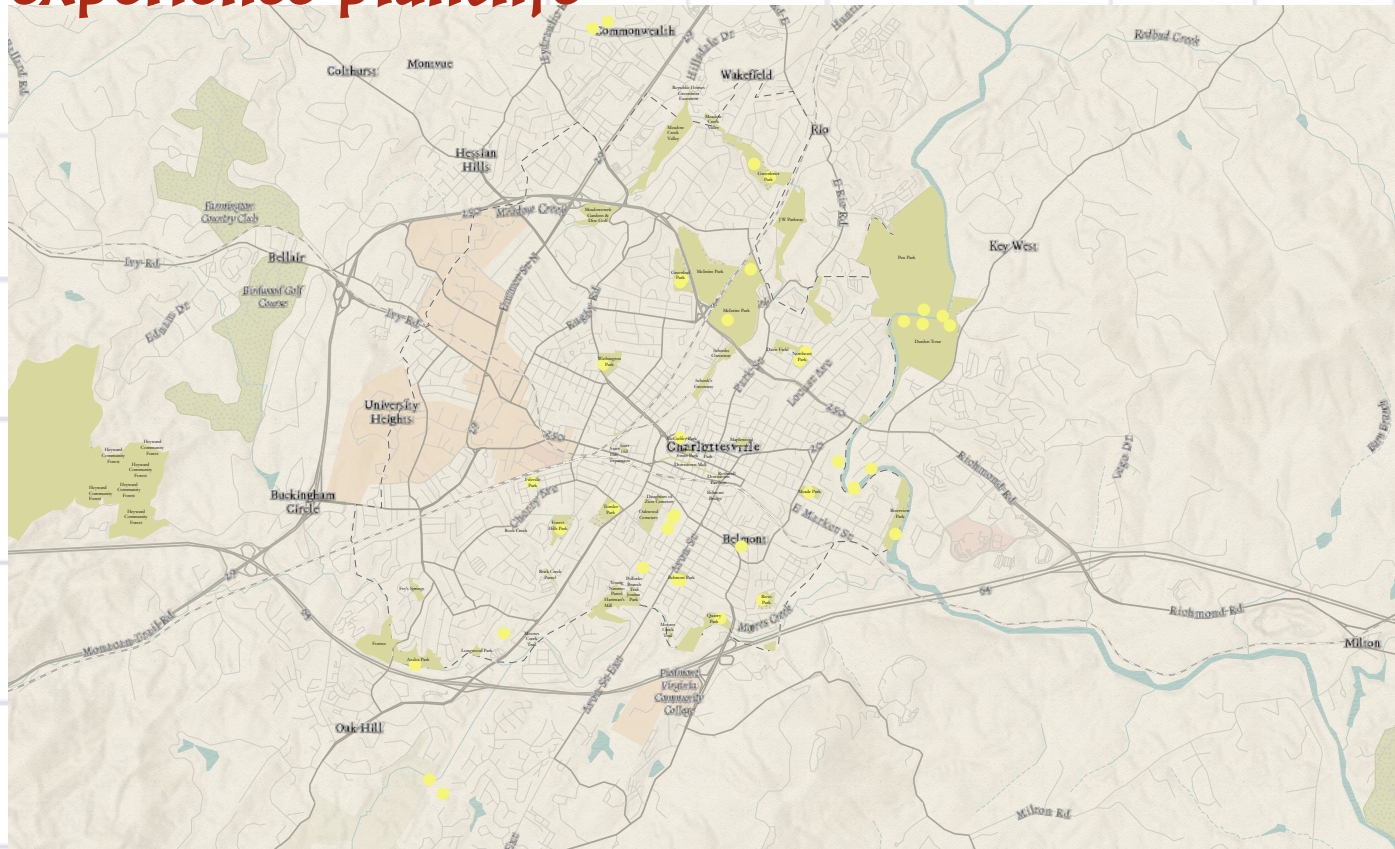
home-base



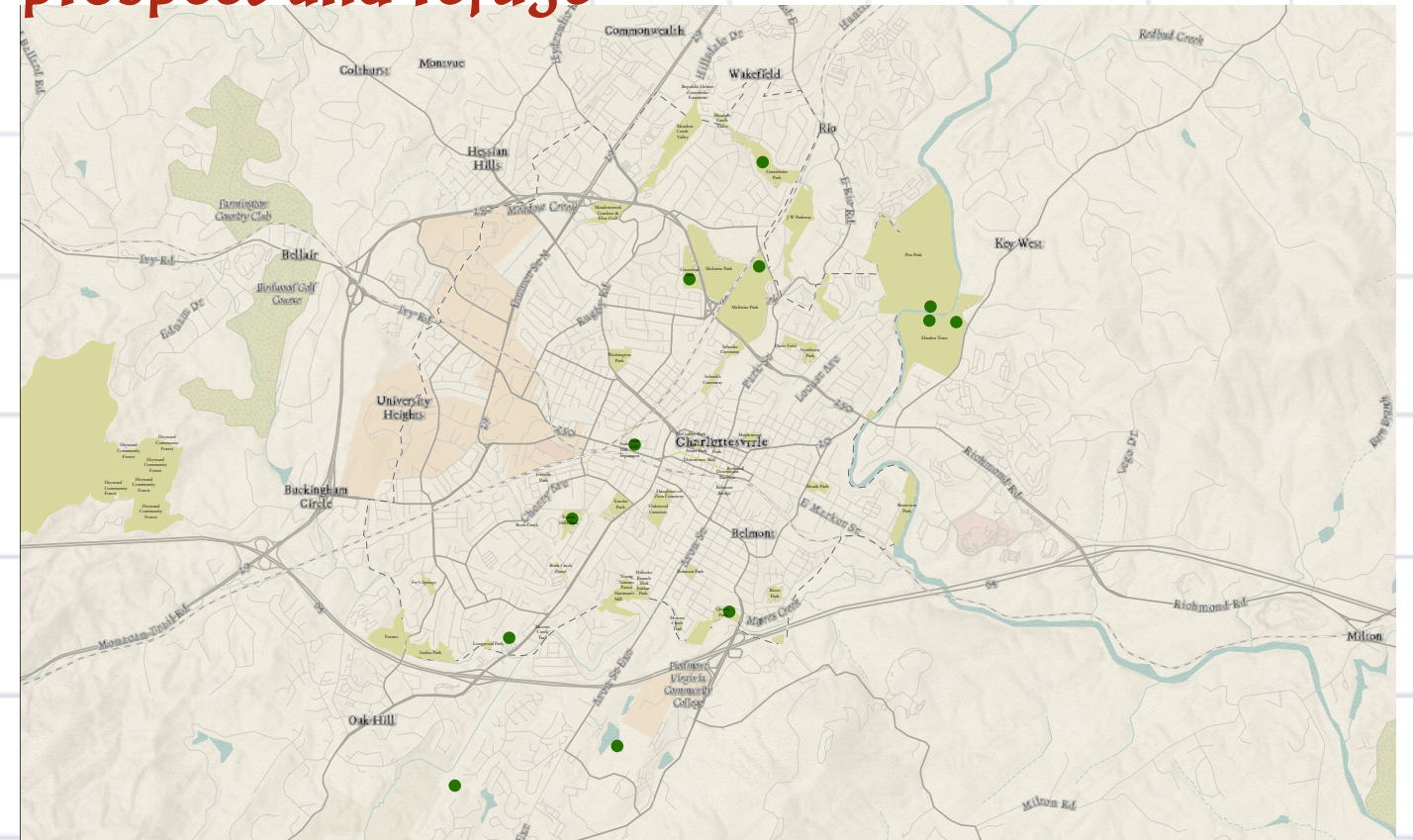
picnic spots



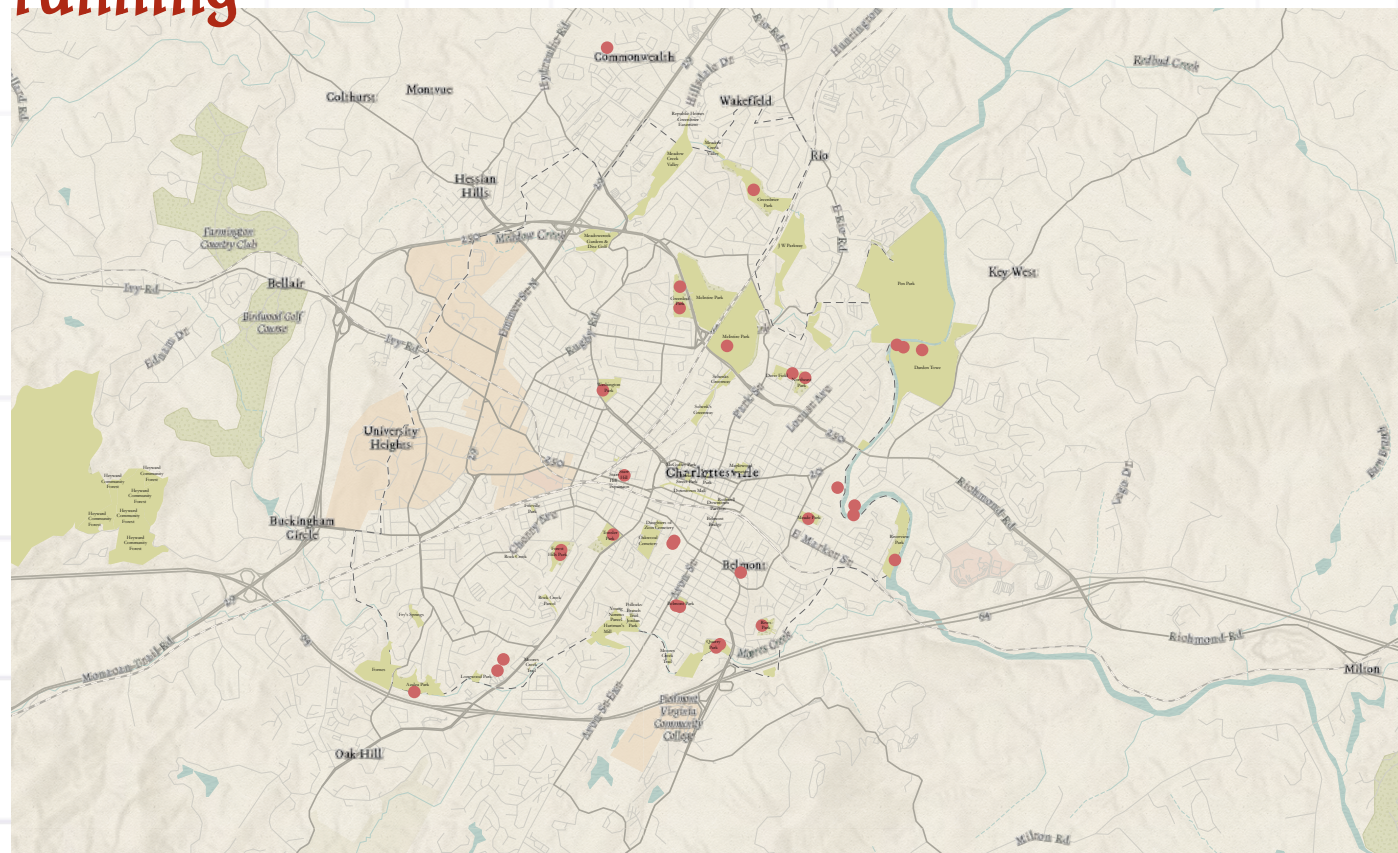
experience plantlife



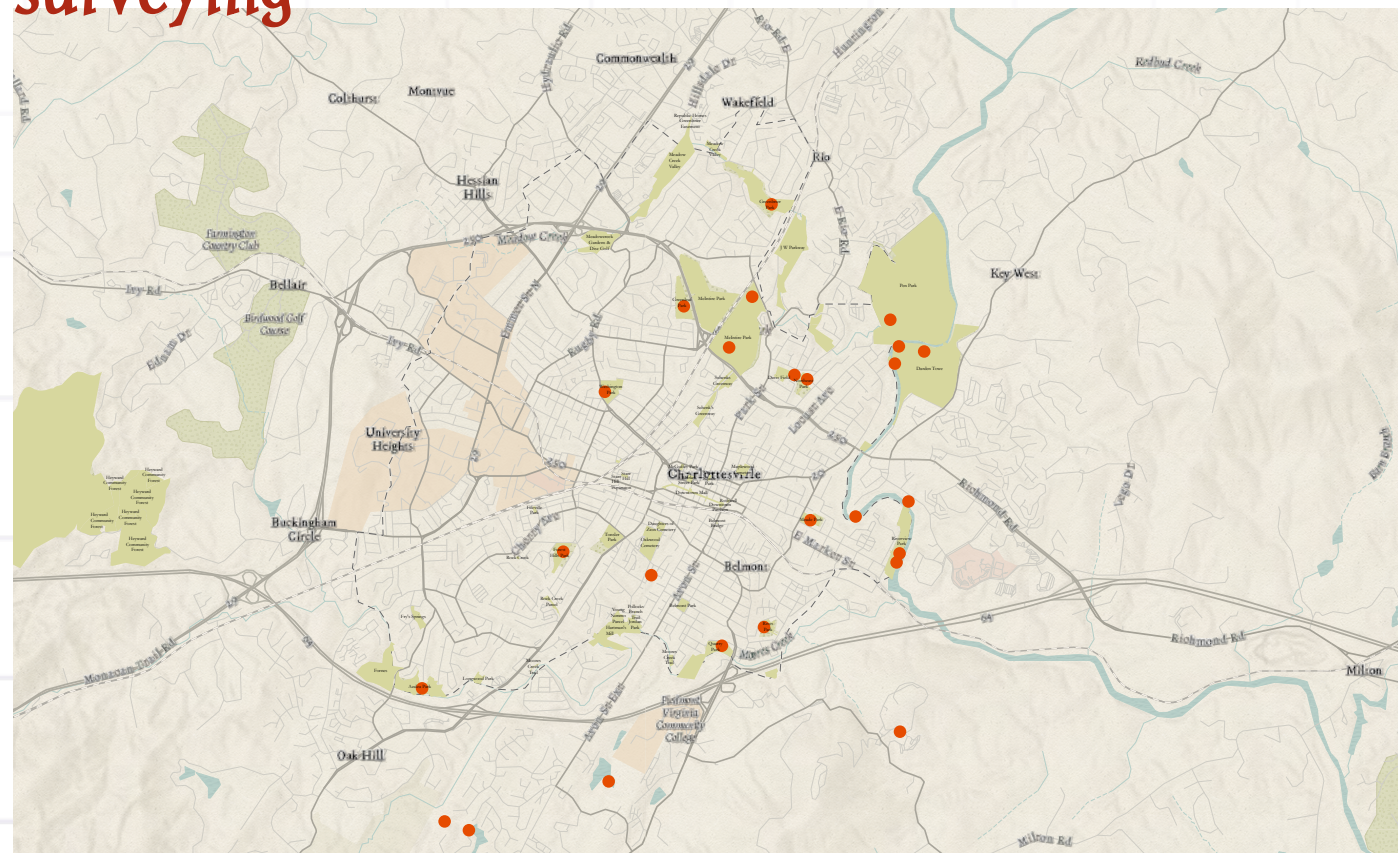
prospect and refuge



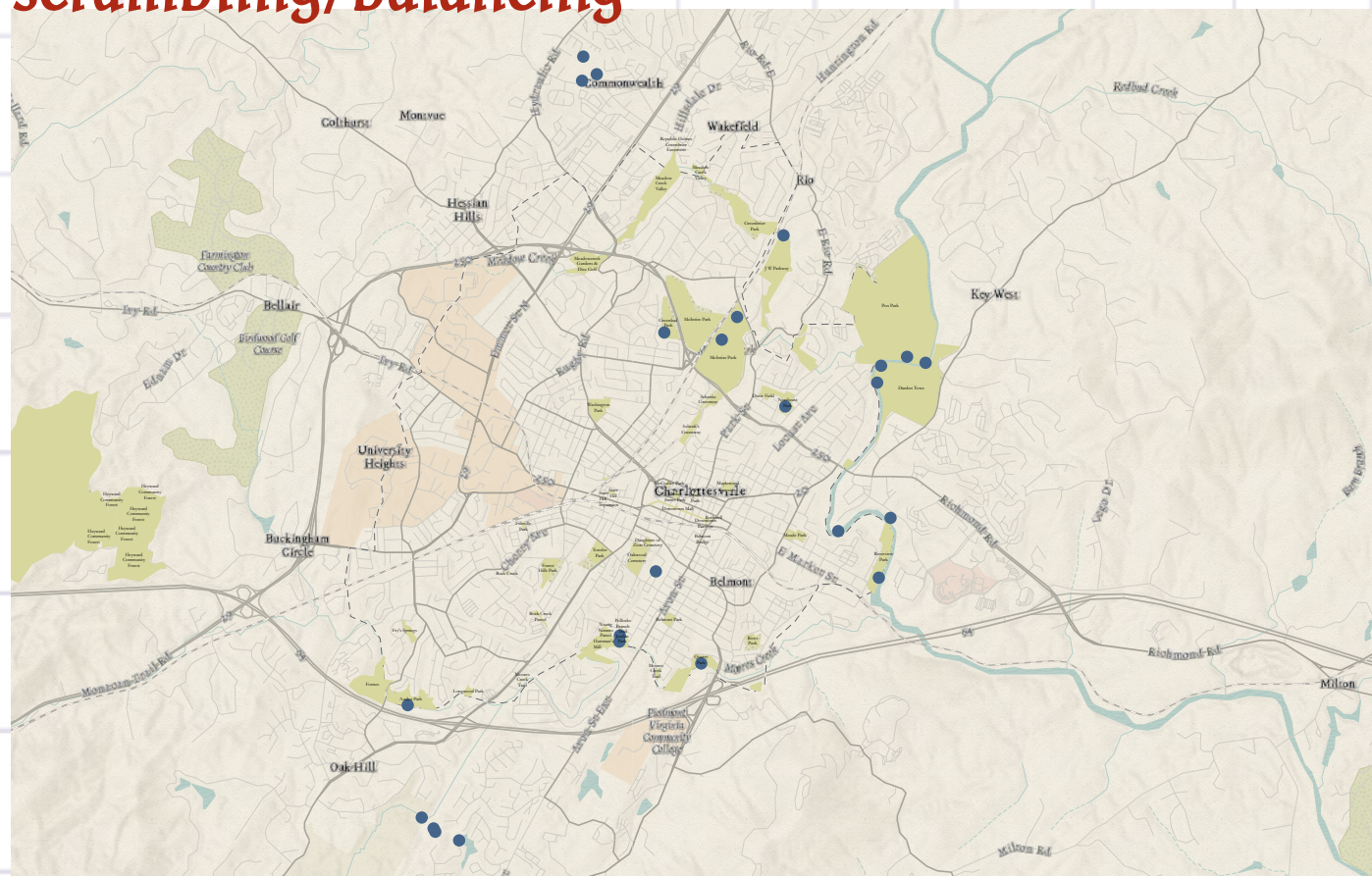
running



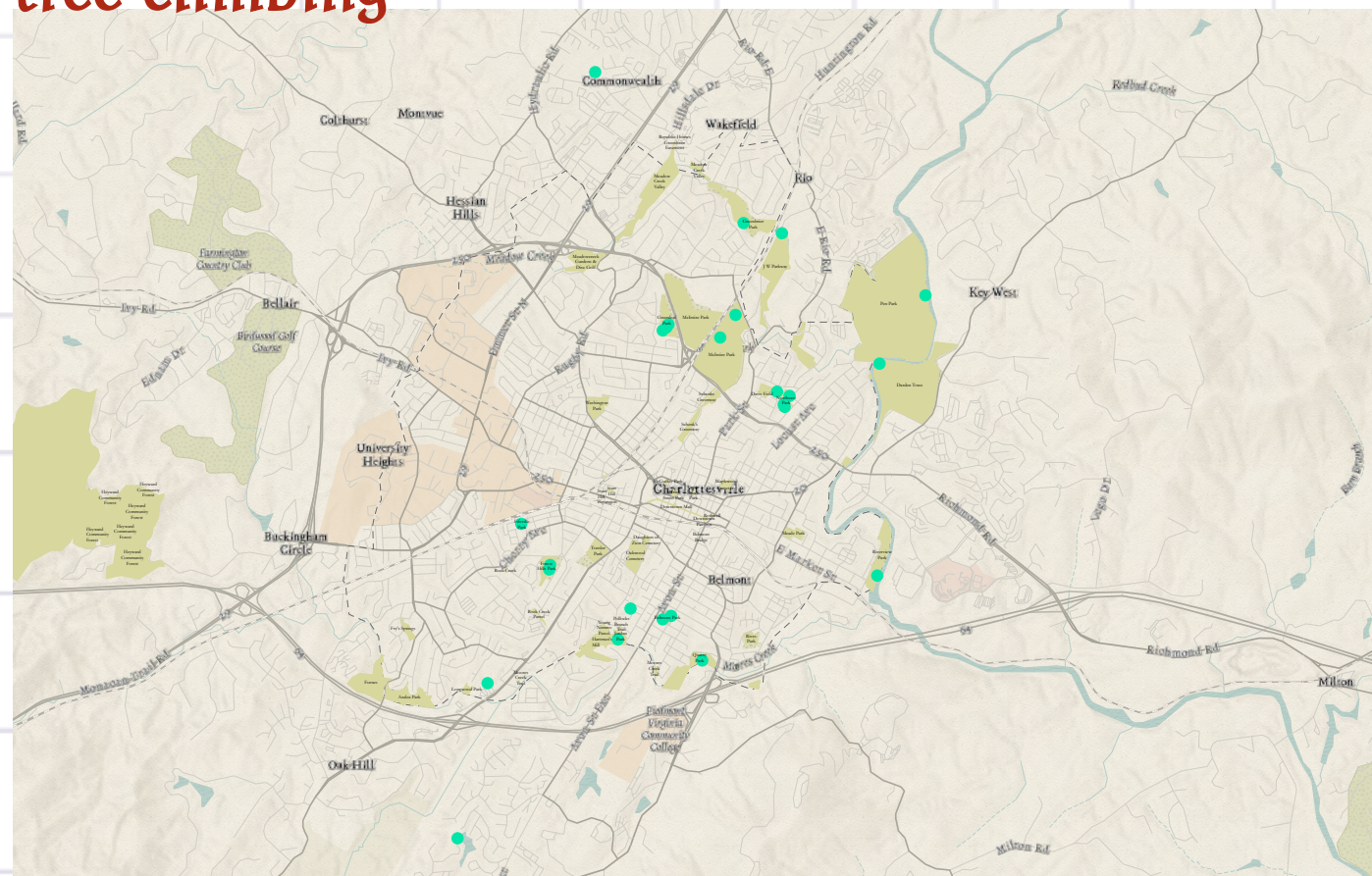
surveying



scrambling/balancing



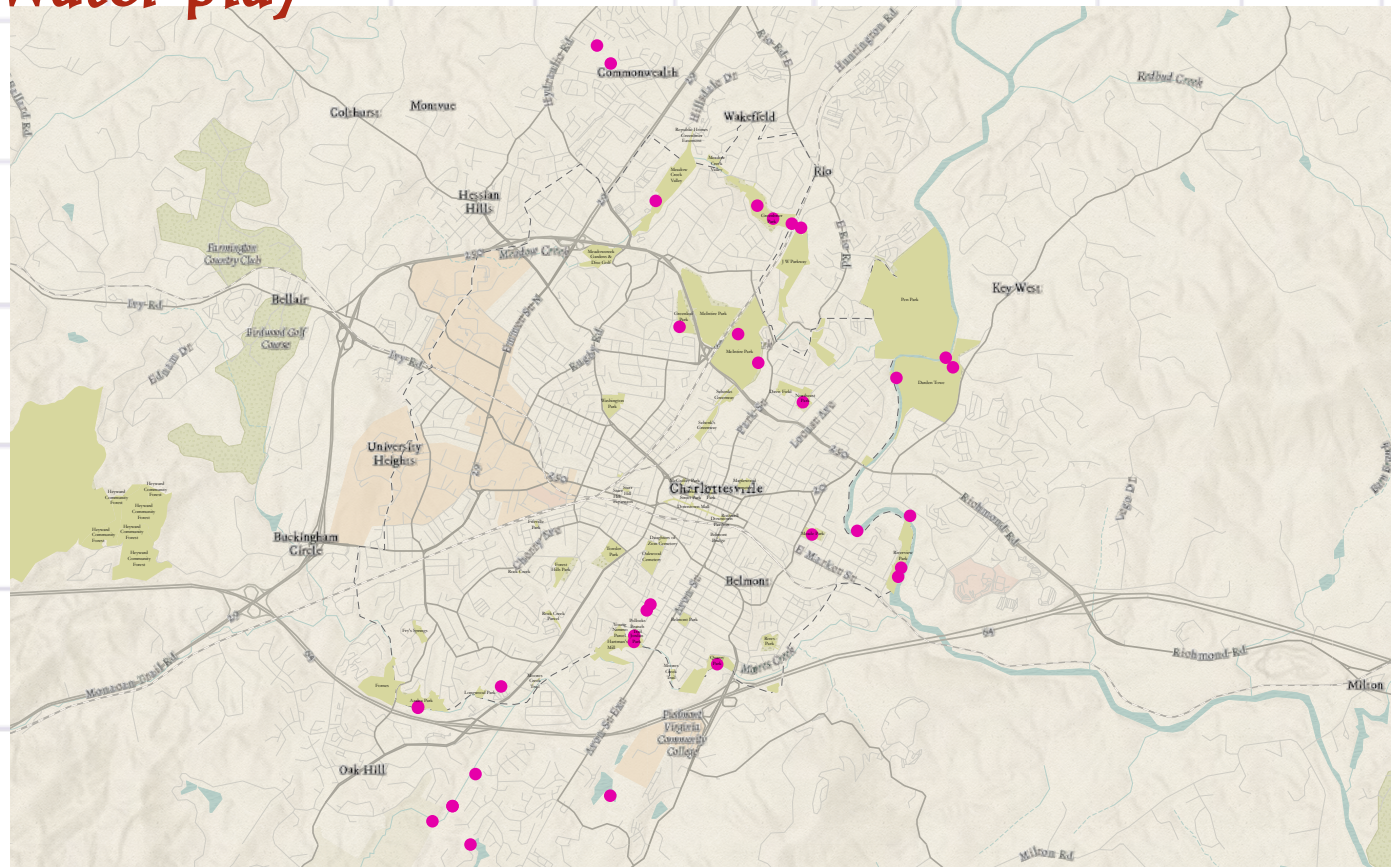
tree climbing



tool play/making



water play



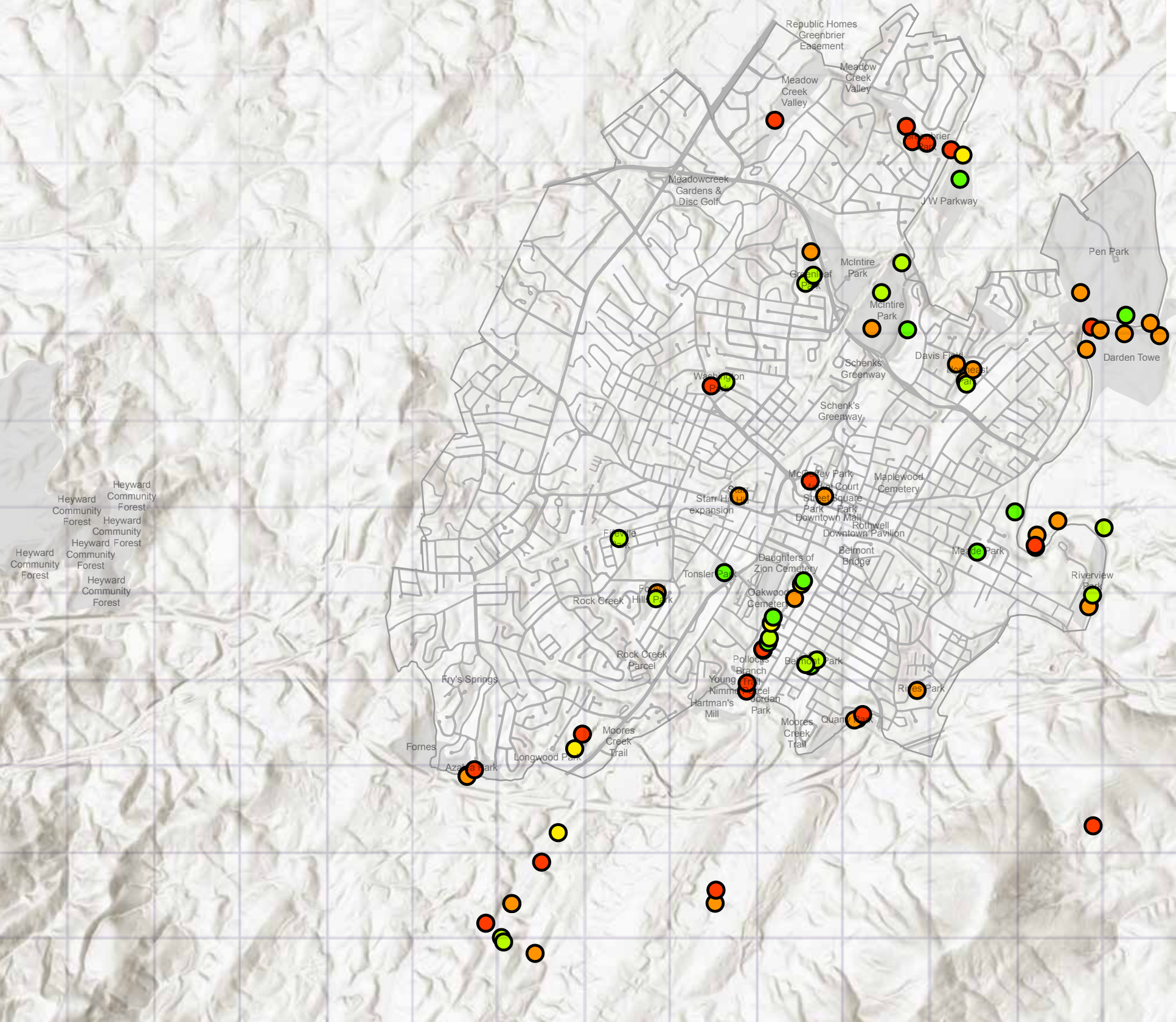
accessibility

Accessibility

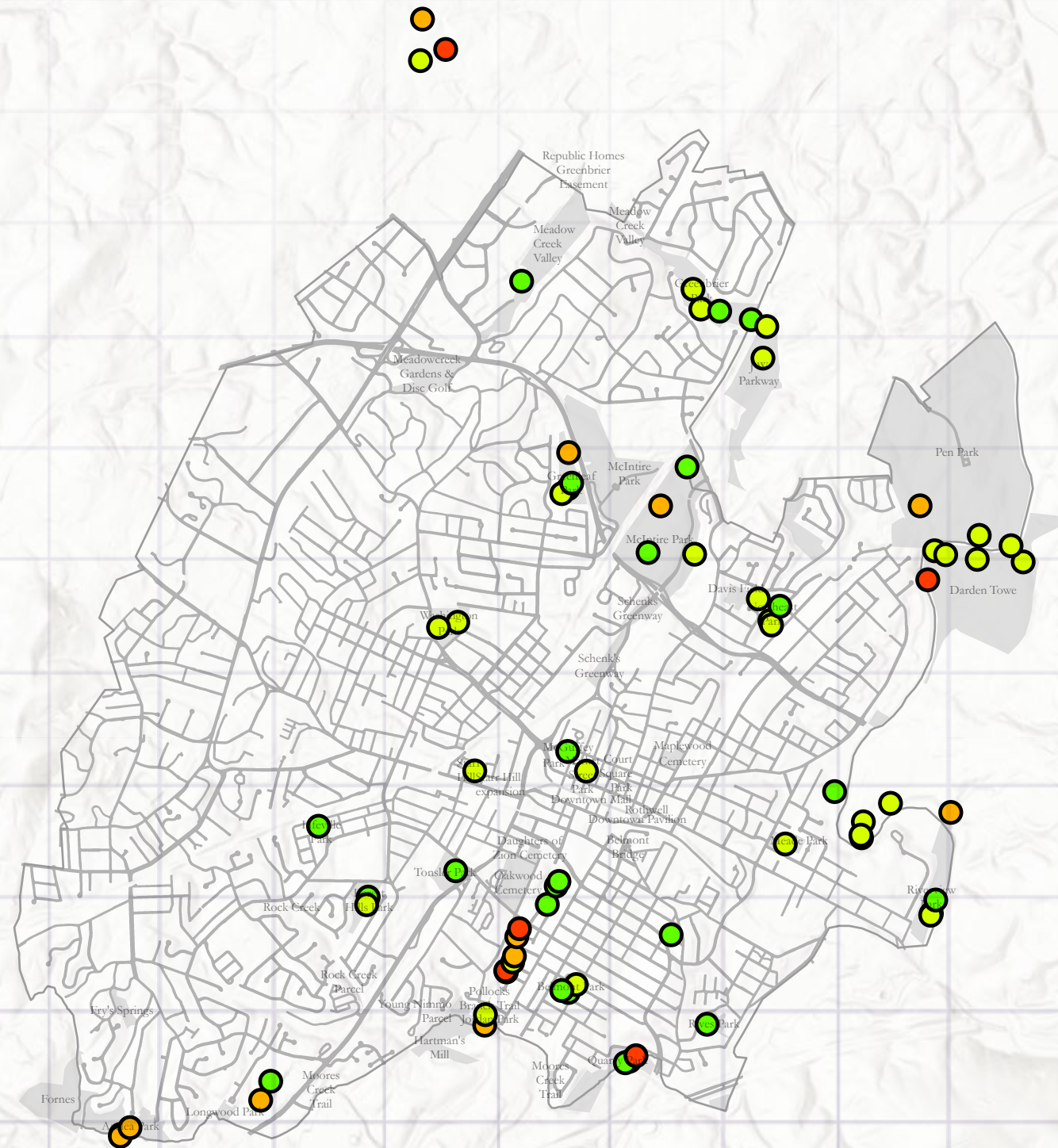
This space is easily usable by persons and children with mobility issues

- Strongly_disagree
- Disagree
- Neutral
- Agree
- Strongly_agree

Charlottesville City Parks



safety

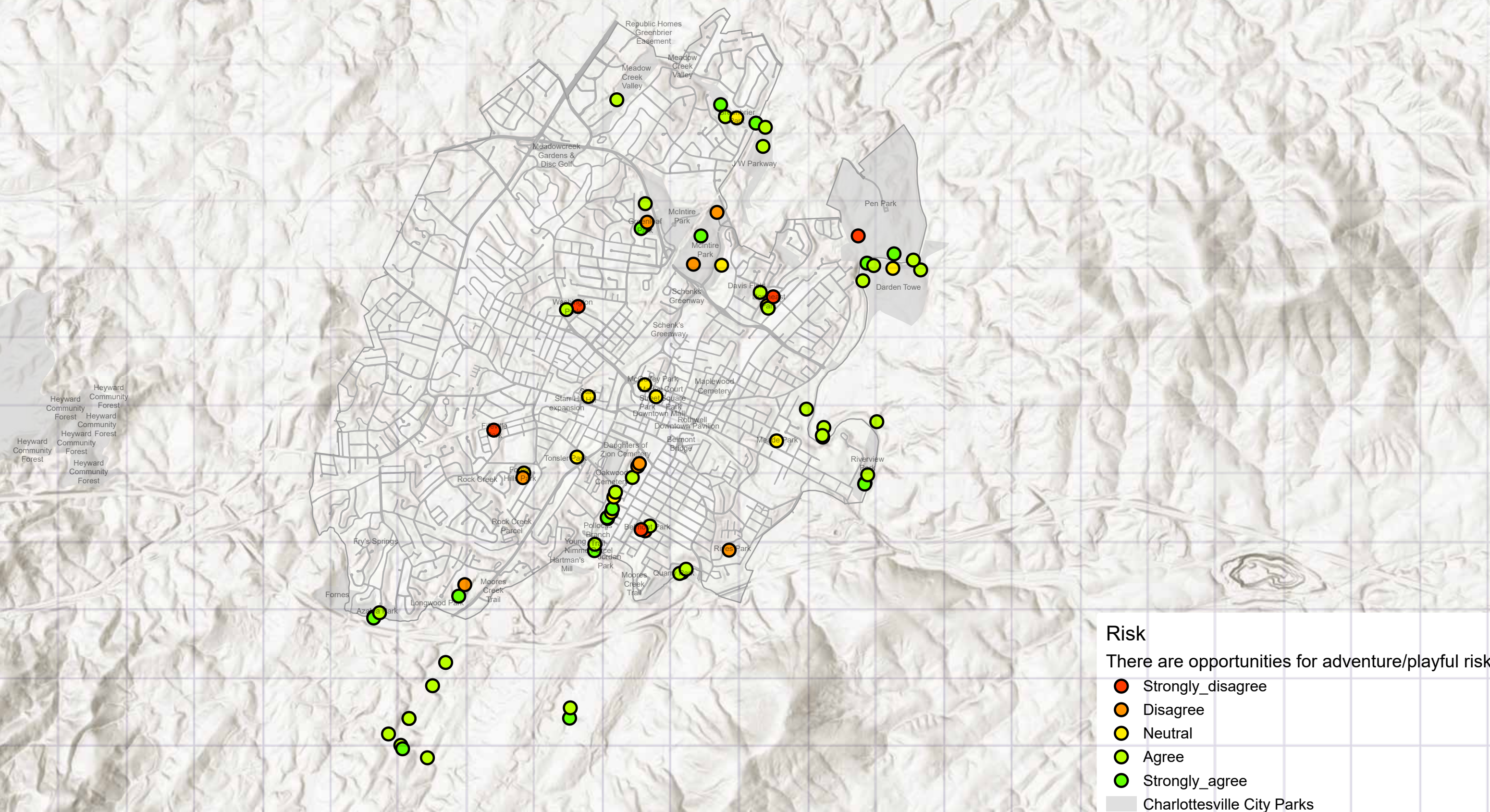


Safety
This space feels safe

- Disagree
- Neutral
- Agree
- Strongly_agree

Charlottesville City Parks

presence of playful risk

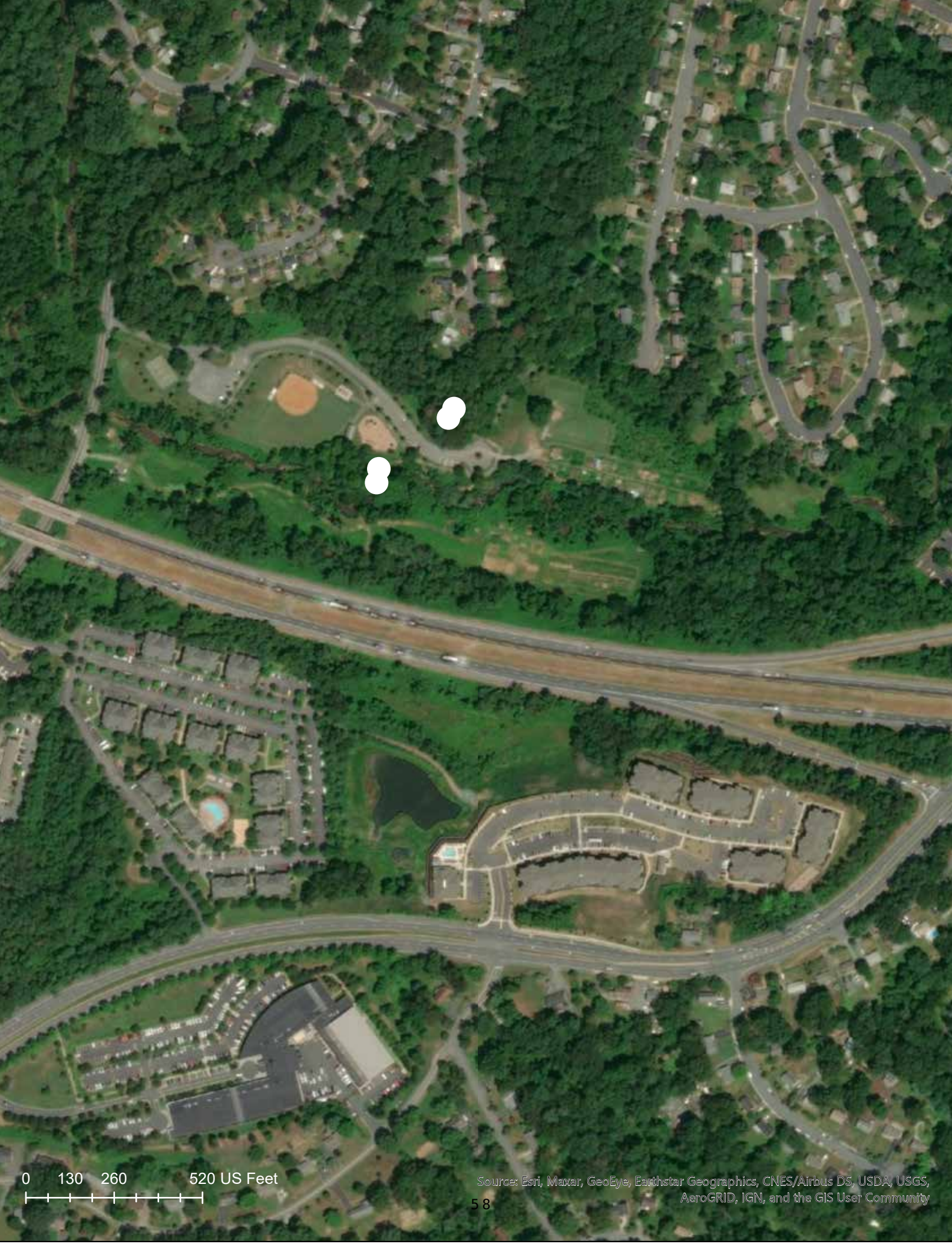


Risk
 There are opportunities for adventure/playful risk

- Strongly_disagree
- Disagree
- Neutral
- Agree
- Strongly_agree
- Charlottesville City Parks



PARK PROFILES



azalea park

Best nature play themes for park:

Water play, Hiding, Digging/Sand/Mud Play

Park Narrative Summary & Directions:

There is access to several nature play zones next to Moore's creek via a path from the east parking lot around the playground. One is anchored by a sycamore with three stems which is an ideal home-base and another accesses a rock dam which can be scrambled on. At both of these locations there is access to the water and ample areas for digging in the sand and mud. Between these areas, there are areas for exploration, building, and hiding between shrubby brush and natural berms. Moreover, the clearings provide space to build with the gathered debris or a place to return to when running and hiding (or playing exploratory games). Across the parking lot, there is a trail that leads to the residential neighborhood at the top of the hill. This trail passes through a diverse forest fragment ecosystem of older trees and replete with fungi, seed, and birds.

All nature play themes possible in park:

Building, Forest Fragments & Magical Thresholds, Digging/Sand/Mud Play, Water Play, Picnic Spots, Tree Climbing, Hiding, Scrambling, Balancing, Home Base, Bird or Wildlife Watching, Discovery & Exploration, Running

Risk play opportunities: (summary of risk play opportunities)

There are a few opportunities for risk play, especially in running through the hiding area (shrub-brush), attempting to climb trees without many low branches, scrambling across rocks, balancing on tree branches over the creek, stepping stones across the creek.

Transportation infrastructure:

Driving, Parking, Walking

There are parking lots and access from them next to the clearing and playground, both of which have access paths to the nature play zone next to the creek. On the opposite side of the parking lot there are paths that lead into the housing community that allow for pedestrian access to the park.

Accessibility considerations:

There are uneven dirt paths, a steep slope, big roots, deep sand and sandy slopes which would make walking tricky for someone with balance issues.

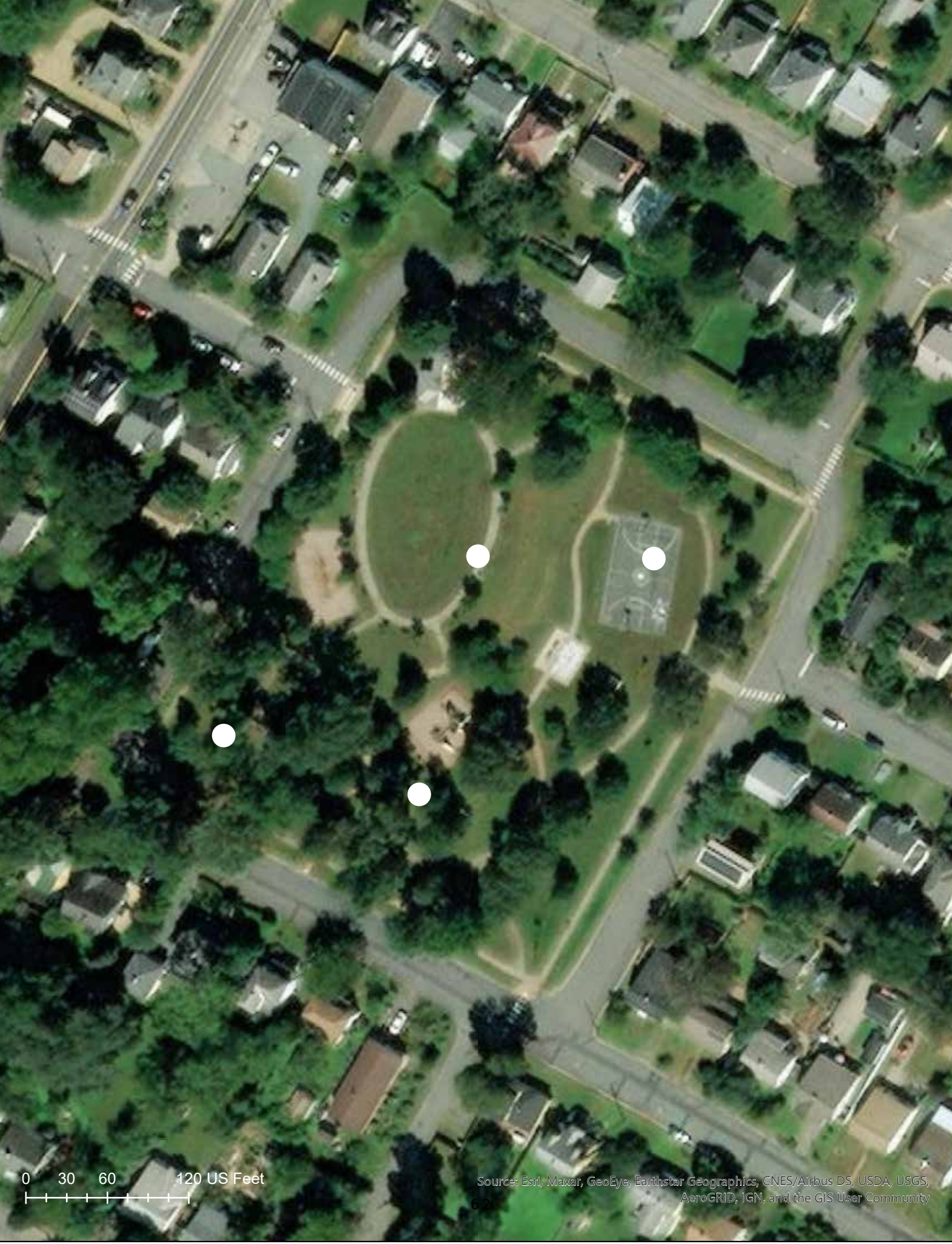
Safety factors:

There are several play spaces close to the playground with clear lines of sight. While a few others have more limited places for parental supervision making the area is more for adventure with plenty of hiding spaces and brambles.

Ecological Educational Opportunities:

The banks are heavily eroded and there is trash in the creek. Because many people walk their dogs here there may be bacterial contamination in soil and water. On the hillside, there is a forest fragment with a robust diversity which includes beech, hickory, holly, pine. Because of this diversity there are opportunities to encounter many types of birds, to see trees with seeds and berries, and to observe fungal decomposition of woody matter.





belmont park

Best nature play themes for park:

Running

Park Narrative Summary & Directions:

Walking from the entrance at Stonehenge Ave and Rialto St leads into the grove of oak trees. The entrance at Druid and Rialto leads to the small tree corridor. There are a variety of trees (redbuds, magnolia), with a gentle slope and small twigs/flowers to collect and trade. There are huge white oaks with amazing lumpy roots to climb over, hide things under, dig under. There are some interesting grasses just around the roots that are soft, full, and comfy. Trees are large enough to hide behind and children here are using the twigs to dig around the roots. There is a big tree that can be used as a home base. There are lots of opportunities to run around, behind, and through trees and grass. Trees are “marker points” for play. Lots of little sticks and flowers to trade, collect, and use as tools.

All nature play themes possible in park:

Collecting/Trading, Experience Plantlife, Picnicking, Home Base, Running, Tree Climbing, Birding or Wildlife Watching, Tool Play/Making, Hiding

Risk play opportunities:

The trees are suited for risk play since they are not too tall but would be exciting to climb and perch in.

Transportation infrastructure:

Walking, Biking, Driving/Parking, Public Transit, Street Parking. There are bus stops on some of the streets that border the park along with ample street parking, bike racks, and sidewalks.

Accessibility considerations:

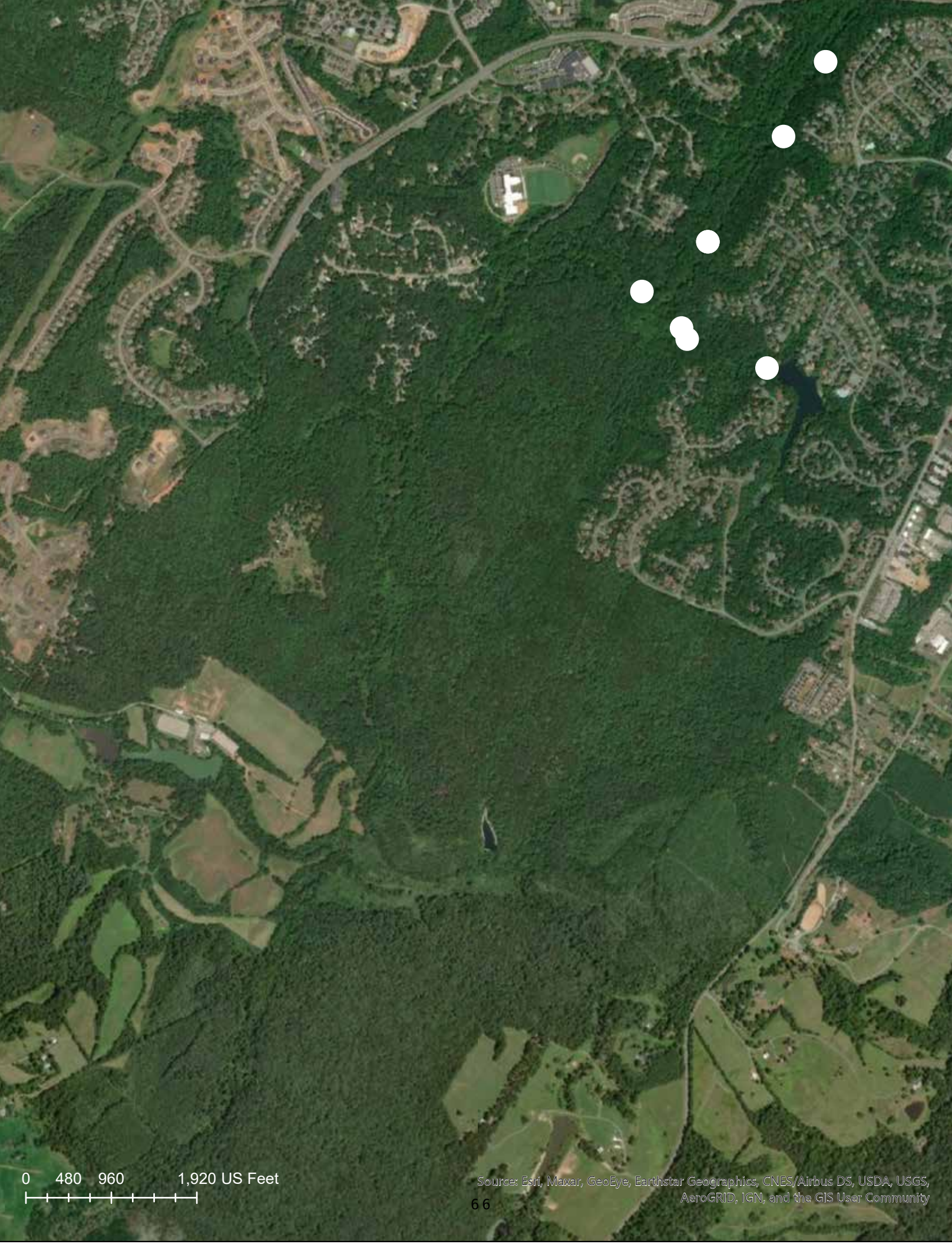
There are mostly paved ramps in good condition and easy access from them to grassy areas. Otherwise there are sidewalks in good condition on either side of the trees.

Safety factors:

High visibility throughout (no low branches). Houses face onto park from all sides, makes it feel like it is a community residential space and like there is social/community trust. The corridor is close to the street but it's not a particularly busy road.

Ecological Educational Opportunities: N/A





biscuit run trail

Best nature play themes for park:

Water Play, Forest Fragments

Park Narrative Summary & Directions:

This is a large park at the southern edge of Charlottesville. It is a forested park, where visitors follow a trail that runs parallel to Biscuit Run. While the space does not afford many opportunities for parents or guardians to sit and watch children, the expanse and variegated nature of the park does allow for almost all types of wilderness play. The park is fairly difficult to access, requiring the auditor to walk between two private lawns to get to the trail. There is no infrastructure such as a parking lot or access to a bus stop. Arrive through the Mill Creek neighborhood.

All nature play themes possible in park:

Bird or wildlife watching
Building
Collecting/trading
Digging/sand/mud play
Discovery/exploration
Forest fragments and magical thresholds
Hiding
Hill rolling
Experience plantlife
Scrambling/balancing
Surveying
Tool play/making
Tree climbing
Water play

Risk play opportunities:

Opportunities for risk play include navigating rocky terrain and high slopes, interacting with water by jumping across streams or walking across logs. Given a dense understory in some areas there is the risk of getting scratched up during play or feeling lost.

Transportation infrastructure:

Access to the trail is severely limited. There is a lack of transportation infrastructure beyond automobile access and parking on the street of a residential neighborhood.

Accessibility considerations:

The park is not very accessible to those with mobility issues. The trail has steep slopes, requires, at times, crossing small streams. Some areas suitable for play, such as a sandy embankment are off the main trail, requiring movement through vegetated zones.

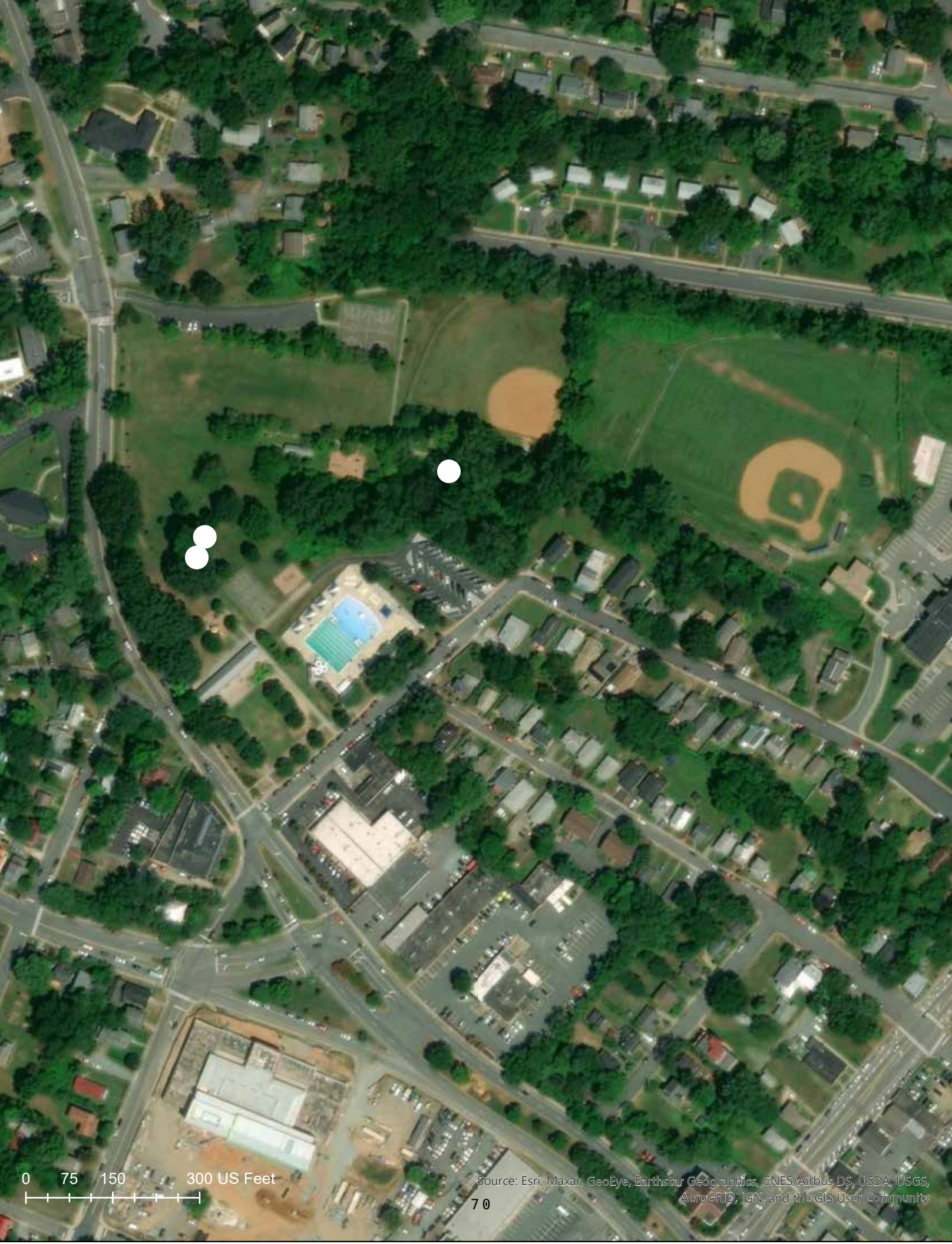
Safety factors:

The park generally feels safe. Auditors walking the trail passed other users, such as children on bikes, people running, people with dogs. There are moments where visibility is limited due to vegetation, so there may be concerns regarding keeping an eye on children.

Ecological Educational Opportunities: N/A

There are educational opportunities in experiencing the rich plant communities in this park. Erosion along the edge of Biscuit Run is a feature that can highlight the need for the protection of waterways.





booker t. washington park

Best nature play themes for park:

Hill Rolling

Park Narrative Summary & Directions:

This is a large park at the southern edge of Charlottesville. It is a forested park, where viFrom the upper parking lot, go down the stairs. From the lower entrance, follow a path up to the boardwalk wooded area. There is a big hill, lots of pollination (including a pollinator hotel) and native woodland plants with labels. The space is excellent for hill rolling and running, has great views and places to sit/watch, and there are plenty of sticks to collect and build with.

All nature play themes possible in park:

Building, Collecting & Trading, Hill Rolling, Home Base, Picnic Spots, Running, Surveying, Bird or Wildlife Watching, Experience Plantlife, Forest Fragments and Magical Thresholds

Risk play opportunities:

The hill itself is risky because of the slope.

Transportation infrastructure:

Walking, Driving, Parking, Public Transit

There is a parking lot and bus stop at the lower entrance with good pedestrian infrastructure but bad bike infrastructure.

Accessibility considerations:

There's stairs and a steep hill. Lower parking lot could be accessible. Upper parking lot only connects with stairs.

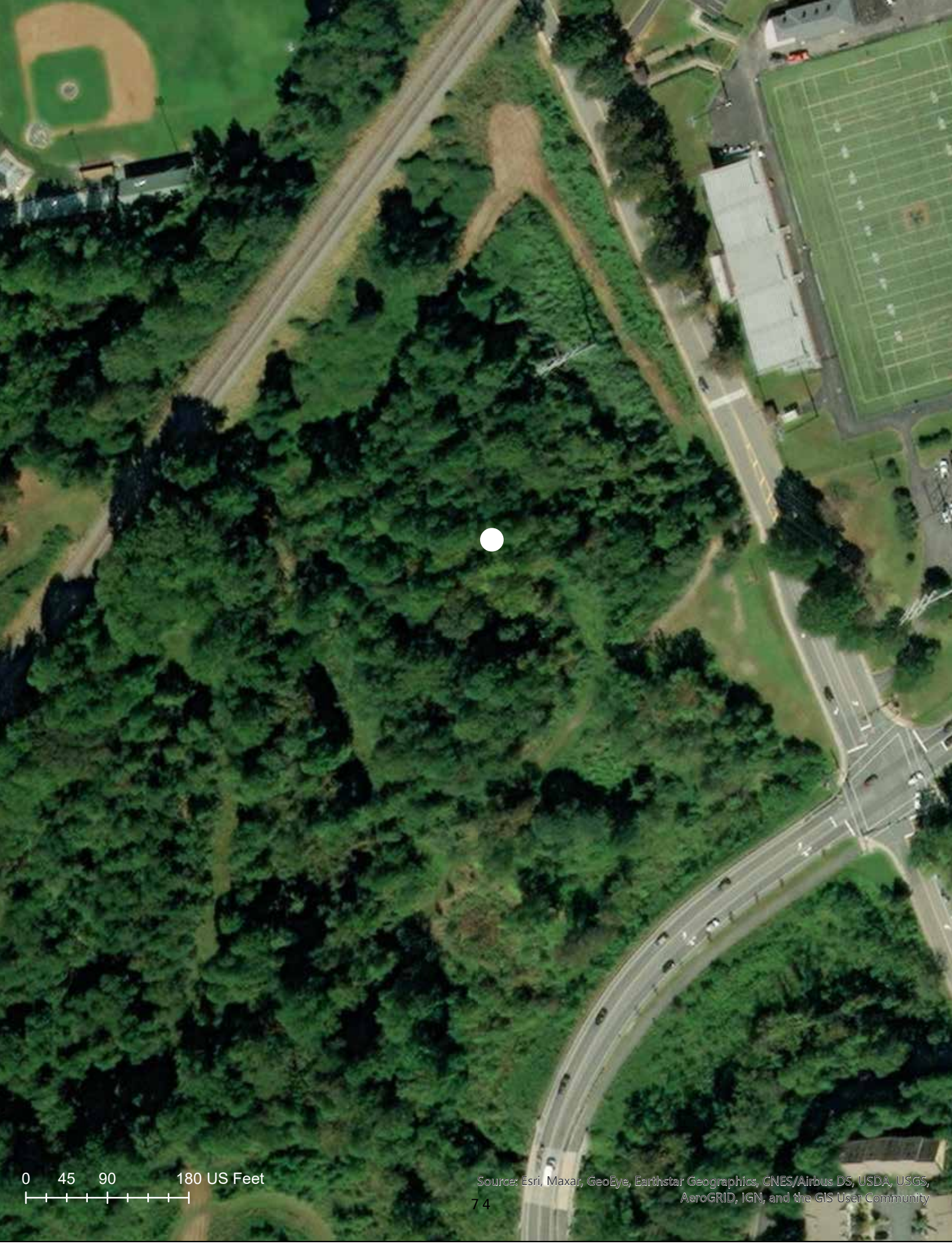
Safety factors:

There is a nearby busy road, though it is separated by a topo change. There are railings on the boardwalk but no lighting on the stairs.

Ecological Educational Opportunities:

The forested wetland/seepage basin is special here, like a little hollow fragment.





botanical garden of the piedmont

Best nature play themes for park:

Discovery & Exploration

Park Narrative Summary & Directions:

The Botanical Garden is in the process of being constructed/created, though there are currently designated mulched paths throughout. A parking lot will be located off of Melbourne St. The entire space is wooded and abundant with places to explore, to experience plantlife, balance on logs, sit, hide, etc. There are birdhouses on trees throughout the entire space which also allow for birdwatching.

All nature play themes possible in park:

Bird & Wildlife Watching, Building, Collecting & Trading, Discovery & Exploration, Forest Fragments & Magical Thresholds, Hiding, Home Base, Experiencing Plantlife, Picnicking, Prospect & Refuge, Scrambling & Balancing, Surveying, Tool Play/Making, Tree Climbing

Risk play opportunities:

Balancing, climbing and exploring could be risky.

Transportation infrastructure:

Bike Lanes, Street Parking and there will be a Parking Lot.

Accessibility considerations:

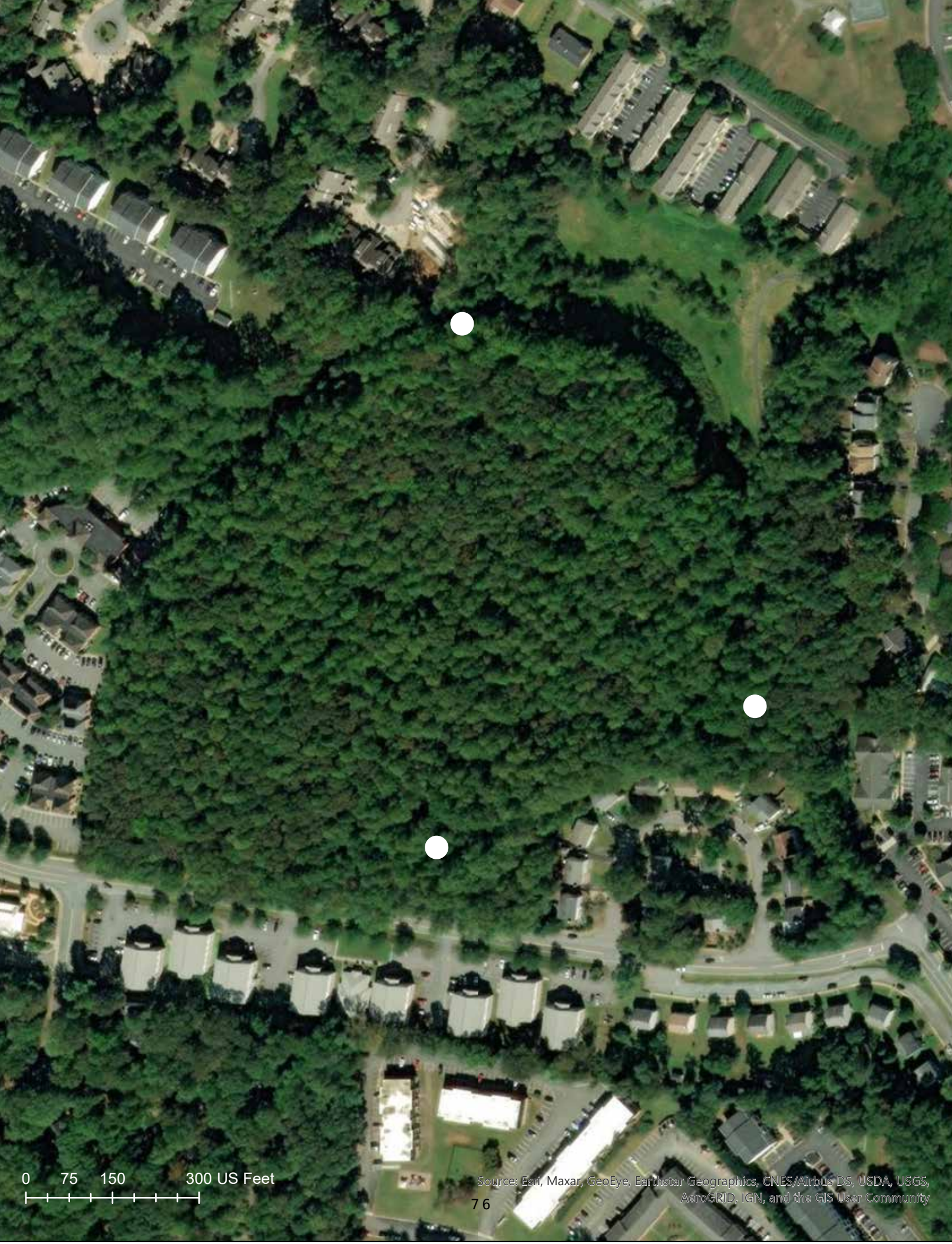
It is currently inaccessible for those with mobility issues as the paths are not paved.

Safety factors:

This space feels extremely safe. Though there are roads nearby, there are barriers between them and the park. It backs up to Charlottesville High School, which means there are frequently other people around.

Ecological Educational Opportunities:

There are plenty of educational opportunities and will certainly be more once it is completed! Many trees and plants are labeled with their names.



charlotte yancy humphris park

Best nature play themes for park:

Hiding and Discovery

Park Narrative Summary & Directions:

The park is characterized by a singular block of new growth forest comprising a diverse set of trees with a meandering, paved path running through it. Gentle changes in microtopography make it feel larger and more appealing for exploration. Plentiful fallen logs dot the undergrowth near the path for kids to climb on and balance. The undergrowth is thick but not impenetrable and deeper into the forest there are mounds to climb on and a runoff channel or two to play in. The creek, which runs along the northern side of the park, is a shallow, slow moving body with rocks and logs bridging it, and generally makes for great risk play. The creek is accessible by one or two sandy paths that gently break from the paved path down to the creek, no further than 25 yards from the main trail. Near the main entrance to the park on Whitewood road, there is a home base with lots of logs for sitting, a park bench, and a magical little shelter made of gnarled branches. This area is quite open before you enter the forest proper, with lots of fallen sticks and a growing branch shelter made by local children.

All nature play themes possible in park:

Bird or wildlife watching, Building, Collecting & trading, Discovery & Exploration, Forest fragments and magical thresholds, Hiding, Home base, Running, Scrambling & balancing, Tool play & making, Water play, Digging/sand/mud play

Risk play opportunities:

There is an element of risk associated with playing in the creek, especially after it rains, as the creek drains the surrounding runoff from neighboring developments. The logs that are good for balancing are also risky in terms of children falling off. There is a risk of getting lost in the denser parts of the woods, especially during the summer, though the path is never far.

Transportation infrastructure:

The park is furnished with a paved path that loops through the park and connects it to three surrounding neighborhoods directly. The park is accessible from its main entrance on Whitewood Road via the sidewalk, though there is no parking lot or street parking immediately available. Infrastructure best suits visitors on bike or on foot.

Accessibility considerations:

The park path is fully paved, though it does experience large changes in elevation that could be difficult to navigate. The entrance trails to the park from the neighborhoods are paved as well, except for the entrance from Birnam Wood which is quite rough and requires one to traverse a narrow bridge and a rocky incline to reach the paved path.

Safety factors:

The park feels less safe given the narrowness of the path corridor and the limited visibility across the park.

Ecological Educational Opportunities:

N/A





clark elementary school

Best nature play themes for park:

Balancing

Park Narrative Summary & Directions:

Clark Elementary School has a play area accessible from Belmont Ave as well as from Monticello Ave. There is a field to run on, a playground area surrounded by a few trees, a basketball area and a small raised-bed garden. There are plenty of places to sit, and there are stumps to play on and a log to balance on.

All nature play themes possible in park:

Collecting & Trading, Balancing, Home Base, Picnic Spots, Running

Risk play opportunities:

Jumping from stump to stump and balancing on the log could be risky.

Transportation infrastructure:

Sidewalks, Bike Lanes, Street Parking, Bus Stop

Accessibility considerations:

Paved paths throughout the park.

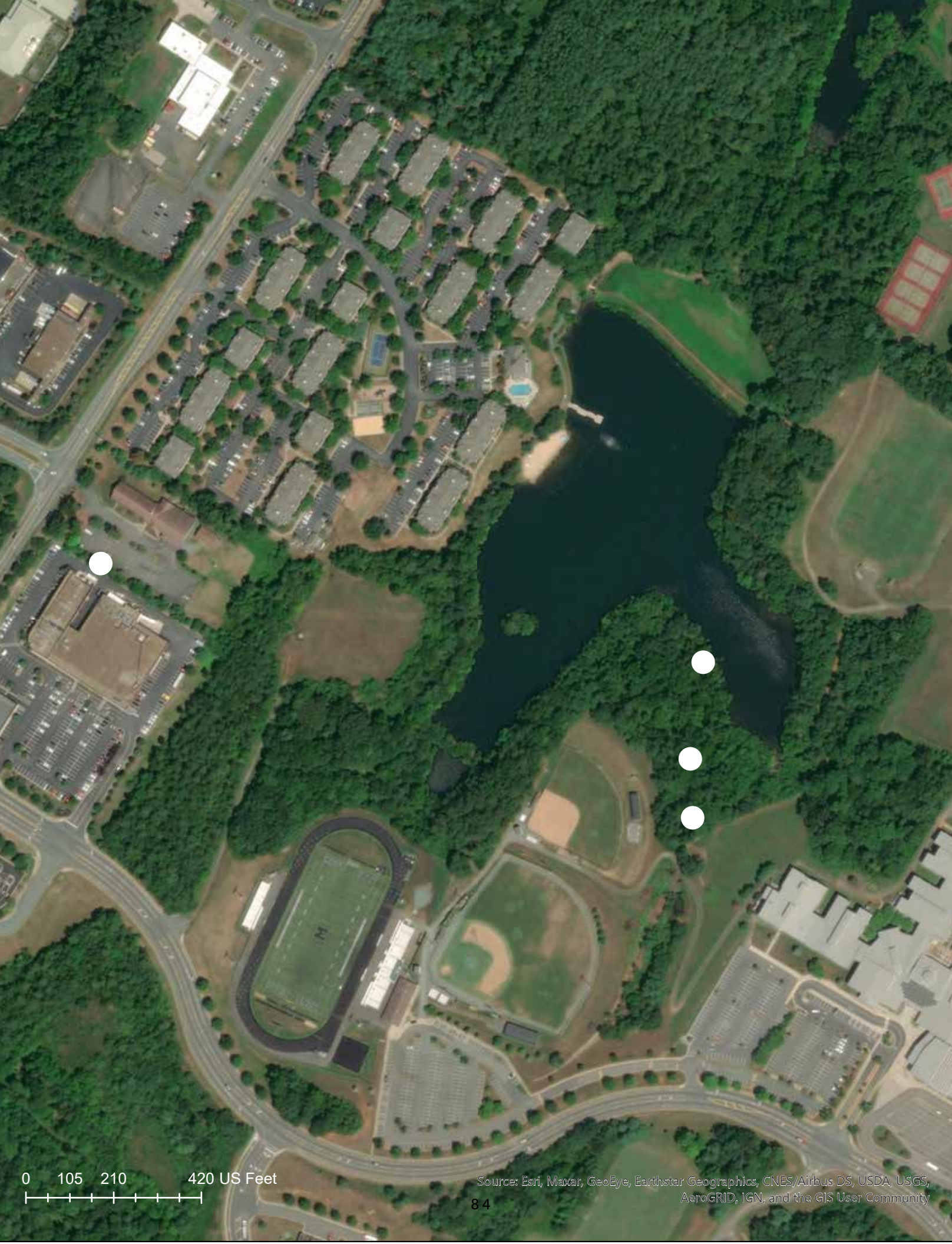
Safety factors:

This space feels safe considering it is part of an Elementary School and visible by homes on Belmont Ave.

Ecological Educational Opportunities:

The garden could be educational.





dam trail at swan lake

Best nature play themes for park:

Discovery and Exploration

Park Narrative Summary & Directions:

This trail follows the perimeter of Swan Lake behind the Lakeside Development. There are lake and mountain views around the trail and many smaller connector trails. The trail itself is windy and buffered with many trees and vines that create magical thresholds and opportunities for discovery and exploration. There are also plenty of sticks and rocks for collecting or trading along the trail and by the water.

All nature play themes possible in park:

Birding or Wildlife Watching, Building, Collecting / Trading, Digging / Sand / Mud Play, Discovery / Exploration, Forest Fragment and Magical Thresholds, Hiding, Experience Plantlife, Prospect and Refuge, Surveying, Tree climbing, Tool Play / Making, Water Play

Risk play opportunities:

There is an element of risk that comes from playing in/near the lake. There are also denser segments of woods that create opportunities to get lost.

Transportation infrastructure:

There is no parking for this space since it is technically part of the private Lakeside development. However, there is public parking at Monticello High School and trails that connect to the lake trail from there. This is a park of town that is less accessible for cyclists or pedestrians.

Accessibility considerations:

The trail is not paved and has topographical changes and roots to trip on, so it would not be very accessible for persons with mobility limitations.

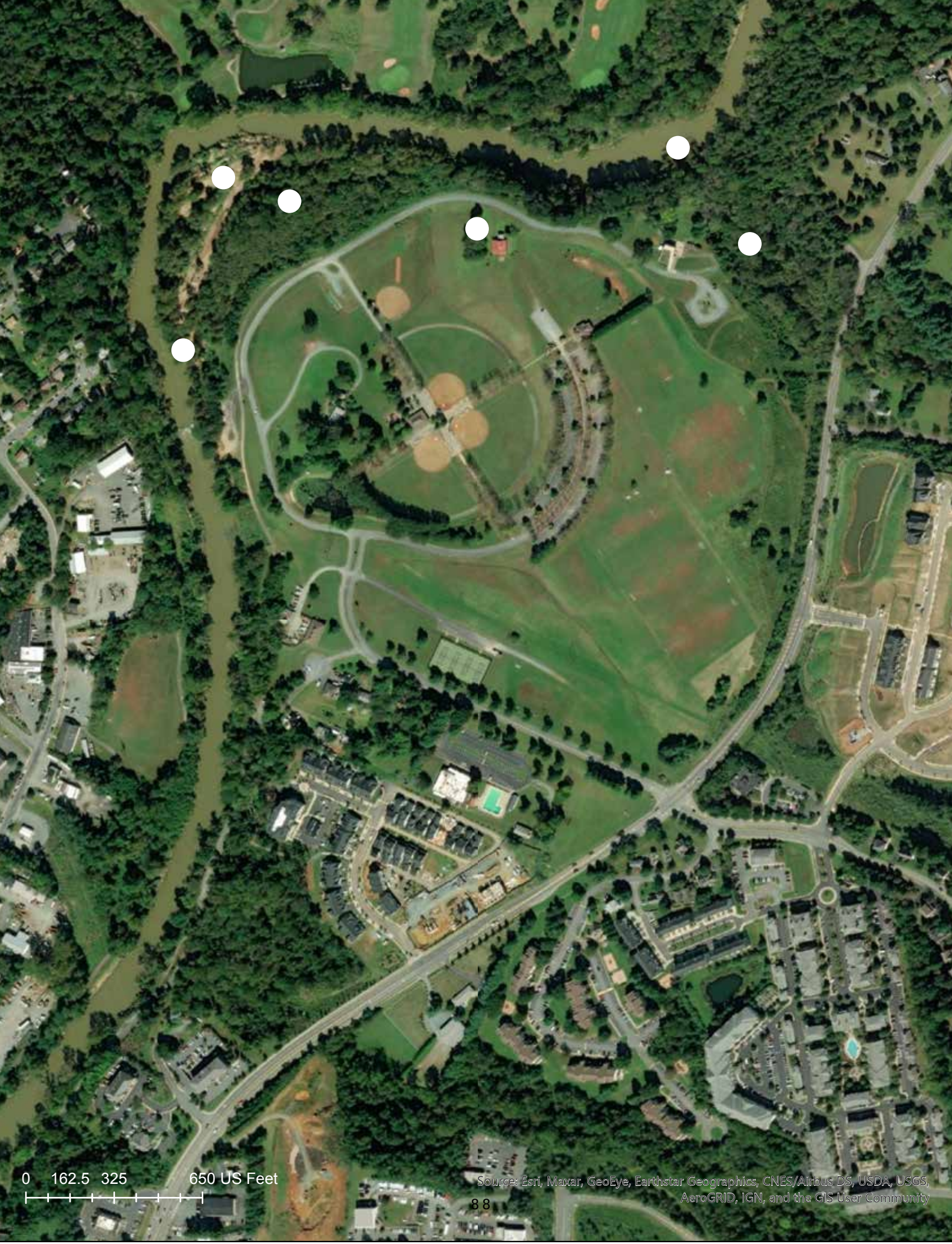
Safety factors:

This space feels very safe because the trail is always close to the lake and surrounded by a school and an apartment complex.

Ecological Educational Opportunities:

N/A





darden towe park

Best nature play themes for park:

Digging, Building, Water play, Tool Play

Park Narrative Summary & Directions:

There is a large, open, unmarked route parallel to the river leading from the parking lot to the bend. own along the wash at the bend in the river. This route is in the floodplain of the Rivanna and along it are lots of fallen trees to scramble on, plenty of driftwood and rocks to collect, build with, and use as tools, and numerous highpoints to look out over the river on both sides of the bend. On the inland side there is a box elder grove to explore and play tag on sandy ground, lots of small plants growing out of sand, big stick fort that's a home base as shelter and high points to look out on the river on two sides. Downhill of the Lewis and Clark exploratory center there is a creek with large river birches, climbing vines, and exciting riffles in the water. Where this creek meets the river (two lefts and a right across the creek from the discovery center) there is a beautiful cove of calm water, large river birch in the floodplain and a gravelly bar for digging, splashing, and swimming.

All nature play themes possible in park:

Bird or wildlife watching, Building, Collecting/trading, Scrambling/balancing, Hiding, Picnic spots, Tool play making, Surveying, Running, Digging/sand/mud play, Forest fragments and magical thresholds, Discovery/exploration, Home base, Hill rolling, Prospect and refuge, Experience plantlife, Water play, Tree climbing

Risk play opportunities:

In the floodplain here there are numerous opportunities for balancing opportunities on big logs and uneven, sandy ground to run and scramble over. At the creek, children would be able to cross the water or hang on a vine over the water, which is risky yet not dangerous.

Transportation infrastructure:

Driving and parking

Accessibility considerations:

In the floodplain, often the routes are not too steep, but they are too sandy for easy access. At the creek, the banks are often eroded and too steep for access or require crossing over stones in the creek to access the play zone. One major problem is the lack of benches which diminish accessibility for differently abled parents/grandparents who might be with the children here (especially as this park needs to be driven to).

Safety factors:

Down in the floodplain most of the areas feel safe due to the good sightlines to the main path from play areas and the multiple exit (yet constrained entrance) routes. At the creek, there are fewer exits and it feels more exposed except at the cove where there is calm water and a sense of hiddenness.

Ecological Educational Opportunities:

The floodplain provides many educational opportunities to observe the normal river birch and disturbance prone box elder as well as sandy berms and log decomposition to understand the frequency and history of floods. There is evidence of litter collecting from floods and large debris collected which provides opportunities for learning about river pollution. Along the creek, there is bank erosion which provides another educational opportunity for learning about disturbed hydrological systems.





fifeville park

Best nature play themes for park:

Picnicking

Park Narrative Summary & Directions:

Main entrance off King St. You could also enter from Grove St to the north. There is a row of large old trees that could serve as home base or a place to store plants, flowers, or sticks. Very small area, so it is probably more suitable for relaxing, picnicking rather than expansive imagination play. This is a great space for home base or picnicking, with minor amounts of foliage and some animals. Much more urban feeling than many other parks. Less running, more sitting and finding stuff type of play.

All nature play themes possible in park:

Collecting/Trading, Experience Plantlife, Picnicking, Home Base, Birding or Wildlife Watching, Tool Play/Making

Risk play opportunities:

N/A

Transportation infrastructure:

Walking, Street Parking, Bus Stop, Biking. Surrounded by street parking and sidewalks. There is a bus stop around the corner on Cherry Ave.

Accessibility considerations:

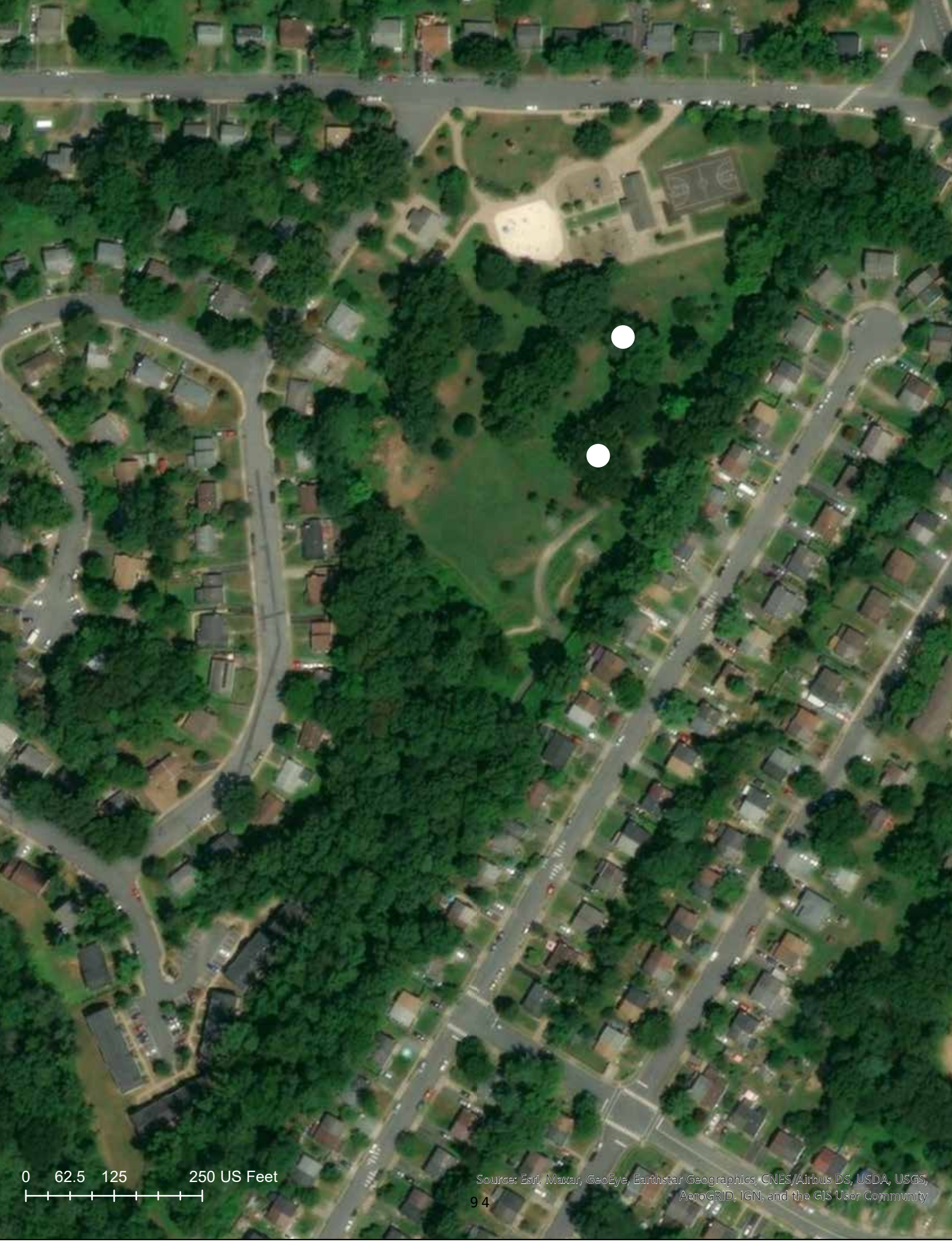
Very flat area with ramp and paved pathway. The grassy area under the trees is also flat and could be accessed by someone in a wheelchair.

Safety factors:

Surrounded by houses and low traffic streets. Very high visibility.

Ecological Educational Opportunities:

N/A



forest hills park

Best nature play themes for park:

Hill rolling

Park Narrative Summary & Directions:

The park features a large hill which descends from the main park entrance near the playground through a sparse but robust set of trees to a flat, grassy clearing at the bottom of the park. The best feature is certainly hill rolling possibilities, though the flat area at the bottom is good for a home base to hang out and picnic and use collected items from the wooded hill. Distinct topography in the park allows you to get to good vantage points, and there is even a vista of the mountains from the top of the hill just above the trees. Parents should have no problem viewing their child playing especially from top of the hill but also from the flat space at the bottom. There is a wide variety of stick sizes and seed pods for collecting, mainly from the large trees dotting the hill. The park is easily accessible from Prospect Hill public housing community by foot via a paved sidewalk that runs the length of the park on the southeastern side, though the path corridor is narrow and isn't particularly suited for nature play. There is also a water feature at the bottom of the park which looks like it runs dry the majority of the year.

All nature play themes possible in park:

Bird or wildlife watching, Digging sand mud play, Experience plantlife, Picnic spots, Building, Collecting & trading, Home base, Running, Tool play making, Hill rolling, Hiding, Surveying, Prospect and refuge

Risk play opportunities:

The steepness of the hill makes for an opportunity for risk play.

Transportation infrastructure:

Walking, Biking, Street Parking, and Public Transit (nearest stop is the CAT 9th at Buford Middle School stop)

Accessibility considerations:

The park has a long, fully paved path that runs the length of the park, though the slope of the wooded hill would be prohibitive to access with a wheelchair, for example.

Safety factors:

The park's proximity to neighborhoods on all sides, as well as its excellent visibility make this park feel quite safe.

Ecological Educational Opportunities:

N/A





greenbrier park

Best nature play themes for park:

Forest Fragments and Magical Thresholds

Park Narrative Summary & Directions:

Greenbrier park features a diverse set of rooms with a wide variety of nature play potential. Namely, the park is transected by Meadow Creek and the Rivanna Trail. There are two footbridges that cross the creek, though adventurous types will not find wading across the clear, shallow creek difficult. Areas of grassy meadow with wildflowers can be found on either side of the creek. The trails, especially on the southern side, are furnished with lots of downed wood, fallen logs next to the trail, and are open to undergrowth. Along the southernmost edge of the park there is a boggy area with mud for digging and evidence of an active deer population. The bog has a relatively clear undergrowth layer and is dotted with trees - there is even a tent-like structure made from logs and branches at the entrance to this boggy room. On the northern side of the park there is a large, gently vegetated mound for surveying, which is also a continuation of the grassy meadow. While the banks of the creek are generally gentle enough to encourage access, as you move towards the railroad culvert at the eastern edge of the park, the banks become more steep. One particularly amazing feature of the creek is a small pebble island, which lies in the middle of a bend towards the culvert. The banks down to the water are steepest here, though the water is still shallow and the island is its own reward - smooth pebbles make a wonderful spot for exploration and imagination. The unpaved trail on the southern side of the creek has a notable tree vine to swing on. Aside from a lone picnic table, there is not a great place for a home base, though the meadowed area is great for a picnic. Along the southwestern bank of the creek there are some wildflowers for foraging near Greenbrier Drive.

All nature play themes possible in park:

Bird or wildlife watching, Collecting & trading, Discovery & exploration, Forest fragments and magical thresholds, Water play, Running, Prospect and Refuge, Picnic spots, Experience plantlife, Hill rolling, Tool play/making, Surveying, Tree climbing, Digging/sand & mud play

Risk play opportunities:

The creek comes with a number of risk play opportunities, such as balancing on submerged rocks, descending steep embankments, and balancing on logs as bridges.

Transportation infrastructure:

Walking, Biking, Street Parking

Accessibility considerations:

The park has one consistently gravelled path on the north side of the creek and the trails are generally flat though not always wide. Footbridges on either end of the park make crossing the stream practical. Park entrances are paved paths that enter from either neighborhood to the north and south or from Greenbrier Drive at the western edge.

Safety factors:

Traversing the creek, balancing on logs, descending steep embankments, stepping on submerged rocks, and running through the undergrowth are all potentially hazardous activities. The bog area is muddy and parents likely won't follow their children in; one could easily get lost/ disorientated in this area though not dangerously so. Finally, the eastern edge of the park is a huge hill of rocks that lead up to the railroad tracks. The rocks are treacherous and a narrow path leads up above the concrete culvert, not to mention the railroad at the top. That being said, it is prohibitively difficult to get up to the railroad anyway.

Ecological Educational Opportunities:

The diverse landscape of meadows, bogs, forest, and the creek make for an interesting study in ecology. Notably, the riparian area of the creek and it's potential for erosion is of educational value.





greenleaf park

Best nature play themes for park:

Water Play

Park Narrative Summary & Directions:

Main nature play opportunities are located on the hill next to the parking lot and the creek corridor at the southwest corner of the park. There are a variety of large and small trees that drop lots of twigs. Lots of small plants, leaves, pine cones to trade and collect. There is a slope that you could roll down with soft grass, and climbable/perchable trees. There are a variety of entrance points to small flowing creek with rocks, twigs, and plants all around. soft and hard mud to dig and build with. Around the creek there are trees, small hills and brush to hide in and run through. There are also rocks in stream and logs to balance on/scramble across. This is a path surrounded by trees on both sides and the stream on the other. There is the potential for running, hiding, and looking at the trees and plants growing along the side of the path. There is the potential for water play but the slope is much steeper along this path than it is at the bottom of the park near the parking lot. Up the hill from the creek, there is a nice place to sit, rest, and view the creek and the sloping hill on the other side. There are plants and sticks to trade as well as great views of tall trees.

All nature play themes possible in park:

Collecting/Trading, Experience Plantlife, Hill Rolling, Picnicking ,Home Base, Running, Tree Climbing, Birding or Wildlife Watching, Tool Play/Making, Hiding, Prospect/Refuge, Surveying, Digging/Sand/Mud Play, Discovery/Exploration, Scrambling/Balancing, Water Play

Risk play opportunities:

Climbing trees, falling into the creek from sloping sides, rolling down the hill too fast.

Transportation infrastructure:

Walking, Driving/Parking, Street Parking, Public Transit, Biking. There is a bus stop on the corner of Rose Hill Ave and Greenleaf Lane as well as a parking lot and street parking.

Accessibility considerations:

It would be difficult for someone in a wheelchair to access the hill and trees. There is

a paved path leading down to the stream but it would be difficult to get down to the river for individuals with mobility issues.

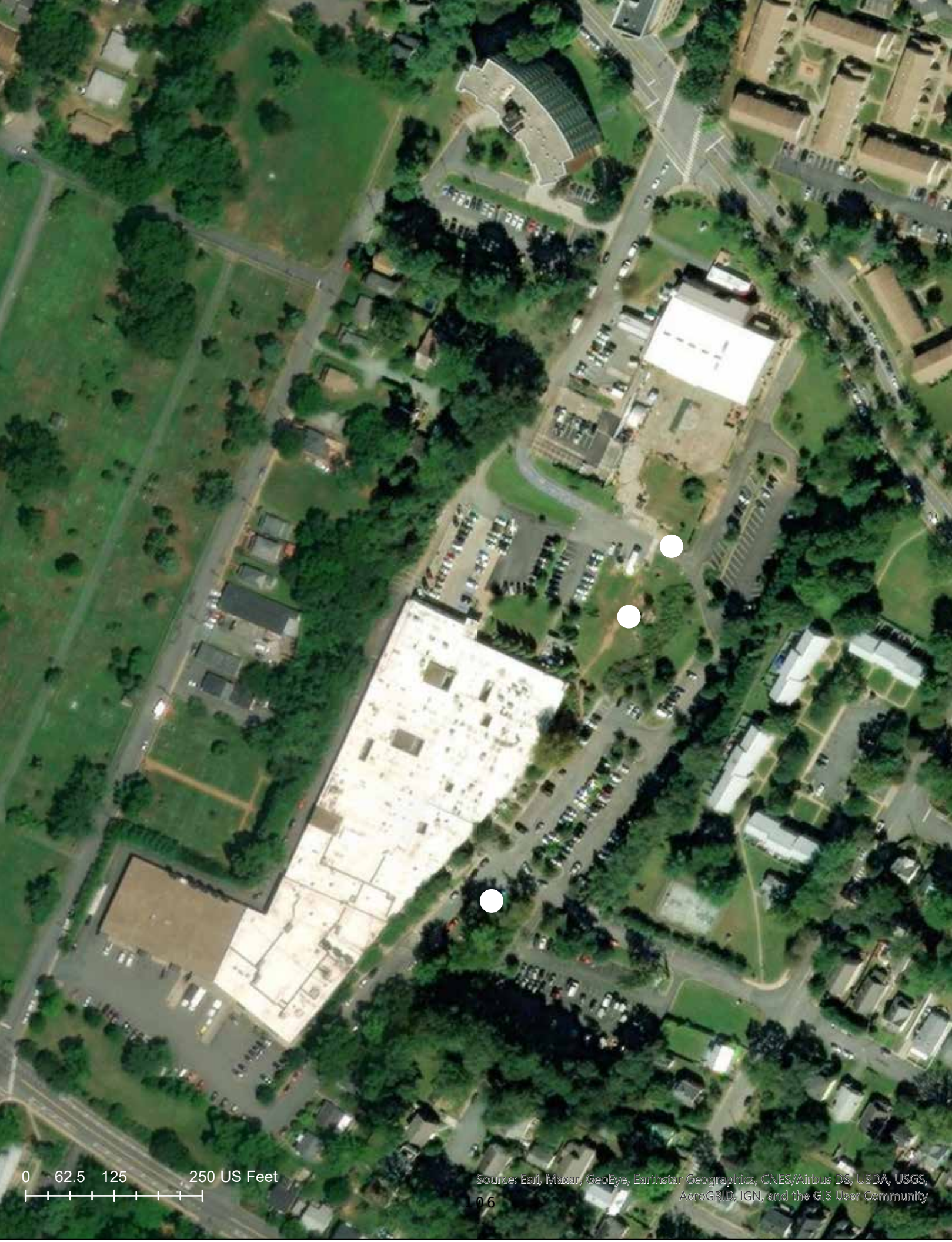
Safety factors:

Well-lit and visible to the parking lot and playground. It is generally safe and free of glass or other sharp objects. Potential for irritants like poison ivy or stinging nettle near the creek.

Ecological Educational Opportunities:

The stream could be a useful tool to teach about the water cycle or how all water is connected. There are a few educational signs about landscaping that could attach vocabulary to lived experience.





ix art park

Best nature play themes for park:

Running, Sand Play, Home Base

Park Narrative Summary & Directions:

There are entrance points from Monticello Ave, Elliot Ave, 6th St SE, and 2nd St SE. There is ample parking from any entrance point. There are three areas of play in this park. The first is a nature play space on a small hill across from JBird Coffee Roasters, where there are two large picnic tables at the base of the little hill. There is a large boulder good for scrambling at the top of the little hill and a path that leads over the hill through trees and shrubs to the other side. The second area is the grassy area in front of Brazos Tacos, which is good for picnicking and running. There is also vegetative path along the small daylight creekbed where one can observe insects, native plant species and other biodiversity. There are many areas for parents to sit and supervise, including beneath shady trees. Third, the main courtyard of IX where the farmers market is held has a sandbox, a vegetative covered dome structure, a grassy area for running, and a hill off of Monticello Ave for rolling.

All nature play themes possible in park:

Collecting & Trading, Home Base, Picnic Spots, Scrambling/Balancing, Bird & Wildlife Watching, Discovery & Exploration, Experience Plantlife, Running, Hill Rolling, Magical Thresholds, Sand Play

Risk play opportunities:

Climbing the boulder on top of the little hill and rolling down the hill off of Monticello Ave could be risky.

Transportation infrastructure:

Sidewalks, Bike Lanes, Parking Lot, Street Parking, Bus Stop

Accessibility considerations:

In general, the park is accessible for those with disabilities. There are sidewalks and paved paths throughout most of the park.

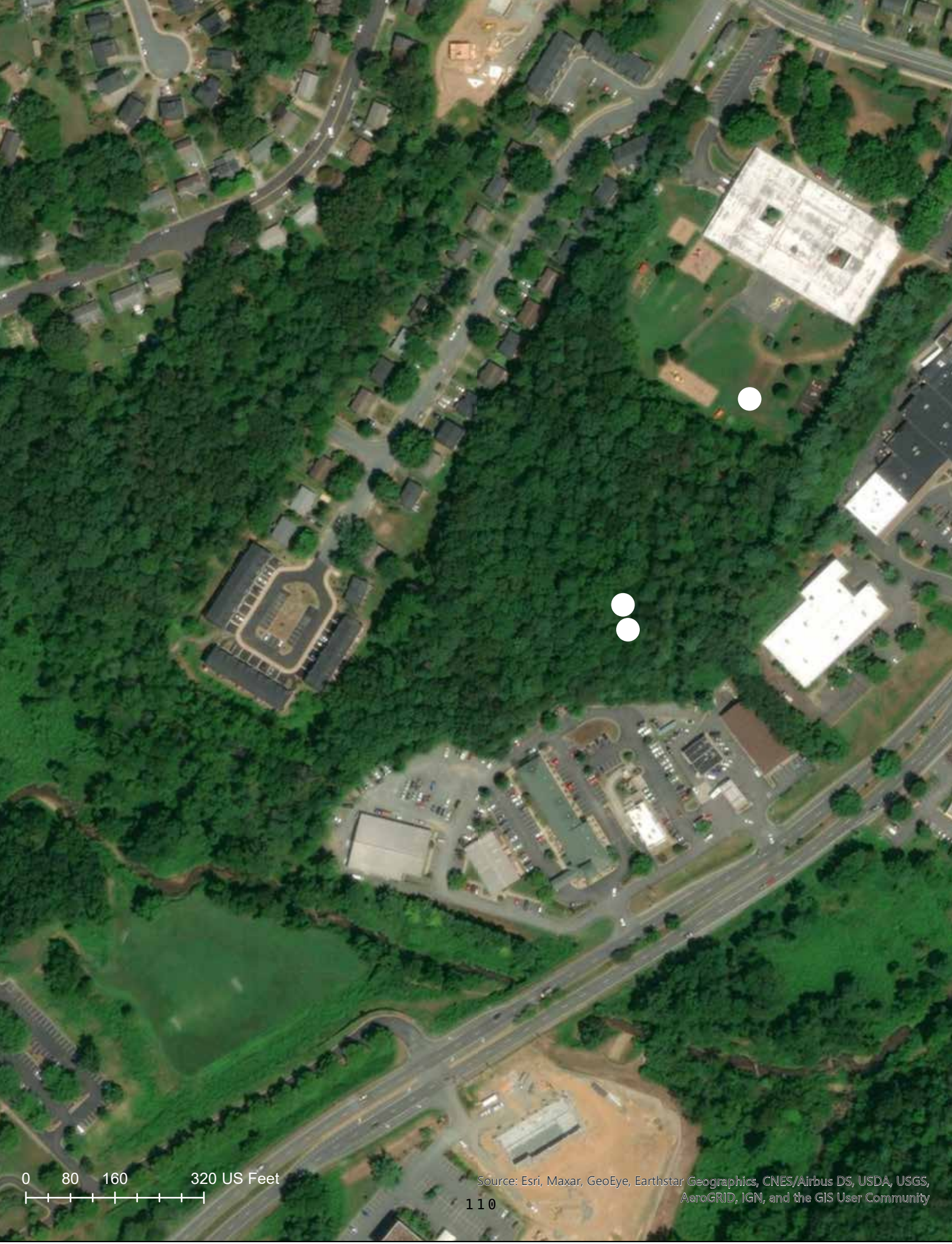
Safety factors:

This space feels extremely safe. Between park users and the nearby businesses, there are almost always people around.

Ecological Educational Opportunities:

This space is highly maintained. There is educational signage for “landscaping for biodiversity” about native Virginia species.





jackson via elementary

Best nature play themes for park:

Discovery & Exploration, Forest Fragments, Prospect & Refuge

Park Narrative Summary & Directions:

Behind the school, there are large open fields and hills great for running and hill rolling. At the back of the field is the entrance to a forested trail network behind the school. There are many smaller trails and amenities along the larger trail loop. This space is great for playing in the woods, hiding, gathering sticks, building, and exploring the trails. The space is accessible by going around either side of the school to the back.

All nature play themes possible in park:

Birding or Wildlife Watching, Building, Collecting / Trading, Digging / Sand / Mud Play, Discovery / Exploration, Forest Fragment and Magical Thresholds, Hiding, Hill Rolling, Experience Plantlife, Running, Scrambling / Balancing, Tree climbing, Tool Play / Making

Risk play opportunities:

There is some inherent risk in wandering off in the woods with commercial and residential areas adjacent to the wooded region. There are also some steep topographical changes that could create an element of risk in play.

Transportation infrastructure:

There is a parking lot at the school, a nearby bus stop, and somewhat adequate bicycle and pedestrian infrastructure.

Accessibility considerations:

Most of this area is not very accessible for persons with mobility limitations. One could access the fields if they were to go through the school, but the trails in the woods are less accessible.

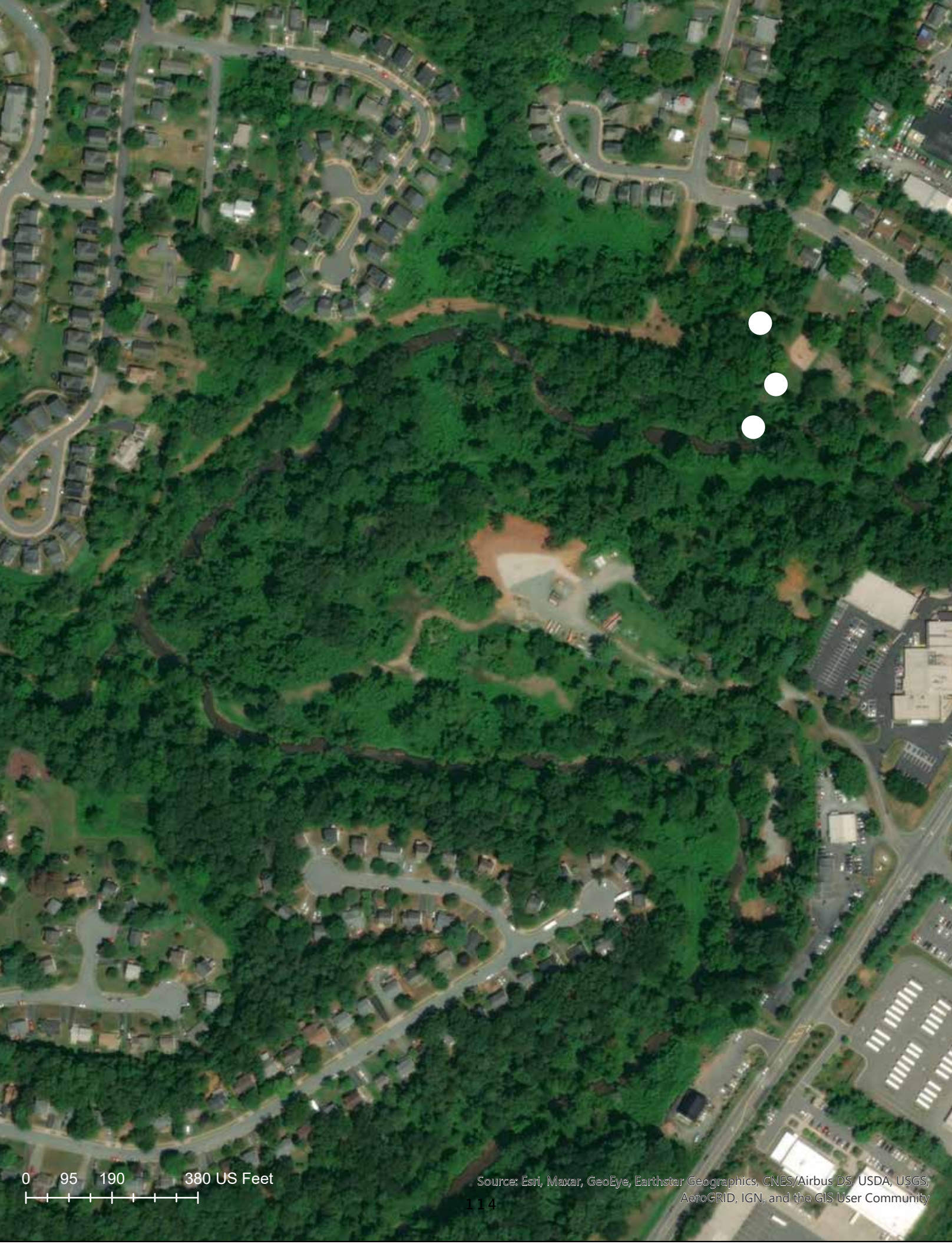
Safety factors:

The biggest safety concern is the neighboring properties to the wooded region and

the possibility to get lost or run into strangers.

Ecological Educational Opportunities:
N/A





jordan park

Best nature play themes for park:

Scrambling/Balancing, Water play, Wildlife Watching

Park Narrative Summary & Directions:

The park consists of an open greenspace with programmed amenities for picnic and play next to a wooded area along Moore's Creek that contains a segment of the Rivanna Trail. The shallow creek creates a great opportunity for water play and rock scrambling, as well as observing aquatic wildlife like minnows. There are steep banks along the side of the creek that create opportunities for climbing and hiding. There are also a lot of opportunities to play along the Rivanna Trail, with plenty of fallen trees and dense brush creating spaces for exploring, building, and collecting.

All nature play themes possible in park:

Birding or Wildlife Watching, Building, Collecting / Trading, Digging / Sand / Mud Play, Discovery / Exploration, Forest Fragment and Magical Thresholds, Hiding, Experience Plantlife, Picnicking, Scrambling / Balancing, Tree Climbing, Tool Play / Making, Water Play

Risk play opportunities:

The stream could create potential risks for small children, as well as the steep banks leading down to it.

Transportation infrastructure:

There is limited street parking at the end of 6th St. SE at the entrance to the park.

Accessibility considerations:

The trail and stream are not very accessible for persons with mobility limitations.

Safety factors:

The Rivanna Trail creates the opportunity to get lost beyond the park. The stream could also be dangerous, especially since it is out of view from the entrance to the park.

Ecological Educational Opportunities:

There is a lot of erosion along the stream.





market st. park

Best nature play themes for park:

Tree Climbing

Park Narrative Summary & Directions:

Market St Park is a square block accessible from all sides. It is highly maintained, with grassy areas and interspersed vegetation including some trees that are suitable for climbing. There is an especially climbable tree directly behind the Lee statue. There are benches throughout the park for parents to sit on.

All nature play themes possible in park:

Tree climbing

Risk play opportunities:

Tree climbing can be risky play.

Transportation infrastructure:

Sidewalks, Bike Lanes, Street Parking, Bus Stop

Accessibility considerations:

There are sidewalks throughout the entire park.

Safety factors:

While this park is highly visible, it is close to the Haven, which means there are sometimes a few people experiencing homelessness in the park.

Ecological Educational Opportunities:

The Robert E Lee statue can be a learning opportunity. There are beds of flowers that likely should not be messed with.





mcguffey park

Best nature play themes for park:

Tree Climbing, Picknicking, Collecting & Trading

Park Narrative Summary & Directions:

McGuffey Park is a small park near downtown, accessible from 2nd St NE. There are stairs and a ramp leading from the street to the park. The area is highly developed with a lunge mulched playground area, a circular paved basketball court, and benches and picnic tables. The picnic tables are located on the High St side of the park. There is a beautiful Japanese Cherry tree on the corner nearest McGuffey with a nice shaded area underneath for sitting. This tree is good for climbing.

All nature play themes possible in park:

Collecting & Trading, Home Base, Picnic Spots, Tree Climbing

Risk play opportunities:

Tree climbing can be risky.

Transportation infrastructure:

Sidewalks, Bike Lanes, Street Parking, Bus Stop

There is no parking lot, only street parking. There is a bike rack near the entrance.

Accessibility considerations:

There is a ramp leading from the street to the park, and brick paths around the park. These paths could be difficult for those in a wheelchair.

Safety factors:

This is a popular playground for kids to play on, so it is likely there are other people around. It is also fairly visible from 2nd St NE.

Ecological Educational Opportunities:

There are fun statues outside of McGuffey that could be fun to look at and play on.





mcintire park

Best nature play themes for park:

Water play, Scrambling/balancing, Building

Park Narrative Summary & Directions:

The park consists of a few rooms: a hill characterized by a large meadow with scattered trees, a forested area and a programmed grassy area with fields. Access to the park is from the 250 bypass, Rugby Road, as well as the John W Warner Parkway.

All nature play themes possible in park:

Bird or wildlife watching, Building, Collecting/trading, Digging/sand/mud play, Discovery/exploration, Experience plantlife, Forest fragments and magical thresholds, Hiding, Hill rolling, Home-base, Picnic spots, Running, Scrambling/balancing, Surveying, Tree climbing, Tool play/making, Water play

Risk play opportunities:

There is a stream flowing through the forested area. Here a steep bank and plenty of fallen trees are potential sites for risk play.

Transportation infrastructure:

The park is easily accessible by car, with a parking lot located off of Rugby Road. Adjacent to the parking is a bus stop. Pedestrian access is from both the northern and southern ends of the park, with pathways from the north connecting via a pedestrian bridge. The park is connected to city bike routes through the John W. Warner Parkway.

Accessibility considerations:

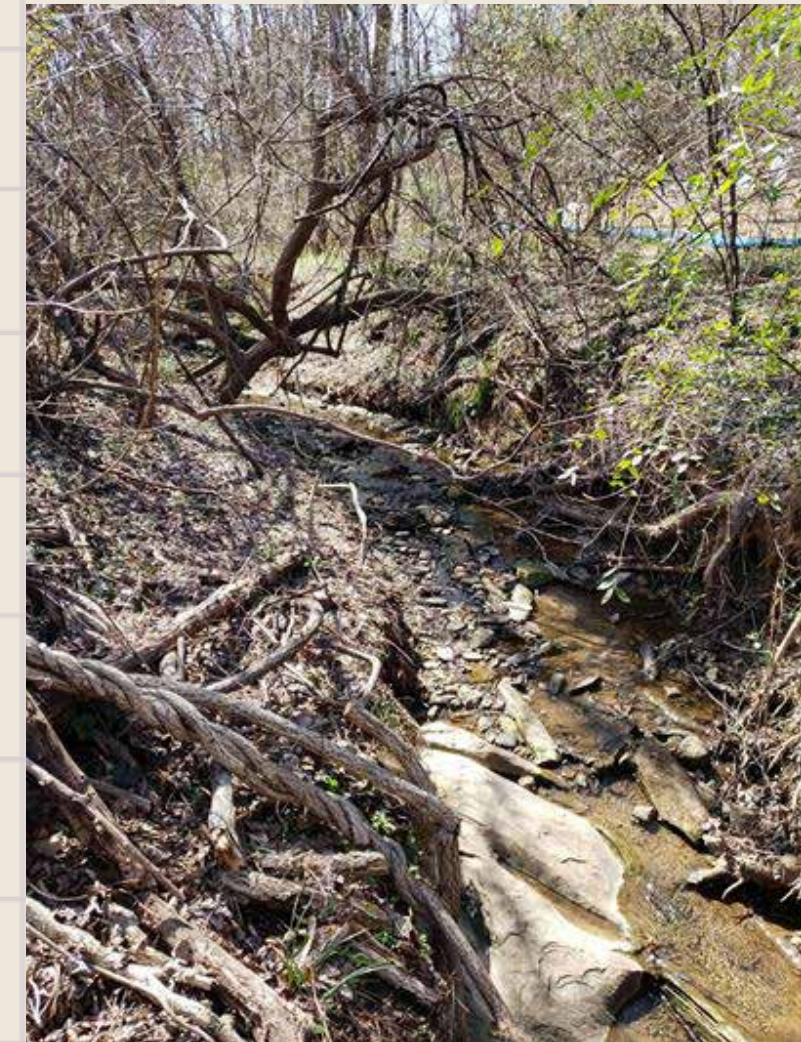
Accessibility is varied throughout the park. An asphalt path with a moderate grade running through the cross section of the park makes it generally accessible. However, certain paths, especially those within the forested area are dirt trails crossing variegated terrain.

Safety factors:

Safety considerations may include the adjacency of some paths to an active train track with no barrier. Otherwise, especially within the meadow area there is good visibility.

Ecological Educational Opportunities:

Educational opportunities may include looking at erosion along the stream. A tree nursery at the edge of the meadow provides informational signs.





meade park

Best nature play themes for park:
Picnic Spot, Hill Rolling, Home Base

Park Narrative Summary & Directions:

Access to the nature play area comes across a pedestrian bridge that connects the grassy field to the parking lot for the water park. There is a little stream that runs from the trees on edge of the park under the bridge that is shallow and approachable, though the water is not particularly clean. There is a covered pavilion to serve as a home base or for parents to watch their children. The main feature of the park is the hill that gently rises up at the back of the field near the Chisholm Place neighborhood entrance, which is good for hill rolling, though the park is best used as a Picnic area. The park is also accessible from a paved path from Fairway Avenue and the surrounding neighborhood. A small wooded area at the edge of the park provides some sticks and pine straw for collection, and while there are some small trees interspersed around the field (one is good for climbing), the trees at the edge provide the majority of the shade.

All nature play themes possible in park:

Digging sand/mud play, Forest fragments and magical thresholds, Hill rolling, Home base, Picnic spots, Running, Surveying, Tree climbing, Water play

Risk play opportunities:

The stream banks are grassy and can be slippery and there are some logs for balancing.

Transportation infrastructure:

Walking, Biking, Street Parking, Parking Lot

Accessibility considerations:

The park has a nicely paved path and pavilion and is generally flat until you reach the foot of the hill, which could be a challenge to get up or down.

Safety factors:

Excellent visibility from the parking lot all through the park. Lots of surrounding neighborhoods and families make this park feel safe.

Ecological Educational Opportunities:

N/A





old mills trail

Best nature play themes for park:

Bird or wildlife watching, Discovery/exploration, Magical Thresholds

Park Narrative Summary & Directions:

The park was accessed from the condo parking lot off of Riverbend Drive behind the Pantops shopping center, though this parking is likely private. You can access the end of the trail easier from Darden Towe Park via the Rivanna Trail. The trail runs by the Rivanna river on the southside. There is a lovely sandy area near the edge of the river that has a magical branch construction and forms a natural room with an open, flat clearing. There is easy access from this space down a steep, sandy bank to the river's edge. Further downstream, a gulley transects the trail and there is an opportunity to follow a wooden bridge off of the trail and up the steep embankment. Below the Pantops shopping center, there is a steep hill that leads down to a nice meadow for picnicking, though the undergrowth is rather thick and the area is cut in half by a concrete drainage gully. Off to the side of this meadow, there is a wonderful forest area with open undergrowth that really embodies the magical threshold ethos.

All nature play themes possible in park:

Experience plantlife, Bird or wildlife watching, Discovery/exploration, Hiding, Building, Forest fragments and magical thresholds, Running, Digging/sand/mud play, Home Base, Picnicking, Collecting/trading, Surveying, Scrambling and balancing

Risk play opportunities:

Vines and thick undergrowth near the trail entrance off of Riverbend Drive make for good risk opportunities. Water play by the river can be risky especially during high river levels. The meadow has uneven terrain to add risk to running/playing, as well as the risk associated with the steep hill that descends from the shopping center

Transportation infrastructure:

Walking, Biking, Parking Lot

Accessibility considerations:

The main trail itself is flat but the central entrance from the condo area is a bit steep and rough. The sandy area by the river bank has a steep bank that makes access difficult. Overall, there aren't many places to sit, aside from a few logs in the sandy area before you enter the room by the river bank. The sand also would make accessing the area difficult with a disability. The meadow below the shopping center parking lot is also fairly inaccessible because of really thick underbrush. Overall, not incredibly accessible aside from the central trail path.

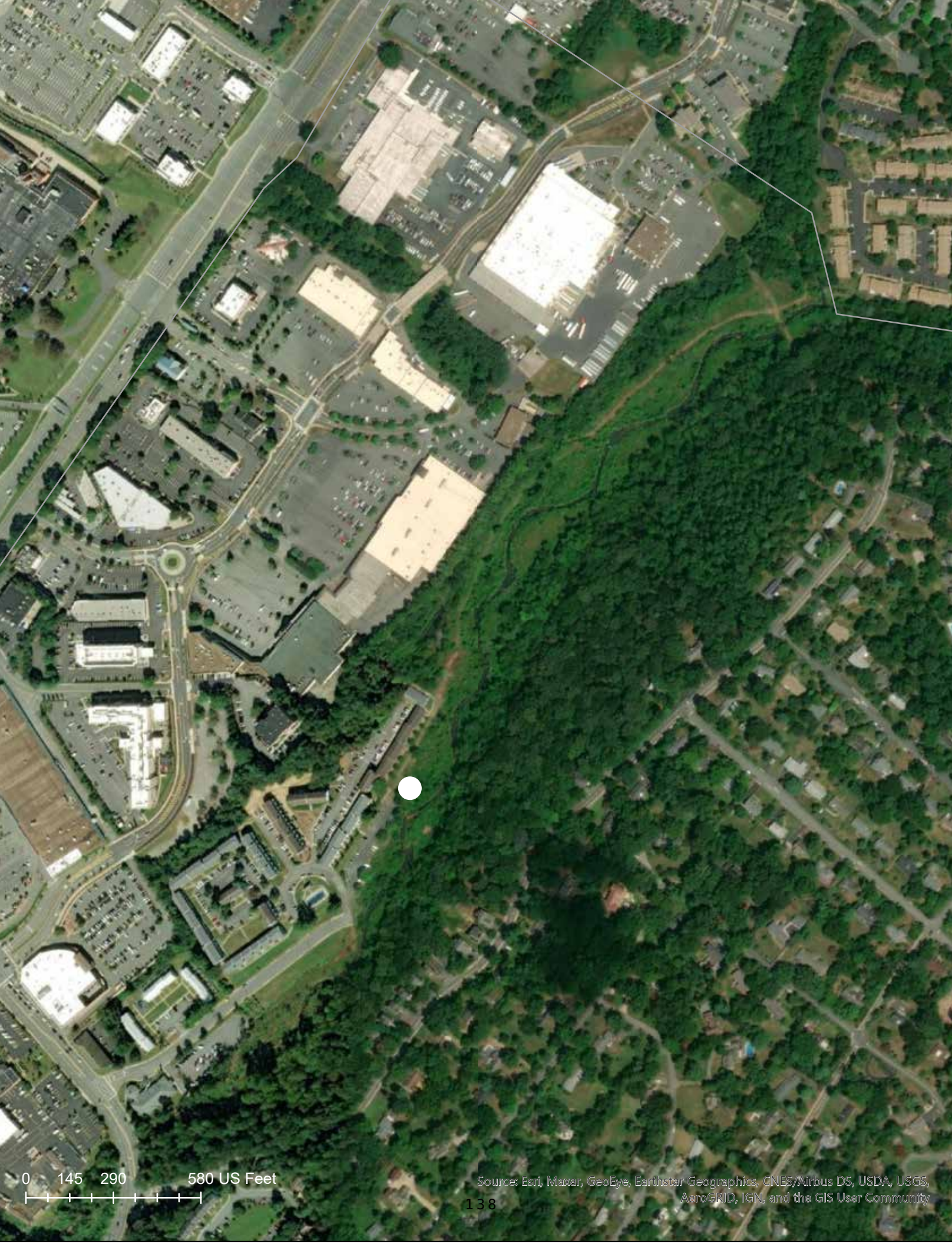
Safety factors:

The central entrance to the Old Mills trail is right behind a condo complex, making it feel safe with its proximity to people's homes. The sand flat down by the river is hidden by the rise in the bank and is therefore somewhat isolated from the other rooms

Ecological Educational Opportunities:

There are some invasive species such as the autumn olive in the undergrowth of the forested area along the trail, and the ecotone is heavily trafficked. The riverbank below the main trail bath is eroding heavily in places, and the sandy flat by the river offers a good opportunity to talk about flood plains.





meadow creek valley

Best nature play themes for park:

Water Play

Park Narrative Summary & Directions:

Next to the apartment complex off of 250, this is a section of Meadow Creek that opens into a broad floodplain valley. There is not a clear trail structure on this side, but there is easy porosity with the local residents whose front porches all face onto the creek. This creek here has recently been restored and there is lots to learn about the plants growing here. Most significantly, because the banks have been restored, and enforced with logs and rocks, there is excellent access to touch the water.

All nature play themes possible in park:

Bird or wildlife watching, Digging sand mud play, Experience plantlife, Water play

Risk play opportunities:

There is limited risk play. The most risk comes from the lack of trails making this quite an exploration through a riverine wetland.

Transportation infrastructure:

There is street parking next to this creek and the parking for the apartments immediately abuts. There is walking access as well from the residential neighborhood and from 250 down the street.

Accessibility considerations:

There is no formal path and there are no benches.

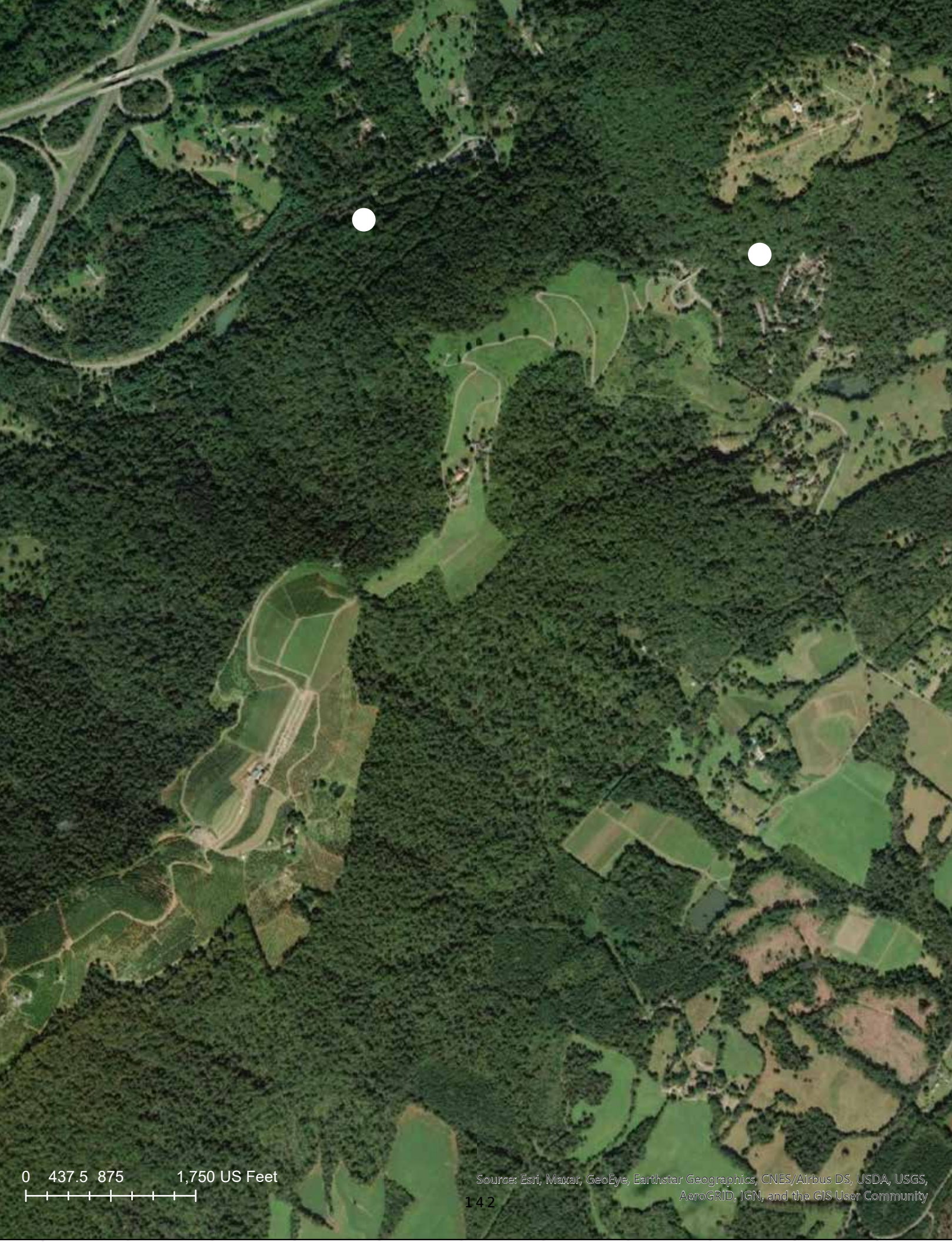
Safety factors:

The space feels very safe as there is visibility from multiple, actively used front porches of apartments.

Ecological Educational Opportunities: It is a restored stream which has been re-

meandered. The plants used are native and designed to prevent erosion and other techniques have been used to slow water (which also make nice ripples). All-in-all, this is a great place to see the positive effects of stewardship.





monticello trail

Best nature play themes for park:

Picnic Spot, Experiencing Plantlife, Surveying

Park Narrative Summary & Directions:

The Saunders-Monticello Trail system has two primary entrances, one at Monticello and one off of Dairy Marn Rd. The main trail is a wide, accessible path that runs parallel to Thomas Jefferson Parkway. There are also smaller trails that branch off to scenic overlooks and other access points. The trail is mostly built as a contained boardwalk that weaves through the trees. While it is not encouraged to stray from the trail, there are opportunities for learning along the trail itself from the labels for much of the nearby plantlife. There are also great designated picnic areas set aside along the trail.

All nature play themes possible in park:

Birding or Wildlife Watching, Discovery / Exploration, Experience Plantlife, Picnicking, Surveying

Risk play opportunities:

There are not very many opportunities for risk play along this trail, as it is mostly a contained boardwalk.

Transportation infrastructure:

There are parking areas at both ends of the trail. The nearest bus access is across Route 20 at PVCC. There is not adequate pedestrian/bicycle infrastructure to access the trail.

Accessibility considerations:

This is an excellent park for persons with mobility limitations. The trail is wide and paved/built with little variation in topography.

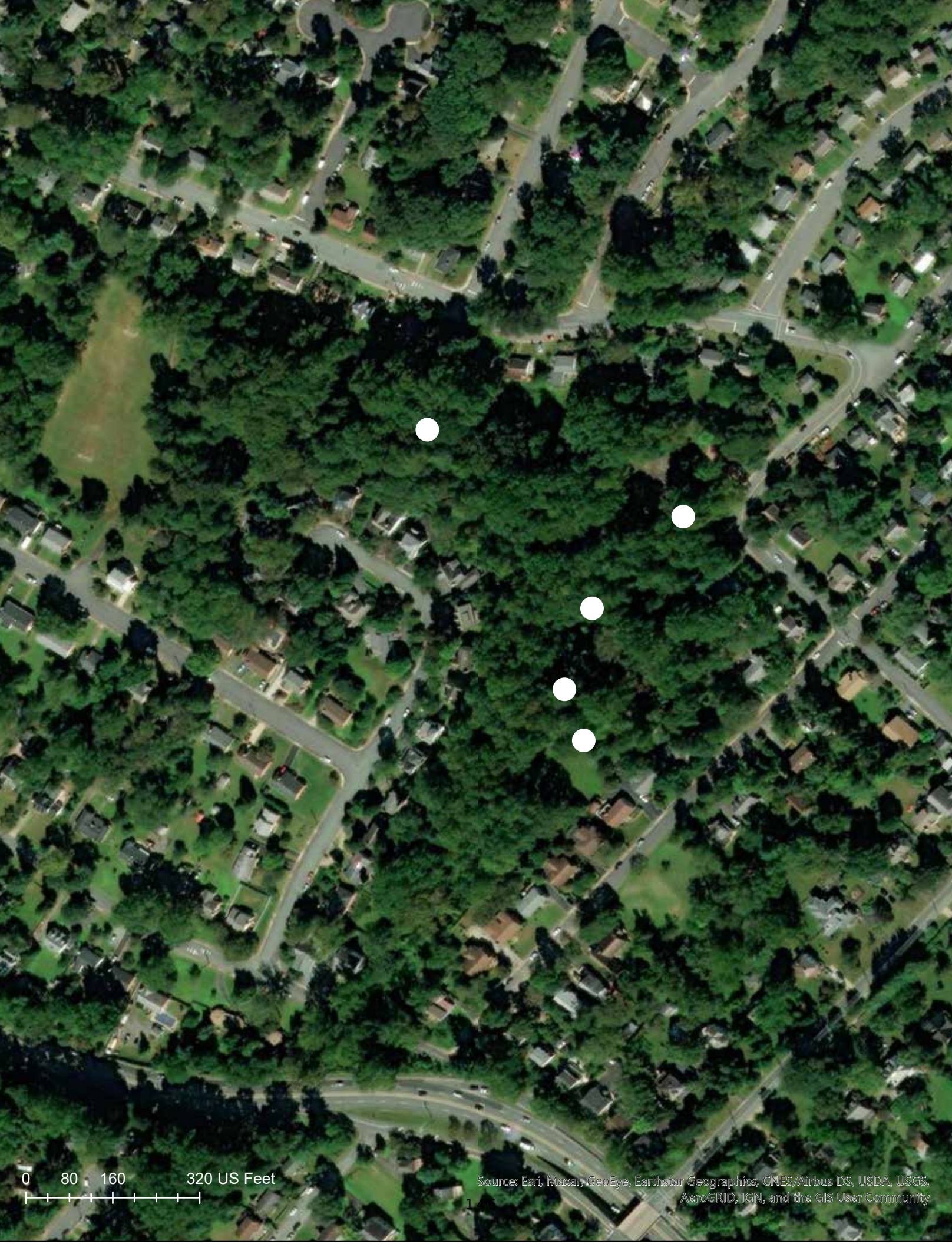
Safety factors:

This trail is very safe, since it is mostly contained and very busy.

Ecological Educational Opportunities:

There are many labels to pantlife that create great learning opportunities.





northeast park + davis park

Best nature play themes for park:

Forest Fragments, Water play, Digging/sand/mud play

Park Narrative Summary & Directions:

There is a stream bank at bottom of hill. There is also a path that connects Davis Park to Northeast Park, heading west after the bridge. The main entrance is from St Charles Ave, to east of the bridge. There is a variety of vegetation at the edge of the stream and exposed ground that could be used for dirt play. Plenty of sticks and woody material to use as tools or trade. There is a large log that can be crossed over the stream. There is an open and visible area and plots for home base. Variety of plant species and birds to look at. Forested area with a lot of woody matter and closed/open spaces. Trail to run on or off, change in topography makes it fun to survey. Plenty of places to hide and explore trees and wildlife(birds and squirrels). A lot of small shrubs that create interior rooms along the path. Lots of sizes and places to hide, explore, and rest in. There is a sloped grassy area with mature trees that provide shade. Lots of opportunities to explore in a self directed way, and an easy gentle, accessible water source.

All nature play themes possible in park:

Collecting/Trading, Experience Plantlife, Hill Rolling, Picnicking, Home Base, Running, Birding or Wildlife Watching, Tool Play/Making, Hiding, Surveying, Digging/Sand/Mud Play, Discovery/Exploration, Scrambling/Balancing, Water Play, Forest Fragments/Magical Thresholds

Risk play opportunities:

Possibility for potential irritants like poison ivy, and scratches/tripping.

Transportation infrastructure:

Walking, Street Parking, Public Transit, Biking.

There are sidewalks and bus stops in front of the park entrance. Walkways and trails make it accessible from three sides.

Accessibility considerations:

Very few ramps or pavement within the park to access nature play areas. Very difficult to access with mobility issues. Rough natural earth terrain.

Safety factors:

Very open and visible. Visibility of houses makes trails feel safe. You can see houses while on the path, which makes you feel less isolated.

Ecological Educational Opportunities:

There are some very eroded banks and hillsides.





pen park

Best nature play themes for park:

Discovery & Exploration, Experiencing Plantlife, Wildlife Watching

Park Narrative Summary & Directions:

There is a network of nature trails that follow the perimeter of the park that are accessible from any of the parking areas at the entrance. The wooded area along the river is a large, dense forest that creates many opportunities for exploring and playing in the woods. This would be a great place for collecting or trading sticks and other treasures from the forest and playing around off the trail itself. The full perimeter trail can take a long time to complete but there are opportunities to shorten it by cutting back through to the entrance at the center.

All nature play themes possible in park:

Birding or Wildlife Watching, Building, Collecting / Trading, Digging / Sand / Mud Play, Discovery / Exploration, Forest Fragment and Magical Thresholds, Hiding, Home-Base, Experience Plantlife, Picnicking, Prospect and Refuge, Scrambling / Balancing, Surveying, Tree climbing, Tool Play / Making

Risk play opportunities:

The park is so large that it is possible to get lost in the forest between the trails and the entrance. Some of the trails also run next to the Rivanna River, which has a high bank and could potentially be dangerous for young children to swim in unsupervised. It can also be dangerous to be exploring the golf course without paying attention to the people playing golf.

Transportation infrastructure:

There is plenty of parking at the one entrance to the park. There is also a great shared use path separated from the road leading into the park. While there is not a bus stop at the park itself, there is a CAT stop at the end of Pen Park Rd.

Accessibility considerations:

The trails around the golf course are paved and would be very accessible to persons

with disabilities. However, the trail in the woods is not paved and there are topography changes, roots, and mud that would create obstacles for people with mobility limitations.

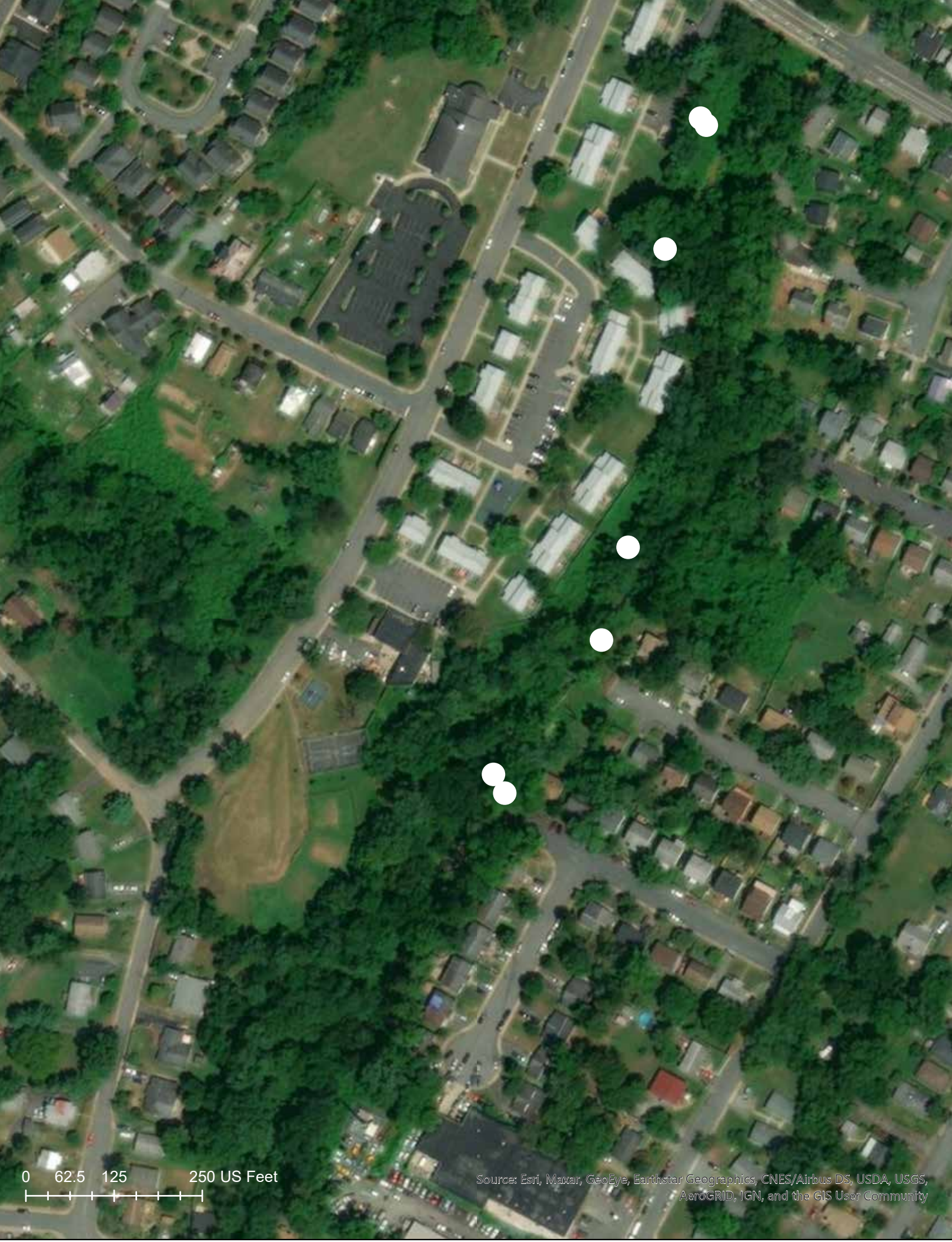
Safety factors:

The park itself is surrounded by a river and some very nice private communities, so the park feels very safe. The only safety concerns would be getting lost in the woods or playing too close to the river.

Ecological Educational Opportunities:

There is some erosion by the river.





pollack's branch

Best nature play themes for park:

Bird or wildlife watching, Building, Forest fragments and magical thresholds

Park Narrative Summary & Directions:

There is one main trail going along the Pollack's branch, which is a heavily polluted and littered stretch of remnant creek, receiving all the stormwater runoff from downtown. Even while polluted and covered by invasive vines, this is still a vibrant forest fragment filled with birdlife to experience and plant matter to make with. There is a grove of bamboo that creates a quite magical space to build with downed bamboo or to hide in between. Likewise there is a good variety of vantage points on the creek, from high above, to level with it, to being in contact with it (and crossing it).

All nature play themes possible in park:

Bird or wildlife watching, Digging sand mud play, Water play, Tool play/making, Home base, Hiding, Collecting/trading, Building, Forest fragments and magical thresholds, Discovery/exploration, Surveying

Risk play opportunities:

C There are opportunities for risk play especially when climbing through the vines (above and below) to access the water from the path. Crossing the creek also requires an element of risk that is exciting. And most uniquely here the height of the eroded banks feels risky just looking down on the water that high up.

Transportation infrastructure:

There are a few routes for access to the trail either by parking or walking from IX or by parking in one of the side streets that abuts into the creek. Walking infrastructure exists, however there is a lack of designated crosswalks.

Accessibility considerations:

The path is narrow and steep, with uneven ground material and sudden obstacles from above and the sides. Access to the water is even less accessible and the path dead-ends into the creek which must be forded unless you turn around.

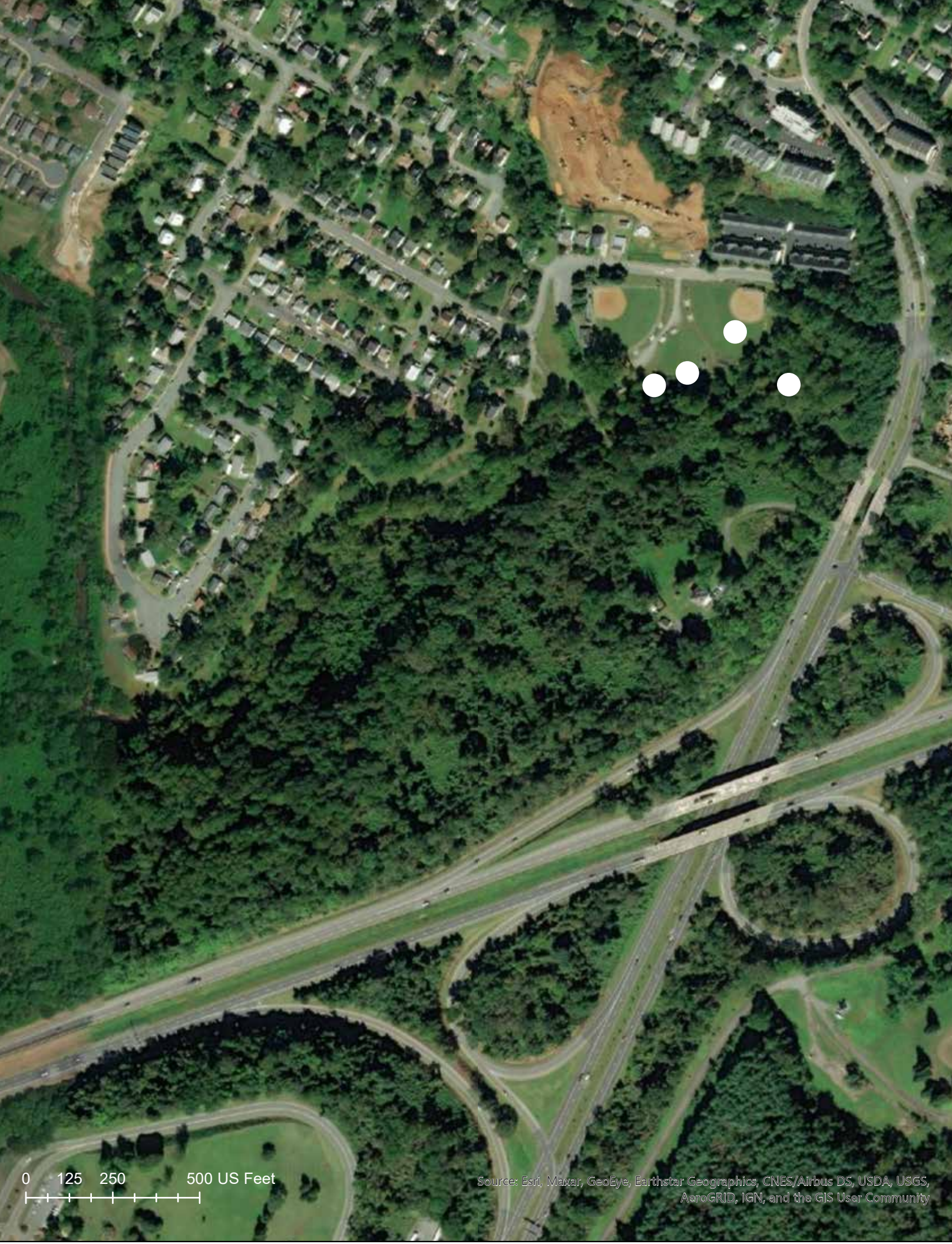
Safety factors:

There is only one entrance on either side of the trail and one of them ends on a street without good visibility. Most often the only visibility is coming from one backyard of houses (rather than the whole community) which makes it feel less safe. At the entrance on Elliot street there is little buffer from the busy street and no crosswalk infrastructure which makes it rather dangerous.

Ecological Educational Opportunities:

There are many invasive species of vines here, particularly privet, porcelain berry, kudzu, and bamboo. The banks are heavily eroded, laden with trash, and covered in an oily film; this has the potential to be a lesson in the issues of stormwater management and the effect of culverts and urban systems on the natural environment (even and especially when they are out of sight and out of mind).





quarry park

Best nature play themes for park:

Hiding, Forest Fragments, Water Play

Park Narrative Summary & Directions:

Entry from Rivanna Trail to the east, or bridge from Quarry park to the south. Riverbank and grassy areas are south of the parking lot and north of Rivanna trail. Other areas are in the southeast corner of the park behind the eastmost baseball field. Lots of edible plants (blackberries, wild roses), draping/curtain vines provide lots of fun rooms to play hide and discover. vines available to climb or use as tools. Water access by stream, and grassy field for picnic just above creek. Rocks to balance on or scramble. Bridge to climb under and hide. Lots of wildlife - deer, birds, squirrels. Lots of vines to hide in a jump around through. Gumballs to collect and trade. Hiding, foraging, imagination landscapes through wildlife and plantlife.

All nature play themes possible in park:

Collecting/Trading, Experience Plantlife, Picnicking, Running, Birding or Wildlife Watching, Tool Play/Making, Hiding, Surveying, Discovery/Exploration, Scrambling/Balancing, Water Play, Forest Fragments/Magical Thresholds, Prospect/Refuge, Home Base

Risk play opportunities:

Potential snakes, spiders, or thorns in forest fragments. Potential for balancing/scrambling risk with a steep bank.

Transportation infrastructure:

Walking, Street Parking, Driving/Parking. There is a parking lot off Quarry Road in the park, with ample street parking along the road. Others may choose to walk in via the Rivanna Trail which runs along the southern edge of the park.

Accessibility considerations:

Rivanna Trail is natural earth - maybe depending on the wheelchair or other mobility device. Picnic spots are accessible, banks of the stream not as much.

Safety factors:

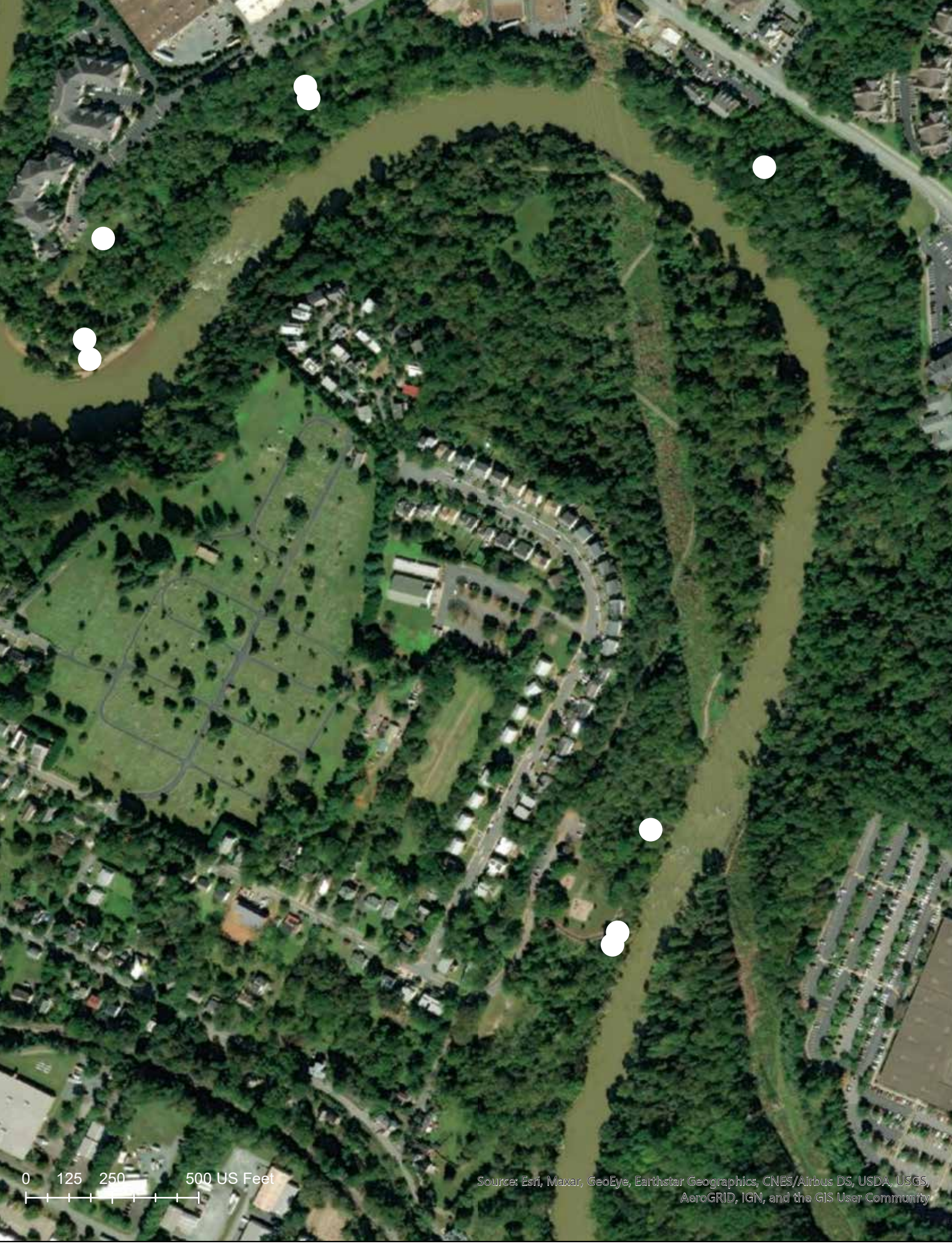
0 125 250 500 US Feet

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Feels safe because there is one way in and out. Very open.

Ecological Educational Opportunities: N/A





riverview park

Best nature play themes for park:

Home Base, Picnic Spot, Water Play

Park Narrative Summary & Directions:

The park is accessible from the parking lot or overflow street parking at the end of Chesapeake street or via the Rivanna trail which runs through the park. Adjacent to the playground area, there is a small, grassy meadow that is well suited as a home base or picnic area. The Rivanna River corridor at the edge of the park has a steep but navigable embankment with lots of fallen logs to play on, as well as a shallow area for play along the river's edge. A wooded trail runs the length of the park, though the undergrowth is thick on one side with the river immediately on the other side. The trail is best for running or collecting sticks and acorns.

All nature play themes possible in park:

Collecting trading, Home base, Picnic spots, Running, Bird or wildlife watching, Digging sand/mud play, Discovery exploration, Hiding, Scrambling balancing, Surveying, Tool play/making, Water play

Risk play opportunities:

The river provides plenty of risk play opportunities, namely wading in the stream and descending the steep embankment.

Transportation infrastructure:

Walking, Biking, Street Parking, Rivanna Trail

Accessibility considerations:

The park is flat with well paved paths and trails throughout, though descending down to the river itself is impractical.

Safety factors:

The park is usually very crowded with families, and the grassy area near the

playground is easily surveyed by parents. The trail and river corridors are more wooded and the river bank could be dangerous, especially when the water level is up.

Ecological Educational Opportunities:

The riverbank is severely eroding in places, which is of ecological interest.





rives park

Best nature play themes for park:

Picnicking, Surveying, Tree Climbing

Park Narrative Summary & Directions:

Accessible from Rives Street. Small open park with great mountain views. some good low trees for climbing. Lots of manmade amenities that make good picnic spaces. Surveying and tree climbing are also possible. A great place to come look at the southeast ridgeline. Restful place, but active play like tree climbing is also possible.

All nature play themes possible in park:

Birding or Wildlife Watching, Home Base, Picnicking, Running, Tree Climbing

Risk play opportunities:

Climbing trees is the only risky activity in the park.

Transportation infrastructure:

Walking Driving/Parking, Street Parking, Public Transit, Biking. There is a parking lot in the park, as well as street parking and a bus stop on Rives St. All infrastructure amenities are right at the entrance.

Accessibility considerations:

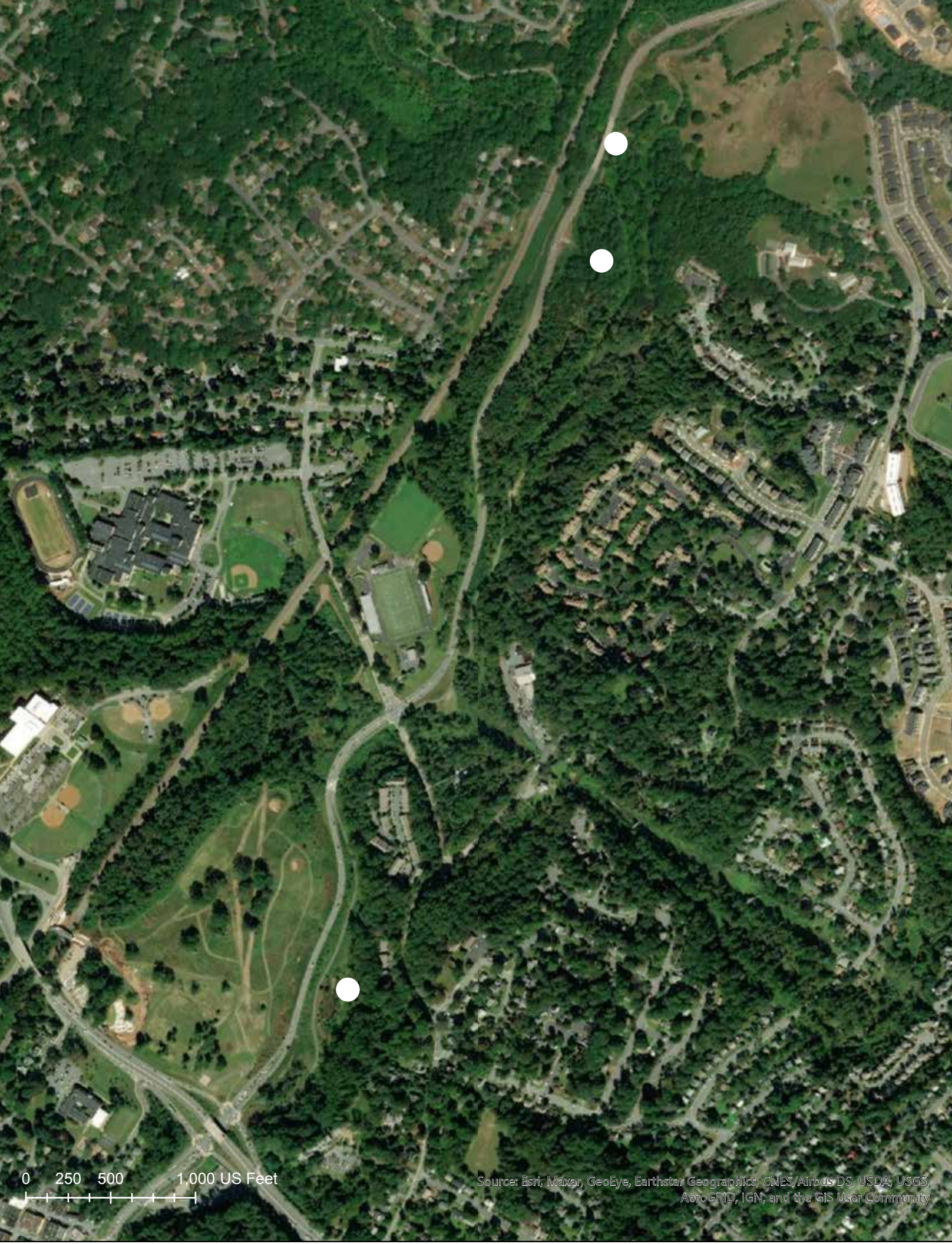
There's a flat paved path through the whole park, which makes it very accessible for individuals with disabilities.

Safety factors:

Open small space - you're very visible throughout the entire park, and the park backs up to backyards.

Ecological Educational Opportunities: N/A





schenk's greenway & jw parkway

Best nature play themes for park:

Discovery and Thresholds, Water Play

Park Narrative Summary & Directions:

This is a linear park sequence that begins along McIntire Road and continues northwards along John W Warner Parkway. It is defined by a bike and pedestrian pathway that makes its way first along the roadway and then parallel to Meadow Creek through forested areas. Access to this park space is easiest for pedestrians and bicyclists. Those arriving by car can park at McIntire Park and enter the Parkway at the intersection of the 250 Bypass and John W Warner Parkway. Access by bus is similarly limited, with the nearest bus stop located at McIntire Park or on Park Street to the east of the Parkway.

All nature play themes possible in park:

Bird or wildlife watching, Building, Collecting/trading, Discovery/exploration, Forest fragments and magical thresholds, Hiding, Experience plantlife, Scrambling/balancing, Tool play/making, Water play

Risk play opportunities:

If one ventures off of the pathway, fallen branches could be tripping hazards. Along the water's edge, there are, similarly, exposed branches and rocks. High undergrowth could make one feel lost, although the linear nature of the park would make getting truly lost difficult.

Transportation infrastructure:

The closest parking lot is at McIntire Park. Bus stops are at McIntire Park and on Park Street.

Accessibility considerations:

This park is accessible to those with disabilities. A 6ft wide asphalt path is continuous throughout the length of the Greenway/Parkway sequence.

Safety factors:

This park feels safe. The pathway is well frequented by those on a walk, joggers, and bicyclists.

Ecological Educational Opportunities:

Eroded stream banks along Meadow Creek are in need of protection and could serve as an educational opportunity.





starr hill park

Best nature play themes for park:

Hill Rolling, Picknicking

Park Narrative Summary & Directions:

You can enter the park from the parking lot off West Main Street, or paths from 7th St NW or Commerce St. Large grass smooth bowl, perfect for rolling, good for parents to observe, small ornamental multistem trees and many edible spring greens like chickweed, allium, violets, and redbuds.

All nature play themes possible in park:

Running, Prospect/Refuge, Picnicking, Birding or Wildlife Watching, Tree Climbing, Hill Rolling

Risk play opportunities:

Risk of children rolling too fast.

Transportation infrastructure:

Driving/Parking, Walking, Public Transit. There is a parking lot adjacent to the park, as well as paths that lead into it. There are bus stops on West Main Street that are close to the park entrance.

Accessibility considerations:

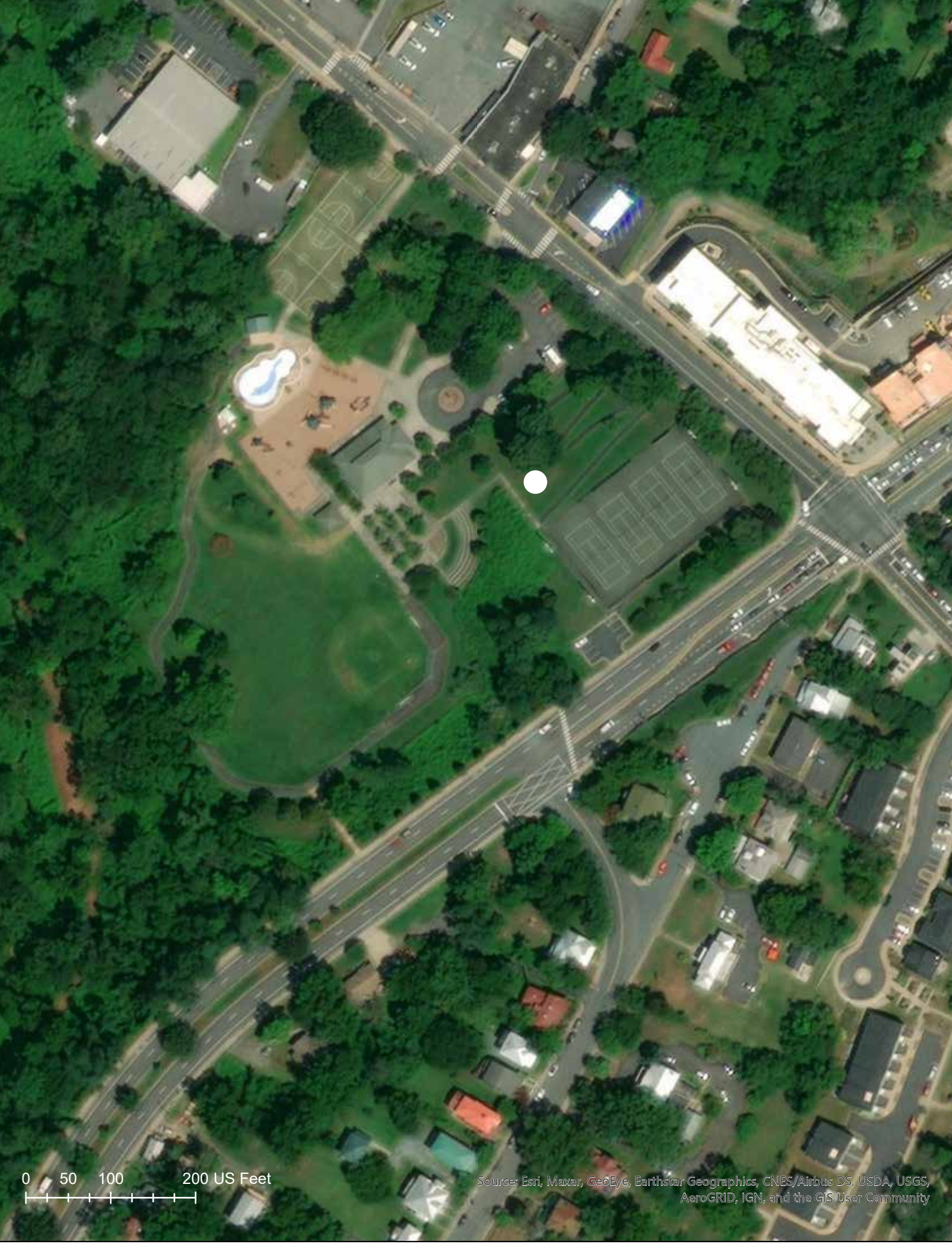
High points and vista are accessible and there are easy accessible benches close to the parking lot.

Safety factors:

The park feels safe since it borders backyards, and has high visibility being near West Main Street. Park also faces away from the parking lot so there is no risk of children rolling into cars.

Ecological Educational Opportunities: N/A





tonsler park

Best nature play themes for park:

Hill Rolling, Running, Picknicking

Park Narrative Summary & Directions:

The parking lot is off of Cherry Avenue, though you can also enter the park from 5th St at the top of the hill. There are tennis courts at the top of the park at the corner of Cherry and 5th St, a large hill leading down to the parking lot, a playground, basketball courts, building with bathrooms, and a field. The park is great for hill rolling, picnicking, and running. There are dedicated picnic areas under large trees and a large mowed field for running.

All nature play themes possible in park:

Hill Rolling, Home Base, Picnic Spots, Running

Risk play opportunities:

The hill is fairly steep and therefore could be risky.

Transportation infrastructure:

Sidewalks, Bike Lanes, Parking Lot, Street Parking, Bus Stop
Sidewalks cover most of the park, there is ample parking, a bike rack at the entrance, and bus stops on both Cherry Ave and 5th St.

Accessibility considerations:

There are paved sidewalks and paths throughout the park as well as a ramp that goes up the hill from the parking lot to 5th St. There are bathrooms and a drop off area.

Safety factors:

The park is highly visible, both from 5th St and Cherry Ave. There are not many places people could hide as the park is an open square with clear lines of sight throughout. There are barriers between the streets and play spaces.

Ecological Educational Opportunities:

There is a daily polluted stream alongside the park, below the field that could use some cleaning up. It is surrounded by prickly vines which makes it currently inaccessible. There are no significant education opportunities.



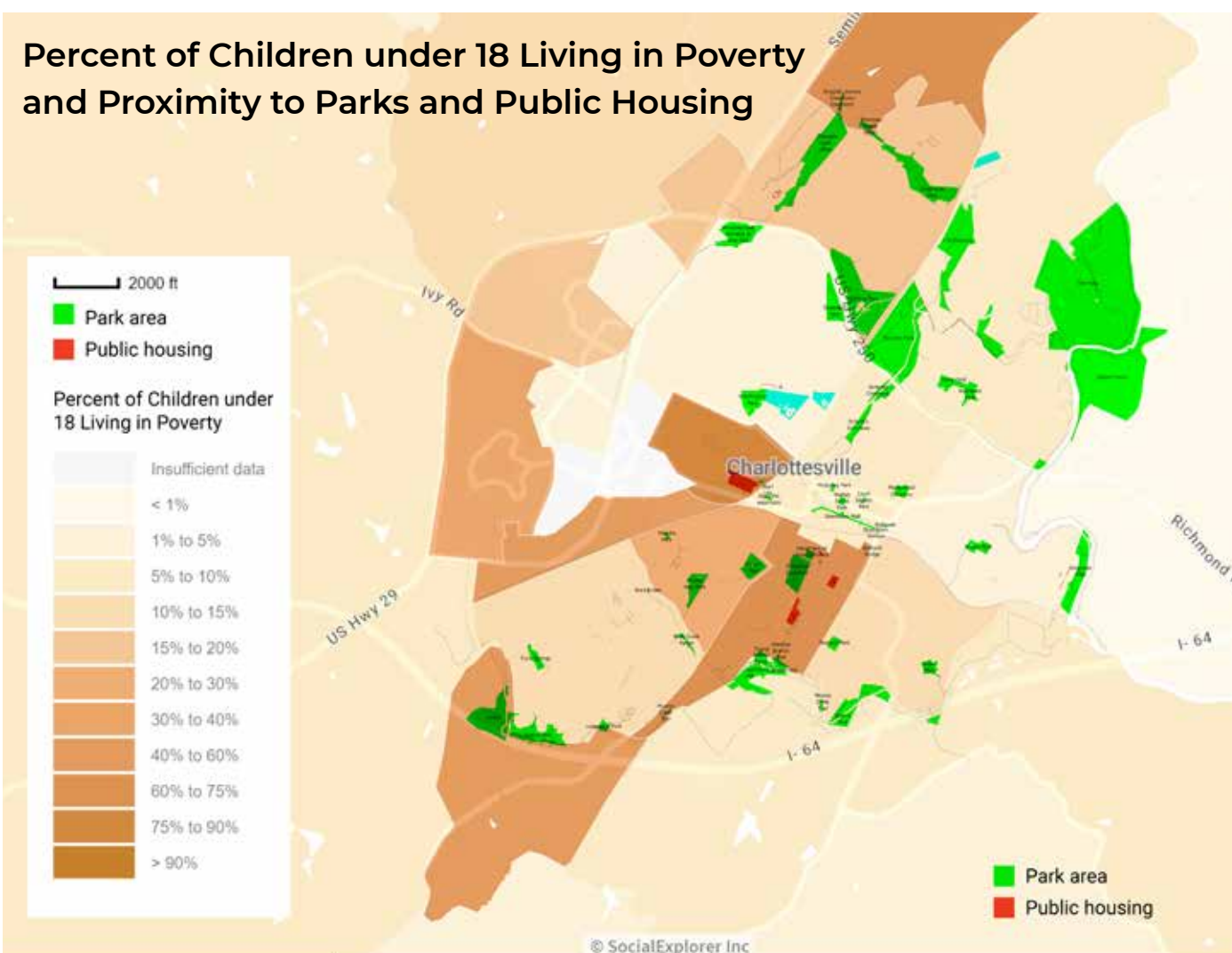
ANALYSIS

Data from the 2019 American Community Survey was overlaid with the park locations audited for this project and locations of public housing in Charlottesville. We wanted to answer the following questions:

1. Where are the areas where residents under 18 years old experience the most poverty?
2. In which neighborhoods are the most children in Charlottesville and Albemarle County located?
3. What is the proximity of those areas to public parks with nature play opportunities?
4. What is the quality of nature play opportunities in those spaces?

These maps and tables show our findings. Four audited parks are within the census tracts with the highest childhood poverty rates, and play themes at two of them are very limited. This has implications on access to high quality nature play opportunities for residents who may experience adverse childhood experiences due to family poverty. Since a high percentage of Charlottesville's children live in two of these tracts, we recommend future park enhancements begin with this area.

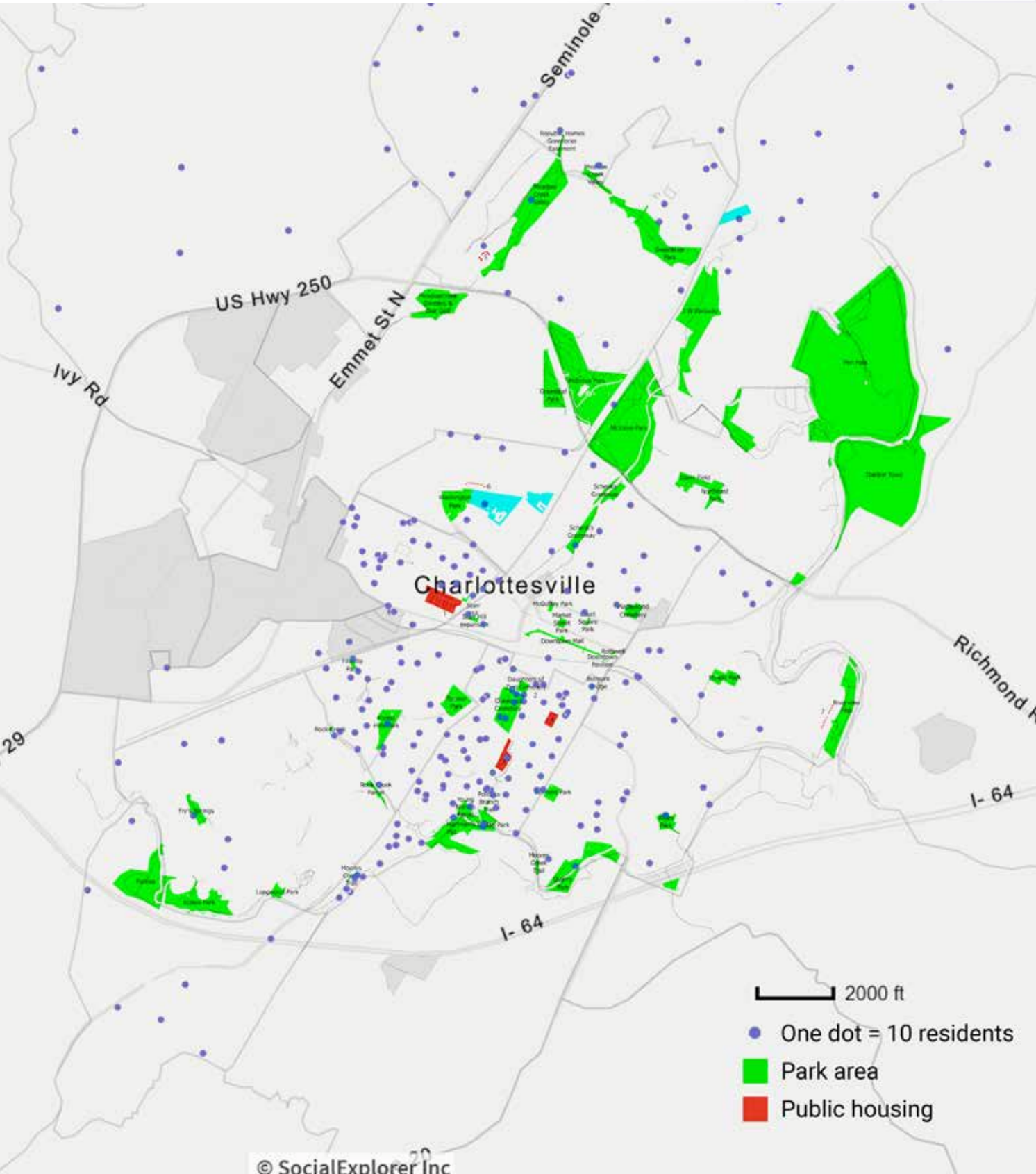
Percent of Children under 18 Living in Poverty and Proximity to Parks and Public Housing



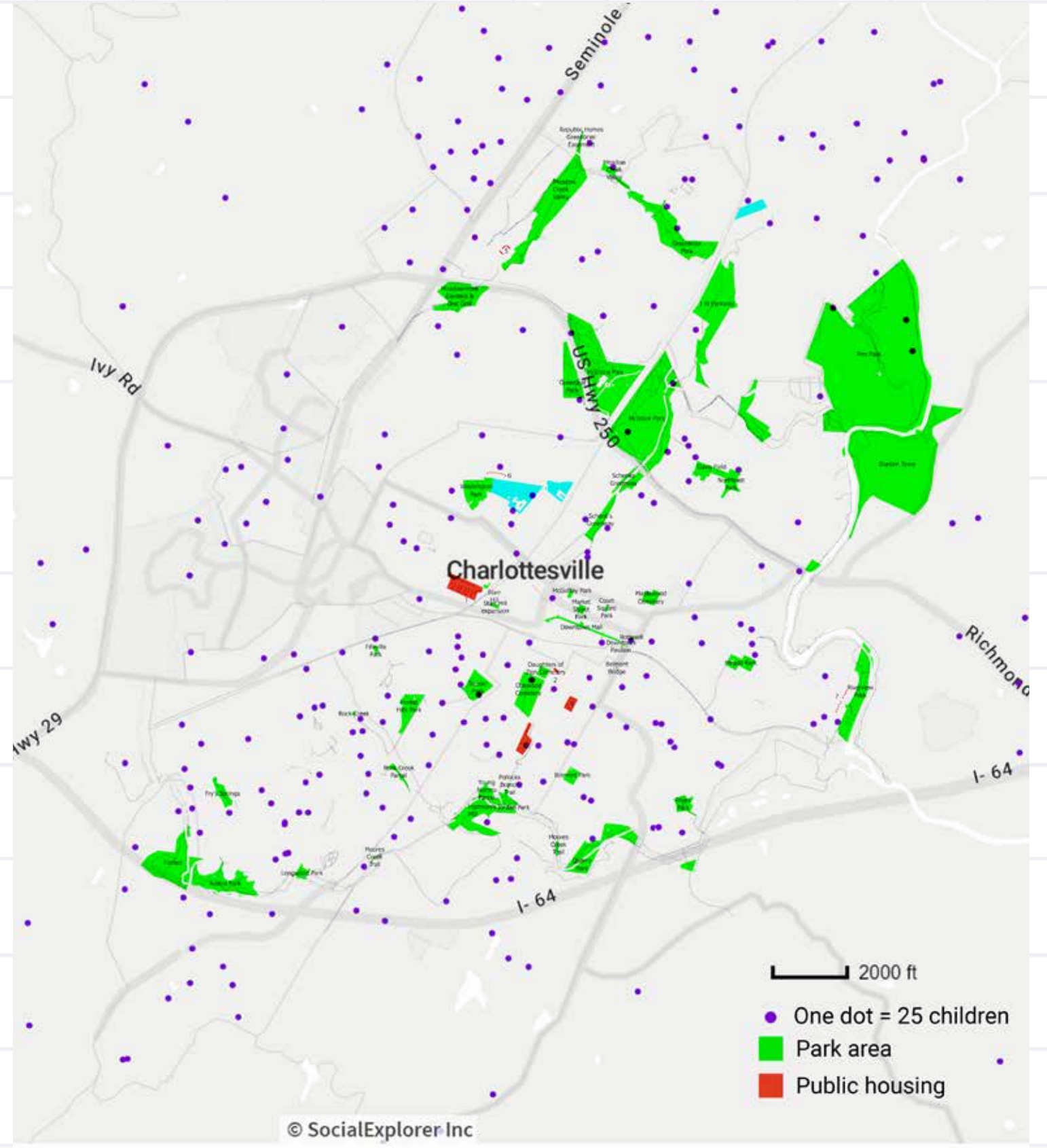
Play themes in neighborhoods with a childhood poverty rate of greater than 40%

Park	Total Play Themes	Neighborhood
Market St Park	1	North Downtown
McGuffey Park	4	North Downtown
Meadow Creek Valley	4	Greenbrier
Starr Hill Park	4	Starr Hill
Tonsler Park	4	Fifeville
Clark Elementary School	5	Belmont
Fifeville Park	5	Fifeville
Monticello Trail	5	Lakeside
Rives Park	5	Belmont
Meadow by Rivanna Trail	8	Martha Jefferson
Belmont Park	9	Belmont
Meade Park	9	Martha Jefferson
Schenk's Greenway & JW Parkway	9	North Downtown
Booker T. Washington Park	10	Barracks Rugby
IX Art Park	11	Fifeville
Pollocks Branch	11	West View Terrace
Azalea Park	12	Fry's Spring
Charlotte Yancey Humphris	12	Birnam Wood
Riverview Park	12	Locust Grove
Dam Trail around Swan Lake	13	Lakeside
Forest Hills Park	13	Fifeville
Jackson-Via Elementary	13	Fry's Spring
Jordan Park	13	West View Terrace
Biscuit Run Trail	14	Mill Creek
Botanical Garden of the Piedmont	14	Greenbrier
Greenbrier Park	14	Greenbrier
Pen Park	14	Pen Park
Quarry Park	14	Belmont
Northeast Park	15	Locust Grove
Greenleaf Park	16	Barracks Rugby
McIntire Park	17	Greenbrier
Darden Towe	18	Locust Grove

Residents in Subsidized Housing and Proximity to Parks and Public Housing



Location of Children under 18 and Proximity to Parks and Public Housing



Nature Play Themes by Neighborhood and Highlighted by Parks in Areas with 40% or Greater Childhood Poverty



Park																			Total Play Themes	Neighborhood
Azalea Park	x	x		X	x	x	X		x		x		x	x		x		X	12	Fry's Spring
Belmont Park	x		x				X		x	x	x		X		x	X			9	Belmont
Biscuit Run Trail	x	x	x	x	x	X	x	x		x				x	x	x	x	X	14	Mill Creek
Booker T. Washington Park	x	x	x			x		X	x	x	X		X		x				10	Barracks Rugby
Botanical Garden of the Piedmont	x	X	x		X	x	x		x	X	x	x		x	x	x	x		14	Greenbrier
Charlotte Yancey Humphris	x	x	x	x	x	X	X		x				X	x			x	x	12	Birnam Wood
Clark Elementary School			x						X		x		X	X					5	Belmont
Dam Trail around Swan Lake	x	x	x	x	X	X	x			x		X			x	x	x	x	13	Lakeside
Darden Towe	x	x	x	X	x	x	x	x	x	x	x	x	x	X	x	x	x	X	18	Locust Grove
Fifeville Park	x		X						x	x	X						x		5	Fifeville
Forest Hills Park	x	x	x	x			x	X	x	x	X	x	x		x		X		13	Fifeville
Greenbrier Park	x		x	x	X	X		x		x	x	x	x		x	x	x	X	14	Greenbrier
Greenleaf Park	x		x	X	x		x	x	x	x	x	x	x	x	x	x	X	X	16	Barracks Rugby
IX Art Park	x		x	X	x	x		x	X	x	x		X	x					11	Fifeville
Jackson-Via Elementary	x	x	x	x	X	x	x	X		X			x	x		x	x		13	Fry's Spring
Jordan Park	x	x	x	x	x	x	x			X	x			X		x	x	X	13	West View Terrace
Market St Park																X			1	North Downtown
McGuffey Park			X						x		X					X			4	North Downtown
McIntire Park	x	X	x	x	x	x	x	x	x	x	X		x	x	x	x	x	X	17	Greenbrier
Meade Park				x		x		x	x		X		x		x	x		x	9	Martha Jefferson
Meadow Creek Valley	x			X						X								X	4	Greenbrier
Meadow by Rivanna Trail	X				x		x		x	X	x		x			x			8	Martha Jefferson
Monticello Trail	x				x						X	X				X			5	Lakeside
Northeast Park	x		x	X	x	X	x	x	x	x	x		x	x	x		x	X	15	Locust Grove
Pen Park	X	x	x	x	X	x	x		x	X	x	x		x		x	x		14	Pen Park
Pollocks Branch	X	X	x	x	x	X	x		x						x		x	x	11	West View Terrace
Quarry Park	x		x		x	X	X		x	x	x	x	x	x	x		x	X	14	Belmont
Riverview Park	x		x	x	x		x		X		X		x	x	x		x	X	12	Locust Grove
Rives Park	x								x		X		x			X			5	Belmont
Schenk's Greenway & JW Parkway	x	x	x		X	X	x			x				x				X	9	North Downtown
Starr Hill Park	x								X			X		x			x		4	Starr Hill
Tonsler Park									X	x			X		X				4	Fifeville



LOOKING AHEAD

future work

Future work on this front will ideally expand upon the survey work described in this report. The added engagement of people in the community through interviews, consultations, or equitable inclusion in future planning processes is a logical next step for continuing the work of this project as a tool for addressing inequities in our community. Any subsequent equity analysis will make use of this sort of community engagement work in order to make nature play more accessible either through the augmentation of existing spaces or through the creation of new ones. In addition, future equity analyses should take careful stock of the distribution of nature play themes across the region, identify trends of accessibility, and locate areas with a dearth of local green spaces.

Any future city plans for redevelopment of public housing or creation of new parks will need to carefully consider the equity impacts in accordance with this preliminary mapping research. The survey itself was generally constrained to the realm of the subjective, which means that replication of the survey, distributed among a variety of other interested parties (i.e. local parents, city planners, etc.), would go a long way towards creating a more robust database of survey results. For example, the safeness of a space will likely be rated differently depending on the party conducting the survey. Additional, more objective findings could help augment the survey results by providing important environmental data to bolster any future conclusions about existing green spaces, such as research

into ambient temperature or air quality. These sorts of data were beyond the scope of this project given the size of our group and limited resources, however a larger, more prepared group could likely begin to fill in some of the gaps in knowledge left unaddressed by our survey's questions. This future work could also include the expansion of the study area. While we focused on spaces within the general urban ring of Charlottesville, there are other communities in Albemarle and beyond that would benefit from a comprehensive assessment of public green spaces and questioning who may be excluded from accessing them.

Further considerations as to determining best practices for protecting our natural areas while also encouraging and facilitating nature play will also interest Wildrock and are important to the long term viability of our parks as the intersection between daily human life and the natural world. These remain as long-standing conservation questions that also have a bearing on equity, such as the degradation of parks in lower income communities. Finally, the landscape of Charlottesville and the surrounding region will continue to change. A more robust methodology for identifying potential green spaces for nature play use, perhaps even interviewing local children themselves about the places they go to play outside, would expand the scope of this project and make the analysis of green spaces and potential opportunities of nature play in the region more comprehensive.

CONVOY deliverables

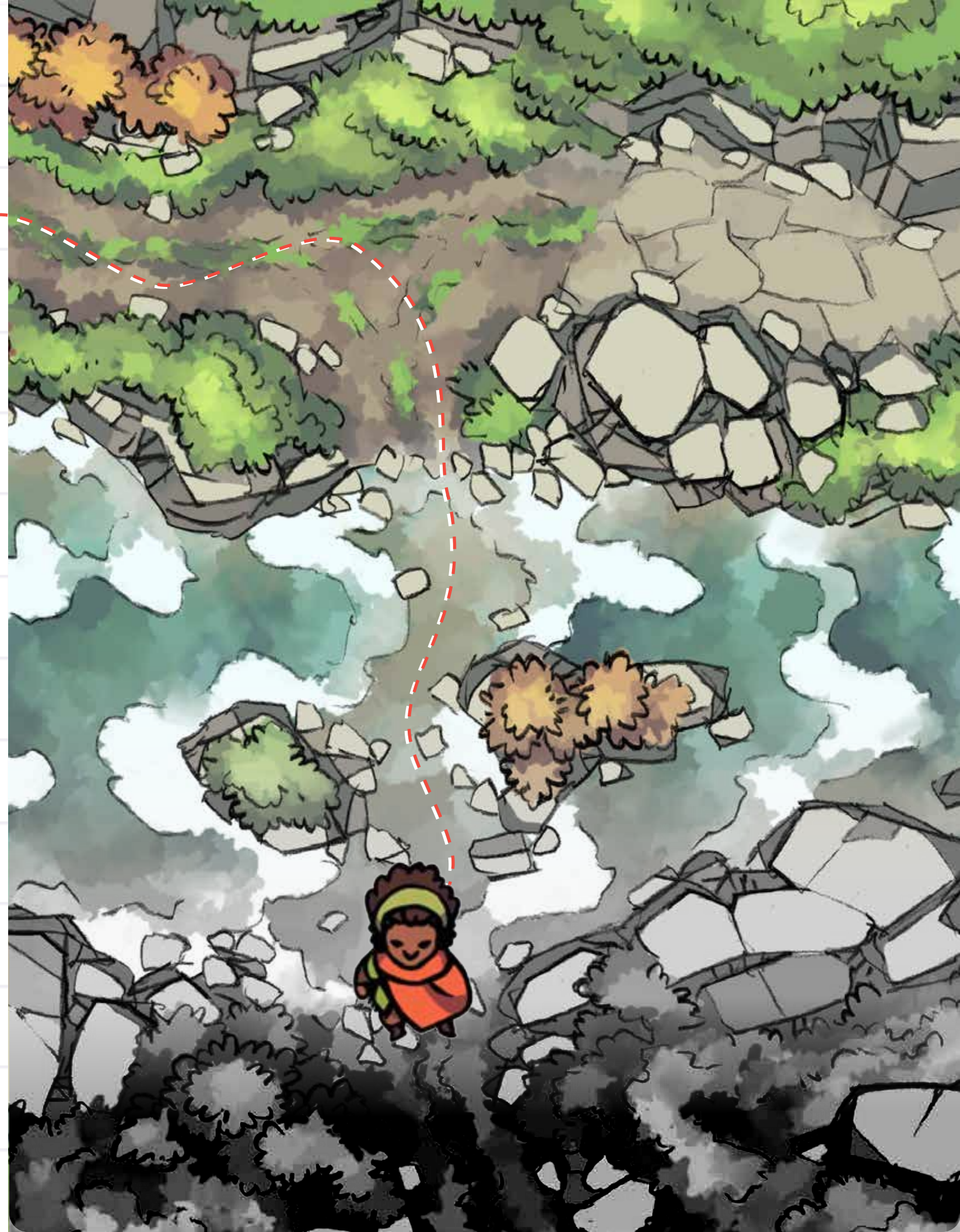
Wildrock has partnered with a local graphic design firm, CONVOY, to create a range of final maps to be utilized and distributed throughout the community in various ways.

Artistic poster (around 24x36) to be displayed on walls around town (doctors offices, libraries, new UVA wellness center, Parks & Rec, etc). This will include the map showing artistic symbols signifying play themes and where they can be found. This will be artistic and aimed at drawing children in and getting them excited.

A foldable hand out map (think of an amusement park map) that will include some more information, perhaps on the back (text box on land acknowledgement, why nature play and risk play is important, LNT principles, importance of care for nature/reciprocal relationship). There was talk of this map including a QR code for each site that will show the reader more information about the site (accessibility, directions, safety, etc) since the map won't be able to fit everything. This map will end up in the backpacks distributed by the libraries, to send home from doctors offices, etc.

A prescription form (8.5x11) to be used by doctors offices and those working with children in mental health settings. The clinician can show parks with special nature play areas, ask the child what type of play is most exciting to them, ask where they live, and together they can find a park/parks nearby where the child can engage in that type of activity. Then they will write a plan together and sign a prescription for nature play.

Website/mobile app
Carolyn is planning to use either Willowtree or another mobile app developer to turn this information into an interactive online platform. They're still brainstorming what this might look like. Some ideas that were thrown around: a series of prompts/questions aimed for children that lead to a call to action (do you like to balance on logs? Do you like to play in streams? etc which would lead to locations where this play is possible and then narrow the location to the nearest option, showing directions, etc)



SUPPLEMENTAL MATERIALS

land acknowledgement

It is important to understand the longstanding history that brought us to this land. The Native Governance Center has outlined recommendations for creating an indigenous land acknowledgement statement.

1. Start with self-reflection: Why am I doing this land acknowledgement? What is my end goal? When will I have the largest impact?
2. Do your homework: Research the Indigenous people to whom the land belongs, the history of the land, names of living indigenous people from these communities, and correct pronunciation for the names of Tribes, places and individuals.
3. Use appropriate language: Don't sugarcoat the past. Use terms like genocide, ethnic cleansing, stolen land, and forced removal.
4. Use past, present, and future tenses: Indigenous people are still here. Don't treat them as a relic of the past.
5. Land acknowledgments shouldn't be grim: They should function as living celebrations of Indigenous communities.

Sample template

"We are gathered on the unceded land of the () people. I ask you to join me in acknowledging the () community, their elders both past and present, as well as future generations. (Name of institution) also acknowledges that it was founded upon exclusions and erasures of many indigenous peoples, including those on whose land this institution is located. This acknowledgement demonstrates a commitment to the dismantlement of ongoing settler colonialism. *Insert information on ways to support and donate to local Indigenous community goals.*"

responsibility toward nature

“It is our collective and individual responsibility to preserve and tend to the world in which we all live” - Dalai Lama

“Environment is no one’s property to destroy; it’s everyone’s responsibility to protect” - Mohith Agadi

“We must protect forests for our children, grandchildren and children yet to be born. We must protect the forests for those who can’t speak for themselves such as the birds, animals, fish and trees.” - Qwatsinas, Nuxalk Nation

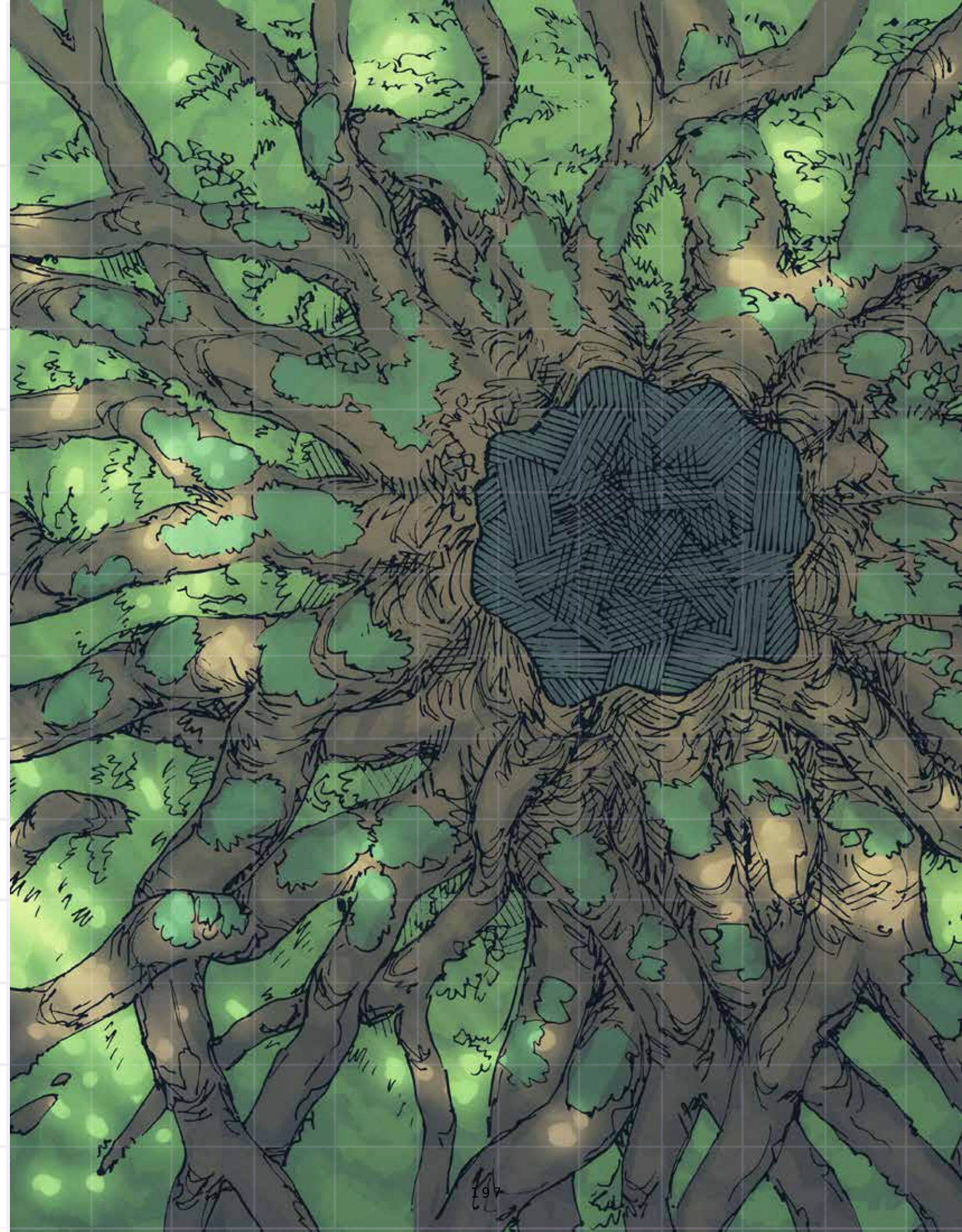
“Humankind’s greatest priority is to reintegrate with the natural world.” - Jonathan Porritt

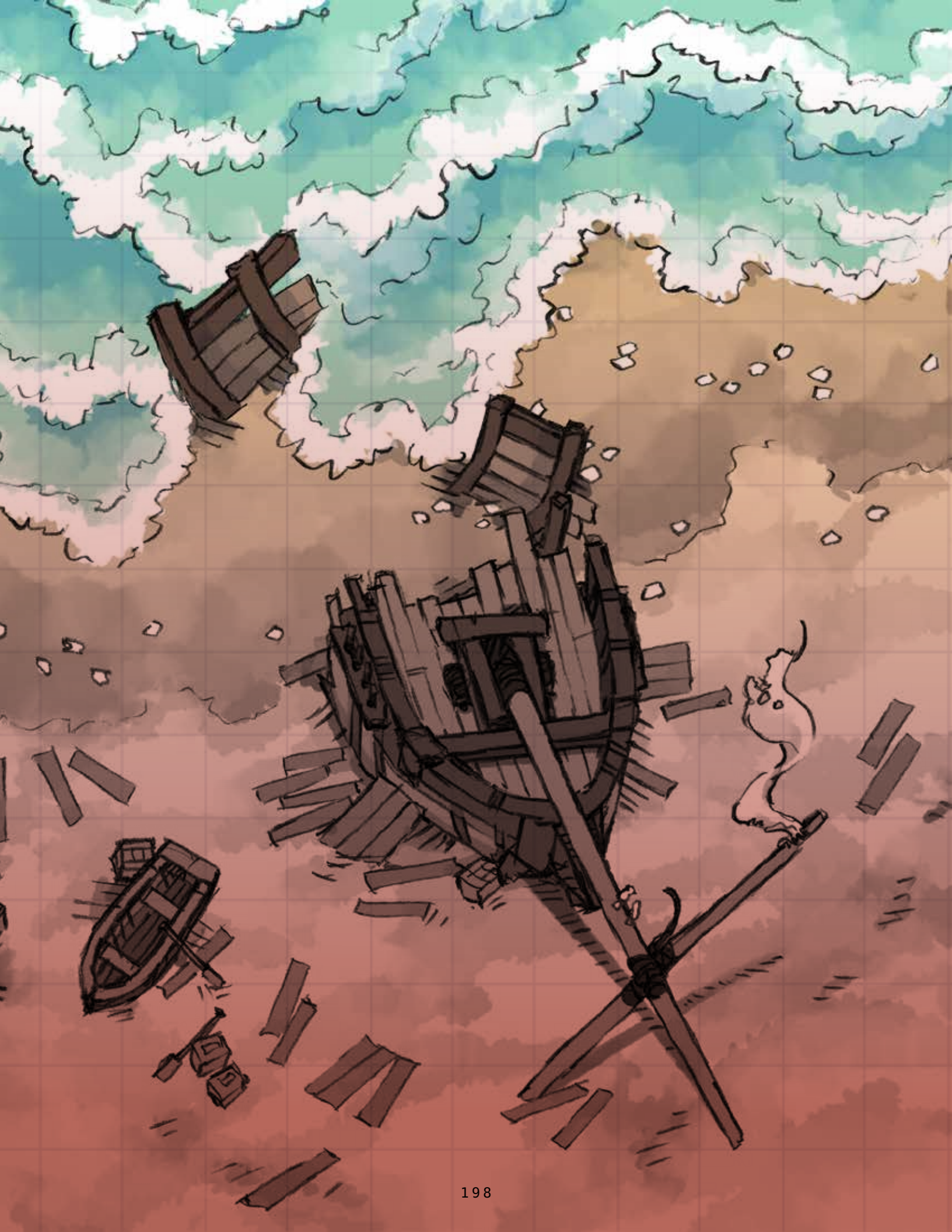
“Our relationship with nature is more one of being than having. We are nature: we do not have nature.” - Steven Harper
“Listen to the voice of nature, for it holds treasures for you.” - Huron Proverb

“Harm no other beings. They are just your brothers and sisters.” - Buddha

leave no trace principles

1. Plan Ahead and Prepare
2. Travel and Camp on Durable Surfaces
3. Dispose of Waste Properly
4. Leave What you Find
5. Minimize Campfire Impacts
6. Respect Wildlife
7. Be Considerate of Other Visitors





- 1 Beaudouin-Mackay, A., & Wagner, S. (2020). A New Way of Play: The Forms and Functions of Participatory Design and Critical Pedagogies (p. 172). Massachusetts Institute of Technology. https://architecture.mit.edu/sites/architecture.mit.edu/files/user/attachments/Thesis_ABeaudouin_2020.pdf
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